Columbia Gas of Pennsylvania, Inc.
2020 General Rate Case
Docket No. R-2020-3018835
Standard Filing Requirements
Exhibit 13
Volume 4 of 10

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.52

Applicability; public utilities other than canal, turnpike, tunnel, bridge and wharf companies.

(a) Whenever a public utility, other than a canal, turnpike, tunnel, bridge or wharf company files a tariff, revision or supplement effecting changes in the terms and conditions of service rendered or to be rendered, it shall submit to the Commission, with the tariff, revision or supplement, statements showing all of the following:

(1) The specific reasons for each change.

Response (Huwar):

The rate changes are being proposed to allow Columbia Gas of Pennsylvania a reasonable opportunity to recover revenue sufficient to cover its operating expenses and increases to rate base and provide a reasonable opportunity to earn a fair rate of return.

(2) The total number of customers served by the utility.

Response (Huwar):Refer to Exhibit No. 3.

(3) A calculation of the number of customers, by tariff subdivisions, whose bills will be affected by the change.

Response (Bell): Refer to Exhibit No.103, Schedule No. 8.

(4) The effect of the change on the utility's customers.

Response (Bell): Refer to Exhibit No. 103, Schedule No. 8.

(5) The direct or indirect effect of the proposed change on the utility's revenue and expenses.

Response (Huwar): Refer to Exhibit Nos. 3 and 4.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.52

(6) The effect of the change on the service rendered by the utility.

Response (Huwar): Service rendered by the utility will not be impacted by the changes to rates.

(7) A list of factors considered by the utility in its determination to make the change. The list shall include a comprehensive statement about why these factors were chosen and the relative importance of each. This subsection does not apply to a portion of a tariff change seeking a general rate increase as defined in 66 Pa. C.S. §1308 (relating to voluntary changes in rates).

Response (Huwar): Not Applicable.

(8) Studies undertaken by the utility in order to draft its proposed change. This paragraph does not apply to a portion of a tariff change seeking a general rate increase as defined in 66 Pa. C.S. §1308.

Response (Huwar): Not Applicable.

(9) Customer polls taken and other documents which indicate customer acceptance and desire for the proposed change. If the poll or other documents reveal discernible public opposition, an explanation of why the change is in the public interest shall be provided

Response (Huwar): No customer polls were taken to indicate customer acceptance and desire for the proposed rate changes.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.52

(10) Plans the utility has for introducing or implementing the changes with respect to its ratepayers.

Response (Huwar): Columbia will notify its ratepayers of the proposed changes through a bill insert in compliance with the Commission's Regulations (Pa Code Section 53.45).

(11) F.C.C., F.E.R.C. or Commission orders or rulings applicable to the filing.

Response (Huwar): The following orders and rulings are applicable to the Company's filing as they relate to its treatment of cloud based assets:

- F.E.R.C Accounting Guidance, issued on December 20, 2019 at Docket No. AI20-1-000;
- Commission Order issued on August 31, 2017 at Docket No. R-2016-2580030; and
- Commission Order issued on December 20, 2018 at Docket No. R-2018-3000124.

(b) Whenever a public utility, other than a canal, turnpike, tunnel, bridge or wharf company files a tariff, revision, or supplement which will increase or decrease the bills to its customers, it shall submit in addition to the requirements of subsection (a), to the Commission, with the tariff, revision or supplement, statements showing all of the following:

(1) The specific reason for each increase or decrease.

Response (Huwar): The rate changes are being proposed to allow Columbia Gas of Pennsylvania a reasonable opportunity to recover revenue sufficient to cover its operating expenses and increases to rate base and provide a reasonable opportunity to earn a fair rate of return.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.52

(2) The operating income statement of the utility for a 12-month period, the end of which may not be more than 120 days prior to the filing.

Response (Huwar): Refer to Exhibit No.2.

(3) A calculation of the number of customers, by tariff subdivision, whose bills will be increased.

Response (Bell): Refer to Exhibit No. 103, Schedule No. 8.

(4) A calculation of the total increase, in dollars, by tariff subdivision, projected to an annual basis.

Response (Bell): Refer to Exhibit No. 103, Schedule No. 8.

(5) A calculation of the number of customers, by tariff subdivision, whose bills will be decreased.

Response (Bell): Refer to Exhibit No.103, Schedule No. 8.

(6) A calculation of the total decreases, in dollars, by tariff subdivision, projected to an annual basis.

Response (Bell): Refer to Exhibit No.103, Schedule No. 8.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 II RATE OF RETURN
A. ALL UTILITIES

13. Attach copies of the summaries of the projected two years' Company's budgets (revenues, expense, and capital).

Response:

Please see the Company's response to Standard Data Request GAS-ROR-13 for projected revenues and expenses.

Please see the Company's response to Standard Data Request GAS-ROR-14 for the projected construction budget.

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
53.52	**Applicability: Public Utilities Other Than Canal, Turnpike, Bridge, and Wharf Companies**					
53.52(a)	Whenever a public utility, other than a canal, turnpike, tunnel, bridge or wharf company files a tariff, revision or supplement effecting changes in the terms and conditions of service rendered or to be rendered, it shall submit to the Commission, with the tariff, revision, or supplement, statements showing all of the following:	13	3			Huwar
53.52(a)1	The specific reasons for each change.	13	1	113	1	Huwar
53.52(a)2	The total number of customers served by the utility.	3 13	 1	103 113	 1	Bell Huwar
53.52(a)3	A calculation of the number of customers, by tariff subdivision, whose bills will be affected by the change.	3 13	 1	103 113	 1	Bell Huwar
53.52(a)4	The effect of the change on the utility's customers.	3 13	 1	103 113	 1	Bell Huwar
53.52(a)5	The direct or indirect effect of the proposed change on the utility's revenue and expenses.	13	1	113	1	Huwar
53.52(a)6	The effect of the change on the service rendered by the utility	13	1	113	1	Huwar
53.52(a)7	A list of factors considered by the utility in its determination to make the change. The list shall include a comprehensive statement about why these factors were chosen and the relative importance of each. This subsection does not apply to a portion of a change seeking a general rate increase as defined in 66 Pa. C. S. & 1308 (relating to voluntary changes in rates).	13	1	113	1	Huwar
53.52(a)8	Studies undertaken by the utility in order to draft its proposed change. This paragraph does not apply to a portion of a tariff change seeking a general rate increase as defined in 66 Pa. C. S. & 1308.	13	1	113	1	Huwar
53.52(a)9	Customer polls taken and other documents which indicate customer acceptance and desire for the proposed change. If the poll or other documents reveal discernible public opposition, an explanation of why the change is in the public interest shall be provided.	13	1	113	1	Huwar
53.52(a)10	Plans the utility has for introducing or implementing the changes with respect to its ratepayers.	13	1	113	1	Huwar
53.52(a)11	FCC, FERC or Commission orders or rulings applicable to the filing.	13	1	113	1	Huwar
53.52(b)	Whenever a public utility, other than a canal, turnpike, tunnel, bridge or wharf company files a tariff, revision or supplement which will increase or decrease the bills to its customers, it shall submit in addition to the requirements of subsection (a), to the Commission, with the Tariff, revision, or supplement, statements showing all of the following:	13	3			Huwar

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
53.52(b)1	The specific reasons for each Increase or decrease.	13	1	113	1	Huwar
53.52(b)2	The operating income statement of the utility for a 12-month period, the end of which may not be more than 120 days prior to the filing.	2 3 13	1	102 103 113	1 1	Miller Bell Huwar
53.52(b)3	A calculation of the number of customers, by tariff subdivision, whose bills will be increased.	3 13	1	103 113	1	Bell Huwar
53.52(b)4	A calculation of the total increases, in dollars, by tariff subdivision, projected to an annual basis.	3 13	1	103 113	1	Bell Huwar
53.52(b)5	A calculation of the number of customers, by tariff subdivision, whose bills will be decreased.	3 13	1	103 113	1	Bell Huwar
53.52(b)6	A calculation of the total decreases. in dollars, by tariff subdivision, projected to an annual basis.	3 13	1	103 113	1	Bell Huwar
53.52(c)1	A Statement showing the utility's calculation of the rate of return earned in the 12-month period referred to on subsection (b)(2), and the anticipated rate of return to be earned when the tariff, revision, or supplemental becomes effective. The rate base used in this calculation shall be supported by summaries of original cost for the rate of return calculation.	8		108		Shultz
53.52(c)2	A detailed balance sheet of the utility as of the close of the period referred to in subsection (b)f2).	1	1	101		Miller
53.52(c)3	A summary, by detailed plant accounts, of the book value of the property of the utility at the date of the balance sheet required by paragraph (2).	8	1, 2	108		Shultz
53.52(c)4	A statement showing the amount of the depreciation reserve, at the date of the balance sheet required by paragraph (2), applicable to the property, summarized as required by paragraph (3).	8	3	108	3	Shultz
53.52(c) 5	A statement of operating income, setting forth the operating revenues and expenses by detailed accounts for the 12-month period ending on the balance sheet required by paragraph (2).	2	1	102	1	Miller
53.52(c) 6	A brief description of a major change in the operating or financial condition of the utility occurring between the date of the balance sheet required by paragraph (2) and the date of transmittal of the tariff, revision or supplement. As used on this paragraph, a major change is one which materially alters the operating or financial condition of the utility from that reflected in paragraphs (1) - (5).	1	2	101		Miller
53.53 I A	**53.53 I. VALUATION** **A. ALL UTILITIES**					
53.53.I.A.1	Provide a corporate history (include the dates of original incorporation, subsequent mergers and/or acquisitions). Indicate all countries and cities and other governmental subdivisions to which service is provided (including service areas outside the state), and the total population in the area served.	15	1	115		Bardes Hasson

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
53.53.I.A.2	Provide a schedule showing the measures of value and the rates of return at the original cost and trended original cost measures of value at the spot, three-year and five-year average price levels. All claims made on this exhibit should be cross-referenced to appropriate exhibits. Provide a schedule similar to the one listed above, reflecting respondent's final claim in its previous rate case.	8		108		Shultz
53.53.I.A.3	Provide a description of the depreciation methods utilized in calculating annual depreciation amounts and depreciation reserves, together with a discussion of all factors which were considered in arriving at estimates of service life and dispersion by account. Provide dates of all field inspections and facilities visited.	9	1	109	1	Spanos
53.53.I.A.4	Set forth, in exhibit form, charts depicting the original and estimated survivor curves and a tabular presentation of the original life table plotted on the chart for each account where the retirement rate method of analysis is utilized. a. If any utility plant was excluded from the measures of value because it was deemed not to be "used and useful" in the public service, supply a detailed description of each item of property. b. Provide the surviving original cost at test year end by vintage by account and include applicable depreciation reserves and annuities. (i) These calculations should be provided for plant in service as well as other categories of plant, including, but not limited, to contributions in aid of construction, customer's advances for construction, and anticipated retirements associated with any construction work in progress claims (if Applicable)	9	1	109	1	Spanos
53.53.I.A.5	Provide a comparison of respondent's calculated depreciation reserve vs. book reserve by account at the end of the test year.	9	2	109	2	Spanos
53.53.I.A.6	Supply a schedule by account and depreciable group showing the survivor curve and annual accrual rate estimated to be appropriate: a. For the purposes of this filing. b. For the purposes of the most recent rate increase filing prior to the current proceedings. (i) Supply a comprehensive statement of any changes made in method of depreciation and in he selection of average service lives and dispersion.	9	3	109	3	Spanos
53.53.I.A.7	Provide a table, showing the cumulative depreciated original cost by year of installation for utility plant in service at the end of the test year (depreciable plant only) as claimed in the measures of value, in the following form: a. Year installed. b. Original cost - the total surviving cost associated with each installation year from all plant accounts.	9	4	109	4	Spanos

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
	c. Calculated depreciation reserve-the calculated depreciation reserve associated with each installation year from all plant accounts. d. Depreciated original cost - (Column B minus Column C). e. Total - cumulation year by year of the figures from Column D. f. Column E divided by the total of the figure in Column D.	9	4	109	4	Spanos
53.53.I.A.8	Provide a description of the trending methodology which was utilized. Identify all indexes which were used (include all backup workpapers) and all the reasons particular indexes were chosen. If indexes were spliced, indicate which years were utilized in any splices. if indexes were composite, show all supporting calculations, include any analysis made to "test" the applicability of any index.	8		108		Shultz
53.53.I.A.9	Provide an exhibit indicating the spot trended original cost at test year end by vintage by account and include applicable depreciation reserves. Include total by account for all other trended measures of value.	8		108		Shultz
53.53.I.A.10	Supply an exhibit indicating the percentages of Undepreciated original cost which were trended with the following indexes: a. Boeckh. b. Handy-Whitman. c. Indexes developed from suppliers' prices. d. Indexes developed from company records and company price histories. e. Construction equipment. f. Government statistical releases.	8		108		Shultz
53.53.I.A.11	Provide a table, showing the cumulative trended depreciated original cost (at the spot price level) by year installation for utility plant in service at the end of the test year (depreciable plant only) as claimed in the measures of value, in the following form: a. Year installed. b. Trended original cost (at the spot price level) - the total surviving cost associated with each installation year from all plant accounts. c. Trended calculated depreciation reserve - the calculated depreciation reserve associated with each installation year from all plant accounts. d. Depreciated trended original cost - (Column B minus Column C). e. Total-accumulation year by year of the figures from Column D. f. Column E divided by the total of the figures in Column D.	8		108		Shultz
53.53.I.A.12	If a claim is made for construction work in progress, include, in the form of an exhibit, the summary page from all work orders, amount expensed at the end of the test year and anticipated in-service dates. Indicate if any of the construction work in progress will result in insurance recoveries, reimbursements, or retirements of existing facilities. Describe in exact detail the necessity of each project claimed if not detailed on the summary page from the work order. Include final completion date and estimated total amounts to be spent on each project. [These exhibits should be updated at the conclusion of these proceedings.]	8		108		Shultz

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Historic Test Year Twelve Months Ended November 30, 2019 Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Schedule	Witness
53.53.I.A.13	If a claim is made for non-revenue producing construction work in progress, include, in the form of an exhibit, the summary page from all work orders, amount expensed at the end of the test year and anticipated in-service dates. Indicate if any of the construction work in progress will result in insurance recoveries, reimbursements, or retirements of existing facilities. Describe in exact detail the necessity of each project claimed if not detailed on the summary page from the work order. Include final completion date and estimated total amounts to be spent on each project. [These exhibits should be updated at the conclusion of these proceedings.]	8		108		Shultz
53.53.I.A.14	If a claim is made for plant held for future use, supply the following: a. A brief description of the plant or land site and its cost. b. Expected date of use for each item claimed. c. Explanation as to why it is necessary to acquire each item in advance of its date of use. d. Date when each item was acquired. e. Date when each item was placed in plant held for future use.	8		108		Shultz
53.53.I.A.15	If materials and supplies comprise part of the cash working capital claim, attach an exhibit showing the actual book balances for materials and supplies by month for the thirteen months prior to the end of the test year. Explain any abrupt changes in monthly balances. [Explain method of determining claim if other than that described above.]	8		108		Shultz
53.53.1.A.16	If fuel stocks comprise part of the cash working capital claim, provide an exhibit showing the actual book balances (quantity and price) for the fuel inventories by type of fuel for the thirteen months prior to the end of the test year by location, station, etc. [Explain the method of determining claim if other than that described above.]	8		108		Shultz
53.53.I.A.17	Regardless of whether a claim for net negative or positive salvage is made, attach an exhibit showing gross salvage, cost of removal, and net salvage for the test year and four previous years by account.	9	5	109	5	Spanos
53.53.I.A.18	Explain in detail by statement or exhibit the appropriateness of claiming any additional items, not previously mentioned, in the measures of value.	8		108		Shultz
53.53.I.C	**53.53.I VALUATION** **C. GAS UTILITIES**					
53.53.I.C.1	Provide, with respect to the scope of operations of the utility, a description of all property, including an explanation of the system's operation, and all plans for any significant future expansion, modification, or other alterations of facilities. This description should include, but not be limited to the following: a. If respondent has various gas service areas, indicate if they are integrated, such that the gas supply is available to all customers. b. Provide all pertinent data regarding company policy related to the addition of new consumers in the company's service area. c. Explain how respondent obtains its gas supply, as follows: (i) Explain how respondent stores or manufactures gas; if applicable. (ii) State whether the company has peak shaving facilities. (iii) Provide details of coal-gasification programs, if any. iv) Describe the potential for emergency purchases of gas. (v) Provide the amount of gas in MCF supplied by various suppliers in the test year (include a copy of all contracts).	17		117		Bell

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
	d. Provide plans for future gas supply, as follows: (i) Supply details of anticipated gas supply from respondent's near-term development of gas wells, if any. (ii) Provide gas supply agreements and well development ventures and identify the parties thereto. e. Indicate any anticipated curtailments and explain the reasons for the curtailments. f. Provide current data on any Federal Power Commission action or programs that may affect, or tend to affect, the natural gas supply to the gas utility.	17		117		Bell
53.53.I.C.2	Provide an overall system map, including and labeling all measuring and regulating stations, storage facilities, production facilities transmission and distribution mains, by size, and all interconnections with other utilities and pipelines.	15	2	115		Bardes Hasson
53.53.II.A	**53.53.II. RATE RETURN** **A. ALL UTILITIES**					
53.53.II.A.1	Provide capitalization and capitalization ratios for the last five-year period and projected through the next two years. (With short-tern debt and without short-term debt.) Company, Parent and System (consolidated)). a. Provide year-end interest coverages before and after taxes for the last three years and at latest date. (Indenture and SEC Bases.) (Company, Parent and System (consolidated)). b. Provide year-end preferred stock dividend coverages for last three years and at latest date (Charter and SEC bases).	401		401		Moul
53.53.II.A.2	Provide latest quarterly financial report (Company and Parent).	402		402		Moul
53.53.II.A.3	Provide latest Stockholder's Report (Company and Parent).	403		403		Moul
53.53.II.A.4	Provide latest Prospectus (Company and Parent).	404		404		Moul
53.53.II.A.5	Supply projected capital requirements and sources of Company, Parent and System (consolidated) for each of future three years.	405		405		Moul
53.53.II.A.6	Provide a schedule of debt and preferred stock of Company, Parent and System (Consolidated) as of test year-end and latest date, detailing for each issue (if applicable): a. Date of issue b. Date of maturity c. Amount issued d. Amount outstanding e. Amount retired f. Amount reacquired g. Gain on reacquisition h. Coupon rate i. Discount or premium at issuance j. Issuance expenses k. Net proceeds l. Sinking Fund requirements m. Effective interest rate n. Dividend rate o. Effective cost rate p. Total average weighted effective Cost Rate	406		406		Moul

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
53.53.II.A.7	Supply financial data of Company and/or Parent for last five years: a. Earnings-price ratio (average) b. Earnings-book value ratio (per share basis) (avg. book value) c. Dividend yield (average) d. Earnings per share (dollars) e. Dividends per share (dollars) f. Average book value per share yearly g. Average yearly market price per share (monthly high-low basis) h. Pre-tax funded debt interest coverage i. Post-tax funded debt interest coverage j. Market price-book value ratio	407		407		Moul
53.53.II.A.8	State amount of debt interest utilized for income tax calculations, and details of debt interest computations, under each of the following rate cases vases: a. Actual test year b. Annualized test year-end c. Proposed test year-end	7		107		Harding
53.53.II.A.9	State amount of debt interest utilized for income tax calculations which has been allocated from the debt interest of an affiliate, and details of the allocation, under each of the following rate cases vases: a. Actual test year b. Annualized test year-end c. Proposed test year-end	7		107		Harding
53.53.II.A.10	Under Section 1552 of the Internal Revenue Code and Regulations 1.1552-1 thereunder, if applicable, Parent Company, in filing a consolidated income tax return for the group, must choose one of four options by which it must allocate total income tax liability of the group to the participating members to determine each member's tax liability to the federal government. (If this interrogatory is not applicable, so state.) a. State what option has been chosen by the group. b. Provide, in summary form, the amount of tax liability that has been allocated to each of the participating members in the consolidated income tax return c. Provide a schedule, in summary form, of contributions, which were determined on the basis of separate tax return calculations, made by each of the participating members to the tax liability indicated in the consolidated group tax return. Provide total amounts of actual payments to the tax depository for the tax year, as computed on the basis of separate returns of members. d. Provide annual income tax return for group, and if income tax return shows net operating loss, provide details of amount of net operating loss allocated to the income tax returns of each of the members of the consolidated group.	7		107		Harding

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
53.53.II.A.11	Provide AFUDC charged by company at test year-end and latest date, and explain method by which rate was calculated.	408		408		Shultz
53.53.II.A.12	Set forth provisions of Company's and Parent's charter and indentures (if applicable) which describe coverage requirements, limits on proportions of types of capital outstanding, and restrictions on dividend payouts.	409		409		Moul
53.53.II.A.13	Attach copies of the summaries of the projected 2 year's Company's budgets (revenue, expense and capital).	13	2	113	2	Miller
53.53.II.A.14	Describe long-term debt reacquisition's by Company and Parent as follows: a. Reacquisition's by issue by year. b. Total gain on reacquisition's by issue by year. c. Accounting of gain for income tax and book purposes.	410		410		Moul
53.53.II.A.15	Set forth amount of compensating bank balances required under each of the following rate base bases: a. Annualized test year operations. b. Operations under proposed rates.	411		411		Moul
53.53.II.A.16	Provide the following information concerning compensating bank balance requirements for actual test year: a. Name of each bank. b. Address of each bank. c. Types of accounts with each bank (checking, savings, escrow, other services, etc.). d. Average Daily Balance in each account. e. Amount and percentage requirements for compensating bank balance at each bank. f. Average daily compensating bank balance at each bank. g. Documents from each bank explaining compensating bank balance requirements. h. Interest earned on each type of account.	411		411		Moul
53.53.II.A.17	Provide the following information concerning bank notes payable for actual test year: a. Line of Credit at each bank. b. Average daily balances of notes payable to each bank, by name of bank. c. interest rate charged on each bank note (Prime rate, formula rate or other). d. Purpose of each bank note (e.g., construction, fuel storage, working capital, debt retirement). e. Prospective future need for this type of financing	412		412		Moul
53.53.II.A.18	Set forth amount of total cash (all cash accounts) on hand from balance sheets for last 24-calendar months preceding test year-end.	1	3	101		Miller
53.53.II.A.19	Submit details on Company or Parent common stock offerings (past 5 years to present) as follows: a. Date of Prospectus b. Date of offering c. Record date d. Offering period-dates and number of days e. Amount and number of share of offering	413		413		Moul

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
	f. Offering ratio (if rights offering) g. Per cent subscribed h. Offering price i. Gross proceeds per share j. Expenses per share j. Net proceeds per share (i-j) l. Market price per share 1. At record date 2. At offering date 3. One month after close of offering m. Average market price during offering 1. Price per share 2. Rights per share-average value of rights n. Latest reported earnings per share at time of offering o. Latest reported dividends at time of offering	413		413		Moul
53.53.II.A.20	Provide latest available balance sheet and income statement for Company, Parent and System (consolidated).	414		414		Miller
53.53.II.A.21	Provide Original Cost, Trended Original Cost and Fair Value rate base claims.	8		108		Shultz
53.53.II.A.22	a. Provide Operating Income claims under: (i) Present rates (ii) Pro forma present rates (annualized & normalized) (iii) Proposed rates (annualized & normalized) b. Provide Rate of Return on Original Cost and Fair Value claims under: (i) Present rates (ii) Pro forma present rates (iii) Proposed rates	2	2	102	2	Miller
53.53.II.A.23	List details and sources of "Other Property and Investments," "Temporary Cash Investments and Working Funds on test year-end balance sheet.	1	4	101		Miller
53.53.II.A.24	Attach chart explaining Company's corporate relationship to its affiliates (System Structure).	15	3	115		Huwar
53.53.II.A.25	If the utility plans to make a formal claim for a specific allowable rate of return. Provide the following data in statement form: a. Claimed capitalization and capitalization ratios with supporting data. b. Claimed cost of long-term debt with supporting data. c. Claimed cost of short-term debt with supporting data. d. Claimed cost of total debt with supporting data. e. Claimed cost of preferred stock with supporting data f. Claimed cost of common equity with supporting data.	400		400		Moul
53.53.II.A.26	Provide the following income tax data: a. Consolidated income tax adjustments, if applicable. b. Interest for tax purposes (basis).	7		107		Harding
53.53.II.C	**53.53.II. RATE RETURN** **C. GAS UTILITIES**					
53.53.II.C.1	Provide test year monthly balances for "Current Gas Storage" and notes financing such storage.	1	5	101		Miller

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
53.53.III.A	**53.53.III. BALANCE SHEET AND OPERATING STATEMENT** **A ALL UTILITIES**					
53.53.III.A1	Provide a comparative balance sheet for the test year and the preceding year which corresponds with the test year date.	1	1	101		Miller
53.53.III.A2	Set forth the major items of Other Physical Property, Investments in Affiliated Companies and Other Investments.	1	6	101		Miller
53.53.III.A3	Supply the amounts and purpose of Special Cash Accounts of all types, such as: a. Interest and Dividend Special Deposits. b. Working Funds other than general operating cash accounts. c. Other special cash accounts and amounts (Temporary cash investments).	1	7	101		Miller
53.53.III.A4	Describe the nature and/or origin and amounts of notes receivable, accounts receivable from associated companies, and any other sign fact receivables, other than customer accounts, which appear on balance sheet.	1	8	101		Miller
53.53.III.A5	Provide the amount of accumulated reserve for uncollectible accounts, method and rate of accrual, amounts accrued, and amounts written-off in each of the last three years.	1	9	101		Miller
53.53.III.A6	Provide a list of prepayments and give an explanation of special prepayments.	1	10	101		Miller
53.53.III.A7	Explain in detail any other significant (in amount) current assets listed on balance sheet.	1	11	101		Miller
53.53.III.A8	Explain in detail, including the amount and purpose, the deferred asset accounts that currently operate to effect or will at a later date effect the operating account supplying: a. Origin of these accounts. b. Probable changes to this account in the near future. c. Amortization of these accounts currently charged to operations or to be charged in the near future. d. Method of determining yearly amortization for the following accounts: Temporary Facilities Miscellaneous Deferred Debits Research and Development Property Losses Any other deferred accounts that effect operating results.	1	12	101		Miller
53.53.III.A9	Explain the nature of accounts payable to associated companies, and note amounts of significant items.	1	13	101		Miller
53.53.III.A10	Provide details of other deferred credits as to their origin and disposition policy (e.g. - amortization).	1	14	101		Miller
53.53.III.A11	Supply basis for Injury and Damages reserve and amortization thereof.	1	15	101		Miller
53.53.III.A12	Provide details of any significant reserves, other than depreciation, bad debt, injury and damages, appearing on balance sheet.	1	16	101		Miller
53.53.III.A13	Provide an analysis of Unappropriated retained earnings for the test year and three preceding calendar years.	1	17	101		Miller
53.53.III.A14	Provide schedules and data in support of the following working capital items: a. Prepayments - List and identify all items b. Federal Excise Tax accrued and prepaid c. Federal Income Tax accrued or prepaid d. Pa. State Income Tax accrued or prepaid e. Pa. Gross Receipts Tax accrued or prepaid	8		108		Shultz

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
	f. Pa. Capital Stock Tax accrued or prepaid g. Pa. Public Utility Realty Tax accrued or prepaid h. State sales tax accrued or prepaid i. Payroll taxes accrued or prepaid j. Any adjustment related to the above items for ratemaking purposes.	8		108		Shultz
53.53.III.A15	Supply an exhibit supporting the claim for working capital requirement based on the lead-lag method. a. Pro forma expenses and revenues are to be used in lieu of book data for computing lead-lag days. b. Respondent must either include sales for resale and related expenses in revenues and in expenses or exclude from revenues and expenses. Explain procedures followed (exclude telephone).	8	4	108	4	Shultz
53.53.III.A16	Provide detailed calculations showing the derivation of the tax liability offset against gross cash working capital requirements.	8	4	108	4	Shultz
53.53.III.A17	Prepare a Statement of Income for the various time frames of the rate proceeding including: Col. 1-Book recorded statement for the test year. 2-Adjustments to book record to annualize and normalize under present rates. 3-Income statement under present rates after adjustment in Col. 2 4-Adjustment to Col. 3 for revenue increase requested. 5-Income statement under requested rates. a. Expenses may be summarized by the following expense classifications for purposes of this statement: Operating Expenses (by category) Depreciation Amortization Taxes, Other than Income Taxes Total Operating Expense Operating Income Before Taxes Federal Taxes State Taxes Deferred Federal Deferred State Income Tax Credits Other Credits Other Credits and Charges, etc. Total Income Taxes Net Utility Operating Income Other Income & Deductions Other Income Detailed listing of Other Income used in Tax Calculation Other Income Deduction Detailed Listing Taxes Applicable to Other Income and Deductions	2 2	3 4	102	3	Miller Miller

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
	Listing Income Before Interest Charges Listing of all types of Interest Charges and all amortization of Premiums and/or Discounts and expenses on Debt issues Total Interest Net Income After Interest Charges (Footnote each adjustment to the above statements with explanation in sufficient clarifying detail.)	2	3, 4			Miller
53.53.III.A18	Provide comparative operating statements for the test year and the immediately preceding 12 months showing increases and decreases between the two periods. These statements should supply detailed explanation of the causes of the major variances between the test year and preceding year by detailed account number.	2	5	102	4	Miller
53.53.III.A19	List extraordinary property losses as a separate item, not included in operating expenses or depreciation and amortization. Sufficient supporting data must be provided.	13	5	113	3	Miller
53.53.III.A20	Supply detailed calculations of amortization of rate case expense, including supporting data for outside services rendered. Provide the items comprising the rate case expense claim (include the actual billings or invoices in support of each kind of rate case expense), the items comprising the actual expenses of prior rate cases and the unamortized balances.	4	4	104	4	Miller
53.53.III.A21	Submit detailed computation of adjustments to operating expenses for salary, wage and fringe benefit increases (union and non-union merit, progression, promotion and general) granted during the test year and six months subsequent to the test year. Supply data showing for the test year: a. Actual payroll expense (regular and overtime separately) by categories of operating expenses. i.e. maintenance, operating transmission, distribution, other. b. Date, percentage increase, and annual amount of each general payroll increase during the test year. c. Dates and annual amounts of merit increases or management salary adjustments. d. Total annual payroll increases in the test year e. Proof that the actual payroll plus the increases equal the payroll expense claimed in the supporting data (by categories of expenses). f. Detailed list of employee benefits and cost thereof for union and non-union personnel. Any specific benefits for electives and officers should also be included, and cost thereof. g. Support the annualized pension cost figures (i) State whether these figures include any unfunded pension costs. Explain. (ii) Provide latest actuarial study used for determining pension accrual rates. h. Submit a schedule showing any deferred income and consultant fee to corporate officers or employees.	4	5	104	5	Miller
53.53.III.A22	Supply an exhibit showing an analysis, by functional accounts, of the charges by affiliates (Service Corporations, etc.) for services rendered included in the operating expenses of the filing company for the 12-month period ended prior to the test year. a. Supply a copy of contracts, if applicable. b. Explain the nature of the services provided. c. Explain basis on which charges are made. d. If charges allocated, identify allocation factors used.	4	11	104	9	Miller

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
	e. Supply the components and amounts comprising the expense in this account. f. Provide details of initial source of charge and reason thereof.					
53.53.III.A23	Describe costs relative to leasing equipment, computer rentals, and office space, including terms and conditions of the lease. State method for calculating monthly or annual payments.	4	12	104	9	Miller
53.53.III.A24	Submit detailed calculations (or best estimates) of the cost resulting from major storm damage.	4	13	104	9	Miller
53.53.III.A25	Submit details of expenditures for advertising (National and Institutional and Local media). Provide a schedule of advertising expense by major media categories for the test year and the prior two comparable years with respect to: a. Public health and safety b. Conservation of energy c. Explanation of Billing Practices. Rates, etc. d. Provision of factual and objective data programs in educational institutions e. Other advertising programs f. Total advertising expense	4	8	104	6	Miller
53.53.III.A26	Provide a list of reports, data, or statements requested by and submitted to the Commission during and subsequent to the test year.	14	1	114	1	Bardes Hasson
53.53.III.A27	Prepare a detailed schedule for the test year showing types of social and service organization memberships paid for by the Company and the cost thereof.	4	14	104	9	Miller
53.53.III.A28	Submit a schedule showing, by major components, the expenditures associated with Outside Services Employed, Regulatory Commission Expenses and Miscellaneous General Expenses, for the test year and prior two comparable years.	4	14	104	9	Miller
53.53.III.A29	Submit details of information covering research and development expenditures, including major projects within the company and forecasted company programs.	4	9	104	7	Miller Krajovic
53.53.III.A30	Provide a detailed schedule of all charitable and civic contributions by recipient and amount for the test year.	4	15	104	9	Miller
53.53.III.A31	Provide a detailed analysis of Special Services-Account 795.	4	14	104	9	Miller
53.53.III.A32	Provide a detailed analysis of Miscellaneous General Expense-Account No. 801.	4	14	104	9	Miller
53.53.III.A33	Provide a labor productivity schedule.	4	10	104	8	Miller
53.53.III.A34	List and explain all non-recurring abnormal or extraordinary expenses incurred in the test year which will not be present in future years.	4	16	104	9	Miller
53.53.III.A35	List and explain all expenses included in the test year which do not occur yearly but are of a nature that they do occur over an extended period of years. (e.g.,-Non-yearly maintenance programs, etc.) [Responses shall be submitted and identified as exhibits.}	4	16	104	9	Miller
53.53.III.A36	Using the adjusted year's expenses under present rates as a base, give detail necessary for clarification of all expense adjustments. Give clarifying detail for such adjustments that occur due to changes in accounting procedure, such as charging a particular expense to a different account than was used previously. Explain any extraordinary declines in expense due to such change of account use.	4	16	104	9	Miller

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Historic Test Year Twelve Months Ended November 30, 2019 Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Schedule	Witness
53.53.III.A37	Indicate the expenses that are recorded in the test year, which are due to the placement in operating service of major plant additions or the removal of major plant from operating service, and estimate the expense that will be incurred on a full-year's operation.	4	16	104	9	Miller
53.53.III.A38	Submit a statement of past and anticipated changes, since the previous rate case, in major accounting procedures.	4	16	104	9	Miller
53.53.III.A39	Identify the specific witness for all statements and schedules of revenues, expenses, taxes, property, valuation, etc.	13	3	113	3	Huwar
53.53.III.A40	Adjustments which are estimated shall be fully supported by basic information reasonably necessary.	13	4	113	3	Miller
53.53.III.A41	Submit a statement explaining the derivation of the amounts used for projecting future test year level of operations and submit appropriate schedules supporting the projected test year level of operations.	13	4	113	3	Miller
53.53.III.A42	If a company has separate operating divisions, an income statement must be shown for each division, plus an income statement for company as a whole.	2	6	102	5	Miller
53.53.III.A43	If a company's business extends into different states or jurisdictions, then statements must be shown listing Pennsylvania jurisdictional data, other state data and federal data separately and jointly (Balance sheets and operating accounts)	2	6	102	5	Miller
53.53.III.A44	Ratios, percentages, allocations and averages used in adjustments must be fully supported and identified as to source.	13	4	113	3	Miller
53.53.III.A45	Provide an explanation of any differences between the basis or procedure used in allocations of revenues, expenses, depreciation and taxes in the current rate case and that used in the prior rate case.	13	4	113	3	Miller
53.53.III.A46	Supply a copy of internal and independent audit reports of the test year and prior calendar year, noting any exceptions and recommendations and disposition thereof.	13	4	113	3	Miller
53.53.III.A47	Submit a schedule showing rate of return on facilities allocated to serve wholesale customers.	11		111		Notestone
53.53.III.A48	Provide a copy of the latest capital stock tax report and the latest capital stock tax settlement.	6	3	106	3	Harding
53.53.III.A49	Submit details of calculations for Taxes, Other than Income where a company is assessed taxes for doing business in another state, or on its property located in another state.	6	4	106	3	Harding
53.53.III.A50	Provide a schedule of federal and Pennsylvania taxes, other than income taxes, calculated on the basis of test year per books, pro forma at present rates, and pro forma at proposed rates, to include the following categories: a. social security b. unemployment c. capital stock d. public utility realty e. PUC assessment f. other property g. any other appropriate categories	6	2	106	2	Harding
53.53.III.A51	Submit a schedule showing for the last five years the income tax refunds, plus interest (net of taxes), received from the federal government due to prior years' claims.	7		107		Harding

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
53.53.III.A52	Provide detailed computations showing the deferred income taxes derived by using accelerated tax depreciation applicable to post-1969 utility property increases productive capacity, and ADR rates on property. (Separate between state and federal, also rate used).	7		107		Harding
	a. State whether tax depreciation is based on all rate base items claimed as of the end of the test year, and whether it is the annual tax depreciation at the end of the test year. b. Reconcile any difference between the deferred tax balance, as shown as a reduction to measures of value (rate base), and the deferred tax balance as shown on the balance sheet.	7		107		Harding
53.53.III.A53	Submit a schedule showing a breakdown of the deferred income taxes by state and federal per books, pro-forma existing rates, and under proposed rates.	7		107		Harding
53.53.III.A54	Submit a schedule showing a breakdown of accumulated investment tax (credits 3 percent, 4 percent, 7 percent, 10 percent and 11 percent), together with details of methods used to write-off the unamortized balances.	7		107		Harding
53.53.III.A55	Submit a schedule showing the adjustments for taxable net income per books (including below-the-line items) and pro-forma under existing rates, together with an explanation of any difference between the adjustments. Indicate charitable donations and contributions in the tax calculation for rate making purposes.	7		107		Harding
53.53.III.A56	Submit detailed calculations supporting taxable income before state and federal income taxes where the income tax is subject to allocation due to operations in another state, or due to operation of other taxable utility or non-utility business, or by operating divisions or areas.	7		107		Harding
53.53.III.A57	Submit detailed calculations showing the derivation of deferred income taxes for amortization of repair allowance if such policy is followed. [Note: Submit additional schedules if the company has more than one accounting area.]	7		107		Harding
53.53.III.A58	Furnish a breakdown of major items comprising prepaid and deferred income tax charges and other deferred income tax credits and reserves by accounting areas.	7		107		Harding
53.53.III.A59	Provide details of the Federal Surtax Credit allocated to the Pennsylvania jurisdictional area, if applicable.	7		107		Harding
53.53.III.A60	Explain the reason for the use of cost of removal of any retired plant figures in the income tax calculations.	7		107		Harding
53.53.III.A61	Submit the corresponding data applicable to Pennsylvania Corporate Income Tax deferment. a. Show the amounts of straight line tax depreciation and accelerated tax depreciation, the difference between which gave rise to the normalizing tax charged back to the test year operating statement. b. Show normalization for both Federal and State Income Taxes. c. Show tax rates used to calculate tax deferment amount.	7		107		Harding

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
53.53.III.A62	Provide the accelerated tax depreciation and the book depreciation used to calculate test year deferrals in amounts segregated as follows: For: a. Property installed prior to 1970. b. Property installed subsequent to 1969 (indicate increasing capacity additions and no increasing capacity additions).	7		107		Harding
53.53.III.A63	State whether all tax savings due to accelerated depreciation on property installed prior to 1970 have been passed through to income. (If not, explain).	7		107		Harding
53.53.III.A64	Show any income tax loss/gain carryovers from previous years that may effect test year income taxes or future year income taxes. Show loss/gain carryovers by years of origin and amounts remaining by years at the end of the test year.	7		107		Harding
53.53.III.A65	State whether the company eliminates any tax savings by the payment of actual interest on construction work in progress not in rate base claim. If response is affirmative: a. Set forth amount of construction claimed in this tax savings reduction. Explain the basis for this amount. b. Explain the manner in which the debt portion of this construction is determined for purposes of the deferral calculations. c. State the interest rate used to calculate interest on this construction debt portion, and the manner in which it is derived. d. Provide details of calculation to determine tax saving reduction. State whether state taxes are increased to reflect the construction interest elimination.	7		107		Harding
53.53.III.A66	Provide a detailed analysis of Taxes Accrued per books as of the test year date. Also supply the basis for the accrual and the amount of taxes accrued monthly.	7		107		Harding
53.53.III.A67	For the test year as recorded on test year operating statement: a. Supply the amount of federal income taxes actually paid. b. Supply the amount of the federal income tax normalizing charge to tax expense due to excess of accelerated tax depreciation over book depreciation. c. Supply the normalizing tax charge to federal income taxes for the 10% Job Development Credit during test year. d. Provide the amount of the credit of federal income taxes due to the amortization or normalizing yearly debit to the reserve for the 10% Job Development Credit. e. Provide the amount of the credit to federal income taxes for the normalizing of any 3% Investment Tax Credit Reserve that may remain on the utility books.	7		107		Harding
53.53.III.A68	Provide the debit and credit in the test year to the Deferred Taxes due to Accelerated Depreciation for federal income tax, and provide the debit and credit for the Job Development Credits (whatever account) for test year.	7		107		Harding

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
53.53.III.A69	Reconcile all data given in answers to questions on income taxes charged on the test year operating statement with regard to income taxes paid, income taxes charged because of normalization and credits due to yearly write-offs of past years' income tax deferrals, and from normalization of investment tax and development credits. (Both state and federal income taxes.)	7		107		Harding
53.53.III.A70	With respect to determination of income taxes, federal and state: a. Show income tax results of the annualizing and normalizing adjustments to the test year record before any rate increase. b. Show income taxes for the annualized and normalized test year. c. Show income tax effect of the rate increase requested. d. Show income taxes for the normalized and annualized test year after application of the full rate increase. [It is imperative that continuity exists between the income tax calculations as recorded for the test year and the final income tax calculation under proposed rates. If the company has more than one accounting area, then additional separate worksheets must be provided in addition to those for total company.]	7		107		Harding
53.53.III.A71	In adjusting the test year to an annualized year under present rates, explain any changes that may be due to book or tax depreciation change and to debits and credits to income tax expense due to accelerated depreciation, deferred taxes, job development credits, tax refunds or other items. (The above refers only the adjustments going from recorded test year to annualized test year).	7		107		Harding
53.53.III.E	**53.53.III.BALANCE SHEET AND OPERATING STATEMENT E. GAS UTILITIES**					
53.53.III.E.1	If Unrecovered Fuel Cost policy is implemented, provide the following: a. State manner in which amount of Unrecovered Fuel Cost on balance sheet at the end of the test year was determined, and the month in test year in which such fuel expense was actually incurred. Provide amount of adjustment made on the rate case operating account for test year-end unrecovered fuel cost. (If different than balance sheet amount, explain.) b. Provide amount of Unrecovered Fuel Cost that appeared on the balance sheet at the opening date of the test year, and the manner in which it was determined. State whether this amount is in the test year operating account..	1	18	101		Miller
53.53.III.E.2	Provide details of items and amounts comprising the accounting entries for Deferred Fuel Cost at the beginning and end of the test year.	1	18	101		Miller
53.53.III.E.3	Submit a schedule showing a reconciliation of test year MCF sales and line losses. List all amounts of gas purchased, manufactured and transported.	10	7	110	7	Bell
53.53.III.E.4	Provide detailed calculations substantiating the adjustment to revenues for annualization of changes in number of customers and annualization of changes in volume sold for all customers for the test year. a. Break down changes in number of customers by rate schedules. b. If an annualization adjustment for changes in customers and changes in volume sold is not submitted, please explain.	3		103		Bell
53.53.III.E.5	Submit a schedule showing the sources of gas supply associated with annualized MCF sales.	12	1	112	1	Bell

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
53.53.III.E.6	Supply, by classification. Operating Revenues - Miscellaneous for test year	3		103		Bell
53.53.III.E.7	Provide details of respondent's attempts to recover uncollectible and delinquent accounts.	16		116	1	Bell
53.53.III.E.8	Describe how the net billing and gross billing is determined. For example, if the net billing is based on the rate blocks plus FCA and STA, and the gross billing is determined by a percentage increase (1, 3, 5 percent), then state whether the percentage increase is being applied to all three items of revenue - rate blocks plus FCA and STA.	3		103		Bell
53.53.III.E.9	Describe the procedures involved in determining whether forfeited discounts or penalties are applied to customers billing.	3		103		Bell
53.53.III.E.10	Provide annualization of revenues as a result of rate changes occurring during the test year, at the level of operations as of end of the test year.	3		103		Bell
53.53.III.E.11	Provide a detailed billing analysis supporting present and proposed rates by customer classification and/or tariff rate schedule.	3		103		Bell
53.53.III.E.12	Provide a schedule showing residential and commercial heating sales by unit (MCF) per month and degree days for the test year and three preceding twelve month periods.	10	1	110	1	Bikienga
53.53.III.E.13	Provide a schedule of present and proposed tariff rates showing dollar change and percent of change by block. Also, provide an explanation of any change in block structure and the reasons therefore.	3		103		Bell
53.53.III.E.14	Provide the following statements and schedules. The schedules and statements for the test year portion should be reconciled with the summary operating statement. a. An operating revenues summary for the test year and the year preceding the test year showing the following (Gas MCF): (i) For each major classification of customers (a) MCF sales (b) Dollar Revenues (c) Forfeited Discounts (Total if not available by classification) (d) Other and Miscellaneous revenues that are to be taken into the utility operating account along with their related costs and expenses. (ii) A detailed explanation of all annualizing and normalizing adjustments showing method utilized and amounts and rates used in calculation to arrive at adjustment. (iii) Segregate, from recorded revenues from the test year, the amount of revenues that are contained therein, by appropriate revenue categories, from: (a) Fuel Adjustment Surcharge (b) State Tax Surcharge (c) Any other surcharge being used to collect revenues. (d) Provide explanations if any of the surcharges are not applicable to respondent's operations. [The schedule should also show number of customers and unit of sales (Mcf), and should provide number of customers by service classification at beginning and end of test year.]	3		103		Bell

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
	b. Provide details of sales for resale, based on periods five years before and projections for five years after the test year, and for the test year. List customers, Mcf sold, revenues received, source of Mcf sold (storage gas, pipeline gas, manufactured gas, natural or synthetic), contracted or spot sales, whether sales are to affiliated companies, and any other pertinent information.	3		103		Bell
53.53.III.E.15	State manner in which revenues are being presented for ratemaking purposes: a. Accrued Revenues b. Billed Revenues c. Cash Revenues Provide details of the method followed.	3		103		Bell
53.53.III.E.16	If revenue accruing entries are made on the books at end of each fiscal period, give entries made accordingly at the end of the test year and at the beginning of the year. State whether they are reversed for ratemaking purposes.	2	7	102	6	Miller
53.53.III.E.17	State whether any adjustments have been made to expenses in order to present such expenses on a basis comparable to the manner in which revenues are presented in this proceeding (i.e.- accrued, billed or cash).	4	1	104	1	Miller Miller/ Krajovic
53.53.III.E.18	If the utility has a Fuel Adjustment Clause: a. State the base fuel cost per MCF chargeable against basic customers' rates during the test year. If there was any change in this basic fuel charge during the test year, give details and explanation thereof. b. State the amount in which the fuel adjustment clause cost per MCF exceeds the fuel cost per MCF charged in base rates at the end of the test year. c. If fuel cost deferment is used at the end of the test year, give (i) The amount of deferred fuel cost contained in the operating statement that was deferred from the 12-month operating period immediately preceding the test year. (ii) The amount of deferred fuel cost that was removed from the test period and deferred to the period immediately following the test year. d. State the amount of Fuel Adjustment Clause revenues credited to the test year operating account. e. State the amount of fuel cost charged to the operating expense account in the test year which is the basis of Fuel Adjustment Clause billings to customers in that year. Provide summary details of this charge f. From the recorded test year operating account, remove the Fuel Adjustment Clause Revenues. Also remove from the test year recorded operating account the excess of fuel cost over base rate fuel charges, which is the basis for the Fuel Adjustment charges. Explain any differences between FAC Revenues and excess fuel costs. [The above is intended to limit the operating account to existing customers' base rate revenues and expense deductions relative thereto].	12	2	112	2	Bell
53.53.III.E.19	Provide growth patterns of usage and customer numbers per rate class, using historical and projected data.	10	2	110	2	Bikienga
53.53.III.E.20	Provide, for test year only, a schedule by tariff rates and by service classifications showing proposed increase and percent of increase.	3		103		Bell

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Historic Test Year Twelve Months Ended November 30, 2019 Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Schedule	Witness
53.53.III.E.21	If a gas company is affiliated with another utility segment, such as a water or electric segment, explain the effects, if any, upon allocation factors used in the gas rate filing of current or recent rate increases allowed to the other utility segment (or segments) of the company.	2	8	102	7	Miller
53.53.III.E.22	Provide supporting data detailing curtailment adjustments, procedures and policies.	10	3	110	3	Bell
53.53.III.E.23	Submit a schedule showing fuel cost in excess of base compared to fuel cost recovery for the period two months prior to test year and the test year	12	3	112	2	Bell
53.53.III.E.24	Supply a detailed analysis of Purchased Gas for the test year and the twelve month period prior to the test year.	12	4	112	2	Bell
53.53.III.E.25	Submit calculations supporting energy cost per MCF and operating ratio used to determine increase in costs other than production to serve additional load.	12	4	112	2	Bell
53.53.III.E.26	Submit detailed calculations for bulk gas transmission service costs under supply and/or interconnection agreements.	12	4	112	2	Bell
53.53.III.E.27	Submit a schedule for gas producing units retired or scheduled for retirement subsequent to the test year showing station, units, MCF capacity, hours of operation during test year, net output produced and cents/MCF of maintenance and fuel expenses.	13	6	113	4	Bell
53.53.III.E.28	Provide a statement explaining the details of firm gas purchase (long-term) contracts with affiliated and nonaffiliated utilities, including determination of costs, terms of contract, and other pertinent information.	17		117		Bell
53.53.III.E.29	Provide intrastate operations percentages by expense categories for two years prior to the test year.	4	17	104	9	Miller
53.53.III.E.30	Provide a schedule showing suppliers, MCF purchased, cost (small purchases from independent suppliers may be grouped); emergency purchases, listing same information; curtailments during the year; gas put into and taken out of storage; line loss, and any other gas input or output not in the ordinary course of business.	12	4	112	2	Bell
53.53.III.E.31	Provide a schedule showing the determination of the fuel costs included in the base cost of fuel.	12	5	112	2	Bell
53.53.III.E.32	Provide a schedule showing the calculation of any deferred fuel costs shown in Account 174. Also, explain the accounting, with supporting detail, for any associated income taxes.	1	19	101		Miller
53.53.III.E.33	Submit a schedule showing maintenance expenses, gross plant and the relation of maintenance expenses thereto as follows. (i) Gas Production Maintenance Expenses per MCF production, per $1,000 MCF production, and per $1,000 of Gross Production Plant; (ii) Transmission Maintenance Expenses per MMCF mile and per $1,000 of Gross Transmission Plant; (iii) Distribution Maintenance Expenses per customer and per $1,000 of Gross Distribution Plant; (iv) Storage Maintenance Expenses per MMCF of Storage Capacity and per $1,000 of Gross Storage Plant. This schedule shall include three years prior to the test year, the test year and one year's projection beyond the test year.	4	18	104	9	Miller
53.53.III.E.34	Prepare a 3-column schedule of expenses, as described below for the following periods (supply sub-accounts, if significant, to clarify basic accounts): a. Column 1 - Test Year b. Column 2 and 3 - The two previous years	4	3 19	104	3	Miller

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
	Provide the annual recorded expense by accounts. (Identify all accounts used but not specifically listed below.)					
53.53.III.E.35	Submit a schedule showing the Gross Receipts Tax Base used in computing Pennsylvania Gross Receipts Tax Adjustment.	6	1	106	1	Harding
53.53.III.E.36	State the amount of gas, in MCF, obtained through various suppliers in past years.	12	4	112	2	Bell
53.53.III.E.37	In determining pro forma expense, exclude cost of gas adjustments applicable to fuel adjustment clause and exclude fuel adjustment clause revenues, so that the operating statement is on the basis of base rates only.	3		103		Bell
53.53.III.E.38	Identify company's policy with respect to replacing customers lost through attrition.	10	4	110	4	Bardes Hasson
53.53.III.E.39	Identify procedures developed to govern relationship between the respondent and potential customers - i.e., basically expansion, alternate energy requirements, availability of supply, availability of distribution facilities, ownership of metering and related facilities.	10	4	110	4	Bardes Hasson
53.53.IV.B	**53.53.IV. RATE STRUCTURE** **B. GAS UTILITIES** Each gas utility shall submit the following simultaneously with any rate increase filing:					
53.53.IV.B.1	Provide a Cost of Service Study showing the rate of return under the present and proposed tariffs for all customer classifications. The study should include a summary of the allocated measures of value, operating revenues, operating expenses and net return for each of the customer classifications at original cost and at the 5-year trended original cost.	11		111	1 - 3	Notestone
53.53.IV.B.2	Provide a statement of testimony describing the complete methodology of the cost of service study.	11		111		Notestone
53.53.IV.B.3	Provide a complete description and back-up calculations for all allocation factors.	11		111	4	Notestone
53.53.IV.B.4	Provide an exhibit for each customer classification showing the following data for the test year and the four previous years: a. The maximum coincident peak day demand. b. The maximum coincident 3-day peak day demand. c. The average monthly consumption in Mcf during the Primary Heating Season (November-March). d. The average monthly consumption in Mcf during the Non-heating season (April-October). e. The average daily consumption in Mcf for each 12-month period	10	5	110	5	Bell
53.53.IV.B.5	Submit a Bill Frequency Analysis for each rate. The analysis should include the rate schedule and block interval, the number of bills at each interval, the cumulative number of bills at each interval, the Mcf or therms at each interval, the cumulative Mcf or therms at each interval, the accumulation of Mcf or therms passing through each interval, and the revenue at each interval for both the present rate and the proposed rates. The analysis should show only those revenues collected from the basic tariff	11		111		Bell
53.53.IV.B.6	Supply copies of all present and proposed Gas Tariffs.	14	2	114	1	Bardes Hasson
53.53.IV.B.7	Supply a graph of present and proposed base rates on hyperbolic cross section paper.	11		111	5	Bell

Columbia Gas of Pennsylvania, Inc.
R-2020-3018835
Referenced by Commission Regulations

Commission Regulation Number	Commission Regulation	Historic Test Year Twelve Months Ended November 30, 2019 Exhibit	Schedule	Fully Projected Future Test Year Twelve Months Ended December 31, 2021 Exhibit	Schedule	Witness
53.53.IV.B.8	Supply a map showing the Gas System Facilities and Gas Service Areas. The map should include transmission lines, distribution lines, other companies' lines interconnecting with the interconnecting points clearly designated, major compressor stations, gas storage and gas storage lines. The normal direction of gas flow within the transmission system should be indicated by arrows. Separate service areas within the system should be clearly designated.	15	2	115		Bardes Hasson
53.53.IV.B.9	Supply a cost analysis supporting minimum charges for all rate schedules.	11		111	2 - 3	Notestone
53.53.IV.B.10	Supply a cost analysis supporting demand charges for all tariffs which contain demand charges.	11		111		Notestone
53.53.IV.B.11	Supply the net fuel clause adjustment by month for the test year.	12	6	112	2	Bell
53.53.IV.B.12	Supply a tabulation of base rate bills for each rate schedule comparing the existing rates to proposed rates. The tabulation should show the dollar difference and the per cent increase or decrease.	11		111	6	Bell
53.53.IV.B.13	Submit the projected demands for all customer classes for both purchased and produced gas for the three years following the test year filing.	10	6	110	6	Bikienga
53.53.IV.B.14	Supply an exhibit showing the gas deliveries to each customer class for the most recent 24 month period. The exhibit should identify the source of the gas, such as "purchased" (pipeline), "production" (include purchases from local producers), "storage withdrawal", "propane/air", and "unaccounted for".	10	7	110	7	Bell
53.62	**53.62 RECOVERY OF FUEL COSTS BY GAS UTILITIES** In addition to information otherwise required to be filed by a jurisdictional natural gas distributor with gross intrastate annual operating revenues in excess of $40 million seeking a change in its base rates, each gas utility must also file updates to the information required by &53.64(c) (relating to filing requirements for natural gas distributors with gross intrastate annual operating revenues in excess of $40 million). In the case of a utility purchasing gas as defined at &53..61 (a) (relating to purpose) from an affiliated interest, it shall also file updates to the information required at &53.65 (relating to special provisions relating to natural gas distributors with gross interstate annual operating revenues in excess of $40 million with affiliated interests). These updates shall be made at the time the base rate case under 66 Pa.C.S. 1308 (relating to voluntary changes in rates) is originally filed. Deficiencies in filing will be treated as set forth at &53.51 (c) (relating to general).					
	Weather Normalization Adjustment	10	8	110	8	Bikienga
	Volumetric Portion of Load Growth Adjustment	10	9	110	9	Bikienga
	Estimated Number of Bills and Normalized Sales Volumes	10	9	110	9	Bikienga
	Future Test Year Sales Forecast	10	9	110	10	Bikienga
	Adjustment to Purchase Gas Expense	12	7	112	3	Bell
	Recovery of Fuel Costs by Gas Utilities (1307-F)	12	8	112	4	Bell

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

40. Adjustments which are estimated shall be fully supported by basic information reasonably necessary.

Response: All adjustments made were based on annualizing and normalizing the 12 months ended November 30, 2019. The derivation and support behind the adjustments are shown on the following exhibits:

Exhibit No. 2	Income Statement
Exhibit No. 3	Revenues
Exhibit No. 4	Expenses
Exhibit No. 5	Depreciation
Exhibit No. 6	Taxes Other Than Income Taxes
Exhibit No. 7	Income Taxes
Exhibit No. 8	Measures of Value

41. Submit a statement explaining the derivation of the amounts used for projecting future test year level of operations and submit appropriate schedules supporting the projected test year level of operations.

Response: Exhibits explaining the derivation of the amounts used for projecting a future test year (12 months ending November 30, 2020) and a fully projected future test year (12 months ended December 31, 2021) are:

Exhibit No. 102	Income Statement
Exhibit No. 103	Revenues
Exhibit No. 104	Expenses
Exhibit No. 105	Depreciation
Exhibit No. 106	Taxes Other Than Income Taxes
Exhibit No. 107	Income Taxes
Exhibit No. 108	Measures of Value

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

44. Ratios, percentages, allocations and averages used in adjustments must be fully supported and identified as to source.

Response: When allocation factors are used, they are identified on the appropriate exhibit.

45. Provide an explanation of any differences between the basis or procedure used in allocations of revenues, expenses, depreciation and taxes in the current rate case and that used in the prior rate case.

Response: There are no differences.

46. Supply a copy of internal and independent audit reports of the test year and prior calendar year, noting any exceptions and recommendations and disposition thereof.

Response: Please see Exhibit 13, Schedule 4 Attachment A for copies of internal audits. There were no independent audit reports performed specifically for Columbia Gas of Pennsylvania during the test year and prior calendar year.

Columbia Gas of Pennsylvania
Internal Audit Report Listing
For the 2 Year Period Ending November 30, 2019

No.	Date of Report	Audit
1	12/19/17	2017 Regulatory Order Implementation Review
2	01/09/18	Point of Delivery Follow-up
3	01/18/18	Change Management Process Audit
4	01/25/18	Critical Valve Finding Follow Up Audit
5	01/29/18	NiSource Corporate Ethics Audit
6	02/14/18	Operator Qualification Audit Finding Follow Up
7	03/06/18	NiSource IT Service Provider Transition - Closure Review
8	04/16/18	NiSource Corp Services Company Cost Allocation Audit
9	04/26/18	Corporate Credit Cards Expense Review & Analytics (2017 Annual Period)
10	06/06/18	NGD Capitol Cost Data Analysis
11	06/06/18	NiSource 2017 Integrated Sustainability Agreed Upon Procedures
12	07/06/18	Transmission Integrity Management Program (TIMP)
13	07/06/18	2017 NiSource Political Contributions
14	07/09/18	2018 Leak Remediation Review - Columbia Gas Companies
15	07/30/18	PowerPlant Upgrade SDLC (Design & Build Phases)
16	07/30/18	IT Steady State Execution (Phase 1)
17	07/31/18	Pension Trust and Benefits Review
18	08/29/18	NiSource Incentive Plans
19	10/08/18	Operating Earnings Adjustment - Weather Calculation
20	12/13/18	Customer Communication Consultative Memo
21	01/08/19	PowerPlant Upgrade SDLC (Test & Deploy Phases)
22	02/13/19	NiSource Capitalization Audit
23	03/06/19	Inside and Inaccessible Meter and Pipeline Inspection Follow-Up - CKY, CVA, CPA, and CMD
24	03/11/19	2018 Abnormal Operating Conditions (AOC) - Columbia Gas of Pennsylvanie & Maryland
25	03/11/19	Meter Barrier Protection - NGD
26	03/12/19	Procure-To-Pay SDLC - Core Release 1 (Design & Build Phases)
27	05/06/19	NiSource Corporate Services Company Cost Allocation Audit
28	06/19/19	Corporate Credit Cards Expense Review & Analytics (2018 Annual Report)
29	09/25/19	Abandonment of Service Line Facilities
30	10/08/19	Robotics Process Automation (RPA) Design
31	09/30/19	Columbia Low Pressure System Safety Enhancements (Attorney-Client Privilege) [1]
32	09/20/19	2018 Pension Trust & Benefits
33	09/20/19	Privileged & Confidential - NTSB Report [1]
34	09/11/19	2019 Disaster Recovery

[1] This report is protected by attorney-client privilege and therefore unavailable for disclosure.

2017 Regulatory Order Implementation Review

December 19, 2017

To: Mark Balmert, Director Regulatory
James Racher, Director Regulatory
Paula Strauss, Director Regulatory

From: Linda Black, Senior Internal Auditor
Jaclyn Callahan, Manager Internal Audit
Ryan Binkley, Director Internal Audit

NiSource®

Executive Summary

Internal Audit conducted a review of the processes and controls associated with the implementation of rate case orders issued by state commissions ("Commission Orders") to all NiSource Gas companies for the audit period of January 1, 2016 through December 31, 2016.*

Note: NIPSCO Gas and Columbia Gas of Ohio did not have Rate Case Orders during the period noted above.

The purpose of this audit is to assess overall compliance with the requirements outlined in Commission Order(s), with a focus on those requirements which impact customer rates or field operations. This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided to NiSource Management. Internal Audit would like to thank Regulatory Strategy & Support and the State Regulatory for their cooperation and time in support of this audit.

Summary Conclusions:

Internal Audit reviewed each Commission Order to identify the requirements of the related NiSource company and selected **18** requirements for further testing. The table below represents the breakdown of selections by each Company:

Selections	
CKY	4
CMD	4
CPA	5
CVA	2
CMA	3
TOTAL	**18**

Internal Audit worked with the State Regulatory teams to identify the owners for each of the 18 selections and obtained the necessary support to validate that all 18 of the requirements were implemented in accordance with the language in the related State Commission Order. (See **Appendix B** for language from the Commission Order requirements selected.)

*Columbia Gas of Massachusetts (CMA) rate case order (DPU15-50) was issued on October 7, 2015. As a result of the DPU15-50 Order, the "Step Adjustment" was "stamped approved" on October 31, 2016, from the Department of Public Utilities. As such, the "Step Adjustment" was included in Internal Audit's selection population.

Background

A rate case is a legal proceeding by which a utility sets rates to recover its cost of delivering gas to the customer. It is also the main vehicle a utility has available to propose changes to its tariffs that set the terms of service. The rate case process is lengthy resulting in either a settlement agreement by the intervening parties or through litigation to produce a hearing examiner's report and a final order by the state public utility commission.

1. **Filing:** (File) - A term commonly used to describe both the process of submitting a document to a court, and sometimes the term is a reference to the document itself.
2. **Testimony:** Evidence of a witness; evidence given by a witness, under oath or affirmation; as distinguished from evidence derived from writings, and other sources.
3. **Rebuttal Testimony:** Testimony that attempts to show the evidence that was presented by an opposing party is not accurate or true.
4. **Stipulation:** An agreement between the parties in a legal action. Some stipulations are oral, but the courts and administrative agencies often require that stipulations be put in writing, signed and filed with the tribunal.
5. **Settlement:** Another word for Stipulation.
6. **Order: (Internal Audit made the selections from the Order)** In civil proceedings, every direction or mandate of a judge or a court which is not a judgment or legal opinion (although both may include an order) directing that something be done or that there is prohibition against some act. In administrative proceedings an order is usually the final opinion of the agency.
7. **Compliance Filing:** The docketing or filing of a document in order to satisfy a mandate from a court or administrative agency.

Audit Scope and Approach

Internal Audit will perform a review of the processes and controls associated with the implementation of regulatory rate case orders issued by state commissions ("Commission Orders") to all NiSource Gas companies for the audit period of January 1, 2016 through December 31, 2016.

Note: NIPSCO Gas and Columbia Gas of Ohio did not have Rate Case Orders during the period noted above.

Objective 1: Determine whether requirements have been implemented in accordance with Commission Orders.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Select a sample (**18**) of requirements included within Orders issued during the audit period of January 1, 2016 through December 31, 2016, including a focus on those which impact customer rates or operational execution, and determine whether selected requirements have been implemented in accordance with Commission Orders.	**No Findings Noted.**

Report Distribution

CC:

J. Hamrock
D.E. Brown
P.T. Disser
M.J. Finissi
C.J. Hightman
M. Kempic
C.W. Levander
V. Sistovaris
S.K. Surface
P.A. Vegas

J.M. Konold
R.P. Cencini
J.M. Cooper
A.D. Lanier
S.D. Larsen
N.M. Paloney
T.L. Tucker
Deloitte & Touche

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*

Appendix B

Co.	Rate Case Order(s)
CKY	An increase to base rates in the amount of $13,086,000 reflecting adjustments to customer charges associated with Columbia Gas of Kentucky's various rate schedules as well as to volumetric rates.
CKY	AMRP recovery is now included in base rates rather than a separate surcharge until subsequent AMRP filings. Per the tariff, an annual balancing adjustment (BA) filing to true-up for actual 2016 expenditures will be made by March 31, 2017 to be effective on May 31, 2017 (Unit 1 June). An annual AMRP filing to recover projected expenditures for calendar year 2018 will be made by October 15, 2017 to be effective on January 2, 2018 (Unit 1 January). A BA true-up filing for 2017 expenditures is not anticipated since AMRP costs for 2017 are being recovered through base rates. For purpose of AMRP, Columbia Gas of Kentucky specified ROE will be 9.5%. A WACC of 7.62% will be used to calculate AMRP rates further grossed up for federal and state taxes.
CKY	Effective in January 2017 business, Columbia Gas of Kentucky will change depreciation rates developed in the rate case by an outside consultant which reflect the ASL (Average Service Life) methodology. (Refer to Attachment A for depreciation rates effective January 1, 2017 and prior rates.)
CKY	The uncollectible charge-off factor will change from 0.00568963 to 0.00923329.
CMD	This rate case filing included an additional $194,985 of costs related to remediation of the Hagerstown Service Center site to be amortized over a ten (10) year period. The case requested return on (Rate Base treatment) and return of (amortization) of these costs in a similar manner as approved in the last three Columbia Gas of Maryland Rate Case and Make Whole filings (Case No. 9316, 9354 and 9390).
CMD	Columbia Gas of Maryland will implement a program to reimburse developers of residential buildings with four or more individually-metered units for the cost of installing house piping up to the positive net present value of the new load.

Appendix B (cont'd)

Co.	Rate Case Order(s)
CMD	Columbia Gas of Maryland will implement rates effective October 27, 2016.
CMD	Effective November 2016, CMD will begin to implement main and service line extension programs to provide 100 feet of main line and 150 feet of service line to new heating customers.
CPA	The Merchant Function Charge (MFC) shall be 1.52% for the residential customers and 0.37% for non-residential customers. These are the charges as filed by Columbia Gas of Pennsylvania . The revised MFC rates shall be reflected in the Purchase of Receivables (POR) discount rates.
CPA	Columbia Gas of Pennsylvania will implement rates effective December 19, 2016.
CPA	Customers will not be charged separate processing fees for bill payments using third party debit card, credit card, Automated Clearinghouse (ACH) or walk-in locations. All processing fees will be considered "above -the-line" for ratemaking purposes. Parties reserve their rights to challenge in a future base rate proceeding the recovery of processing fees through rates, and Columbia reserves the right in response to cease payment of such third-party costs.
CPA	Columbia Gas of Pennsylvania agrees to extend its Third Party Notification Program to include all Customer Assistance Program (CAP) reminder notices, including notices of Potential CAP removal such as income verification requests. Additionally, Columbia agrees to make Third Party Notification forms available at local Community Based Organizations (CBO), and will encourage CBOs to include Third Party Notification forms in processing other assistance. Customers should be informed that completion of a Third Party Notification form is completely voluntary.
CPA	Columbia's Large Customer Incentive (LCI) proposal is approved with the following modification: customers participating in the program will be required to pay 30% of the uneconomic portion upfront or have a repayment period that does not exceed ten (10) years. Columbia agrees to provide the following information related to Columbia's LCI proposal, as applicable: (a) Main and service investment per project; (b) Net Present Value (NPV) model results for each project, inclusive of the main and service allowances; (c) Required LCI deposit by project; (d) Number of customers connected by each project and number of subsequent connections; (e) Annual non-gas revenues received by project separated into base rate and LCI repayment revenues (principal and interest stated separately); (f) Annual usage by project; (g) Average investment cost per customer by project; and (h) Number of new service requests for projects in which the NPV model is run, but the project does not proceed to construction.

Appendix B (cont'd)

Co.	Rate Case Order(s)
CVA	The Company will refund, with interest and pursuant to such terms and conditions as specified by the Commission, the revenues collected under the interim rates implemented effective for the first billing unit of October 2016 that are in excess of the level agreed to herein. The refund must be made within 90 days of the issuance of the final order. Interest upon the ordered refunds shall be computed from the date payments of monthly bills were due to the date each refund is made at the average prime rate for each calendar quarter, compounded quarterly, using the average prime rate values published in the Federal Reserve Bulletin or in the Federal Reserve's Selected Interest Rates (Statistical Release H. 15) for the 3 months of the preceding calendar quarter. The refunds ordered herein may be credited to the current customers' accounts. Refunds to former customers shall be mailed by check to the last known address of such customers when the refund amount is $1 or more. CVA may offset the credit or refund to the extent of any undisputed outstanding balance for the current or former customer. No offset shall be permitted against any disputed portion of an outstanding balance. CVA may retain refunds to former customers when such refund is less than $1; however, such refunds shall be promptly made upon request. All unclaimed refunds shall be subject to 55-210.6:2 of the Code. Within 60 days of completing the ordered refunds, CVA shall deliver to the Commission's Divisions of Energy Regulation and Utility Accounting and Finance a report showing that all refunds have been made pursuant to the Final Order and detailing the costs incurred in effecting such refunds and the accounts charged. CVA must bear all costs incurred in making the refunds.
CVA	The increase in the Company's jurisdictional non-gas base revenue requirement will be $28.5 million.
CMA	Bay State Gas Company d/b/a Columbia Gas of Massachusetts shall provide capacity-eligible transportation customers with their proportionate share of the pipeline refund it received pursuant to the Federal Energy Regulatory Commission's decision in Portland Natural Gas Transmission System, Docket No. RP10-729-001 , Opinion No. 524-A (2015); and it is FUTHER ORDERED: That Bay State Gas Company d/b/a Columbia Gas of Massachusetts shall file with the Department of Public Utilities within thirty (30) days of the date of this Order its proposed refund method to transportation customers, along with the incremental costs associated with the return of the refund; and it is FUTHER ORDERED: That Bay State Gas Company d/b/a Columbia Gas of Massachusetts shall comply with all other directives contained in this Order. (D.P.U. 15-171).
CMA	Columbia Gas of Massachusetts to implement new rates effective November 1, 2016.
CMA	The November 1, 2016 "Step Adjustment" is an element of the rate settlement entered into by the Company, the Attorney General of Massachusetts ("AGO") and the Low-Income Weatherization and Fuel Assistance Program Network (the "Network") (together, the "Settling Parties", as approved by the Department of Public Utilities (the "Department") in Columbia Gas of Massachusetts, D.P.U. 15-50 (2015) (the "Settlement")). Section 1.3 of the Settlement provided for an additional increase to base revenues of $3.6 million, over and above the level of base revenues allowed effective November 1, 2015.

NiSource
Internal Audit
Professionalism ▪ Integrity ▪ Objectivity

January 9, 2018

To : Don Eckstein, Senior VP of Gas Operations

From: Natalie Ladd, Lead Internal Auditor
Sal Alshuqairi, Manager of Internal Audit
Lin Koh, Director of Internal Audit

Dear Don,

Internal Audit performed a follow-up review over the Columbia Companies Point of Delivery Audit findings issued in 2016. The review included an assessment of the progress made over management responses described in the findings. The following five findings were reviewed during this follow-up:

1. The Gas Standards related to Regulator Stations do not consistently specify the types of records required.
2. There are no procedures in place that establish a formal ongoing compliance auditing process.
3. We identified instances of duplicate company premise IDs in WMS.
4. An evaluation was not performed over the completeness of asset records received for transferred POD stations.
5. The designation of Critical Valves needs finalization in Kentucky.

The objective of this review was to review the management responses provided and assess if progress has been made for each item. Our follow-up results are noted below:

Finding 1: The Gas Standards related to Regulator Stations do not consistently specify the types of records required. (Target Completion Date 12/31/2017).

Finding Status: *Item has been completed.*

Internal Audit recommended evaluating and establishing a system of records for tracking compliance and maintenance activities and assess whether the current system captures all essential regulator station activity consistently.

Based on our follow up review, the Work Management System (WMS) is the system of records for work, including compliance activities, for regulator stations. Management has established new controls in WMS to ensure that all facilities at a POD must map to a function (regulation, measurement, etc.) and a premise ID. The individuals who execute the work (i.e. inspections, pressure testing) are responsible for documenting their work in WMS. When a new POD station is built, certain required fields exist within WMS to capture essential information, such as inlet type, inlet size, valve pressure, etc. Internal Audit walked through the creation of a new POD in WMS and noted these required fields. In addition, for any paper records associated with a POD station, management has created a central electronic depository, WMS Docs, in Q4 2016.

Short of replacing the WMS system, which is a company-wide decision outside the scope of this audit, the existing WMS has controls in place to ensure appropriate documentation is captured for any newly created POD stations going forward.

Finding 2: There are no procedures in place that establish a formal ongoing compliance auditing process. (Target Completion Date 12/31/2017).

Finding Status: *Item has been completed.*

Internal Audit recommended establishing a formal process for auditing ongoing compliance with required inspection, maintenance, and data capture requirements at M&R stations and establishing consistent reporting practices and data capture to ensure adequate oversight over POD compliance activities.

Based on our follow up review, the Work Management System (WMS) is the system of records for work, including compliance activities, on regulator stations. The individuals who schedule and manage the execution of the work (Integration Center and operations employees) actively monitor compliance activities in real-time on a day-to-day basis, with the support and guidance of the Compliance function. There are multiple layers of reporting and monitoring activities performed by the Integration Center, which Internal Audit walked through. In addition, Distribution Integrity has an auditing function where certain integrity related activities are audited and reviewed.

Given the dynamic reviews taking place within the IC, the auditing function of Distribution Integrity, and the supporting function provided by the Compliance function, compliance activities appear to be monitored on an ongoing basis.

Finding 3: We identified instances of duplicate company premise IDs in WMS (Target Completion Date 12/31/2017).

Finding Status: *Item has been completed.*

Internal Audit recommended performing a review over the 32 company premise IDs with no facilities in WMS and any duplicates should be removed from WMS to eliminate redundancy. For any premise IDs that are not duplicates, the appropriate facilities and scheduled compliance work should be verified in WMS.

Internal Audit detail tested the 32 company premise IDs and noted that appropriate action was taken by management to either 1) retire the company premise ID or 2) create facilities with required scheduled compliance repetitive tasks.

Finding 4: An evaluation was not performed over the completeness of asset records received for transferred POD stations (Target Completion Date 12/31/2017).

Finding Status: *Item has been completed.*

Internal Audit recommended performing an inventory over the records for the PODs transferred from TCO to Columbia to reach a thorough understanding on what presently exists for each POD.

A project is currently in place to assess the records at all above ground regulator (POD) stations, including those acquired from TCO (Columbia Pipeline Group). The review process includes an inventory of records available and a calculation of MAOP given the available records. Internal Audit discussed the process with management and obtained the Station Review Status Report noting the most progress in CVA and CPA, with lagging progress in COH and CKY. In 2018, COH and CKY will be assessed to create an approach. Integrity Management is progressing forward with the inventory of records despite a pause in the PHMSA Gas Transmission "Mega Rule" finalization. The PHMSA rule would indicate the required level of documentation (material test record), which could change given the new administration, and would also provide guidance to use in future ratemaking configurations. This rule is not finalized as of 12/20/2017 and will not be finalized until late 2018 at the earliest.

Based on discussions and review of current status, a process is currently in place to review the records of above ground regulator station facilities, including all facilities acquired from CPG. While there is a disparity in progress among the states due to regulatory and budgetary differences, a plan is in place to evaluate the records of all above ground regulator stations. As such, IA determines that management has taken appropriate action and is in the process of executing the finding and completing the management response.

Finding 5: The designation of Critical Valves needs finalization in Kentucky (Target Completion Date 12/31/2017).

Finding Status: *Item has been completed.*

Internal Audit recommended implementing a plan to finalize the treatment of critical valves in Kentucky based on federal and state codes.

IA reviewed management's memo outlining the CKY Exterior Shut Off valve history and the 6 options going forward. Based on legislation that could change, CKY Engineering has opted to pursue the 5th option where they see if the regulation in KY is rescinded, but go forward with updating GIS for critical valves and creating an annual inspection Repetitive Task (RT) in WMS.

IA verified that each facility with a valve deemed as critical had an annual inspection RT created in WMS and mapping was updated in GIS.

Based on the above procedures, IA determined that management has addressed the finding and completed the management response.

Conclusion: Findings 1 through 5 have been addressed by management.

CC: Pablo Vegas, Pete Disser, Lin Koh, Sal Alshuqairi, Natalie Ladd

Change Management Process Audit

January 18, 2018

To: E.E. Kendall, VP Capital Allocation & Controls
J.E. Zucal, VP Major Projects - Electric
R. M. Kitchell, VP Major Projects - Gas

From: M.R. Easterday, Lead Auditor - Capital & Construction Audits
A.J. Patel, Manager - Capital & Construction Audits
R.W. Binkley, Director - Internal Audit

NiSource®

Executive Summary

Internal Audit conducted a review of the change management process related to NiSource Major Projects (our sample of seven projects included NIPSCO Gas, NIPSCO Electric, and Columbia projects). The focus of the review was to ensure policies, procedures, and controls exist to capture and document project scope changes. Internal Audit will use existing NiSource Project Management standards, along with industry recognized best practices set by the Project Management Institute (PMI).

Audit Results Summary:

Based on the procedures performed, Internal Audit noted change management processes appear to generally conform to Organizational Project Management (OPM) standards and other corporate policies. However, Internal Audit identified (3) low risk, best practice findings associated with the following:

- Inconsistent documentation of Change Management Plans across NiSource segments.
- Existing Change Management Plans do not quantify risks in risk registers or outline guidance for use of project contingency.
- Inconsistent documentation of Change Order logs across NiSource segments.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, will be provided to the Audit Committee. IA would like to thank management for their cooperation and time in support of this audit.

Background

The Capital & Construction group of the Internal Audit department has conducted an array of audits involving Major Project controls, project management, as well as contractors performing work on major projects. A component of all major projects involves the processing of project scope changes. Based on our experience, a review of change management practices for major projects across NiSource was included for the 2017 Internal Audit Annual Plan.

Organizational Project Management (OPM) standards were established by NiSource in order to provide a common basis for defining practices, establishing performance metrics, and implementing governance of project management. Several OPM standards outline guidance for developing project management plans, assembling project execution plans, as well as managing, monitoring and controlling project execution. Specifically, OPM 5.0 includes guidance for establishing change management plans including criteria and thresholds for project scope changes while OPM 7.0 provides guidance for monitoring and reporting such changes.

Audit Scope and Approach

Internal Audit conducted a review of the change management process related to NiSource Major Projects. The focus of the review was to ensure policies, procedures, and controls exist to capture and document project scope changes. Internal Audit relied upon existing NiSource Project Management standards, along with industry recognized best practices set by the Project Management Institute. The review involved sampling seven major projects from across NiSource (three Columbia Company, two NIPSCO – Gas, and two NIPSCO – Electric). All of the projects were initiated prior to an April 2017 revision to the Organization Project Management (OPM) standards. Fieldwork was conducted during October and November of 2017. Review procedures included the following objective and associated procedures listed below.

Objective 1: Ensure policies and procedures related to scope changes for Major Projects are aligned with NIPSCO Major Project standards .

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Review corporate level standards (i.e. NiSource Capital Disbursements, Supply Chain, and Accounts Payable policies) in conjunction with Major Project Organizational Project Management (OPM) standards and a sample of project specific documents (i.e. project charters, project budget requests, etc.) to ensure Major Projects have implemented required change management processes.	Finding #1 – See page 4 Finding #2 – See page 5
2	Select a sample of scope changes from Major Projects for Electric (T&D and Generation) and Gas (Columbia & NIPSCO) and review for compliance with corporate level standards, OPM standards, and project specific documentation.	Finding #3 – See page 6

Findings

Procedure #1: Review corporate level standards (i.e. NiSource Capital Disbursements, Supply Chain, and Accounts Payable policies) in conjunction with Major Project Organizational Project Management (OPM) standards and a sample of project specific documents (i.e. project charters, project budget requests, etc.) to ensure Major Projects have implemented required change management processes.	**Risk Rating**
Finding #1: Inconsistent documentation of Change Management Plans across NiSource segments.	Low
Process Owner(s): Project Controls	

Observation

Criteria: *OPM 5.0 - Assemble Project Execution Plan* section 6.0 establishes that Project Execution Plans consist of Project Baselines and Project Control Criteria / Change Management Plans. Section 6.2.0 further requires: *"The Project Manager will implement a "Project Change Control System" that will define how project objectives, deliverables, and/or documentation will be controlled, changed, and approved."*

Condition: Per review of project documentation it appears projects related to Columbia Companies do not formally document change management plans within the project charters, project budget request, or related documentation. Per discussion with Columbia Company project management, formal documentation detailing a specific change management plan for each project does not exist and project management relies upon current corporate policies and past practices to guide the execution of any necessary project changes. Selected NIPSCO projects appeared to have formal documentation for change management plans with only minor deviations from OPM standards.

Risk/Impact: A lack of documented procedures can result in inconsistent execution and reporting of project scope changes.

Recommendation

Project Controls should help ensure Project Management across NiSource have aligned processes and documentation with the Organization Project Management standards.

Management Response

Not Required for Low Risk Findings

Findings

Procedure #1: Review corporate level standards (i.e. NiSource Capital Disbursements, Supply Chain, and Accounts Payable policies) in conjunction with Major Project Organizational Project Management (OPM) standards and a sample of project specific documents (i.e. project charters, project budget requests, etc.) to ensure Major Projects have implemented required change management processes.	**Risk Rating**
Finding #2: Existing Change Management Plans do not appear to include quantified risk registers or outline guidance for use of project contingency.	**Low**
Process Owner(s): Project Controls	

Observation

Criteria: *OPM 5.0 - Assemble Project Execution Plan* section 6.2.9 stipulates: *"The approved risk response plan or risk baseline designates a requirement for the utilization of project resources to perform work, in a time frame, at an estimated cost. Risk response plans are considered part of the project scope, schedule, and funding. Additional risk response plans, contingent risk responses, or fallback plans are regarded as scope, schedule, and cost changes and will be evaluated consistent as a project change."*

Condition: Per review of project documentation, Internal Audit was unable to verify if project changes were due to execution of the risk response plans, per the PM Standard 6.2.9 or were treated as additional risk response plans (subject to change management).

Risk/Impact: By not delineating between execution of risk response plans and additional risks response plans, project lessons learned due to scope changes may not be accurately captured.

Recommendation

Scope change should be linked back to existing risks (risk register) or unforeseen risks (additional risks) to help properly capture lessons learned.

Management Response

Not Required for Low Risk Findings

Findings

Procedure #2: Select a sample of scope changes from Major Projects for Electric (T&D and Generation) and Gas (Columbia & NIPSCO) and review for compliance with corporate level standards, OPM standards, and project specific documentation.	**Risk Rating**
Finding #3: Inconsistent documentation of Change Order logs across NiSource segments.	**Low**
Process Owner(s): Project Controls	

Observation

Criteria: *OPM 5.0 - Assemble Project Execution Plan* section 6.2.11 stipulates: *"The Project Manager will establish the Project Change Log. ...The Project Manager will ensure the criteria for change identification, change response, change resolution, etc. is supported throughout the project."*

Condition: Per review of project documentation and conversations with management, it appears (2) of the (3) Columbia Company projects reviewed did not historically maintain change logs. Per discussion with project management, a template has recently been disseminated and is currently being implemented by Columbia Company major projects. Selected NIPSCO projects appeared to maintain change order logs for scope changes as well as PO or payment related changes which do not always require documentation as stipulated by change management plans. The level of detail and qualifying factors determining if a project change is to be documented in the Change Order Log appears to be inconsistent across all NiSource change logs reviewed.

Risk/Impact: A lack of documented procedures can result in inconsistent execution and reporting of project scope changes.

Recommendation

Project Controls should help ensure Project Management across NiSource have aligned processes and documentation with the Organization Project Management standards. Internal Audit will review for continued implementation of change logs in future audits.

Management Response

Not Required for Low Risk Findings

Report Distribution

CC:

J. Hamrock	S. Anderson
D.E. Brown	D.L. Bull
M.J. Finissi	A. Sayers
C.J. Hightman	B. Travis
M. Kempic	D.P. Dunn
C.W. Levander	D. Roudebush
V. Sistovaris	J.D. Klaich
P.A. Vegas	A. Terry
S.K. Surface	R.F. Ebright
P.T. Disser	I.T.H. Brown
T.A. Dehring	R.B. Bollinger
T.J. Tokish	T.L. Tucker
R.V. Mooney	Deloitte & Touche

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*

Critical Valve Finding Follow Up Audit

January 25, 2018

To: Don Eckstein, Senior VP Gas Operations
Bob Kitchell, VP Projects & Construction Gas

From: Chris Marlatt, Lead Internal Auditor
Jaclyn Callahan, Manager Internal Audit
Ryan Binkley, Director Internal Audit

NiSource®

Executive Summary

The Department of Transportation's Pipeline and Hazardous Materials Safety Administration requires that critical valve facilities be inspected "at intervals not exceeding 15 months, but at least once each calendar year." (CFR 49 §192.747)

For Columbia Gas Companies, a valve is deemed critical by either entering (new valves) or updating (existing valves) a checkbox field for the related facility within the Work Management System (WMS). In addition, a Repetitive Task (RT) must be manually created within WMS, which will automatically create the inspection job order on an annual basis to ensure compliance with DOT 192.747.

As a result of an audit conducted in 2017, Internal Audit identified the following medium risk finding:

- NiSource management should implement/create controls or processes for the review of WMS critical valve facilities on a consistent basis to ensure all critical valve facilities have a repetitive task (RT) [which ensures completion of the required inspection]. Creation of a detective control mitigates the risk associated with the manual process required to create/update critical valves in WMS and related RTs.

NiSource management provided the following response:

- Management will assemble a team to understand the processes and departments that impact the creation, update or retirement of WMS critical valve facility. The team will recommend process changes and controls that can be implemented to mitigate compliance risk.

To ensure that NiSource management fulfilled the commitments noted in their response above, Internal Audit completed the following procedures:

- Reviewed the COGNOS Job Orders Dashboard, noting that a critical valve facility field has been added to highlight all critical valve facilities without an assigned RT; and
- Independently verified the metrics shown within the critical valve facility field within the Dashboard, noting that metrics appears to be complete and accurate.

Summary Conclusions:

Internal Audit noted that Integration Center management has established procedures and controls to review critical valve facilities on a consistent basis thereby ensuring they have an assigned RT. As a result, Internal Audit will close the action plan associated with the medium risk finding identified in 2017.

Review Scope and Approach

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided to Management. Internal Audit would like to thank Integration Center Management for their cooperation and time in support of this audit.

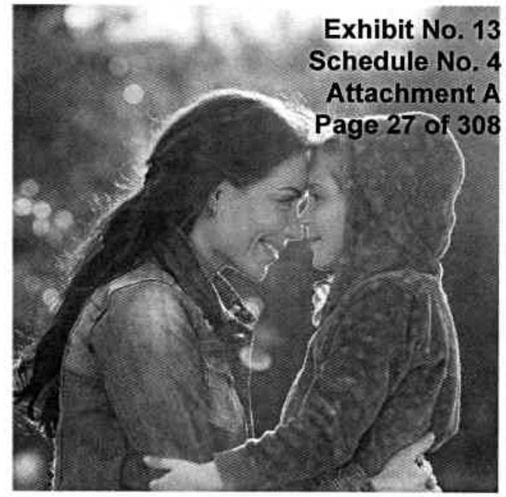
Objective 1: Determine if management implemented controls or processes for the review of WMS critical valve facilities that will, on a consistent basis, ensure all critical valve facilities have a repetitive task.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Perform walkthroughs with management and process owners to understand the processes and controls implemented and where applicable perform testing procedures (i.e. sample test process).	**No Findings Noted.**

Report Distribution

CC:	J. Hamrock	S.W. Sylvester
	D.E. Brown	J.S. Pino
	C.J. Hightman	M.J. Davidson
	M. Kempic	W.F. Davis
	C.W. Levander	P.D. Wilson
	V. Sistovaris	A. Donnini
	P.A. Vegas	T.A. Dehring
	S.K. Surface	T.L. Tucker
	M. Finissi	K.H. Cole
	P. Disser	Deloitte & Touche, LLP

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



NiSource Corporate Ethics Audit

January 29, 2018

To: Sam Lee, VP & Corporate Secretary

From: Adrian Serles, Internal Audit Senior
Sal Alshuqairi, Manager Internal Audit
Lin Koh, Director Internal Audit

NiSource®

Executive Summary

Internal Audit performed an evaluation over the NiSource Corporate Ethics Department. The objective of this evaluation was to review whether management has established formal Code of Business Conduct policies and procedures. We examined the policies to determine if they provide adequate direction on how to handle reported violation claims. In addition, we assessed whether actual reported complaints are handled in accordance with current policies.

IA noted no exceptions during our testing. However, we noted that while the Ethics Investigation Case Report Summary includes a short description of the remediation action, it does not include a description of the process/steps used to verify that the remediation action was completed. We recommend, as a process improvement, keeping more detailed records of who was involved in the remediation, what specific actions were taken, and the date(s) the remediation efforts occurred.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, has been provided. IA would like to thank staff and management for their cooperation and time in support of this audit.

Background

The mission of the NiSource Corporate Ethics Department is to be the premier provider of ethics services. The Corporate Ethics Department helps develop processes, programs and training to promote a strong culture of compliance with laws, regulations and policies, and foster a benchmark culture of ethics and compliance where employees take ownership and responsibility for doing the right thing.

The Code of Business Conduct (COBC) explains how to report potential violations. To report potential violations of laws, rules, regulations, or the COBC, employees may talk with a supervisor or a local HR consultant. Reports can be also made to the Ethics Hotline at 1-800-457-2814, in which reporters can choose to remain anonymous. Reports can also be made by web reporting at nisource.alertline.com or by mail. A third party, Alertline, provides reported information to the Corporate Ethics Department for investigation.

A lead investigator is appointed by the VP of Audit for significant accounting/controls issues (Level 1), otherwise the Lead Investigator is appointed by the Corporate Ethics Department. The Lead Investigator is either a representative from or working under the direction of the Legal Department, usually an HR consultant. The Lead Investigator prepares an Investigation Plan which is presented for approval to the Chief Legal Officer for Level 1 issues. All other level 2 issues do not require the approval of the Chief Legal Officer.

The Corporate Ethics Department tracks the investigation and resolution of all allegations of ethics violations. It is the responsibility of the Lead Investigator to ensure allegations are investigated in a fair and consistent manner, to determine whether reported complaints are substantiated or not, and to coordinate the investigation with the Corporate Ethics Department. Per the NiSource Investigation Procedure for Code of Business Conduct Violations, investigations are to be completed within 30 days, unless otherwise specified by the Corporate Ethics Department. An update is provided to the Director of Corporate Ethics within 10 days of the inception of an ethics case investigation, and, when appropriate, the supervisor of the investigated department is notified. Types of complaints include allegations involving harassment, inappropriate behavior, misuse of IT resources, workplace violence, accounting and auditing practices, unfair employment practices, and conflicts of interest.

Investigation results include an Ethics Investigation Case Report Summary which details the investigator's name, the report number, the investigation dates, the report type, the allegation, interview details, documents utilized, a summary of fact finding, corrective action, and a date for corrective action. Results are also communicated to affected parties (i.e. complainant, accused wrongdoer, and the Corporate Ethics Department).

Audit Scope and Approach

Internal Audit performed an evaluation over the NiSource Corporate Ethics Department. The objective of this evaluation was to review whether management has established formal Code of Business Conduct policies and procedures. We examined the policies to determine if they provide adequate direction on how to handle reported violation claims. In addition, we assessed whether actual reported complaints are handled in accordance with current policies.

Objective 1: Obtain and review the NiSource Code of Business Conduct policy. Evaluate whether the policy fosters an ethical behavior.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess whether management has established formal Code of Business Conduct policies and procedures.	**No Findings Noted.**

Audit Scope and Approach

Internal Audit performed an evaluation over the NiSource Corporate Ethics Department. The objective of this evaluation was to review whether management has established formal Code of Business Conduct policies and procedures. We examined the policies to determine if they provide adequate direction on how to handle reported violation claims. In addition, we assessed whether actual reported complaints are handled in accordance with current policies.

Objective 2: Assess if the policies are communicated and distributed to stakeholders, including employees, management, Board of Directors, etc.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess whether required training is completed timely and in accordance with established policies.	**No Findings Noted.**

Audit Scope and Approach

Internal Audit performed an evaluation over the NiSource Corporate Ethics Department. The objective of this evaluation was to review whether management has established formal Code of Business Conduct policies and procedures. We examined the policies to determine if they provide adequate direction on how to handle reported violation claims. In addition, we assessed whether actual reported complaints are handled in accordance with current policies.

Objective 3: Select a sample of reported claims to assess whether reported claims are handled in accordance with the policies.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess whether reported complaints are addressed in accordance with policies and procedures.	**No Findings Noted.**
2	Assess whether appropriate action was taken against violators to appropriately address risk.	**No Findings Noted.**
3	Assess whether a remediation plan was implemented to address each substantiated claim.	Finding #1 – See Page 6
4	Assess whether investigation results were appropriately communicated.	**No Findings Noted.**

Findings

Procedure #3: Assess whether a remediation plan was implemented to address each substantiated claim.	Risk Rating
Finding #1: While IA observed no exceptions during our testing, we noted that though the Ethics Investigation Case Report Summary includes a short description of the remediation action, it does not include a description of the process/steps used to verify that the remediation action was completed.	Low

Process Owner(s): Sam Lee, VP & Corporate Secretary

Observation

Criteria: Detailed records are kept to ensure that the remediation action was completed.

Condition: While the Ethics Investigation Case Report Summary includes a short description of the remediation action, it does not include a description of the process/steps used to verify that the remediation action was completed.

Risk/Impact: Remediation may not be fully implemented and the underlying issue may not be fully resolved.

Recommendation

Internal Audit recommends, as a process improvement, keeping more detailed records of who was involved in the remediation (involved employee, supervisors, HR, - parties with a role in the remediation), what specific actions were taken, and the date the remediation occurred.

Management Response

The investigator will be required to provide in the Investigation Report Summary more specific information regarding remediation action, such as the name of the party who is to carry out the remediation action, the date remediation action will take place, and the nature of the remediation action. The Corporate Ethics Department will follow up with the named party to confirm completion based on the dates and remediation action provided.

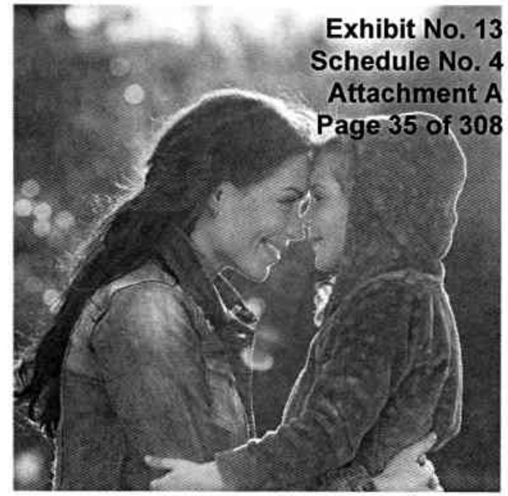
Report Distribution

CC:

J. Hamrock
D. E. Brown
P. A. Vegas
C. J. Hightman
M. Kempic
C. W. Levander
V. Sistovaris
M. J. Finissi
P. T. Disser
S. K. Surface
T. L. Tucker
Deloitte & Touche

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



Operator Qualification Audit Finding Follow Up

February 14, 2018

To: C. J. Anstead, Director Technical Services

From: Chris Marlatt, Lead Internal Auditor
Jaclyn Callahan, Manager Internal Audit
Ryan Binkley, Director Internal Audit

NiSource®

Executive Summary

The Pipeline Safety and Compliance (PS&C) Technical Support Department maintains Operator Qualification (OQ) plans for the entire NiSource Gas service territory to ensure compliance with PHMSA Code of Federal Regulations (CFR), 'Title 49, Part 192: Subpart N (Qualification Program)'.

As a result of an audit conducted in 2016, Internal Audit identified the following high risk findings:

- NiSource management should document and define the roles and responsibilities of the OQ Team under the PS&C Technical Support Department for all companies and evaluate process impacts to other departments; and
- NiSource management should determine the appropriate staffing level of the OQ Team based on the established roles and responsibilities noted above.

NiSource management provided the following response:

- Management agrees that NiSource currently has three (3) distinct OQ Plans, which accounts for the current lack of standard roles (and in some cases, undefined roles) and responsibilities, as well as different roles and responsibilities and distinct manpower and staffing needs among the business units. Therefore, over the next 12 months management will undertake an analysis of the three (3) different plans and make a recommendation to senior management on either continuing to operate three (3) different OQ Plans, or develop a strategy for migrating all NiSource locations to a single plan. Based on the outcome of that discussion, roles and responsibilities and a staffing plan for the structure (or structures) selected, will be created.

To ensure PS&C Technical Support Management fulfilled the commitments noted in their response above, Internal Audit completed the following procedures:

- Confirmed that NiSource leadership made a decision to continue forward utilizing the three (3) separate OQ Plans noted above;
- Reviewed the final draft of a file titled "OQ Training Roles and Responsibilities" which was created by PS&C Technical Support Management to outline (by department) who is accountable and responsible for all key OQ related tasks;
- Obtained support documenting agreement from departments identified as accountable or responsible within the "OQ Training Roles and Responsibilities"; and
- Confirmed increase in staffing of the OQ Team through review of the NiSource organizational chart and discussion with PS&C Technical Support Management.

Summary Conclusions:

Internal Audit noted that PS&C Technical Support Management has established roles and responsibilities as they pertain to the OQ Program for each company and have increased staffing to help meet those needs. As a result, **Internal Audit will close the action plan** associated with the high risk finding identified in 2016.

Review Scope and Approach

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided to management.

Internal Audit would like to thank Pipeline Safety and Compliance Technical Support Management for their cooperation and time in support of this audit.

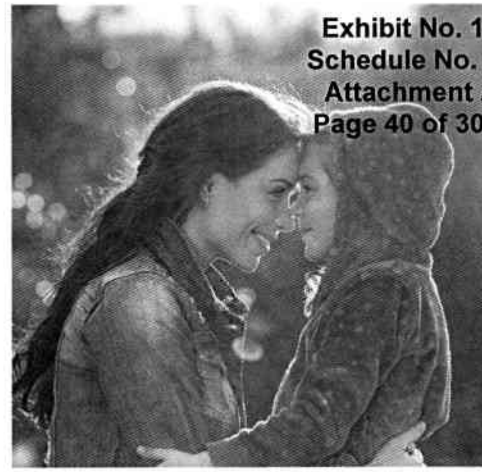
Objective 1: Determine if management created clearly defined roles and responsibilities for the OQ Department.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Follow up with management to determine if clearly defined roles and responsibilities are created for the OQ Department.	**No Findings Noted – Prior audit finding is closed.**

Report Distribution

CC:	J. Hamrock	M.S. Chepke
	D.E. Brown	M.E. Walker
	C.J. Hightman	M.M. Zain
	M. Kempic	R.M. Kitchell
	C.W. Levander	A.A. Stone
	V. Sistovaris	M.J. Davidson
	P.A. Vegas	W.F. Davis
	S.K. Surface	S.W. Sylvester
	M. Finissi	J.S. Pino
	P. Disser	P.D. Wilson
	D.A. Monte	T.L. Tucker
	R.V. Mooney	Deloitte & Touche, LLP
	D.A. Eckstein	

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



NiSource IT Service Provider Transition – Closure Review

To: Russ Viater, VP – Enterprise Architecture
Tom Campbell, Director – IT Applications
Ken Smith, Director – IT Service Management

From: John Manfreda, Project Manager - Infor. Systems Audit
Brett Welsch, Project Manager – Infor. Systems Audit
Goranka Kasic, Sr. Auditor - Infor. Systems Audit
Greg Wancheck, Director - Infor. Systems Audit

March 6, 2018

NiSource IT Audit conducted our IT Service Provider Transition - Closure Review between December 2017 and January 2018 to provide an independent perspective around both final program go-live activities occurring on December 1, 2017 and steady state operational planning for 2018. This IT Service Provider Transition - Closure Review is also a continuation assessment supporting IT Audit's previous IT Service Provider Transition Pre Go-Live Review completed in November 2017 which focused on the implementation of enabling processes and technologies to support a multi-vendor IT environment.

IT Audit's IT Service Provider Transition - Closure Review found the following:

- **IT Audit noted a single (1) MODERATE level finding for NiSource IT management to develop a global IT risk management controls structure that is modeled on an adoptable framework.**
  - **Although a risk and controls structure is in place (and effectively operating) for NiSource IT systems having a SOX designation, there is currently no risk and controls framework adopted for non-SOX IT systems and supporting technologies. IT Audit recommends that having this non-SOX IT risk controls framework adoption would help facilitate a structured IT risk management process that includes control ownership, documentation, internal review cadence, and periodic testing requirements.**
- **IT Audit noted the IT Service Provider Transition Program properly included Sarbanes Oxley Act (SOX) control considerations for the new IT service providers, including engagement of appropriate service provider personnel.***
- **IT Audit noted IT Service Provider Transition Program related Service Level Agreement (SLA) definitions and metrics have been defined and placed in operation. ****

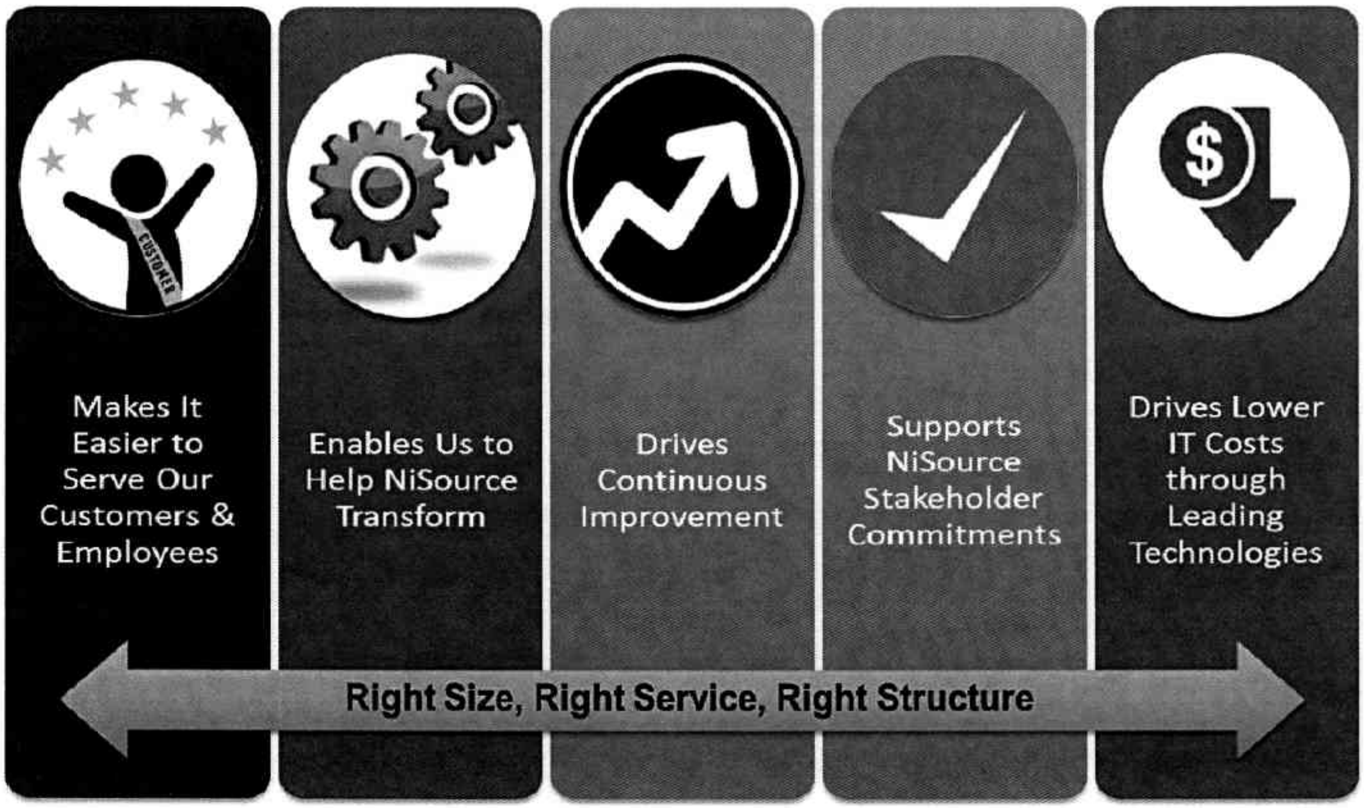
***See Appendix B: High Level IT Service Provider Transition Program Risks as of January 30, 2018 (slide 13) for on-going risks being actively assessed by NiSource IT Audit.**

**** IT Audit will conduct an IT Service Provider Transition – Steady State Review commencing in February 2018 that will include assessment of residual SLA risk.**

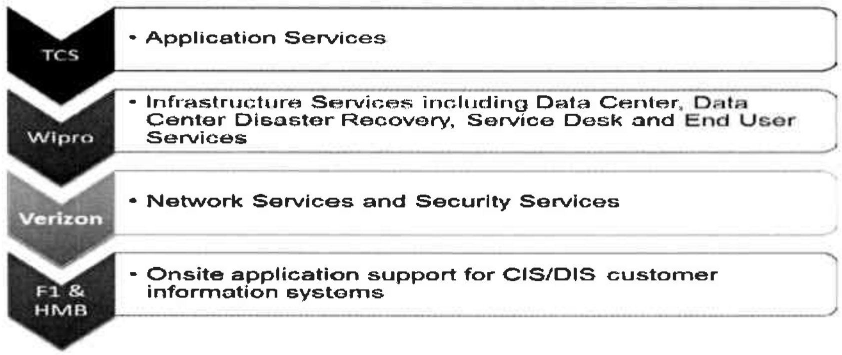
This audit conforms with the International Standards for the Professional Practice of Internal Auditing, whereby a summary of HIGH and/or MODERATE findings will be provided to the NiSource Audit Committee. NiSource IT Audit would like to thank IT Service Provider Transition management for their cooperation and time in support of this effort.

Beginning in July 2017, NiSource IT Management began the IT Service Provider Transition program to enable a multi-provider IT service execution model. This was undertaken for the reasons depicted in the following program communication.

Our New IT Service Provider Model...



The following graphic depicts the 2018 NiSource steady-state IT operating environment by service area. Three IT Service Providers (TCS, Wipro, Verizon) are net new while two (F1 & HMB) have legacy operating history with NiSource.



The IT Service Provider Transition program was further segmented into the following work-streams to enable both the transition of services and implementation of service integration management capabilities.

Workstream / Subworkstream	Area of Focus
Service Integration and Management (SIAM)	NEW functionality for a set of consistent processes to ensure centralized integration, coordination, collaboration and governance for multiple NiSource IT service providers
ServiceNow	Replacement of the existing IT ticketing system (ISM) with a new tool by the name of ServiceNow that enables industry leading capabilities
Infrastructure	Transition of 'Servers and Storage' type IT assets and services and Data Center operations, Service Desk, End User Services and Data Center Disaster Recovery tasked with working through transitioning Priority Resolution, desktop/laptop deployment, MDT deployment/replacement, and non-standard system access
Network and Security	Transition of Network and Security support services
Application Services	'Lift-and-Shift' approach of approximately 250 applications to new Service Provider
Service Provider Management	Relationship, contract, financial and performance management for all IT Service Providers
PMO	Provides oversight of the schedule and resources tasked with implementing the IT Service Provider Transition program

Audit Scope and Approach

For testing purposes, IT Audit reviewed the following:

- Governance standards
- Delivery model setup
- Delivery model execution
- IT SOX controls engagement
- Post go-live management reporting

IT Audit additionally conducted a series of interviews in January 2018 with designated IT Service Provider governance personnel and key execution stakeholders in the retained IT organization to gain a perspective on program closure and in-flight governance enablement for the new steady state IT environment.

Objective 1: **Review governance standards created around the IT Service Provider Transition program to provide a perspective on the following: Sponsor Engagement, Executive Sponsor/Stakeholder Reference Group engagement, project organizational structure, and program team knowledge/skills/abilities.**

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess the process used to engage program Sponsors in the IT Service Provider Transition effort, along with the communication cadence being leveraged to continually inform program Sponsors of relevant IT Service Provider Transition activities.	**No Findings Noted**
2	Determine whether an IT Service Provider Executive Sponsor Team and Stakeholder Reference Group (SRG), has been created to aid with program activity governance. If in place, assess whether the Executive Sponsor Team and Stakeholder Reference Group has adequate membership and representation from appropriate organizations.	**No Findings Noted**
3	Provide a perspective on project organizational structure developed for the IT Service Provider Transition program to determine whether the program team possess the necessary tools, knowledge and resources for delivering solution components as required for successful transition.	**No Findings Noted**

Audit Scope and Approach (cont'd)

Objective 2: Review process/procedure around IT Service Provider Transition delivery model setup to provide a perspective on the following: Program Cost Management, Scope, Schedule, Risk and Issues Management, Program Resource Management, Organizational Change Management, and Quality Assurance.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess how IT Service Provider Transition program costs are being gathered, maintained (specifically budget-to-actual) and reported. Determine whether the program's costing components have been aligned to provide for stakeholder transparency.	**No Findings Noted**
2	Determine whether program scope, schedule, issue and risk management processes/procedures/tools are being leveraged for adequate control around time capture, individual work stream completion metrics, variance analysis and scope creep prevention.	**No Findings Noted**
3	Provide a perspective on what efforts/initiatives the IT Service Provider Transition Team has in place to analyze and action the ongoing management of program resources, including internal NiSource, NiSource to 3rd party vendor(s), and 3rd party vendor to 3rd party vendor.	**No Findings Noted**
4	Assess the involvement and communication cadence structure of NiSource Organizational Change Management (OCM) within the IT Service Provider Transition program.	**No Findings Noted**
5	Determine whether the IT Service Provider Transition Team has developed a quality assurance structure over program delivery. Elements to consider in this area would be the program team's definition of quality, quality control plans and efforts, remediation plans and efforts for quality issues, audit advisory identification of potential quality gaps for consideration.	**No Findings Noted**

Audit Scope and Approach (cont'd)

Objective 3: Review process/procedure around IT Service Provider Transition program delivery model execution to provide a perspective on the following: NiSource IT PMM and IT Policy and Procedure compliance, IBM Unwind work-stream management, tracking and monitoring of incumbent service provider participation/performance in the transition effort.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Determine whether the IT Service Provider Transition program is adhering to the NiSource enterprise IT Project Management Methodology (PMM). Are IT Service Provider Transition program deliverables being aligned with PMM?	**No Findings Noted**
2	Assess whether IT Service Provider Transition program efforts are being aligned to follow NiSource's enterprise IT policies and procedures.	**Finding #1 (see slide 10)**
3	Provide a perspective on the IBM Unwind work-stream to track and measure incumbent provider participation and performance.	**No Findings Noted**

Audit Scope and Approach (cont'd)

Objective 4: Review IT Service Provider Transition program controls to provide a perspective on SOX controls design consideration, engagement of IT and SOX Compliance personnel, IT security considerations and whether SOX controls testing and reviews are conducted prior to go-live.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Determine whether general IT computing SOX control designs (IT GCC) are being considered in service integration development, testing and deployment efforts for the IT Service Provider Transition program.	**No Findings Noted ***
2	Assess the engagement of NiSource/3rd party compliance entities (i.e. IT Compliance, SOX Compliance, Internal Audit and Deloitte) into relevant IT Service Provider Transition program work streams.	**No Findings Noted**
3	Provide a perspective on security design considerations and ongoing security execution components (specifically identity & access management and cybersecurity, data integrity and privacy) as they pertain to the IT Service Provider Transition program.	**No Findings Noted ***
4	Determine how testing efforts associated with the IT Service Provider Transition are being planned and executed. Assess whether the proper individuals/teams are being proactively informed of their requirement to participate and being communicated to in a timely and transparent manner.	**No Findings Noted ***

* Objective 4, Procedures 1,3 and 4 have associated program risks which have mitigation efforts underway and have been appropriately transitioned to responsible personnel in the retained NiSource IT organization. - **see Appendix B: High Level IT Service Provider Transition Program Risks on page 13 for details.**

Audit Scope and Approach (cont'd)

Objective 5: Review reporting and knowledge dissemination components associated with the IT Service Provider Transition program to provide a perspective on the following: key performance indicators (KPI) related to program health, service level agreement (SLA) definition and execution, and knowledge transfer design/engagement for 3rd parties.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess how key performance indicators (KPIs) associated with program health are being captured and reported. Determine whether KPIs being communicated are being relayed to IT Service Provider Transition stakeholders and relevant parties in a "complete" and "accurate" manner.	**No Findings Noted ****
2	Determine how program service level agreements (SLAs) have been defined and who is responsible for invoking action to ensure SLA compliance. Analyze the process/processes used to monitor program SLA compliance in relation to pre go-live activities.	**No Findings Noted ****
3	Provide a perspective on knowledge transfer design and execution efforts to inform new NiSource 3rd party providers of their contracted responsibilities.	**No Findings Noted**

Finding #1

Objective #3, Procedure #2: Assess whether IT Service Provider Transition program efforts are being aligned to follow NiSource's enterprise IT policies and procedures.	**Risk Rating**
Finding #1: Although a controls structure is in place (and effectively operating) for NiSource IT systems having a SOX designation, there is currently no controls framework adopted for non-SOX IT systems and supporting technologies.	**MODERATE**
Process Owner(s) Responsible: Mike Rozsa (Chief Information Officer) **Executive Council Member Responsible:** Mark Kempic (Chief Transformation Officer)	**Target Remediation Date:** **Q1 2019**

Observation

Criteria: Use of a standards-based risk and controls process via the leveraging of an adopted framework is a known best practice to facilitate risk management practices for non-SOX IT systems and supporting technologies.

Condition: Although NiSource IT management has a formal risk and controls framework in operation over SOX designated IT systems and supporting technologies, IT management does not currently have a defined risk and controls framework over systems and supporting IT technologies with a non-SOX designation.

Risk/Impact: Not having a NiSource specific risk and controls framework over non-SOX systems and supporting IT technologies could lead to unmitigated risk events and conditions occurring which could have a negative impact on the IT Services, Security Operations and IT Compliance functions.

Recommendation

IT Audit recommends NiSource IT management adopt and implement a non-SOX IT risk and controls framework to facilitate a structured IT risk management process that includes control ownership, documentation, internal review cadence, and periodic testing requirements.

Management Response

The IT Compliance team will develop a control framework that will be used to implement IT General Controls (ITGCs) for the non-SOX IT environment. The controls will be implemented and will be self assessed by the owner within IT. The IT Compliance team will periodically spot check various controls to ensure compliance.

Report Distribution

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *<u>Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.</u>*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *<u>Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.</u>*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *<u>Internal Audit does not perform follow-up review procedures on low risk findings.</u>*

Appendix B

IT Service Provider Transition – High Level Program Risks					
Risks (Updated as of IT Service Provider Transition program closure)					
Risk Category	**#**	**Detailed Risk Title**	**Detailed Risk Description**	**Risk Owner**	**Target Close Date**
SOX and IT Compliance Risk	1	Privileged Access Review (PAR)	Ownership/implementation of the PAR process needs to be established along with the necessary tools for process automation needing to be identified. **Impacts the operation of six (6) IT SOX controls.**	NiSource IT Security	**April 6, 2018** In Process
	2	Logging Capabilities	Log collection, analysis, remediation and archive process need to be established with the responsible IT vendor(s) to support IT SOX controls execution. **Impacts the operation of two (2) IT SOX controls.**	NiSource IT Security	**March 16, 2018** In Process
	3	Knowledge Transfer of "Production Control Tasks"	Knowledge transfer tasks/activities for Mainframe Production Control need to be clarified, identified and owned in order to avoid impacts to steady state IT SOX control operation. **Impacts the operation of thirteen (13) IT SOX controls.**	NiSource IT Infrastructure	**March 16, 2018** In Process
	4	Tool and report readiness for IT SOX control steady state operation/support	Clarity of tools and reports readiness for steady state IT SOX control operations. **Impacts all twenty-three (23) applicable IT SOX controls operated by Wipro.**	NiSource IT Security	**March 16, 2018** In Process

NiSource Corporate Services Company Cost Allocation Audit

April 16, 2018

To: Jeff Gore, Controller, Corporate Accounting

From: Chris Marlatt, Lead Internal Auditor
Jaclyn Callahan, Manager Internal Audit
Ryan Binkley, Director Internal Audit

NiSource®

Executive Summary

Internal Audit performs an annual review of the accounting systems, source documents, allocation methods, and billing procedures used by NiSource Corporate Services Company (NCSC) to allocate costs/expenses to the various subsidiary companies ("affiliates"), including the holding company.

The focus of the audit includes the following procedures:

- Determine that costs are fairly and equitably allocated to all subsidiary companies, including the holding company; and
- Verify procedures are in place to ensure that all costs have been allocated monthly and are accurately reflected in the FERC Form 60 Financial Report.

Summary Conclusions:

Based on our audit results, the methods and procedures used to allocate costs/expenses and bill subsidiary companies, including the holding company, are reasonable. Amounts reported as convenience and contract billing payments in the FERC Form 60 appear appropriate.

Note: there is an inherent risk related to the proper application of these methods by employees (i.e. manual application of billing pool codes to invoices or timesheets).

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided to Corporate Accounting Management. Internal Audit would like to thank NCSC staff and management for their cooperation and time in support of this audit.

Background

- In February 2006, the Public Utility Holding Company Act (PUHCA) was repealed and replaced with the PUHCA of 2005. Prior to this date, NiSource Corporate Services Company (NCSC) was required to obtain prior approval from the Securities and Exchange Commission on new allocation methods used to allocate costs and expenses. The PUHCA of 2005 is primarily a "books and records" statute and provides the Federal Energy Regulatory Commission (FERC) with the authority over the books and records, the ability to prescribe standards, and gives access to the books and records of the holding company to the public utility commissions, but only to the extent relevant to the costs of the subsidiaries.

- NCSC uses various allocation methods to assign expenses to companies (including the holding company), or groups of companies, to classify and disclose expenses in the financial statements. Such allocation methods are defined in the service agreements ("agreements") between NCSC and the affiliates. Affiliates are billed by NCSC via contract and convenience billings. Contract billings represent labor and expenses billed to an affiliate. The allocation between affiliates is based on a billing pool which is a four digit code that identifies the company or company's benefiting from the charge. Convenience billings are accommodation payments that are rendered when NCSC makes a payment to a vendor for goods or services that are for the benefit of more than one or all affiliates, and can be made for an affiliate who may not have the means to wire money to outside vendors. Each affiliate is billed monthly for their proportional share of the payments made in that respective month.

Audit Scope and Approach

Internal Audit has completed a review of the accounting systems, source documents, allocation methods, and billing procedures used by NCSC to allocate costs/expenses to the various subsidiary companies, including the holding company, for the period January 1, 2017 through December 31, 2017.

Objective 1: Costs are fairly and equitably allocated to all subsidiary companies including the holding company.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Determine if allocation factors are updated regularly to reflect current statistical data to ensure that NCSC charges are billed relative to current operations.	**No Findings Noted.**
2	Verify contract and convenience billings are properly billed to affiliates.	**No Findings Noted.**
3	Verify holding company costs incurred are properly segregated and paid by the holding company.	**No Findings Noted.**
4	Verify executive time allocation accurately reflects the companies benefiting from their services.	**No Findings Noted.**
5	Verify costs charged by department are in accordance with the NCSC cost allocation guidelines.	**No Findings Noted.**

Objective 2: Processes and procedures are in place to ensure that all costs have been allocated monthly and are accurately reflected in the FERC Form 60 Financial Report.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Determine that all costs are appropriately allocated to affiliates.	**No Findings Noted.**
2	Verify that contract billings and accommodation payments are accurately reported in the FERC Form 60 Financial Report.	**No Findings Noted.**

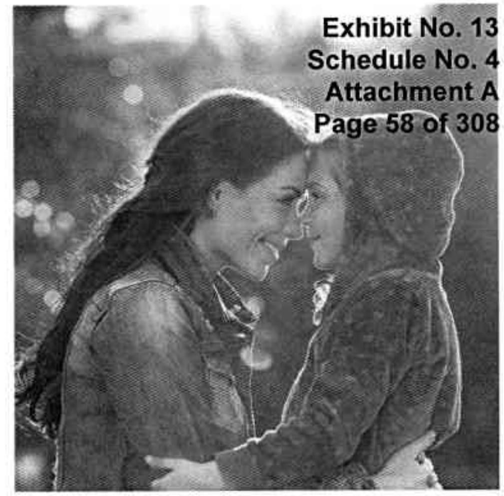
Report Distribution

CC:

J. Hamrock
D.E. Brown
C.J. Hightman
M. Kempic
C.W. Levander
V. Sistovaris
P.A. Vegas
S.K. Surface
M. Finissi
P.T. Disser
J.W. Mulpas
B.K. Archer
D.A. Creekmur
M.A. Huwar
H.A. Miller
S.H. Bryant
T. L. Tucker
Deloitte & Touche, LLP

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



Corporate Credit Cards Expense Review & Analytics (2017 Annual Period)

April 26, 2018

To: D.J. Speas, Director Procurement Operations
J.N. Upper, Director Fleet
M.A. Napoli, Director Fin Bus App & Projects

From: L.E. Black, Senior Auditor
J.M. Callahan, Manager Internal Audit
R.W. Binkley, Director Internal Audit

NiSource®

Executive Summary

In 2009, Internal Audit began performing regular audits of employee expense transactions processed within the expense reporting system to analyze trends in employee spending and aid in identifying instances of non-compliance. Beginning in 2018, Internal Audit incorporated an analysis of the transactions from **ALL** spend which falls under the NiSource Corporate Cards policy for the audit period of January 1, 2017 through December 31, 2017.

See the table below for a summary of total spend and refer to **Appendix B** for a chart outlining the conditions for when to use each card:

Card Type	Administrator	Total 2017 Spend	Total 2016 Spend	Variance	% of Change
Employee Expense Cards *	American Express	$ 25,543,317	$ 20,930,035	$ 4,613,282	22%
Purchasing Cards	Citibank	$ 23,435,608	$ 24,785,020	$ (1,349,412)	(5%)
Fuel Cards	ARI/WEX	$ 14,270,963	$ 12,251,130	$ 2,019,833	16%
Fleet Cards	ARI	$ 40,121	$ 64,074	$ (23,953)	(37%)
Total Corporate Credit Card Spend		$ 63,290,008	$ 58,030,259	$ 5,259,750	9%

* Employees who are not issued corporate credit cards or who incur out of pocket expenses may still incur legitimate reimbursable business expenses. These expenses are submitted within the MySpend expense reporting system and are included in the Employee Expense Cards total referenced above.

The focus of the audit includes the following procedures:

- Analyze expense reimbursement data to identify any unusual items and/or trends in spend and timely submission;
- Determine whether employee expenses are processed in accordance with Corporate Policy and Internal Revenue Service (IRS) guidelines; and
- Review the processes and controls associated with the overall use of all Employee Expense Cards, Purchasing Card, Fuel & Fleet credit card purchases.

Executive Summary

Summary Conclusions:

Internal Audit reviewed processes and communicated related audit findings related to Purchasing Cards as a result of an audit completed in 2017 (original report date of September 25, 2017). Additionally, Internal Audit began to align with the Procure to Pay (P2P) team, who was working toward clarifying the requirements for the proper use of NiSource Corporate Cards (i.e. Purchasing Cards & Employee Expense Cards). In 2018, the P2P team finalized the decision to move forward with implementing a one card/one expense reporting system and process.

As a result of our current procedures, Internal Audit identified some minor exceptions to established policies and procedures which have been communicated to Accounts Payable, Supply Chain, and the P2P team in the form of (1) Low Risk Finding which recommends that the P2P team incorporate these audit results into their development of future policies, controls and processes, including the clarification on how to properly incur and request reimbursement for expenses related to charitable events and or contributions.

Internal Audit will continue to align with these teams throughout the planning and implementation of the P2P initiative.

NOTE: *Internal Audit noted that expenses incurred using Employee Expense and Purchasing Cards are subject to supervisor approval, and supervisors are responsible for performing an adequate review and ensuring expenses align with company policy. A supervisor's assessment of the reasonableness of the expense in accordance with policy is limited to the information available for review.*

Background

Employee Expense Corporate Cards

Employee Expense cards (also referred to as American Express (AMEX) cards) are provided to exempt employees to pay for appropriate Company related expenses and to certain non-exempt employees who travel frequently on Company business. "Receipt Acknowledgements" are required to be signed by each employee, agreeing to the terms for using the AMEX card.

Card charges are auto-fed into the NiSource expense reporting system and then processed by individual employees. For the period under audit, the following expense reporting systems were utilized by the Company:

- ERS, an IBM supported application, was utilized for expenses processed from January 1, 2016 through January 25, 2016.
- Concur Expense Solutions, also known as "MySpend", was used during the remainder of 2016 and through December 31, 2017.

Accounts Payable performs pre-payment audits on expense reports meeting programmed criteria within MySpend. Additionally, MySpend allows for "Hard Stops" which will generate an automatic web response if a transaction does not meet specific required criteria and will not allow the expense report to be processed until all required criteria have been entered. Once expense reports are processed within the reporting system, payments are remitted to AMEX and/or employee by NiSource.

Purchasing Cards

Purchasing cards are used as a payment method for small purchases (usually less than $1,000 per transaction) of materials, supplies, and certain project-related services. In order to obtain a Purchasing Card, an employee must complete an application (which outlines the intended use of the card) and obtain approval from their supervisor. Starting in 2016, all new cardholders are required to complete an LMS training which outlines the information referenced in **Appendix B**.

Once expenses are incurred, cardholders are responsible for providing a monthly packet (including matching receipts) to their supervisors for approval (evidenced via manual signature). Approved packets are then sent to a third party vendor, 3SG, who reviews the packet for the following required components:

- Packet cover with approver signatures that match employee's supervisor (as identified on the NiSource Human Resources file provided to 3SG)
- Statement for month in question
- Receipts to match all transactions on statement

Once 3SG determines the number of transactions match the number of receipts provided in the submitted packet, it is uploaded into OnBase, a software which stores images of the packet pages for 7 years. If 3SG finds the cardholder failed to submit all the required components, 3SG will notify Supply Chain who is responsible for following up with the employee. (3SG does not match the receipts to the transactions on the statement.)

NOTE: *Internal Audit noted that expenses incurred using Employee Expense and Purchasing Cards are subject to supervisor approval, and supervisors are responsible for performing an adequate review and ensuring expenses align with company policy. A supervisor's assessment of the reasonableness of the expense in accordance with policy is limited to the information available for review.*

Background Cont'd

Fuel Cards

Fuel cards are used to purchase fuel or very limited vehicle-related expenses (e.g. a car wash, quart of oil, or diesel additive). Fuel cards are restricted using the Merchant Category Code (MCC) to limit the types of purchases that can be made using the card. Cards are assigned to a vehicle within a NiSource company and must remain with the vehicle at all times. Each card is assigned a cost accounting code and changes to the code require management approval.

In order to use a Fuel card, an employee must sign the NiSource Automotive Resource International (ARI) Wright Express Card User Agreement and submit the form with manager approval to the NiSource Credit Card Program Administrator. Employees are then assigned a unique PIN number which allows purchases to be traced to the individual employee using a vehicle card.

ARI monitors spend for compliance with NiSource policy and potential fraud and will communicate with the Fleet Administration team when transactions need further review.

In addition to the controls outlined above, exception reporting is also available to supervisors of employees using Fuel cards. Each supervisor may determine what criteria they would like to monitor related to fuel spend and the Fleet Administration team will communicate the results of the daily exceptions to the supervisors. Examples of exception reports are (but not limited to): cardholders with more than 3 transactions per day, transactions greater than $150, cardholders who made a purchase in gallons which exceeded the vehicle's tank capacity, and a purchase of premium fuel when vehicle calls for regular.

Fleet Cards

Fleet cards are not credit cards but they do contain ARI billing information which allow users to make purchases at automotive parts stores via a purchase order process managed for NiSource by ARI. Purchases under $50 don't require approval, however, any purchase over $50 is required to go through an ARI approval process. Cardholders are instructed to only use the incidental card for small items (i.e. lights bulbs, oil, windshield wipers) as way to be cost effective and not use a garage for replacing the items.

Note: Cardholders who incur Fuel and Fleet (incidental) spend are not required to submit receipts or "process" expenses. ARI (Wright Express) maintains the detail of all spend transactions and monitors spend on a daily basis.

Audit Scope and Approach

Internal Audit performed an audit of the processes and controls in place related to the use of NiSource Corporate Cards and other employee expense reimbursements. The purpose of the audit is to assess overall compliance with the requirements of the Corporate Credit Card policy and any other applicable policies for the period January 1, 2017 through December 31, 2017.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, was provided to Management. Internal Audit would like to thank Accounts Payable, Supply Chain, and Tax Management for their cooperation and time in support of this audit.

Objective 1: Perform data analysis on corporate card expenses and reimbursement data to identify any unusual items or trends.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Analyze a two-year period of corporate card expenses and examine historical spending patterns to detect significant variations over time.	**Refer to Appendix C.**
2	Analyze the current audit period's corporate card expenses and determine whether cardholder's submitted expenses timely for review, approval, and payment.	**No Findings Noted.**
3	Analyze the current audit period's corporate card expenses to identify outliers, anomalies, or potential fraud indicators.	**Refer to Objective 2 - Step 2.**

Audit Scope and Approach

Objective 2: Determine whether corporate card expenses are processed in accordance with corporate policy and IRS guidelines.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Review the procedures performed by Accounts Payable and Supply Chain to monitor spend and/or periodically audit transactions incurred by cardholders.	**No Findings Noted.**
2	Using a risk-based approach, review selected corporate card expense transactions identified as part of our analytic procedures in Step 3 of Objective 1 and evaluate their compliance with Corporate Policies. *NOTE: Upon reviewing the controls and processes in place to monitor Fuel and Fleet spend and performing an independent analysis of the Fuel and Fleet transactions to identify potential fraud indicators and/or significant outliers, Internal Audit noted that additional sample testing was not necessary to assess the risk related to Fuel and Fleet transactions. As such, the sample testing performed herein focused on transactions from Employee Expense Cards (AMEX) and Purchasing Cards (P-CARD).*	**Finding #1 – See Pages 8 & 9**
3	Review procedures followed to identify expenses incurred on behalf of the cardholder's spouse and ensure proper treatment for tax purposes.	**No Findings Noted.**
4	Verify that taxable travel has been identified and properly included in income as required by IRS reporting requirements for employees with unique working arrangements, including travel with the use of the Company-leased aircraft for compliance.	**No Findings Noted.**

Findings

Objective 2, Procedure #2: Review selected corporate card expense transactions identified as outliers, anomalies, or potential fraud indicators and evaluate their compliance with Corporate Policies.	**Risk Rating**
Finding #1: Expenses incurred deviated from established policy requirements.	**Low**

Process Owner(s): Mario Napoli (Director Finance Business Applications & Projects) and David Speas (Director Procurement Operations)
Executive Council Member Responsible: Donald Brown (Chief Financial Officer) and Mike Finissi (EVP Safety and Capital Execution)

Observation

Criteria: Employee expenses are for a valid business purpose, are adequately supported and reviewed, and are in compliance with the Corporate Credit Card Policy.

Condition:

Employee Expense Cards (AMEX):
As a result of the review of **85** transactions, Internal Audit identified **4** minor deviations from the established policy requirements:

- **(1)** transaction (~$0.6K) was misclassified as "Tips/Gratuities" when the expense was actually a "Hotel" expense within the MySpend system; as a result, the required receipt documentation was not submitted.
- **(1)** transaction (~$3.6K) did not include the proper accounting code when entered into MySpend, impacting proper classification of political action committee expenses.
- **(1)** transaction (~$0.8K) represented a charitable donation. The Corporate Credit Card Policy states "The Corporate employee expense card may not be used for materials, supplies, fleet expenses**, charitable donations**, software, or IT equipment".
- Additionally, Internal Audit identified one (1) employee consistently using a personal card for business expenses instead of the company issued AMEX card. The Corporate Credit Card Policy states: "All exempt employees that travel are required to use a Corporate Employee Expense Card wherever the card is accepted for travel-related expenses".

Findings

Objective 2, Procedure #2: Review selected corporate card expense transactions identified as outliers, anomalies, or potential fraud indicators and evaluate their compliance with Corporate Policies.	**Risk Rating**
Finding #1: Expenses incurred deviated from established policy requirements.	**Low**

Process Owner(s): Mario Napoli (Director Finance Business Applications & Projects) and Jamie Ricci (Director Supply Chain)
Executive Council Member Responsible: Donald Brown (Chief Financial Officer) and Mike Finissi (EVP Safety and Capital Execution)

Purchasing Cards (P-CARD):
As a result of the review of **53** transactions, Internal Audit noted the following:

- **(18)** selected transactions appeared to be Gifts (which should have been submitted through MySpend to ensure proper treatment for tax purposes) and/or Charitable Contributions (which are not currently an allowable expense on a Corporate Card according to **Appendix B**.)
- **(4)** selected transactions did not have the required manual expense packets submitted by the date of Internal Audit's testing.
- **(8)** selected transactions lacked detail within the receipt documentation to allow Internal Audit to conclude on the business purpose.
- **(22)** selected transactions were incurred using the wrong corporate credit card according to **Appendix B**, resulting in required information not being captured to support established tax assessment and income reporting processes.

Risk/Impact: Expenses may not be properly classified or coded for accounting purposes to ensure accurate reporting and evaluation by established tax assessment and income reporting processes.

Recommendation:

Employee Expense Cards and Purchasing Cards:
Internal Audit noted that Management has formed a P2P team which is currently working to develop enhancements to the Purchasing Card process and related impacts to the Employee Expense process. As of the date of this report, a decision has been made to move to a "one card solution", effectively merging the Purchasing Card and the Employee Expense Card. Internal Audit recommends that the P2P team incorporate these audit results into their development of future policies, controls and processes, including the clarification on how to properly incur and request reimbursement for expenses related to charitable events and or contributions.

Report Distribution

CC:	J. Hamrock	E.T. Belle
	D.E. Brown	C.W. Bunting
	P.T. Disser	J.E. Ricci
	M.J. Finissi	J.M. Matusz
	C.J. Hightman	J.W. Mulpas
	M. Kempic	L.M. Bolin
	C.W. Levander	C.A. Mannix
	V. Sistovaris	M.D. McCuen
	S.K. Surface	R.L. Bond
	P.A. Vegas	T.L. Langhurst
	T.J. Tokish	J.M. Konold
	S.J. Kelly	R.C. Rosenbrock
	B.R. Radulovich	T.L. Tucker
	H.L. Peters	D. Thompson
	E.E. Kendall	Deloitte & Touche

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*

NiSource

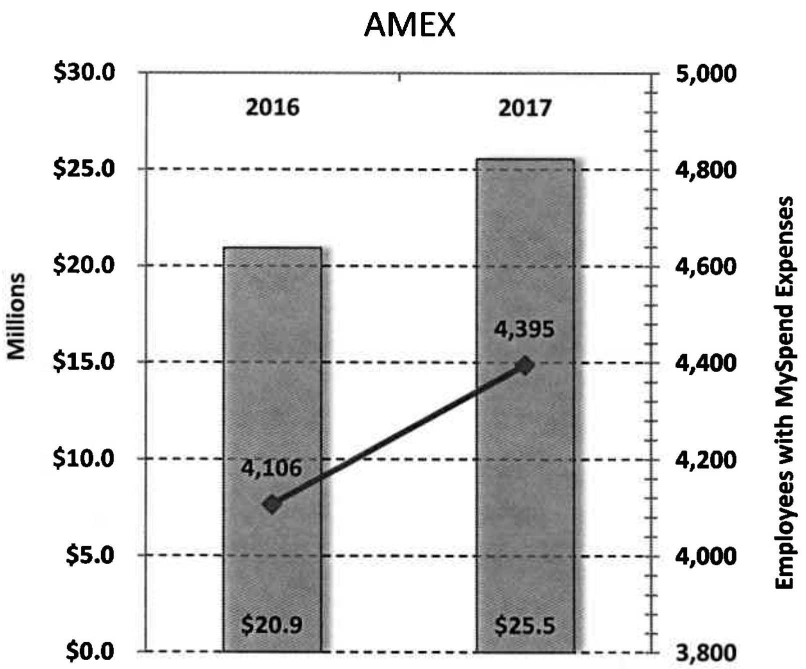
Corporate Credit Cards	Pcard	Fleet Card	Fuel Card	Expense Card	Don't use Credit Card
Card is Currently Issued by	*Citibank*	*ARI*	*WEX*	*AMEX*	
Business Meals - Offsite					
Business Meals - Onsite	X			X	
Catering for meetings				X	
Charitable Contributions					X
Dues & Memberships[2]				X	
Employee Gifts, Recognition[1]				X	
Entertainment - Reimbursable Buisness-related[2]				X	
Environmental Services					X
Fuel - Fleet Car			X		
Fuel - Rental Car				X	
Incidental Fleet Purchases - Low Dollar		X			
Incidental Fleet Purchases - Car Wash				X	
Materials - Inventory					X
Materials - Non inventory	X				
Meeting room deposits or rentals				X	
Meeting room equipment				X	
Services	X				
Special Memberships[2]					X
Supplies	X				
Training Supplies or books				X	
Travel - Airfare[2]				X	
Travel - Hotel Room/Tax[2]				X	
Travel - Rental Car				X	
Travel - Meals[2]				X	
Office Furniture					X

Notes:

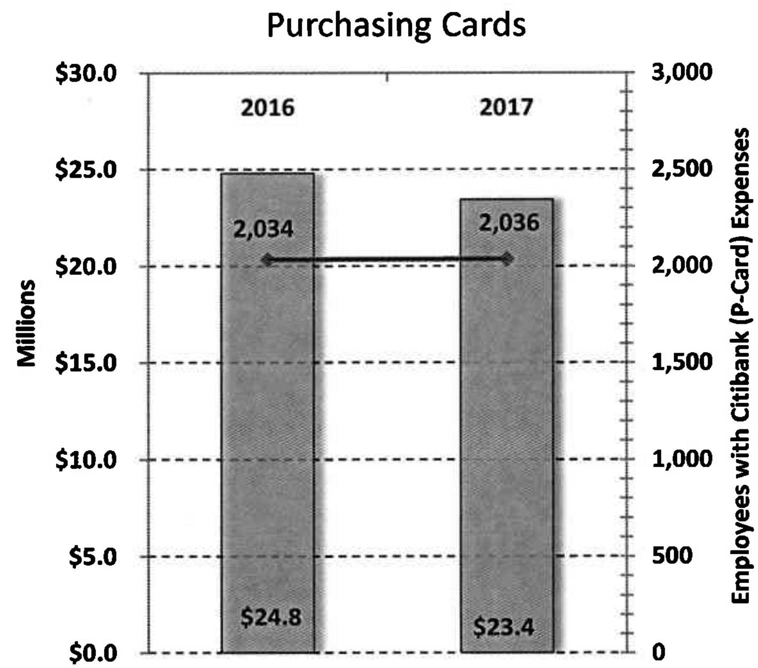
[1] Defined in Employee Gift and Award and Reporting Accounting Policy

[2] Defined in Business Expense Reimbursement and Reporting Policy

NiSource Employee Expense and Purchasing Card Expenses
2016-2017

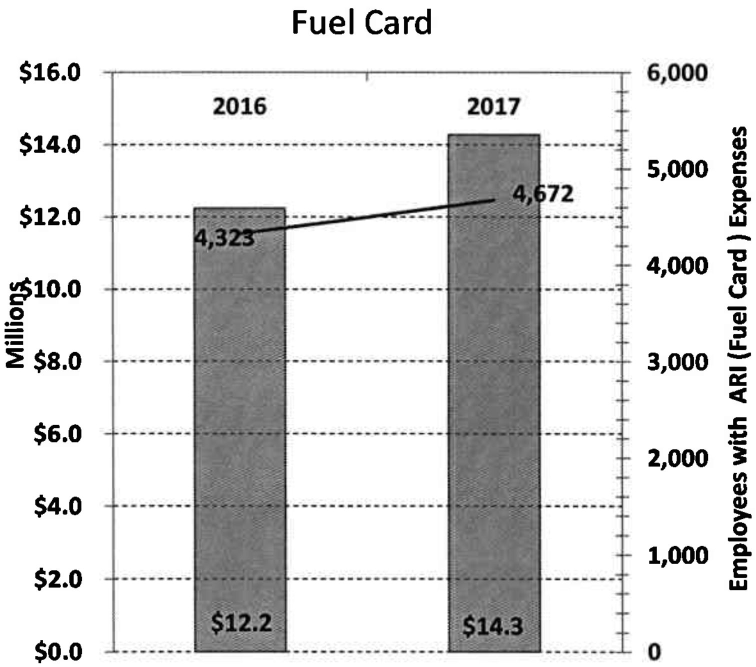


Overall total Employee Expense spending increased ~22% from 2016 to 2017. The total number of employees submitting expenses increased by ~ 7% during 2017 (4,106 – 4,395).

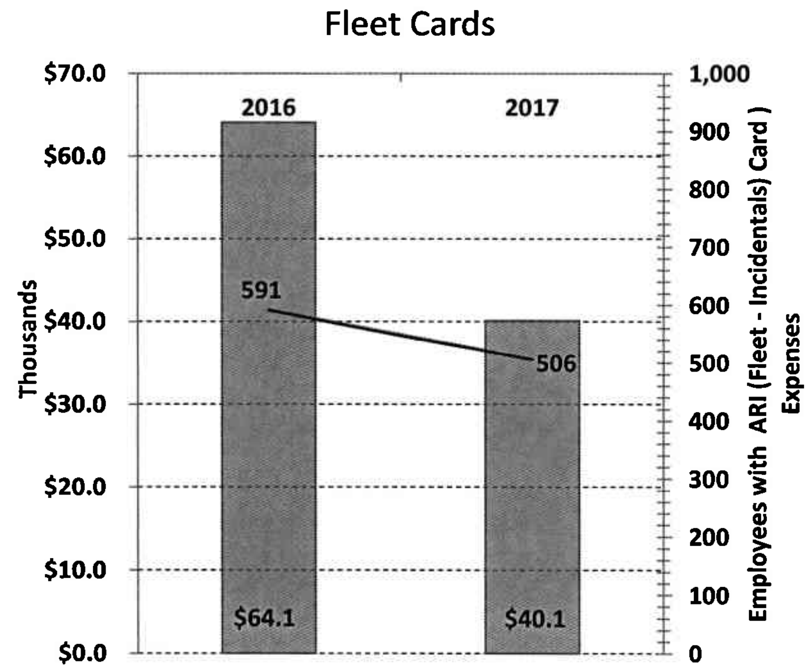


Overall total Purchasing Card spending decreased ~6% from 2016 to 2017. The total number of employees submitting expenses increased by less than ~ 1% during 2017 (2,034 – 2,036).

NiSource Fuel Card and Fleet Card Expenses
2016-2017

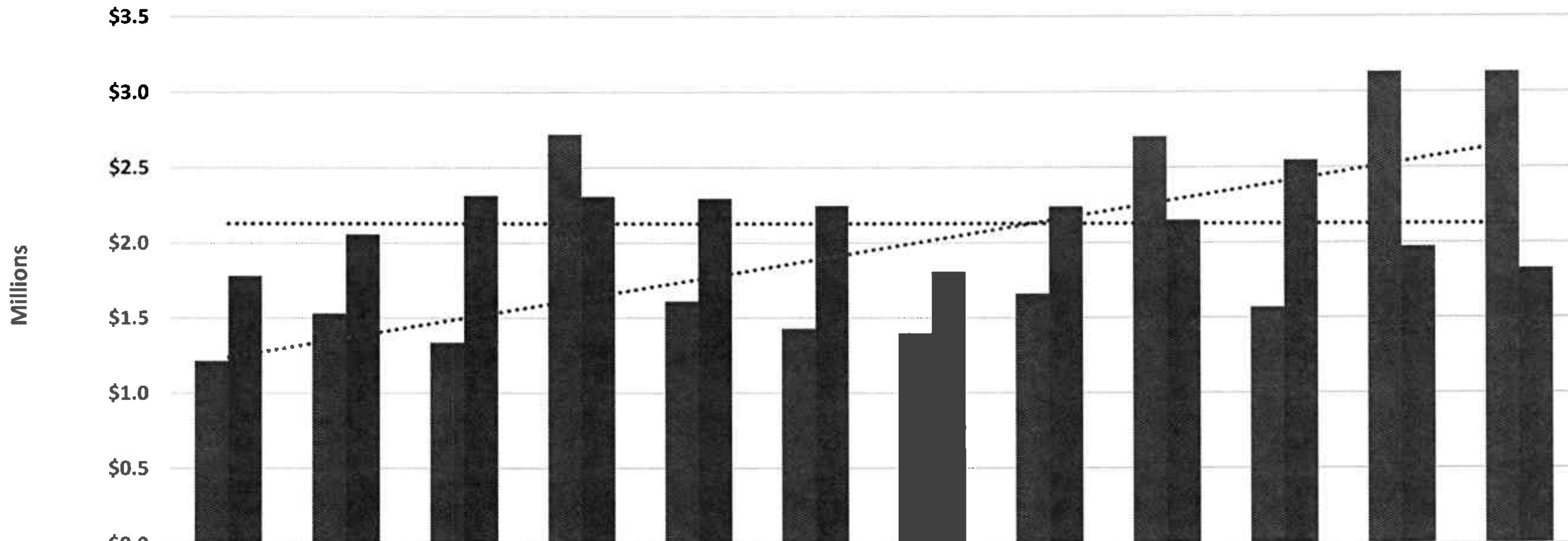


Overall total Fuel Card Expense spending increased ~17% from 2016 to 2017. The total number of employees submitting expenses increased by ~ 8% during 2017 (4,323 – 4,672).

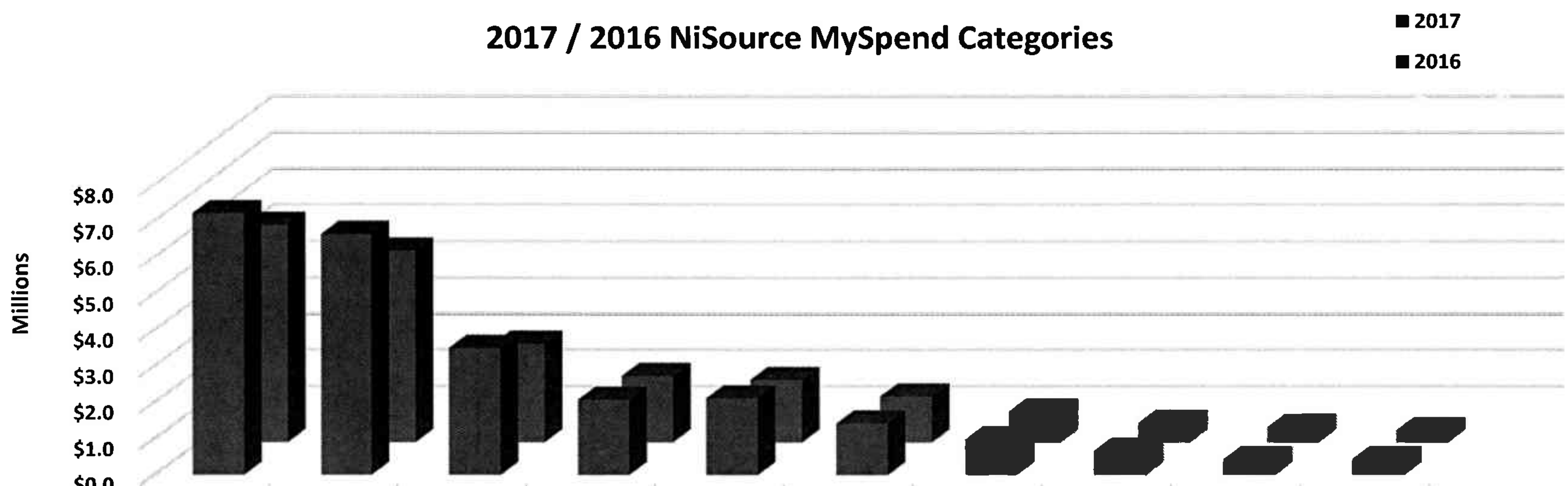


Overall total Fleet (incidental) spending decreased ~37% from 2016 to 2017. The total number of employees submitting expenses decreased by ~ 14% during 2017 (591 – 506).

AMEX vs P-CARD Spend
Trend by Month
2017



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
■ Pcard 2017	1,216,740.	1,531,898.	1,337,049.	2,719,444.	1,612,151.	1,430,308.	1,399,225.	1,660,903.	2,701,357.	1,569,173.	3,128,952.	3,128,401.
■ AMEX 2017	1,783,091.	2,058,879.	2,313,399.	2,308,520.	2,293,898.	2,245,777.	1,808,255.	2,239,377.	2,148,944.	2,543,867.	1,972,569.	1,826,735.



	Hotel	Meals	Air Trans.	Mileage	Ground Trans.	Training	Other	Office	Entertain.	Gifts & Awards
2017	$7,215,236	$6,642,953	$3,502,654	$2,080,631	$2,126,973	$1,431,222	$982,648	$675,989	$439,991	$445,020
2016	$5,982,873	$5,277,824	$2,717,164	$1,831,629	$1,724,348	$1,269,713	$850,642	$527,828	$417,925	$330,090
Percent Change	21%	28%	29%	14%	26%	17%	-2%	28%	5%	36%

General Data Observations:

Hotels, Meals and Air Transportation accounted for 68% of the spend in 2017.

- **Hotels** - Increased by ~ 6,578 transactions when compared to 2016
- **Meals** - Increased by ~ 22,822 transactions when compared to 2016
- **Air Transportation** - Increased by ~ 4,911 transactions when compared to 2016
- **Ground Transportation** – Increased by ~13,817 transactions when compared to the number of transactions in 2016

NOTE: “Conference Room Rental” expenses are included in the “Other” category for 2016 & 2017.

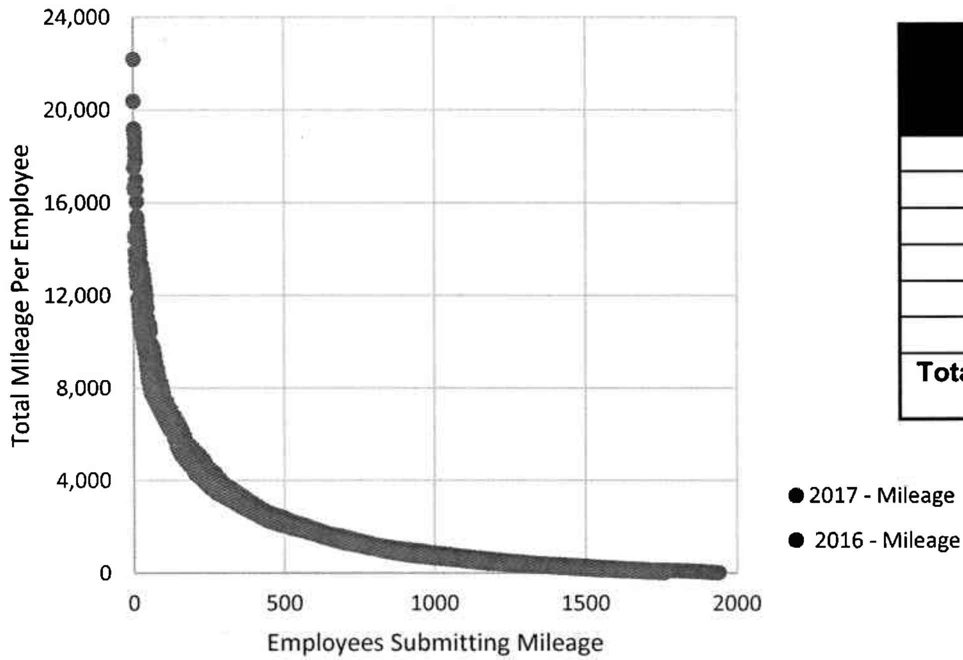
Total "Gift" MySpend Expenses Category 2016-2017

TOTAL MySpend GIFT TRANSACTIONS					
Expense Description	2016 ERS/My Spend		2017 My Spend		% of Total
TOTAL ERS / MySpend GIFT TRANSACTIONS	$	330,090	$	445,020	35%

TOTAL MySpend GIFT TRANSACTIONS		
Expense Description	2017 My Spend	
Bereavement - Flowers/Food	$	28,833
Employee - Flowers		17,017
Employee - Gift Card/Certificate		89,378
Employee - Merchandise		196,169
Employee - Retirement		2,131
Employee - Retirement Gift Card/Certificate		5,520
Employee - Retirement Merchandise		8,423
Non Employees		40,585
Retirement - Merchandise		2,298
Safety Awards - Taxable		16,884
Safety Awards Non Taxable		37,783
TOTAL MYSPEND GIFT TRANSACTIONS	**$**	**445,020**

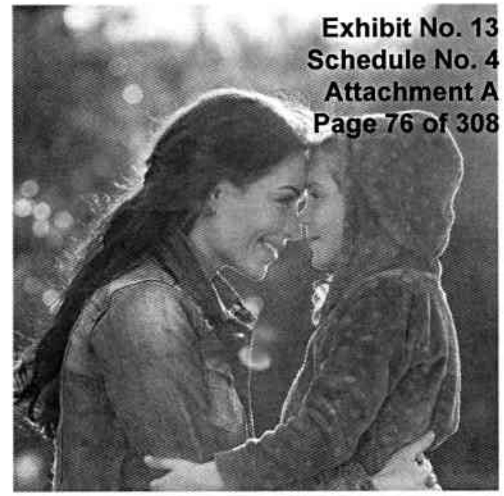
NOTE: New Expense Descriptions were created during 2017 to provide further clarity on the type of gift purchased and related tax implications. As a result, a comparison to 2016 spend by expense description is not meaningful.

2016 vs 2017 MySpend Mileage Submissions



Miles Submitted for Reimbursement	2016 Number of Employees	2017 Number of Employees
1 - 100	152	145
101 - 500	486	555
501 - 1,000	309	334
1,001 - 5,000	651	686
5,001 - 12,000	151	179
> 12,000 *	13	41
Total number of Employees Submitting Mileage	**1,762**	**1,940**

* The Vehicle Policy states "An employee ***is eligible*** to be assigned a passenger type Company vehicle if the position requires that the employee travel in excess of 12,000 business miles on an annual basis or if the employee's job duties make the use of a personal vehicle unreasonable". Internal Audit provided a list of the (41) employees noted above who submitted more than 12,000 miles to Fleet Management to determine eligibility for a fleet vehicle. Fleet Management noted that there are plans to increase the mileage threshold to 14,000 miles, which would result in 20 employees during 2017 exceeding the new proposed limit.



NGD Capital Cost Data Analysis

June 6, 2018

To: Ed Kendall – VP Capital Planning & Controls
Bob Kitchell – VP Projects & Construction, Gas
Scott Kelly – VP Supply Chain

From: M.R. Easterday, Lead Auditor - Capital & Construction Audits
A.J. Patel, Manager - Capital & Construction Audits
R.W. Binkley, Director - Internal Audit

NiSource®

Executive Summary

Throughout the course of our audit work, Internal Audit interacts with various datasets maintained by the company. Internal Audit noted the ease of access and the granular level of detail maintained for work performed by NGD contractors in the WMS system lends this segment to be suited for data exploration. Based on our previous experience, Internal Audit identified three **(3)** parameters available in COGNOS data sets to be evaluated for potential outliers (excess spend opportunity). By identifying and resolving these outliers (as described in the three data sets below) NiSource could potentially realize future cost savings and more efficient management of spend. Our review is consultative in nature and we realize that there could be potential "false positives" in our data analysis given various limitations of detail captured by our systems. We look to work with Supply Chain and Capital Program Management as Organizational Project Management (OPM) Standards are revised and disseminated as well as in conjunction with on-going Customer Value initiatives to help find an opportunity to discover better ways to manage our contracts and contractors to find cost saving opportunities. Below, we have outlined our analysis and on the slides following, highlighted these potential cost saving opportunities.

Gas Main Installation Data Summary Analysis:

Negotiated rates for Gas Main installation are unique to each contractor but often include tiered pricing that decreases per linear foot as the scope of the work increases (i.e. economies of scale.) Internal Audit identified 116 Project IDs out of 4,135 (2.8%) with linear footage quantities inconsistent with the negotiated rate. Potentially, a total of 283K units out of 6.5M units (4.3%) could have been paid for at a rate slightly higher than should have been paid. However, without further inquiry into *each* case, a precise error rate can not be known. *To determine an estimated amount of potential savings, Internal Audit sampled 10 exceptions out of the 116 identified by our analysis and determined ~$0.9 Million in potential overpayments; because each exception would need to be investigated individually to determine actual overpayment, we made a sample to provide a perspective for management's potential further investigation and consideration for future contractor management.*

Restoration Data Summary Analysis:

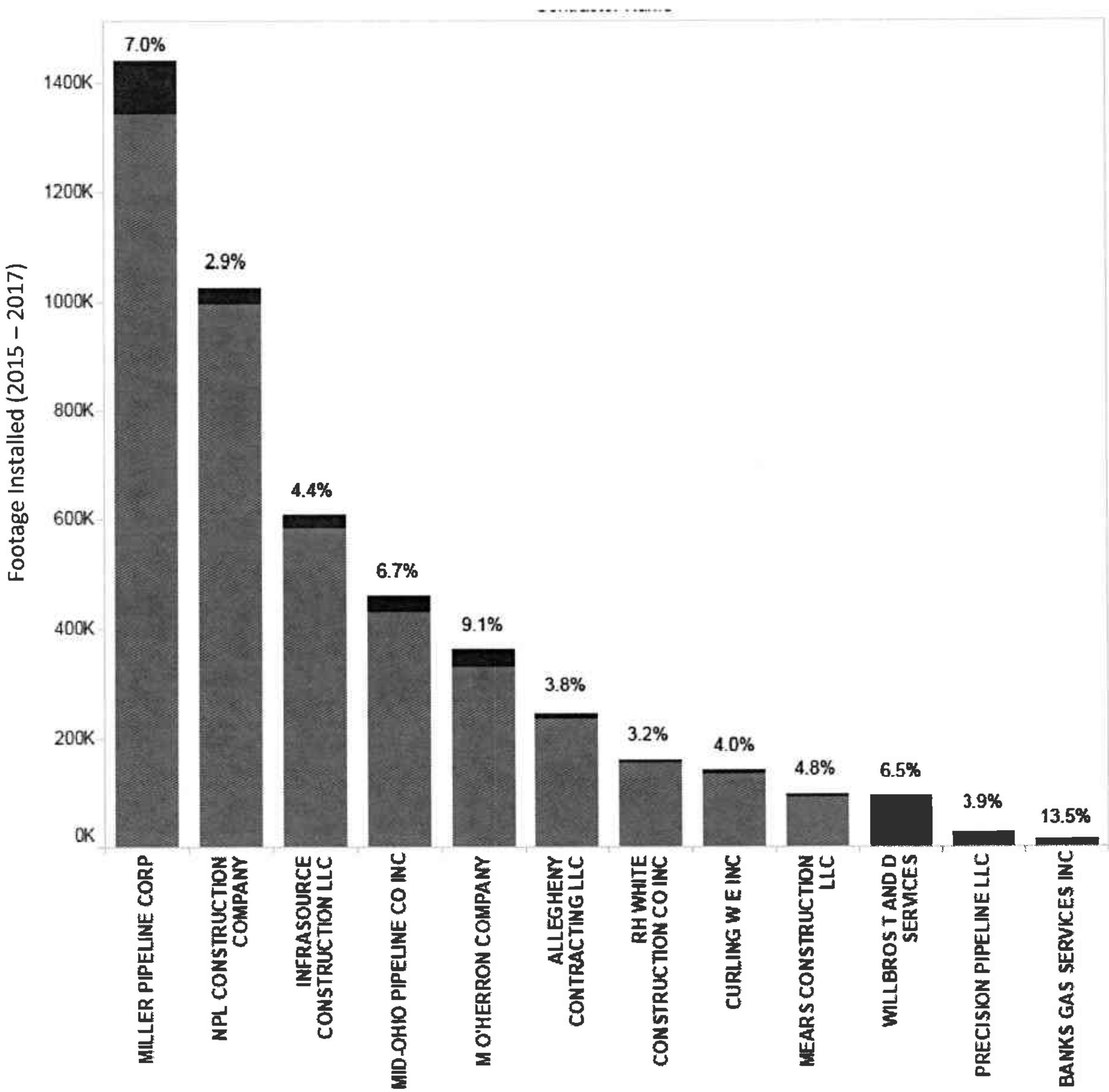
Rates for Restoration by square footage is negotiated similarly to Gas Mains in that they often included tiered pricing due to economies of scale. Internal Audit found 851 items on 824 Job Orders out of 157K total Job Orders with item quantities above the upper limit of the described range. Potentially, a total of 219K units out 6of 40.3M units (<1%) could have been paid for at a rate slightly higher than should have been paid. Without further inquiry into each case, a precise error rate can not be known. *To determine an estimated amount of potential savings, Internal Audit sampled 10 exceptions out of the 851 identified by our analysis and determined ~$0.2 Million in potential overpayments; because each exception would need to be investigated individually to determine actual overpayment, we made a sample to provide a perspective for management's potential further investigation and consideration for future contractor management.*

Per Diems Data Summary Analysis:

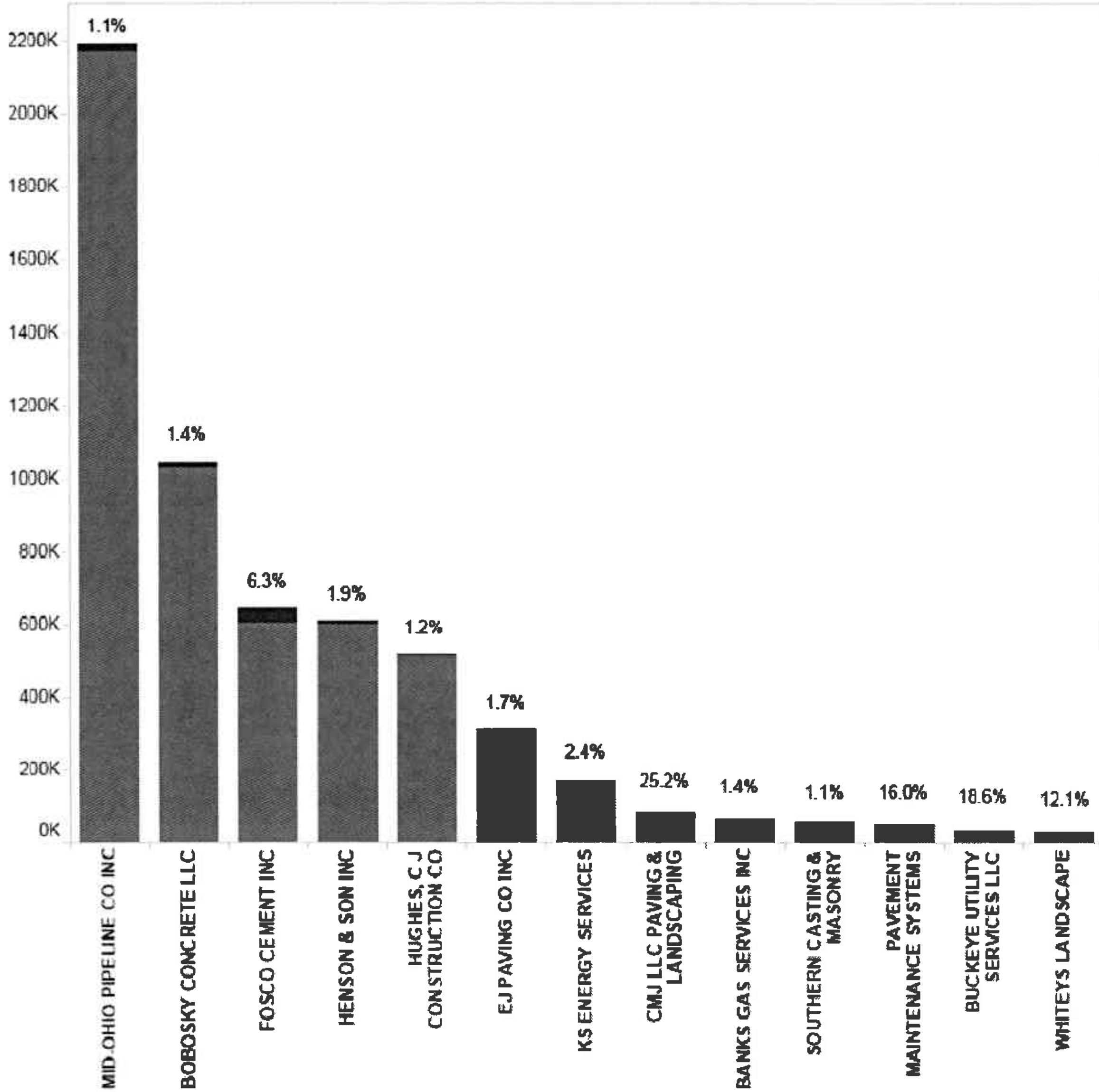
Per Diem rates are a general part of price and compensation negotiations with contractors. Internal Audit benchmarked Per Diem rates paid against US General Services Administration (GSA) rates. Internal Audit identified 48K instances (63%) where the Per Diem rate charged was in excess of the combined standard GSA rates for Meals & Incidental Expenses and Lodging. Furthermore, such occurrences appear to be mostly attributable to one contractor, Elk Energy Services, LLC. *Through our review, Internal Audit has determined that for the three year period reviewed, had we paid contractors at the standards GSA rates, NiSource could have saved an estimated ~$1.2 Million.*

See next three (3) slides of further discussion of the above topics and also refer to the Appendix for more detailed descriptions of procedures and results.

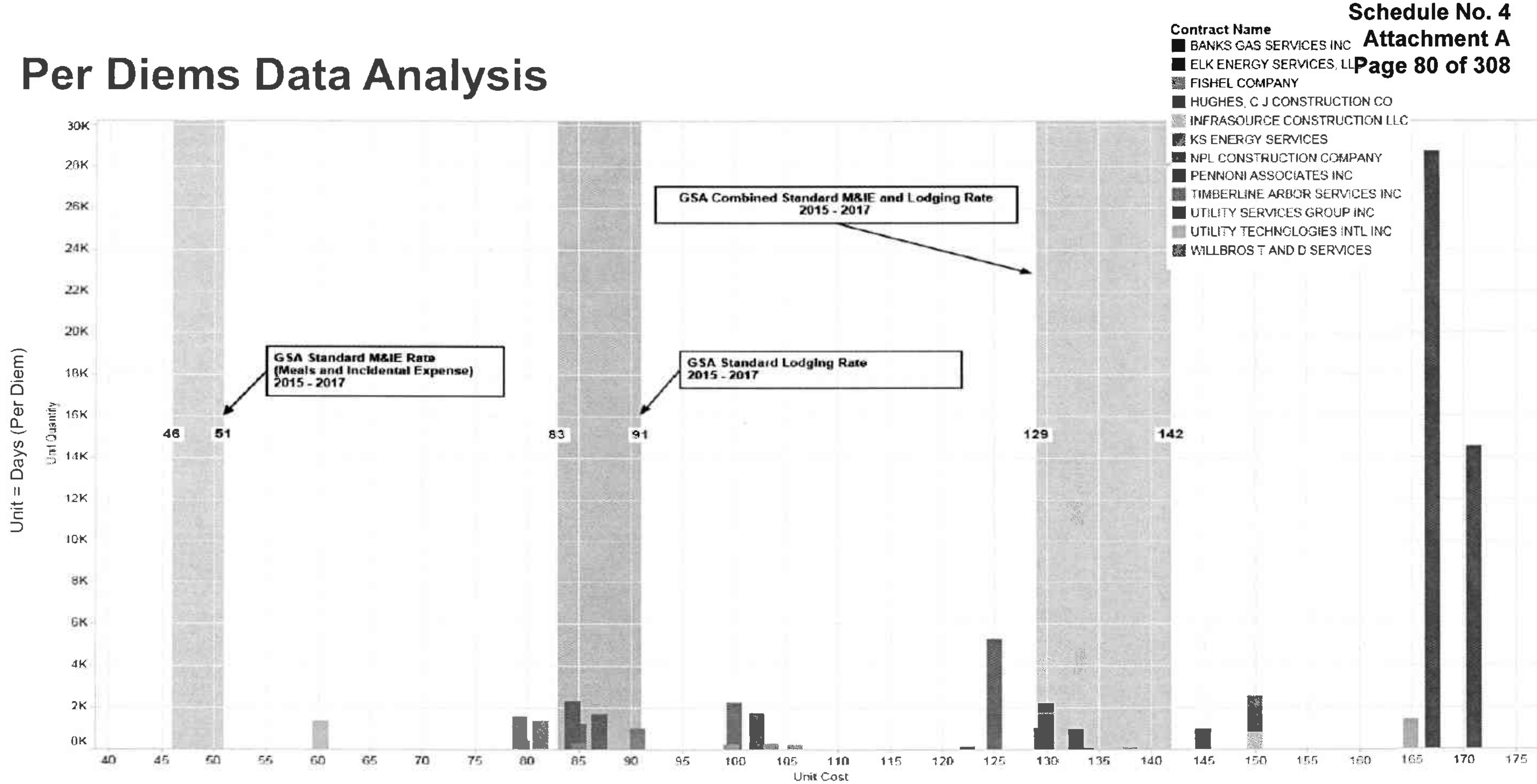
Gas Main Installation Data Analysis



Restoration Data Analysis



Per Diems Data Analysis



Report Distribution

CC:

J. Hamrock
D.E. Brown
M.J. Finissi
C.J. Hightman
M. Kempic
C.W. Levander
V. Sistovaris
P.A. Vegas
S.K. Surface
P.T. Disser
T.A. Dehring
T.J. Tokish
R.V. Mooney
S. Anderson
S. Diener

Appendix – Table of Contents

Background and Summary Procedures

Throughout the course of our audit work, Internal Audit interacts with various datasets maintained by the company. Some datasets contain more detailed information than others, some are specific to company segment, and some are easier to access than others. The Capital & Construction group within Internal Audit primarily performs reviews of construction contractors which involves obtaining and reviewing billing and payment data. The datasets for such payments are split between company segments and are in brief:

NGD: *WMS* - Payments are made to contractors using the reverse billing process. Field personnel observe completed units, record them into DPRs, and administrative staff enter units completed into WMS which prompts payment to contractors. Level of detail: Units of Item Numbers, by DPR date. This data can be accessed by Internal Auditors using COGNOS at any time with no outside assistance.

NIPSCO: *MAPPS* - Payment are made to contractors using a traditional three-way match process. Invoices are received, reviewed by cost analysts who coordinate with field personnel to determine if activities or amounts billed represent services or benefits received. Account coding is applied to invoiced amounts at the NOE level and processed for payment in MAPPS. This data can be accessed by NIPSCO AP personnel only who run queries on request based on vendor, PO, date range, or other.

Internal Audit noted the ease of access and the granular level of detail maintained for work performed by NGD contractors in the WMS system lends this segment and work to be better suited for data exploration than NIPSCO data. Internal Audit used COGNOS to download contractor payment information using the Contract Units Cost Per Item With Details and Acct Proj Cd report for calendar years 2015, 2016 and 2017. (See slide 19 for report query criteria and field listing.) Then, using this data Internal Audit conduct limited procedures to identify anomalies in contractual rates paid for three major categories of item numbers. Such procedures included the following:

- *Review Gas Main installation unit rates which were negotiated for a prescribed length or area and determine if appropriate rates were applied on each project or job order.*
- *Review Restoration unit rates which were negotiated for a prescribed length or area and determine if appropriate rates were applied on each project or job order.*
- *Review Per Diem rates charged and identify outliers as compared to US General Services Administration rates.*

Background and Summary Procedures (continued)

In order to identify anomalies in the data found in COGNOS, it is important to understand the parameters on which the unit rates are agreed. In most Service Authorizations, an exhibit titled "Bid Unit Descriptions" is included using standardized language describing the nature of work included for each subset of item numbers (see below). While the item numbers and descriptions used are relatively consistent across all SA's, each SA will have a unique "Price Matrix" which lists the unit price assigned to all items negotiated by the contractor (see next slide).

01 – 09 GAS MAIN (only) ITEMS

- 01 – New Main – Plastic
- 02 – New Main – Established Area – Plastic
- 03 – Replace Main – Plastic
- 05 – New Main – Builder Dig & Backfill
- 07 – New Main – Steel
- 09 – Replace Main – Steel

01 – NEW MAIN INSTALLATION – PLASTIC (OH, KY, PA, MD, VA)

This item includes the installation of new gas distribution mains. This item includes all excavation and backfilling, incidental flagging, sloping, shoring up to 10 feet, supervision, labor, equipment, and miscellaneous supplies not otherwise provided. This item also includes:

Lining up, fusing of plastic pipe, cutting of pipe, installation of warning tape and locating wire along with the laying of plastic pipe. The welding/fusing of any end caps, purge points or pressure verification fittings as well as the installation of plastic valves up to and including 4". Laying and lowering of the pipeline including minor stream crossings (defined as crossings that can be made with normal trenching equipment). Air test and interior cleaning (pigging) and purging of the pipeline,

Steel pipe installed as a transition to plastic pipe up to 10 feet in length shall be paid as plastic pipe. When steel pipe is installed, cleaning, priming, coating and wrapping per manufacturer's specifications of all bare joints, holidays and damaged coating shall be included. This item includes the installation of anodes and test stations when required.

The unit of measure will be paid according to the installation type, length, and method specified by Owner's Authorized Representative. The project total length shall be used to determine the unit price paid for each size of pipe installed.

The only extras that will be considered will be erosion seeding, boring, rock excavation, hard surface removal and restoration, special backfill, extra depth, frost cutting and sod installation, where applicable, and those will be paid according to prices as established elsewhere in the Contract.

Background and Summary Procedures (continued)

A common provision included in boilerplate bid unit descriptions addresses how to determine the unit price to be paid. This language is commonly: *"The project total length shall be used to determine the unit price paid for each size of pipe installed."* This language appears to be included for all contractors whether or not the scope of the SA is for a specific project or if the SA is intended to cover blanket Job Order work. Therefore, it is important to interpret the term "project" properly in order to evaluate which price should have been paid. Throughout our analysis, Internal Audit interpreted "project" to be at the Job Order level. This is the most conservative interpretation of the provision and could yield many more exceptions if the analysis was performed by summarizing units at the Project_ID level.

For Gas Main installation and most restoration items, these rates are negotiated on a linear foot increment and include progressively lower rates for longer footage projects (concurrent with economies of scale and less mobilization as a percentage of the work performed). Per Diems are a flat daily rate any may be for Lodging, Meals & Entertainment, or both in a combined rate. See below.

Item No.	Description	UOM	2015 Price
01-225	NEW MN,501-1000'	LF	7.41
01-230	NEW MN,1001-3500'	LF	6.88
01-235	NEW MN,>3500'	LF	6.35
01-354	NEW MN,501-1000'	LF	8.46
01-364	NEW MN,1001-3500'	LF	7.94
01-374	NEW MN,>3500'	LF	7.41
01-625	NEW MN,501-1000'	LF	11.64
01-630	NEW MN,1001-3500'	LF	11.11
01-635	NEW MN,>3500'	LF	10.58
01-825	NEW MN,501-1000'	LF	13.76
01-830	NEW MN,1001-3500'	LF	13.23
01-835	NEW MN,>3500'	LF	12.70
02-225	NEW MN,ESTAB,501-1000'	LF	7.94
02-230	NEW MN,ESTAB,1001-3500'	LF	7.41
02-235	NEW MN,ESTAB,>3500'	LF	6.88

Gas Main Installation Data Analysis

Gas Main Installation Data Analysis (continued)

The table at right depicts a listing of contractors, Gas Main Install footages, and possible error rates. These footages are not all inclusive and are the summation of units data downloaded from COGNOS for calendar years 2015, 2016, and 2017. Most likely these figures do not represent the exact gas main footage installed during these periods as these records are for footage paid through WMS only. Mains may be installed using hourly crew rates which are not captured in this data and may be paid for through other systems (such as Catalyst) and completely outside of the dataset reviewed.

Note: "Other Contractors without errors (9)" is included to highlight the pervasiveness of the inconsistencies identified in the analysis.

Contractor Name	Linear Feet Over Footage Threshold A	Total Linear Feet in Error B	Total Linear Feet Paid C	Error % = B / C
BANKS GAS SERVICES INC	291	1,791	13,299	13.5%
M O'HERRON COMPANY	8,656	32,656	360,540	9.1%
MILLER PIPELINE CORP	***21,898***	***100,398***	***1,441,106***	***7.0%***
MID-OHIO PIPELINE CO INC	***20,863***	***30,863***	***461,007***	***6.7%***
WILLBROS T AND D SERVICES	1,981	5,981	92,233	6.5%
MEARS CONSTRUCTION LLC	592	4,592	96,656	4.8%
INFRASOURCE CONSTRUCTION LLC	***13,139***	***26,639***	***609,719***	***4.4%***
CURLING W E INC	628	5,628	140,723	4.0%
PRECISION PIPELINE LLC	26	1,026	26,054	3.9%
ALLEGHENY CONTRACTING LLC	822	9,322	245,127	3.8%
RH WHITE CONSTRUCTION CO INC	2,151	5,151	158,890	3.2%
NPL CONSTRUCTION COMPANY	***3,427***	***29,427***	***1,025,819***	***2.9%***
HUGHES, C J CONSTRUCTION CO	591	5,091	209,089	2.4%
STANLEY PIPELINE INC	138	2,638	123,004	2.1%
RILEY BROTHERS ASPHALT INC	1,103	2,103	100,589	2.1%
KINSLEY CONSTRUCTION INC	1,310	6,310	304,337	2.1%
ROBERT J DEVEREAUX CORP	372	4,872	278,372	1.8%
FEENEY BROTHERS EXCAVATION LL	165	2,165	142,579	1.5%
FISHEL COMPANY	1,581	5,581	387,236	1.4%
RLA INVESTMENTS INC	593	1,093	94,446	1.2%
Other Contractors without errors (9)	0	0	203,612	0.0%
TOTALS	80,327	283,327	6,514,437	4.3%

Gas Main Installation Data Analysis (continued)

Total Project Linear Feet Quantity	Count of Project IDs	Percent of Count
<0.00	1	0.0%
0.00 - 39.99	256	6.2%
40.00 - 79.99	169	4.1%
80.00 - 119.99	126	3.0%
120.00 - 159.99	103	2.5%
160.00 - 200.00	72	1.7%
All other Projects	3,408	82.4%
TOTALS	4,135	100.0%

Gas Main Installation Data Analysis (continued)

Restoration Data Analysis

Restoration Data Analysis (continued)

The table at right depicts a listing of Restoration Item descriptions with quantities over footage thresholds summarized by Job Order.

For example: "4-IN CONC SIDEWALK 0-200SF" had 109 Job Orders that included this item totaling a quantity more than 200 square feet for the Job Order number. The total quantity of all 109 instances where this occurred was 59,191 square feet units charged.

These footages are not all inclusive and are the summation of units data downloaded from COGNOS for calendar years 2015, 2016, and 2017. Most likely these figures do not represent exact restoration completed during these periods as these records are for square footage paid through WMS only. Restoration may also be completed using hourly crew rates which are not captured in this data and may be paid for through other systems (such as Catalyst) and completely outside of the dataset reviewed.

Item Description	Total Units in Error	Count of JOs with Errors
TPSL RKE MLCH N SEED 51-500SF	558	1
LOAM AND SEED LT 6 SY	182	10
SOIL,RAKE,MULCH,SEED 1-50SF	90	1
SOIL RAKE MULCH SEED 0-200SF	40,558	95
ASPL REP<45SF2.5"BASE1.5"CAP	11,528	150
ASPLT REP,MINCHRG,<45SF	248	3
ASP,GRND,301-1000SY,1.5ICAP	2,975	2
ASP,GIND,1001-3000SY,1.5ICP	5,401	1
BACKFILL/FLASHFILL <3 CY	242	3
ASPH CURB ONLY ROLLED 0-50LF	2,036	24
CONCRETE CURB ONLY 0-50 LF	4,375	32
CURB AND GUTTER 0-50 LF	598	8
4-IN CONC SIDEWALK 0-200SF	**59,191**	**109**
6 IN CONC SIDEWALK 0-200 SF	31,175	83
ASPHALT - 4 INCH 0-200 SF	18,788	52
ASPHALT - 6 INCH 0-200 SF	10,814	32
ASPHALT - 8 INCH 0-200 SF	1,594	5
6.1-25 SY	7,773	204
CONCRETE - 4 INCH 0-200 SF	2,205	7
CONCRETE - 6 INCH 0-200 SF	1,087	4
CONCRETE - 8 INCH 0-200 SF	270	1
CONCRETE - 10-INCH 0-200 SF	794	3
6 IN CNCRT 4 IN ASPH 0-200SF	336	1
ASPH MIL OVRLY 1.5IN 0-300 SY	8,103	12
ASPH ML OVRLY 1.5IN 301-600SY	3,939	4
ASP MIL OVRLY1.5IN601-1000SY	3,229	2
ASP MILL-OVLY 2IN 0-300SY	305	1
ASP MILL-OVLY 2IN 601-1000SY	1,071	1
TOTAL	219,464	

Per Diem Data Analysis

Internal Audit utilized ACL to compare Per Diem rates paid against the applicable standard GSA rate. Internal Audit's analysis made adjustments for new rates effective October 1 of each year and while "City" information maintained in WMS did not directly correlate to the municipalities for which the GSA established specific rates, Internal Audit was able to consider instances where the WMS field for location indicated clearly as relating to Columbus or Pittsburgh and use the applicable municipality rates in those instances.

Based on the analysis performed, Internal Audit identified 48K instances (63%) where the Per Diem rate charged was in excess of the GSA rate. This figure likely contains some degree of false positives as better alignment with WMS location and GSA municipalities could impact the number of exceptions, however it is apparent that there exists, at a not insignificant level, instances where Per Diems are agreed to in excess of the GSA rate. The next slide shows maximum and minimum Per Diem rates paid by year and by state for the NGD footprint. All states had Per Diems charged in excess of the standard GSA Rate.

Contractor Name	Total Units over GSA Standard
ELK ENERGY SERVICES, LLC	42,929
UTILITY TECHNOLOGIES INTL INC	2,282
NPL CONSTRUCTION COMPANY	1,536
PENNONI ASSOCIATES INC	953
UTILITY SERVICES GROUP INC	504
RECONN HOLDINGS LLC	119
R & R PIPELINE INC	113
All Other Per Diems Paid (under GSA Standard)	28,655
TOTAL	77,090

Further Possible Procedures

1. *Review outlier contracts:* Upon identifying the most egregious Per Diem rates agreed to, obtain related SA's to validate the amounts. Further, perform inquiries with management to determine the propriety of agreed upon Per Diems.

Per Diem Analysis (continued)

State	Year	Minimum Unit Cost A	Maximum Unit Cost B	*GSA Std ME&I C*	*GSA Std Lodging D*	*GSA Std Full Rate E = C + D*	Over/(Under) = B - E	Total Unit Quantity	Total Unit Cost
KY	2015	$ 39	$ 171	*$ 46*	*$ 83*	*$ 129*	**$ 42**	1,337	$ 125,336
KY	2016	$ 40	$ 130	*$ 51*	*$ 89*	*$ 140*	**$ (10)**	1,580	$ 157,057
KY	2017	$ 40	$ 167	*$ 51*	*$ 91*	*$ 142*	**$ 25**	2,378	$ 272,762
MA	2015	$ 39	$ 171	*$ 46*	*$ 83*	*$ 129*	**$ 42**	1,010	$ 141,514
MA	2016	$ 40	$ 152	*$ 51*	*$ 89*	*$ 140*	**$ 12**	444	$ 59,185
MA	2017	$ 42	$ 155	*$ 51*	*$ 91*	*$ 142*	**$ 13**	391	$ 58,216
MD	2015	$ 50	$ 171	*$ 46*	*$ 83*	*$ 129*	**$ 42**	701	$ 92,606
MD	2016	$ 50	$ 105	*$ 51*	*$ 89*	*$ 140*	**$ (35)**	98	$ 8,752
MD	2017	$ 40	$ 150	*$ 51*	*$ 91*	*$ 142*	**$ 8**	1,425	$ 174,070
OH	2015	$ 39	$ 171	*$ 46*	*$ 83*	*$ 129*	**$ 42**	5,407	$ 720,845
OH	2016	$ 31	$ 167	*$ 51*	*$ 89*	*$ 140*	**$ 27**	13,071	$ 2,036,482
OH	2017	$ 31	$ 175	*$ 51*	*$ 91*	*$ 142*	**$ 33**	10,906	$ 1,660,970
PA	2015	$ 39	$ 171	*$ 46*	*$ 83*	*$ 129*	**$ 42**	3,674	$ 434,119
PA	2016	$ 40	$ 167	*$ 51*	*$ 89*	*$ 140*	**$ 27**	5,319	$ 710,216
PA	2017	$ 40	$ 250	*$ 51*	*$ 91*	*$ 142*	**$ 108**	12,447	$ 1,673,619
VA	2015	$ 39	$ 171	*$ 46*	*$ 83*	*$ 129*	**$ 42**	5,280	$ 813,266
VA	2016	$ 40	$ 171	*$ 51*	*$ 89*	*$ 140*	**$ 31**	6,303	$ 943,177
VA	2017	$ 40	$ 171	*$ 51*	*$ 91*	*$ 142*	**$ 29**	5,321	$ 754,469
	2015							17,408	$ 2,327,686
	2016							26,814	$ 3,914,870
	2017							32,867	$ 4,594,106

COGNOS Report Title, Query Criteria and Report Field Listing

Contract Units Cost Per Item With Details and Acct Proj Cd

- Location: <*blank*>
- Date Range: Between Jan 1, 2015 and Dec 31, 2017
- Contract No: <*blank*>
- Vendor: <*blank*>
- Item Number: <as appropriate>
- Job Type: <*blank*>

The resulting report contains the following fields which can be used for analysis:

NiSource

Internal Audit

Professionalism ▪ Integrity ▪ Objectivity

June 26, 2018

To: Michael Banas, Director of Communications

From: Tanya Muvceski, Senior Internal Auditor
Sal Alshuqairi, Manager of Internal Audit
Lin Koh, Director of Internal Audit

Internal Audit performed Agreed Upon Procedures (AUP) associated with NiSource's 2017 Integrated Sustainability Report. The Report includes information related to NiSource's financial and Environmental, Safety and Governance (ESG) such as environmental, safety, customers, and employee diversity data.

The objective of the AUP was to ensure that the sustainability information listed in the Report and supplemental sustainability information was consistent with the supporting schedules as well as reviewing the mathematical accuracy of the various schedules. Additionally, Internal Audit has obtained an understanding of the scope of the Verification Statements provided by Trinity Consultants and Jacobs hired by NiSource. Trinity Consultants verified the environmental data for accuracy and Jacobs verified the Integrated Report, GRI table, scorecard, and supplemental sustainability data for completeness against the GRI guidelines.

<u>Summary of Observations</u>
While we were able to obtain supporting schedules and agree the data covered in the scope to the information issued, there were a few instances where the information did not agree to the supporting schedules. Additionally, we noted some instances where management support consisted only of emails and manually attached spreadsheets rather than original source data.

<u>Conclusion and Process Improvements Recommendation:</u>
While no significant issues were identified during our work, Internal Audit noted the following opportunities for improvement:

1. Obtaining and maintaining adequate supporting documentation, including source data, for example, application queries or other source reports.

   <u>Management Response:</u> For non-environmental data, management conversations are in progress with Financial Planning to build sustainability-related data collection into their quarterly/annual process. Financial Planning was already collecting much of the same information for different purposes. A plan to further improve environmental data integrity, the team is beginning to increase usage of a database developed specifically for this purpose.

2. Creating a central repository for Sustainability information, where it can be shared, updated, and analyzed by users involved in the reporting process.

   <u>Management Response:</u> See above response.

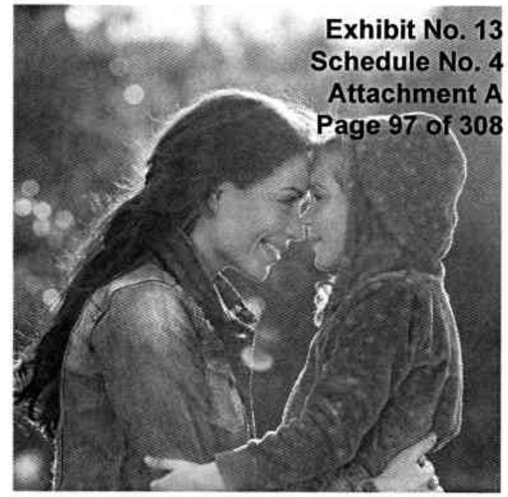
3. Including a disclosure statement on Supplemental Sustainability data published on the NiSource website indicating that the information listed is currently under review and is subject to change, based on management or independent third party review.

   <u>Management Response:</u> Immediately upon this recommendation, management has revised the document to accurately reflect the status of the independent third-party review.

4. Consider the timing of the verification work provided by third party consultants to ensure that the majority of their work is completed, including Verification Statements, prior to issuing/posting the environmental information.

   Management Response: Management plans to begin discussions with vendor and build this into the scope of work for 2019 with the intent not to publish any detailed data (supplemental materials) until after the information is verified.

cc: Peter Disser, Carl Levander, Julie Stephenson, Kelly Carmichael, Mark Downing, Greg Shoemaker, Lin Koh, Sal Alshuqairi, Tanya Muvceski



Transmission Integrity Management Program (TIMP)- NiSource

July 6, 2018

To: Robert Mooney, VP of Gas Engineering and Pipeline Safety

From: Natalie Ladd, Lead Internal Auditor
Chris Marlatt, Lead Internal Auditor
Sal Alshuqairi, Manager of Internal Audit
Lin Koh, Director of Internal Audit

NiSource®

Executive Summary

Internal Audit performed an evaluation over certain key elements of the gas Transmission Integrity Management Plan (TIMP) at NiSource and the adherence to Pipeline and Hazardous Materials and Safety Administration (PHMSA) regulation 49 CFR 192, Subpart O. The audit focused on the risk assessment process to identify potential threats to the integrity of gas transmission pipelines, the remediation and mitigation efforts taken to address identified potential threats, and the overall governance and oversight structures in place to execute and monitor the TIMP program. Based on our review, the following findings were noted:

Low Risk Findings:

- Processes for executing TIMP, including HCA identification methods, annual pipeline inspections, and the risk models, are not consistently applied across NiSource (Slide 6).
- While NIPSCO and the Columbia Companies perform an annual risk assessment with their respective models, as required by federal regulations, there is no formal process to document the conclusions for how the risk model results are applied within the TIMP plan, like the prioritization of integrity assessments and decisions for preventative and mitigative measures (Slide 7).

This audit conforms to the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, has been provided. IA would like to thank Pipeline Asset Integrity staff and management for their cooperation and time in support of this audit.

Background

Federal Regulations

Pipeline Integrity is central to ensuring public safety for pipeline operators. A formalized approach to gas pipeline integrity programs was initiated by the American Society of Mechanical Engineers (ASME) B31.8S "Managing System Integrity of Gas Pipelines in 2001. PHMSA's Office of Pipeline Safety (OPS) established regulations requiring a formal gas pipeline integrity program under 49 CFR Part 192, Subpart O ("The Regulation") as required by the Pipeline Safety Improvement Act of 2002. The Regulation makes gas transmission pipeline operators develop an Integrity Management Program with key program elements for continually monitoring and assessing pipeline integrity in order to reduce the likelihood and consequence of incidents.

Integrity management requires pipeline operators to identify transmission pipelines located within high consequence areas (HCAs) where significant damage to people and property could occur in the event of a pipeline failure. HCAs are defined using two acceptable methods. Method 1 uses a combination of potential impact radius and class locations (1-4) where Class 1 locations are more rural and Class 4 locations are more urban. Method 2 defines HCAs as an area with a potential impact circle containing 20 or more buildings or an identified site (as defined through federal regulations). Pipeline operators must annually reassess HCAs and potential threats to identify any changes.

Through the integrated evaluation of pipeline data and information, pipeline operators perform an annual risk assessment to identify the nature and location of risks along a pipeline and facilitate decision making. Potential threats for a pipeline are determined through data and information gathering that includes information on the operation, maintenance, design, operating history, and also includes conditions or actions that affect defect growth or reduce pipeline properties. The Regulation leaves the risk assessment approach up to the pipeline operator. At NiSource, risk assessment methodologies are used in conjunction with subject matter experts (SMEs) that regularly review the data input, assumptions, and results of risk assessments.

Based on priorities determined through risk assessment, all HCAs are then incorporated into an integrity assessment plan that ensures integrity assessments (direct assessment, in line inspection, pressure testing) are performed in accordance with The Regulation. Each new HCA is required to have a baseline (initial) assessment performed within ten (10) years of the HCA determination date, with reassessment every seven (7) years. An annual assessment plan is created to determine the scheduled direct assessments to be performed in a given year.

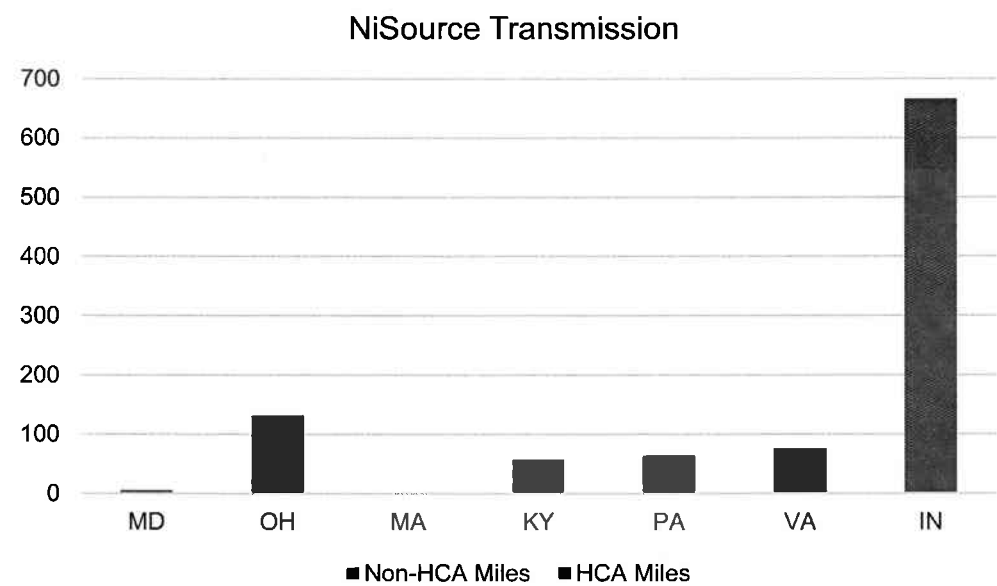
Planned responses, which include prevention and mitigation activities, to assessment results are then developed by the pipeline operator. The Regulation leaves the specific prevention and mitigation responses and timeframes up to the pipeline operator.

The Regulation has other program elements, such as quality assurance, record keeping, and management of change, but these elements are out of scope for this audit.

Background

NiSource

NiSource operates nearly 1,000 miles of transmission pipe across the seven (7) NiSource states, with the majority of miles in Indiana. Refer to the breakdown of transmission miles (including HCA and Non-HCA miles) through 2017 below.



NiSource implemented Transmission Integrity Management Program (TIMP) plans in each of the states since the final ruling was issued in 2002. Effective March 31, 2018, NiSource created a unified TIMP plan that combines the separate state plans into one company plan with unified documentation requirements. Each of the program elements from the Regulation are detailed within this NiSource TIMP plan. NiSource uses two different risk models within TIMP with the Columbia Companies using the Kiefner model and NIPSCO using the Drivers, Resistors, Indicators, Preventers (DRIP) model.

On March 5, 2018, a Notice of Investigation was issued by the Virginia State Commission listing six probable violations pertaining to technical process application, recordkeeping, and integrating the nine categories of possible threats into the risk assessment process. On February 9, 2017, a Notice of Areas of Concern was issued by the Indiana Utility Regulatory Commission listing three areas pertaining to documentation, the coordination of information, and recordkeeping.

Audit Scope and Approach

Objective 1: Assess whether the governance and oversight structure in place provides effective oversight over transmission integrity.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess whether integrity management roles and responsibilities are well defined and communicated.	Finding #1- See Page 6
2	Assess whether a communication plan has been established to communicate pipeline integrity issues and safety concerns.	No findings noted.

Objective 2: Assess whether management applies a transmission pipeline risk assessment process in accordance with established federal regulations.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
3	Assess whether high consequence areas (HCAs) are continuously reassess in accordance with regulatory standards.	No findings noted.
4	Assess the integrity of asset data used in performing risk assessments.	Finding #2- See Page 7
5	Determine whether an annual threat assessment is performed using risk prioritization and data integration.	No findings noted.
6	Assess whether management has established an appropriate risk model and assess whether the current risk model has been reviewed and validated by management.	Finding #2- See Page 7
7	Determine whether a long term plan is reviewed on an annual basis after each annual assessment effort.	No findings noted.

Objective 3: Assess whether management implements appropriate risk remediation and mitigation programs to ensure the integrity of the gas transmission pipeline.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
8	Assess whether action is taken to address integrity issues discovered during the assessment process.	No findings noted.

Findings

Procedure #1: Assess whether integrity management roles and responsibilities are well defined and communicated.	**Risk Rating**
Finding #1: Processes are not consistently applied across all of NiSource. As of 3/31/2018, the individual state TIMP plans were unified into one NiSource TIMP plan document. While this plan combines the activities and requirements for implementing TIMP to comply with federal regulations into a unified plan, differences exist that prevent a uniform application of TIMP. These differences are as follows: • **HCA Identification Methods:** While both permitted under PHMSA regulation, NIPSCO uses Method 1 and the Columbia Companies use Method 2 for HCA identification. • **Annual Pipe Inspections:** Annually, every state reviews the transmission pipe in their region to ensure any new sections are considered for HCA classification. These reviews are performed differently based on system efficiencies. NIPSCO uses a risk based approach and will walk certain sections based on several factors (aerial photos, known construction, SME input). The Columbia Companies have operations personnel physically walk all transmission lines as a required repetitive task embedded into the Work Management System. • **Risk Model**: NiSource uses a relative risk ranking approach to assist in determining the level of risk involved in operating the various covered segments of the transmission pipeline system. NIPSCO uses the Drivers, Resistors, Indicators, Preventers (DRIP) Risk Model for TIMP and contracts with a third party for an additional risk model used in the TDSIC filings. The Columbia Companies use the Keifner Risk Model.	Low

Process Owner(s): Rob Mooney, VP of Gas Engineering and Pipeline Safety

Executive Council Member Responsible: Michael Finissi, Executive VP of Safety, Capital Execution, and Technical Services

Observation

Criteria: TIMP is consistently applied across the NiSource transmission system.

Condition: Processes for executing TIMP, including HCA identification methods, annual pipeline inspections, and the risk models, are not consistently applied across NiSource.

Risk/Impact: Inconsistent processes may create inefficiencies within TIMP execution.

Recommendation

Management should determine if there should be preferred HCA identification method, annual inspection, and Risk Assessment methods and if it should be consistently applied across NiSource.

Management Response

Not required for low risk findings.

Findings (cont'd)

Procedures #4: Assess the integrity of asset data used in performing risk assessments. **Procedure #6**: Assess whether management has established an appropriate risk model and assess whether the current risk model has been reviewed and validated by management.	**Risk Rating**
Finding #2: While NIPSCO and the Columbia Companies update their respective risk models on an annual basis, as required by federal regulations, the risk model results do not contain a conclusion as to how they are integrated into the TIMP plan. Integrity assessments are being performed in accordance with federal regulations and preventative and mitigating actions are taken; however, these actions are not formally tied back to the risk model results. In regards to NIPSCO TDSIC projects, an external risk model is run by a third party to prioritize TDSIC projects for the TDSIC filings. This external risk model uses a separate risk logic that incorporates both pipeline safety and operational risk.	Low

Process Owner(s): Rob Mooney, VP of Gas Engineering and Pipeline Safety

Executive Council Member Responsible: Michael Finissi, Executive VP of Safety, Capital Execution, and Technical Services

Observation

Criteria: The risk model should permit a risk ranking and identification of specific threats that leads to the identification of integrity assessment and/or preventative and mitigating options.

Condition: The risk model results are not clearly linked to the prioritization of integrity assessments and preventative and mitigating actions.

Risk/Impact: Integrity assessments and preventative/mitigating work may not effectively address sections of transmission pipe with the highest pipeline safety risk.

Recommendation

Management should consider creating a process to formally document the conclusions for how the risk model results are applied within the TIMP plan, like the prioritization of integrity assessments and decisions for preventative and mitigating measures. The documentation of decisions will aid in the NiSource adoption of the Safety Management System (SMS).

Management Response

Not required for low risk findings.

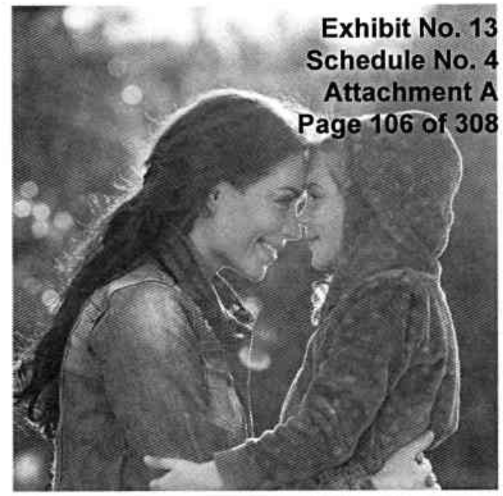
Report Distribution

CC:

J. Hamrock
D. E. Brown
C. J. Hightman
M. Kempic
C. W. Levander
V. Sistovaris
P. A. Vegas
S. K. Surface
M. Finissi
S. Anderson
D. A. Monte
C. Kanoy
P. T. Disser
T. L. Tucker
M. Downing
G. Shoemaker
Deloitte & Touche

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



2017 NiSource Political Contributions

July 6, 2018

To: Charles Mannix, VP Tax Service
Rebecca Sczudlo, VP Federal Government Affairs

From: Tanya Muvceski, Internal Audit Senior
Sal Alshuqairi, Manager of Internal Audit
Lin Koh, Director of Internal Audit

NiSource®

Executive Summary

Internal Audit performed an evaluation over the political contributions process at NiSource pursuant to the Board Policy on Political Spending. The review included an assessment of whether effective controls exist to ensure that political contributions and lobbying expenses are properly identified, coded and reported in accordance with current policies and regulatory requirements.

The following process improvement opportunities were identified during our review:

- While there are formal written policies and procedures, we recommend, as a process improvement, adding a supplemental step-by-step procedures that identify the key supporting documents and the steps for the Annual Political Spending Report process and establishing guidelines for retaining such documentation.
- Internal Audit noted inconsistency with the reported process related to organizations where individual dues and memberships are paid. For 2017, NiSource reported one state CPA society as having dues attributed to lobbying but did not report the lobbying of other state CPA societies engage in state and federal lobbying.
- During our review of completeness, we identified that MySpend data has not been reviewed as part of the Annual Political Reporting Process. Internal Audit recommends including MySpend as part of the review process in order to ensure all transactions are properly being captured.

This audit confirms to the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, has been provided. IA would like to thank NiSource staff and management for their cooperation and time in support of this audit.

Background

NiSource is committed to being a good corporate citizen in the communities in which business is conducted, including participating in the political process where legal and appropriate.

It is NiSource's policy to not make direct independent expenditures related to political contributions at the federal level or to federal candidates. Direct independent expenditures would consist of corporate funds spend on public communications in support of or in opposition to any federal candidate, without coordination with any candidate. Corporate funds may be used, where legally permissible, for indirect political support and to participate in the election of state and local candidates who share NiSource's public policy views or in support of state and local ballot measures having an impact on the industry.

The Nominating and Governance Committee of the Board of Directors is responsible for overseeing corporate political spending. The Senior Vice President, Corporate Affairs reviews all corporate political spending, including indirect political spending through third parties, and at least annually review corporate political spending with the Nominating and Governance Committee.

In order to facilitate the internal monitoring and tracking of political spending, direct and indirect political contributions and ballot initiatives made by NiSource or any of its subsidiaries (not including any PACs) are reported to the Vice President, Federal Governmental Affairs.

Audit Scope and Approach

Internal Audit performed an evaluation over the political contributions process at NiSource pursuant to the Board Policy on Political Spending. The review included an assessment of whether effective controls exist to ensure that political contributions and expenses allocated to lobbying are properly identified, coded and reported in accordance with current policies and regulatory requirements.

Objective 1: Assess the current policies and procedures for approving, processing, tracking and reporting political contributions to determine whether complete and accurate records of all political contributions are maintained and reported.		
#	Procedure	Findings Summary (Refer to Appendix A for rating scale)
1	Assess whether adequate policies and procedures exist for approving, processing, tracking and reporting expenses allocated to lobbying and political contributions made by NiSource.	Finding #1 – See page 5 Finding #2 – See page 6

Objective 2: Determine whether political contributions and expenses allocated to lobbying are properly approved, processed, tracked and reported in accordance with the current policy and regulatory requirements.		
#	Procedure	Findings Summary (Refer to Appendix A for rating scale)
1	Evaluate whether political contributions and lobbying expense records are accurate and complete.	Finding #3 – See page 7
2	Review whether political contributions and expenses allocated to lobbying are properly approved and disbursed in accordance with current policies and procedures.	**No Findings Noted.**
3	Review whether political contributions and expenses allocated to lobbying are accurately tracked and reported.	**No Findings Noted.**

Findings

Objective 1, Procedure #1: Assess the current policies and procedures for approving, processing, tracking and reporting political contributions to determine whether complete and accurate records of all political contributions are maintained and reported.	**Risk Rating**
Finding #1: There is a lack of step-by-step procedures to the identify the support used and steps performed in completing the political spending report process.	Low
Process Owner(s): Charles Mannix, VP Tax Service and Rebecca Sczudlo, VP Federal Government Affairs	

Observation

Criteria: Procedures are documented to identify the support used and steps performed in the political spending reporting process.

Condition: Step-by-step procedures have not been documented.

Risk/Impact: Lack of documented procedures could lead to errors or inconsistent political spending reporting.

Recommendation

Internal Audit recommends adding a supplemental step-by-step procedure that identifies the key supporting documentation used to perform the steps of the Annual Political Spending Report process and establishing guidelines for retaining such documentation.

Management Response

Management will expand upon our process paper to include step-by-step procedures for obtaining and verifying supporting documents that are used for determining the amount of lobbying expenses and political contributions.

Findings

Objective 1 Procedure #1: Assess the current policies and procedures for approving, processing, tracking and reporting political contributions to determine whether complete and accurate records of all political contributions are maintained and reported.	**Risk Rating**
Finding #2: There is a lack of consistency in the reporting process related to organizations where individual dues and memberships are paid.	Low
Process Owner(s): Charles Mannix, VP Tax Service and Rebecca Sczudlo, VP Federal Government Affairs	

Observation

Criteria: Guidelines are established to provide consistency related to individual dues attributed to lobbying.

Condition: Dues attributed to lobbying are not consistently reported.

Risk/Impact: Inconsistency may lead to improper reporting of political contributions.

Recommendation

Internal Audit recommends establishing guidelines to provide consistency in the reporting process.

Management Response

With regard to the finding that some dues employees pay to organizations which perform lobbying services are paid as a group spend through Catalyst and others are paid individually through MySpend, management will review and determine whether such expenses should be included or excluded from our report.

Findings

Objective 2, Procedure #1: Determine whether political contributions and expenses allocated to lobbying are properly approved, processed, tracked and reported in accordance with the current policy and regulatory requirements.	Risk Rating
Finding #3: MySpend data was not included in the review process for reporting political contributions.	Low
Process Owner(s): Charles Mannix, VP Tax Service and Rebecca Sczudlo, VP Federal Government Affairs	

Observation

Criteria: All sources of expense data should be reviewed in order to ensure all transactions are properly being captured.

Condition: MySpend data is not being reviewed as part of the reporting process.

Risk/Impact: The amounts recorded and reported for lobbying expenses and political contributions are incomplete and inaccurate.

Recommendation

Internal Audit recommends including MySpend data as part of the review process in order to ensure all transactions are properly being captured.

Management Response

Management will review the ability to capture MySpend data and determine how to report that data since amounts could be de minimis, given spending limits in MySpend.

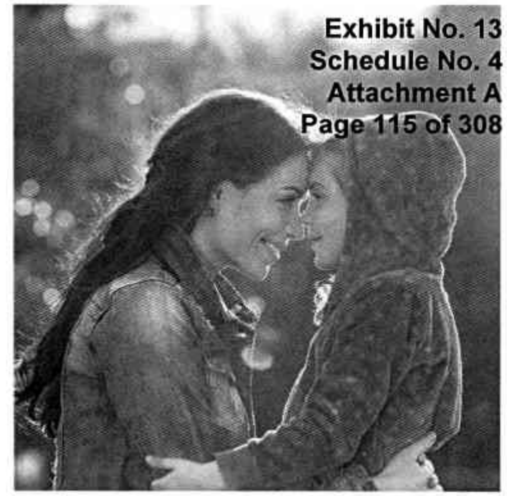
Report Distribution

CC:

- J. Hamrock
- D.E. Brown
- C.J. Hightman
- M. Kempic
- C.W. Levander
- V. Sistovaris
- M. J. Finissi
- P.A. Vegas
- J.C. Stephenson
- M.S. Downing
- G.L. Shoemaker
- P.T. Disser
- S.K. Surface
- T.L. Tucker
- Deloitte & Touche

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



2018 Leak Remediation Review - Columbia Gas Companies

July 9, 2018

To: K.H. Cole, VP Distribution Operations

From: L.E. Black, Senior Internal Auditor
M.L. Eich, Lead Data Analyst
J.M. Callahan, Manager Internal Audit
R.W. Binkley, Director Internal Audit

NiSource®

Executive Summary

Internal Audit conducted a review of the processes and controls associated with the remediation and documentation of identified outside* leaks within the Columbia Gas Companies**. The focus of this review was to ensure that both records within the Work Management System (WMS), the system of record, and manual "Distribution Plant Inspections and Leakage Repair" forms (referred to herein as DPIs) support the completion of required remediation activities in accordance with the respective company's Gas Standards for the period of ***April 1, 2016 through March 31, 2018***.

Summary Conclusions:

While processes and controls are effective in supporting compliance with the requirements outlined in the Columbia Gas Standards for **99.92%** of the leaks identified during the audit period of April 1, 2016 through March 31, 2018 (~**53.8K**), minor instances of non-compliance (**42** instances or ~**0.08%** of the total population) were noted; however, all instances of non-compliance had been remediated prior to the completion of our testing.

Internal Audit did identify **3 low risk** audit finding related to the timely recording of identified leaks within WMS, leak response and documentation. Please see the following recommendations based on the related condition/risk:

- Internal Audit identified eight (**8**) instances where the entry of an identified leak into WMS was significantly delayed, with the time between date found and date of entry into WMS ranging from 50 days to 347 days. Of these eight (**8**) instances, two (**2**) instances of non-compliance related to the time to clear for one (1) Grade 2+ leak and required re-evaluation for one (1) Grade 2 leak.
    - Recommendation: Field / System Operations should communicate and remind personnel on timely recording (both manual and system entry) of identified leaks. Additionally, Field / System Operations should collaborate with Gas Standards to specifically define "timely" recording of leaks using the number of days within the applicable Gas Standards.
- The monitoring report to identify and correct when leaks remain open despite a job order being competed is not being worked timely.
    - Recommendation: Integration Center Management and Construction should establish a process to ensure that leaks included on the "DPIs Still Open After Job Completed" report on the COGNOS Leakage Dashboard are evaluated and addressed within a month of the completed job order to ensure the leak is properly reflected in WMS as closed.
- Internal Audit noted instances where the following key fields were not populated on the manual DPI form or within WMS. Additionally, Internal Audit also identified instances where key fields were conflicting within the two sources of information.
    - Recommendation: Field / System Operations and Training should continue to reinforce the importance of populating DPI forms accurately and completely, while ensuring that system records agree to the manual form.

*The scope of this review excludes the processes associated with identifying and recording leaks on inside piping and meters as it was subject to review in 2018 (2018-204 Inside and Inaccessible Meter Inspection Audit Finding Follow Up).

**NIPSCO Gas was excluded from the scope of this review as it was subject to review in 2017 (2017-313 Leak Management Process Follow-up).

Background

The Department of Transportation's Pipeline & Hazardous Materials Safety Administration requires that an operator inspect each pipeline for leakage and atmospheric corrosion within timeframes established in Code of Federal Regulations, Title 49, Section 192: Subpart I: Requirements for Corrosion Controls and Subpart M: Maintenance. The Columbia Gas Companies have established the following inspection cycle timeframes as inspections for both atmospheric corrosion and leakage are performed simultaneously: (Refer to **Appendix F-G** for the Gas Standards referenced)

Business District	Non-Business District
Once each calendar year (not to exceed 15 months)	Once every 3 years (not to exceed 39 months)

In addition to the program leakage inspections noted above, leaks can be identified through other means (e.g. customer or public calls reporting the smell of gas, notifications from emergency responders, or resulting from other work being performed by company or contractor personnel). Once a leak has been confirmed by responding qualified personnel, Company Gas Standards require each leak to be classified based on the grades outlined in the table below: (Refer to **Appendix F-G** for the Gas Standards referenced)

Classification	Definition
Grade 1	A leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous
Grade 2+	A leak that is recognized as being non-hazardous at the time of detection, but justifies ACCELERATED scheduled repair based on probably future hazard
Grade 2	A leak that is recognized as being non-hazardous at the time of detection, but justifies scheduled repair based on probable future hazard
Grade 3	A leak that is non-hazardous at the time of detection and can be reasonably expected to remain non-hazardous

Refer to **Appendix B** for a breakdown of the leaks found by Columbia Company during the audit period and their grade classifications.

Once a leak is classified, Company Gas Standards define the requirements to clear, re-inspect (for a cleared leak), and re-evaluate (if the leak is open) based on the respective grade assigned. (Refer to **Appendix C** for a summary of the requirements for each Grade Classification.) An identified leak must be documented in two ways:

1. Completion of a "Distribution Plant Inspections and Leakage Repair" form, referred to herein as a DPI
2. Creation of a WMS system record (the DPI number in the system will agree to the manual form)

Once documented within WMS, the Integration Center is then responsible for monitoring recorded leaks and ensuring that appropriate remediation job orders are scheduled. (Refer to **Appendix D-E** for further detail on the origination and clearance of identified leaks.)

Audit Scope and Approach

Internal Audit performed a review of the processes and controls associated with the recording and remediation of identified outside leaks within the Columbia Gas Companies. The purpose of the audit was to review company records to ensure they contain the information necessary to document an identified leak and support the completion of required remediation activities in accordance with the respective company's Gas Standards for the period of April 1, 2016 through March 31, 2018.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided to Field Operations and Integration Center Management, and Internal Audit thanks them for their cooperation and time in support of this audit.

Objective 1: Utilizing the population of leaks found (as recorded within WMS) during the audit period, identify patterns of activity, trends, or anomalies related to leak data.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)	
1	Utilizing COGNOS, a reporting tool which can access data from WMS, obtain the population of leaks found during the audit period to identify patterns of activity, trends, or anomalies within the data.	Finding #1 – see page 5	Finding #2 – see page 6

Objective 2: Determine whether identified leaks are remediated in a timely manner as defined by the applicable Gas Standards.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Using the data population obtained in Objective 1, determine whether leaks, as determined by their grade, are properly cleared, re-inspected, and/or re-evaluated in accordance with applicable Gas Standards.	**No Findings Noted.**

Objective 3: Evaluate whether information recorded within the DPI manual form and within WMS is consistent, complete and accurate.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Sample 40 leaks found during the audit period and review the required data fields on the manual DPI forms or within WMS for proper population/completion and identify any inconsistencies.	Finding #3 – see page 7

Findings

Objective #1, Procedure #1: Utilizing the population of leaks found (as recorded within WMS) during the audit period, identify patterns of activity, trends, or anomalies related to leak data.	**Risk Rating**
Finding #1: Eight (8) leaks which were entered late into WMS, resulting in two (2) instances of non-compliance.	Low
Process Owner(s): All Columbia Company Presidents and General Managers & Gas Standards	

Observation

Criteria: All leaks identified are documented within WMS and on a manual DPI form in a timely manner.

Condition:

- Leak Population
  - *May 14, 2018*: Internal Audit ran a query from the COGNOS leakage dashboard to provide all leaks with found dates occurring from April 1, 2016 through March 31, 2018 (Record count 53,764).
  - *May 22, 2018*: To verify that the COGNOS leakage dashboard contained all leaks entered into WMS, Internal Audit obtained an independent data query from WMS using the same criteria as what was used to generate the COGNOS query (Record count 53,772).
- In attempting to reconcile the two query populations, Internal Audit noted that the WMS query contained *8 additional leaks* as compared to the COGNOS query. Upon further investigation, it was determined that all 8 leaks (with found dates included in the audit period) were entered after the date of the COGNOS query but before the date of the WMS query.
- The number of days between the date found and the date of entry into WMS ranged from 50 days to 347 days, resulting in two (**2**) instances of non-compliance. However, these instances of non-compliance had been remediated as of the date of our audit procedures. *Note: One (1) of the two instances related to exceeding the time to clear for a Grade 2+ leak and the remaining instance exceeded the period required for re-evaluation for a Grade 2 leak.*

Risk/Impact: Identified leaks which are entered late into the system may be at risk of non-compliance as they will not be subject to the monitoring activities performed by the Integration Center.

Recommendation

Field / System Operations should communicate and remind personnel on timely recording (both manual and system entry) of identified leaks. Additionally, Field / System Operations should collaborate with Gas Standards to specifically define "timely" recording of identified leaks using the number of days within the applicable Gas Standards.

Management Response

Not required for Low Risk Findings

Findings (cont'd)

Objective #1, Procedure #1: Utilizing the population of leaks found (as recorded within WMS) during the audit period, identify patterns of activity, trends, or anomalies related to leak data.	**Risk Rating**
• **Finding #2**: The monitoring report to identify and correct when leaks remain open despite a job order being competed is not being worked timely.	Low

Process Owner(s): Integration Center Management & Construction

Observation

Criteria: All open leaks are closed upon completion of the required remediation activity (e.g. repair of the leak, replacement of a service line, etc.).

Condition:

- Within the population of leaks found during the audit period, Internal Audit identified instances where leaks were in "open" status despite there being a job order completed to clear them.
- Upon discussion with Integration Center Management, these instances are identified through the COGNOS Leakage Dashboard report titled "DPIs Still Open After Job Completed", which is supposed to be monitored and addressed at least monthly by various departments depending on what type of job order has been completed.
    - At the time of testing (May 31, 2018), Internal Audit noted a total of 60 leaks meeting this criteria, ranging from 1 day to 1,581 days after the completion of the job order.

Risk/Impact: Leaks will appear to be outstanding even though they have been addressed.

Recommendation

Integration Center Management and Construction should establish a process to ensure that leaks included on the "DPIs Still Open After Job Completed" report on the COGNOS Leakage Dashboard are evaluated and addressed within a month of the completed job order to ensure the leak is properly reflected in WMS as closed.

Management Response

Not Required for Low Risk Findings

Findings (cont'd)

Objective #3, Procedure #1: Sample 40 DPIs found during the audit period and review the required data fields on the manual DPI forms and within WMS for proper population/completion and identify any inconsistencies.	**Risk Rating**
Finding #3: Manual DPI forms were not uploaded to the Integration Center's shared drive and available manual forms were not completely populated or had instances where fields were conflicting to the information within WMS.	**Low**

Process Owner(s): All Columbia Company Presidents and General Managers

Observation

Criteria: All manual DPIs are uploaded to the Integration Center's shared drive, are populated completely and consistently as compared to the WMS DPI system entry.

Condition: Upon review of the 40 selected leaks, Internal Audit noted instances where the following key fields were not populated on the manual DPI form or within WMS. Additionally, Internal Audit also identified instances where key fields (e.g. Date Found, Reference Leak Order Number, Leak Grade Criteria, and Origination Code) were conflicting within the two sources of information.

Risk/Impact: Source records contain conflicting information, resulting in the potential for decisions to be made based on inaccuracies.

Recommendation

Field / System Operations (in conjunction with Training where appropriate) should continue to reinforce the importance of populating DPI forms accurately and completely, while ensuring that system records agree to the manual form.

Management Response

Not Required for Low Risk Findings

Report Distribution

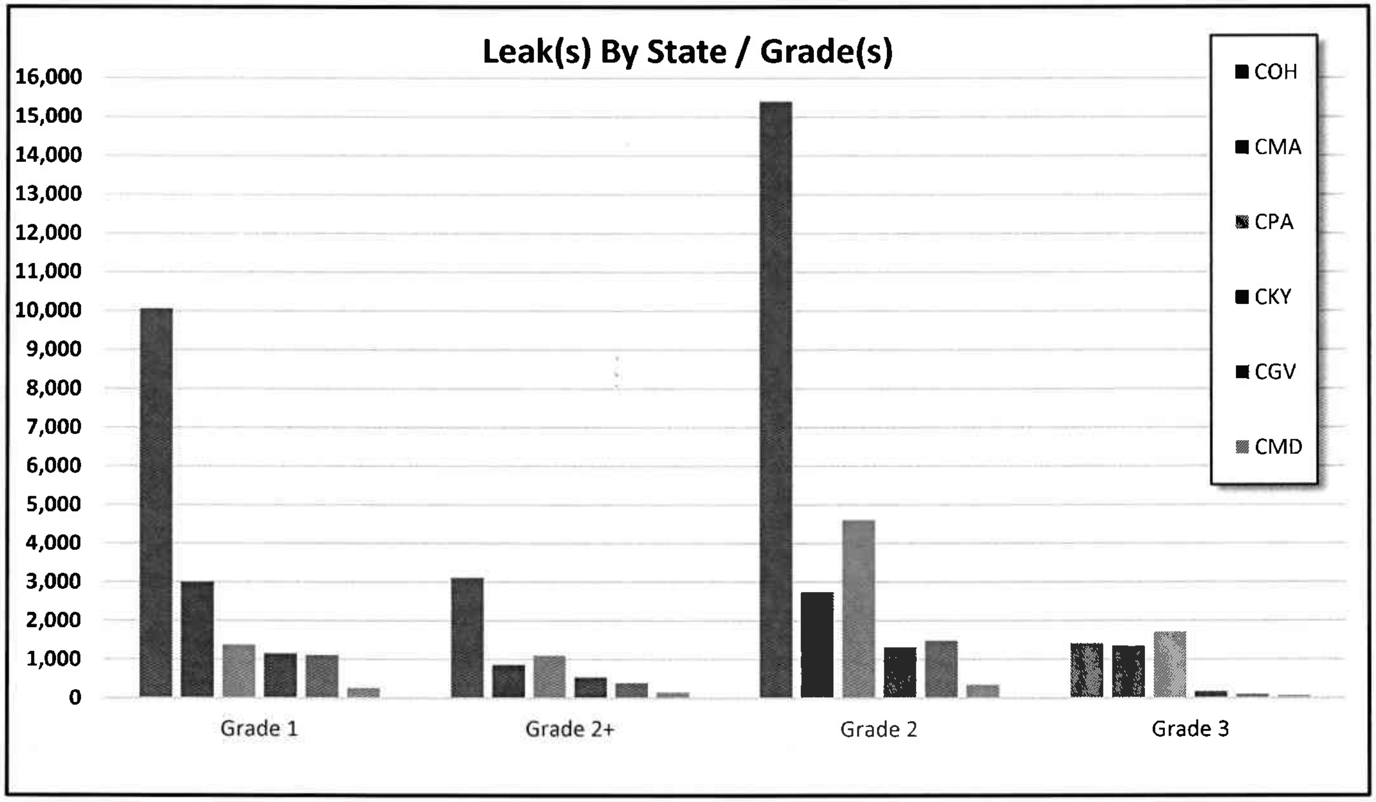
CC:

J. Hamrock
D.E. Brown
C.J. Hightman
M. Kempic
C.W. Levander
V. Sistovaris
P.A. Vegas
S.K. Surface
M. Finissi
P.T. Disser
T.A. Dehring
R.D. Poe
D.T. Williamson
T.L. Tucker
S. Anderson
M.S. Downing
G.L. Shoemaker
Deloitte & Touche

R.M. Kitchell
B.K. Archer
P.D. Wilson
S.H. Bryant
W.F. Davis
D.A. Creekmur
S.W. Sylvester
D.A. Eckstein
M.A. Huwar
M.J. Davidson
H.A. Miller
J.S. Pino
M.D. Ramsey
D.L. Reynolds
D.A Monte
R.V. Mooney

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



State	Grade 1	Grade 2+	Grade 2	Grade 3	Leak by State Total
COH	10,057	3,103	15,395	1,410	**29,965**
CMA	2,998	858	2,746	1,346	**7,948**
CPA	1,372	1,100	4,614	1,708	**8,794**
CKY	1,147	541	1,312	169	**3,169**
CGV	1,104	390	1,479	93	**3,066**
CMD	259	155	344	64	**822**
Leakage Type Total	**16,937**	**6,147**	**25,890**	**4,790**	**53,764**

<table>
<tr><th colspan="4">Requirements Summary</th></tr>
<tr><th>Grade</th><th>Time to Clear:</th><th>Required Follow-up Inspection:</th><th>Required Re-evaluation (Leaks Not Cleared)</th></tr>
<tr><td>Grade 1</td><td>Prompt Action (1)</td><td><u>All Companies (except COH)</u>
Follow-ups are required no later than the last day of the next calendar month following the repair date

<u>COH</u>
Follow-ups are required within 30 days of repair or reclassification</td><td>N/A</td></tr>
<tr><td>Grade 2 +</td><td>21 calendar days</td><td rowspan="2"><u>Annual Inspection Cycle Area</u>
No Follow-up Required

<u>All Other Areas</u>
Follow-ups are required to be completed prior to the last day of the next calendar month following the leak being cleared for the population of leaks as defined below:
1. A random sample of REPAIRED(2) Grade 2+ or Grade 2 leaks on buried unprotected metallic pipelines; and
2. Leaks for which the person clearing requests follow-up</td><td>N/A</td></tr>
<tr><td>Grade 2</td><td><u>All Companies (except CMA)</u>
1. Repaired - Last day of the 15th month from the date of discovery
2. Replaced/Retired - Last day of the 24th month from the date of discovery

<u>CMA</u>
12 months from the date of discovery</td><td><u>All Companies (except CMA & COH)</u>
Re-evaluate no later than the last day of the 6th month after date of discovery or the date of the last re-evaluation until cleared

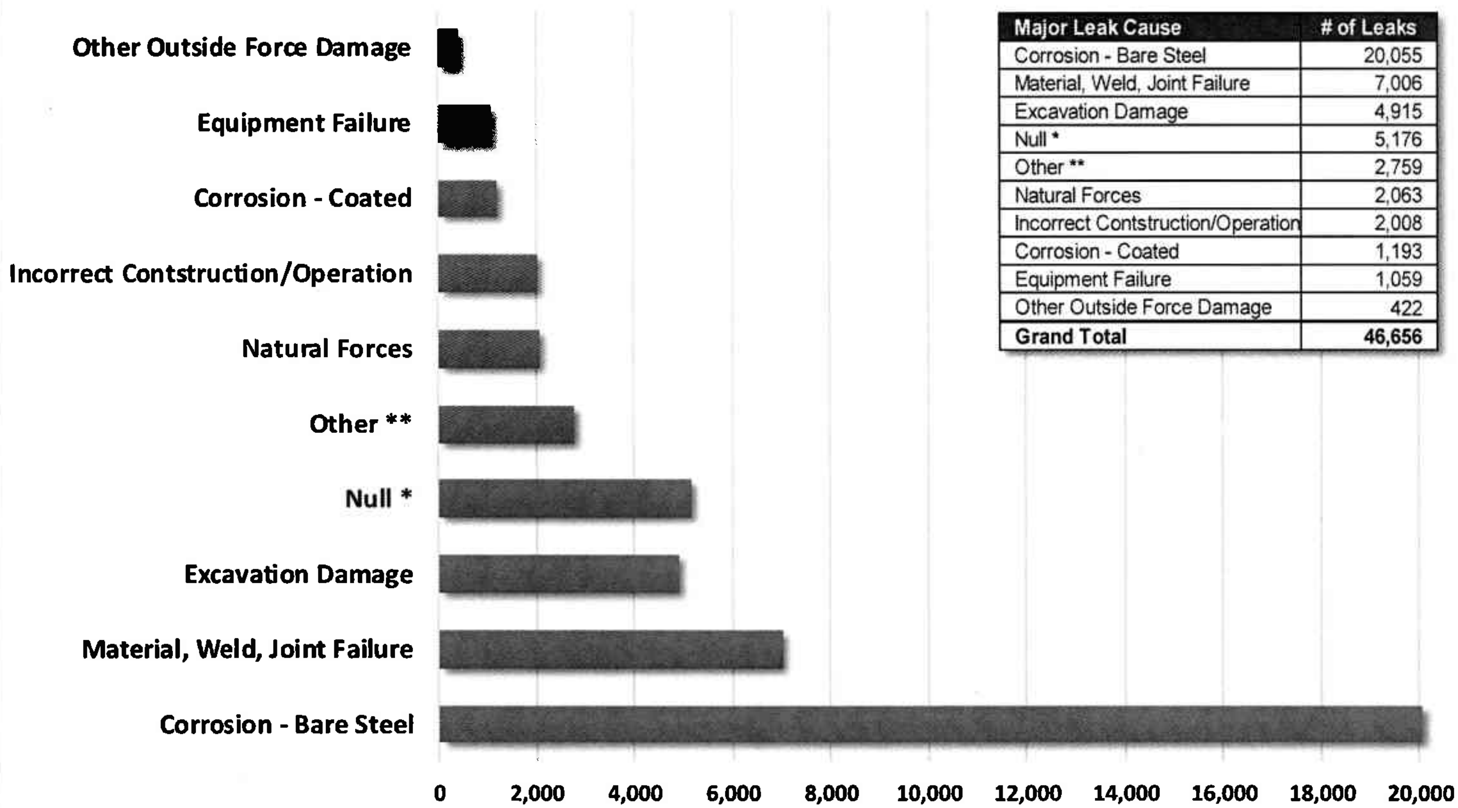
<u>CMA & COH</u>
Re-evaluated at least once every 6 months following the date of discovery</td></tr>
<tr><td>Grade 3</td><td>N/A</td><td>N/A</td><td><u>CPA/CMD/CGV</u>
Re-evaluate(3) at least once each calendar year until the leak is cleared

<u>CKY/COH/CMA</u>
Re-evaluate(3) using the earliest of the following two dates:
a. During the next scheduled leakage survey
b. Within the last day of the 15th month (CKY) or 15 months (COH)/12 months (CMA) following the date of discovery or last reevaluated</td></tr>
<tr><td colspan="4">(1) The prompt action in some instances may require one or more of the following: Implementation of Company's emergency plan, evacuating premises, blocking off an area, rerouting traffic, eliminating sources of ignition, venting the area by removing manhole covers, barholing, installing vent holes, or other means, stopping the flow of gas by closing valves or other means, and notifying police and fire departments.</td></tr>
<tr><td colspan="4">(2) Does not include leaks cleared by replacement or abandonment, negative readings, etc.</td></tr>
<tr><td colspan="4">(3) Grade 3 leaks that do not produce a detectable reading during the scheduled leakage survey are not required to be reevaluated but shall remain open until cleared.</td></tr>
</table>

Leak Origination	Description	Count	%
Programmed Plant Survey	Found during a programmed leak survey (every 1 or 3 years based on the area type)	15,161	28%
Customer/Public Call	Found/called in by the customer/public	11,486	21%
Service Department	Found by a service technician performing work in the field	5,765	11%
Dig-In Call	Caused by a dig-in by first, second, or third party damages	4,097	8%
Other Company/Contractor Activity	Found by company or contracted resources performing other work in the field (including QA/QC audits)	3,840	7%
Supplemental Survey	Found through "miscellaneous" surveys that occur after specific activities (e.g. paving, service orders, etc.)	3,723	7%
CSL Inspection with Building	Found during a designated building survey (Note: CGV uses this code for all customer servce line inspections,including programmed surveys)	3,255	6%
Reclassification	Originates from the reclassification of an existing leak (i.e. creating a new leak to reflect either a higher or lower leak grade)	2,551	5%
Patrol	Found during an inspection of a specific piece of pipe occuring on an alternate timeframe than the programmed plant survey	1,650	3%
Police or Fire	Found/called in by police or fire	910	2%
Mistake DPI	Used to create a new leak when information was entered incorrectly during the creation of an existing DPI (Note: Certain fields in a DPI entry cannot be adjusted once input in the system)	687	1%
Follow Up Inspection	Found on a follow up inspection	611	1%
Mitigation Survey	Found on a mitigation survey	20	0%
Propane System	Found on a propane system such as a propane farm or plant	5	0%
Mitigation Installation	Found on a mitigation installation	3	0%
	Leaks Found During Audit Period	**53,764**	**100%**

Activity to Clear	Description	Count	%
Repaired	Remediated through repair of the pipe	24,595	46%
Replaced/Abandoned	Remediated through replacement and/or abandonment of the pipe	16,747	31%
Negative Readings	Personnel dispatched to repair or re-inspect an open DPI cannot find any readings in the defined leak area Note: This code should only be used after a thorough investigation yields no positive readings	2,890	5%
Reclassified without Repair	Leak was cleared without performing repairs to allow for the creation of a new DPI at a higher or lower leak grade	1,085	2%
Mistake	Certain fields populated in the WMS system cannot be corrected within the system once a leak is entered. As such, leak entries containing data inaccuracies must be cleared by "Mistake" and a new DPI with the corrected information will be created	936	2%
Foreign Facility/Stray Gas	Leak is on foreign company's facility or determined to be stray gas	190	0%
Customer Owned Facility	Leaks identified on customer owned facilites to be addressed by the customer	171	0%
Reclassified with Repair	Leak was cleared after performing repairs to allow for the creation of a new DPI at a higher or lower leak grade	42	0%
	Total Leaks Cleared from Audit Population	**46,656**	**87%**
	Leaks Open as of the date of the COGNOS data pull	**7,108**	**13%**
	Total Leaks Found During Audit Period	**53,764**	**100%**

Number of Leaks by Cause



Major Leak Cause	# of Leaks
Corrosion - Bare Steel	20,055
Material, Weld, Joint Failure	7,006
Excavation Damage	4,915
Null *	5,176
Other **	2,759
Natural Forces	2,063
Incorrect Contstruction/Operation	2,008
Corrosion - Coated	1,193
Equipment Failure	1,059
Other Outside Force Damage	422
Grand Total	**46,656**

** Null Leak Causes are appropriate when a leak is cleared due to the following codes: Mistake, Customer Owned Facility, Foreign Facility/Stray Gas, Negative Readings, Reclassified with Repairs.*

*** When the Other Cause is selected, additional comments must be provided on the DPI.*

Gas Standards Management directed Internal Audit to the following Gas Standards to perform this review:

- GS 1708.010 – General Policy for Gas Leakage Inspection and Control
- GS 1708.070 – Outside Leak Investigation
- GS 1708.070 (MA) – Outside Leak Investigation CMA ONLY
- GS 1708.070 – 1 – Leakage Perimeter/Area Monitoring Document
- GS 1708.100 – Leakage Control Records
- GS 1708.100 (MA) – Leakage Control Records CMA ONLY
- GS 1708.100 – 1 – Distribution Plant Inspection and Leakage Repair (Refer to Appendix G)

- GS 1714.010 (KY) – Leakage Classification and Response (CKY ONLY)
- GS 1714.010 (MA) – Leakage Classification and Response (CMA ONLY)
- GS 1714.010 (MD) – Leakage Classification and Response (CMD ONLY)
- GS 1714.010 (OH) – Leakage Classification and Response (COH ONLY)
- GS 1714.010 (PA) – Leakage Classification and Response (CPA ONLY)
- GS 1714.010 (VA) – Leakage Classification and Response (CGV ONLY)

- GS 1714.060 – Leakage Repair Follow-Up Inspections
- GS 1714.060 (KY) – Leakage Repair Follow-Up Inspections (CKY ONLY)
- GS 1714.060 (OH) – Leakage Repair Follow-Up Inspections (COH ONLY)

FORM GS 1708.100-1 (01/2018)

ORIGINAL – FILE COPY

DISTRIBUTION PLANT INSPECTION AND LEAKAGE REPAIR

INSPECTED BY______________ REPORTED TO______________ AT_____ HOUR ON ____/____/____

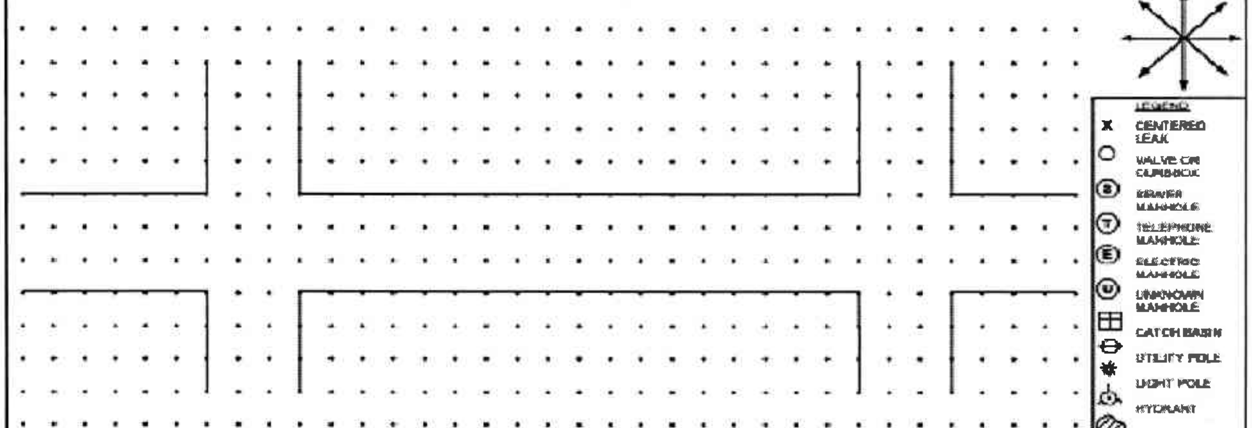
CO *	LOC NO.	MAP NO.	SYSTEM NO.	DATE FOUND	ORIG. CODE *	REF. LEAK ORDER NO.	LEAK GRADE *	LEAK ORIG *	LEAK ORDER NO.

STREET NUMBER/STE ADDRESS/LEAK LOCATION	MUNICIPALITY	COUNTY	R/S CODE *

BETWEEN	AND	DETECTOR NUMBER	SERVICE OR WORK ORDER NUMBER	TIME FOUND

GPS LONGITUDE (X) COORDINATE	GPS LATITUDE (Y) COORDINATE	FOOTAGE INSP.	PROBABLE MAIN KIND *	PROBABLE MAIN SIZE

Indicate on sketch the relative magnitude of gas indication (% LEL or % gas)



SURFACE TYPE CODE *	TYPE OF AREA	PROBABLE LEAK SOURCE	JOB ORDER OR ACCOUNT NO.
	☐ BUSINESS DISTRICT OR ANNUAL SURVEY ☐ OUTSIDE BUSINESS DISTRICT (3 YR OR 5 YR SURVEY)	☐ TRANS LINE ☐ SERV LINE M-PL ☐ MAIN VLV ☐ MTR SET ☐ DISTR MAIN ☐ SERV LINE PL-MTR ☐ STN PIPING	

REMARKS

MADE SAFE Gr1 SL PL-Mtr (OH, KY)	THE CONDITION HAS BEEN MADE SAFE	PERSON TAKING ACTION	MADE SAFE TIME	MADE SAFE DATE	MADE SAFE ACTION
					☐ TURNED OFF AT SERVICE LINE VALVE ☐ TURNED OFF AT METER VALVE

EXPOSURE DATA		MATERIAL CODE *	PIPE CONDITION CODE *	CORROSION CODE *	PITS CODE *	INTERNAL CORROSION FOUND? *	COATING CODES CONDITION *	COATING CODES TYPE *	EXPOSED PIPE (FT.)	DEPTH OF COVER (IN.)	SOIL TYPE * REMOVED CODE	YEAR INSTALLED	NO. OF EXISTING CLAMPS	PIPE SIZE	IN SOLOR *	CORROSION CONTROL CODE *
	SERVICE LINE															
	MAIN															

LEAK CLEARANCE DATA	CLR BY CODE *	LEAK LOCATION AND DETAIL CODES *	LEAK CAUSE CODE *	NO. CLAMPS INST	NO. ANODES INST	OP PRESS CD *	PIPE ABOVE GRD?	CLEARED DATE
							☐ Y ☐ N	

REMARKS (include mention of the other underground structures and leakage encountered)

PowerPlant Upgrade SDLC (Design & Build Phases)

July 30, 2018

To: Jennifer Tipton, VP – Enterprise Applications
Walt Wojcik, Director – IT Applications
Steve Brown, Program Manager - IT Applications

From: John Manfreda, Project Manager - Infor. Systems Audit
Greg Wancheck, Director - Infor. Systems Audit

NiSource®

NiSource

NiSource IT Audit conducted our PowerPlant Upgrade SDLC Review for the project's Design & Build phases between December 2017 and June 2018 to provide an independent perspective around project governance, delivery service activities and inclusion of relevant solution control considerations. This PowerPlant Upgrade SDLC Review is the first of two project assessments and will be directly followed by a PowerPlant Upgrade SDLC Review that will provide a perspective on the project's Testing and Deployment phase activities.

IT Audit's PowerPlant Upgrade SDLC Review (Design & Build Phases) noted the following:

- **The PowerPlant Upgrade project team has both implemented and executed appropriate solution-based controls for the Design and Build phases to address project delivery risk.**

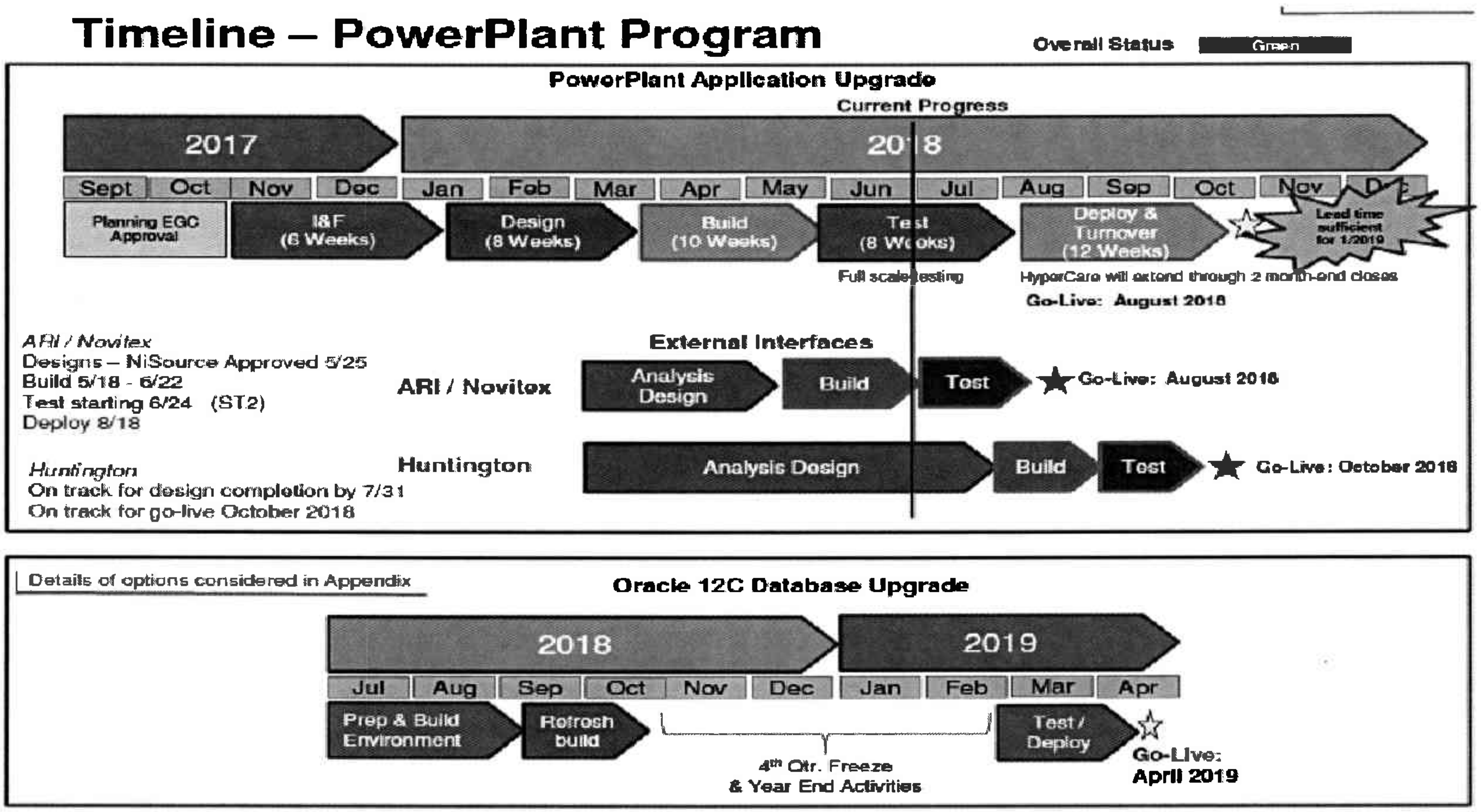
- **Sarbanes Oxley Act (SOX) control considerations have been included as part of both PowerPlant Upgrade and Lease Module application design, including appropriate engagement of related assurance personnel.***

- **The PowerPlant Upgrade project team is exhibiting appropriate activities to deploy project deliverables within both agreed-to time and quality objectives.**

****** IT Audit's Powerplant Upgrade SDLC Review (Test & Deployment Phases) will opine on subsequent engagement and delivery activities related to SOX control design/execution.***

This audit conforms with the International Standards for the Professional Practice of Internal Auditing, whereby a summary of HIGH and/or MODERATE findings will be provided to the NiSource Audit Committee. NiSource IT Audit would like to thank both IT and Finance/Accounting management for their cooperation and time in support of this effort.

Beginning in November 2017, NiSource commenced an initiative to upgrade the enterprise's application version of Powerplant that currently enables functional Asset Management and Corporate Tax process execution. Along with the PowerPlant application version upgrade targeted for August 2018, NiSource will concurrently deploy PowerPlant's new Lease Accounting suite to help support new FASB (Financial Accounting Standards Board) lease accounting mandates which will go into effect starting January 1, 2019.



The Powerplant Upgrade initiative incorporates the following project team structure to perform ongoing project management and delivery activities. The following graphic depicts the reported structure as of June 2018.

Steering Committee

Chuck Mannix
Joe Mulpas
Jennifer Tipton

Sponsorship

IT Sponsor (Jennifer Tipton)
Business Sponsor (Jeff Gore)

Stakeholder Reference Group (SRG)

Panpilas Fischer
Elizabeth Garvey
Mike McCuen
Kevin Swiger
Walt Wojcik

Core Team

IT

Program Manager (Steve Brown)
Project Manager (Tom Shaw)
OCM Lead (Joseph Holliman)
Business Analyst (Dave Strickland)
Test Lead (Blake Roth)
Deploy Lead (Elangovan Sivaswamy)

Functional Team

Jeff Gore
Doug Loudermilk
Dee Porterfield

PowerPlan

Project Manager (George Schott)
Tech Code Review (Robert Plant)
Accounting Architect (Matt Devries)
PowerTax Architect (Sam Camacho)
Property Tax Architect (Sean Kelly)
Lease Architect (Eric Ramson)

Subject Matter Experts

<u>Leased Assets (FASB)</u>
Nick Drew

<u>Depr/Depr Studies</u>
Matt Ruth, Kirk Isley, Nicki Shultz

<u>Cost Repository</u>
Dee Porterfield

<u>IT Architecture</u>
Michael Young

<u>NCS Asset Accounting</u>
Nicki Shultz

<u>IT PMO</u>
Michelle Myles

<u>Property Tax</u>
John Scott

<u>Lease Accounting</u>
Nicki Shultz
Matt Ruth

<u>Legacy Systems</u>
TBD - TCS

<u>PowerTax</u>
Megan Garber
Nate Schlessman

<u>Projects – Project Management</u>
Stephanie Thomas

<u>SOX/Audit</u>
John Manfreda, Kevin Morris, Joe Wood

<u>Asset Retirement Obligation (ARO)</u>
Kirk Isley, Matt Ruth

<u>Cyber Security</u>
Chris Johnson

Audit Scope and Approach

For testing purposes, IT Audit reviewed the following:

- Governance standards
- Delivery model setup/design
- Delivery model execution
- IT SOX control identification and engagement

IT Audit additionally attended regular project status and governance meetings along with having as-required meetings with relevant personnel over the course of the review period.

Objective 1: Review NiSource PowerPlant Upgrade program delivery-based controls to provide a perspective on organizational risk inherent in project delivery.		
#	**Procedures**	**Findings Summary (Refer to Appendix A for rating scale)**
1	Assess whether Project Scope, Cost and Schedule controls are in place and compliant with NiSource's IT Project Management Methodology (PMM).	**No Findings Noted**
2	Assess whether Project Quality controls over solution conformance to requirements are in place and are operating as designed.	**No Findings Noted**
3	Assess whether controls over communications and stakeholder alignment are in place and are operating as designed.	**No Findings Noted**
4	Review project user acceptance, approval activities, third-party service provider management, and deployment plans (where applicable) to provide reasonable assurance NiSource corporate policy and/or program standards are followed.	**No Findings Noted**

Audit Scope and Approach (cont'd)

Objective 2: Review NiSource PowerPlant Upgrade program solution-based controls to provide a perspective on any nonconformance risks associated with corporate control requirements.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess whether business process controls (automated and manual) were included in the solution development, testing and deployment processes for the NiSource PowerPlant Upgrade project.	**No Findings Noted**
2	Assess whether interface controls were considered and included in the solution development, test and deployment processes for the NiSource PowerPlant Upgrade project.	**No Findings Noted**
3	Assess NiSource enterprise IT change management compliance for the NiSource PowerPlant Upgrade project.	**No Findings Noted**

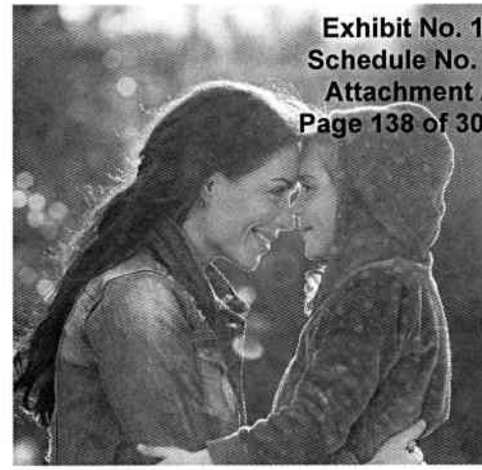
Objective 3: Review overall NiSource PowerPlant Upgrade project team conduct in helping to achieve project objectives.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Monitor on-going integration, alignment and communications between the NiSource PowerPlant Upgrade Project Team, IT Project Management Office (PMO), Third-Party Providers and Business Stakeholders to provide feedback on both project approach and process execution during the review period.	**No Findings Noted**

Report Distribution

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



IT Steady State Execution (Phase 1)

July 30, 2018

To: Kevin Johannsen, VP – IT Services
Ken Smith, Director – IT Service Management
Kimberly Jones, Manager – Service Governance

From: John Manfreda, Project Manager - Infor. Systems Audit
Brett Welsch, Project Manager – Infor. Systems Audit
Goranka Kasic, Sr. Auditor - Infor. Systems Audit
Greg Wancheck, Director - Infor. Systems Audit

NiSource IT Audit conducted our IT Steady State Execution Review (Phase 1) between March 2018 and June 2018 to provide an independent perspective around steady state NiSource IT operational execution. This IT Steady State Execution Review is also a continuation assessment supporting IT Audit's previous IT Service Provider Transition - Program Closure Review, which was completed in March 2018 and focused on the implementation of enabling processes and technologies to support a multi-vendor IT environment.

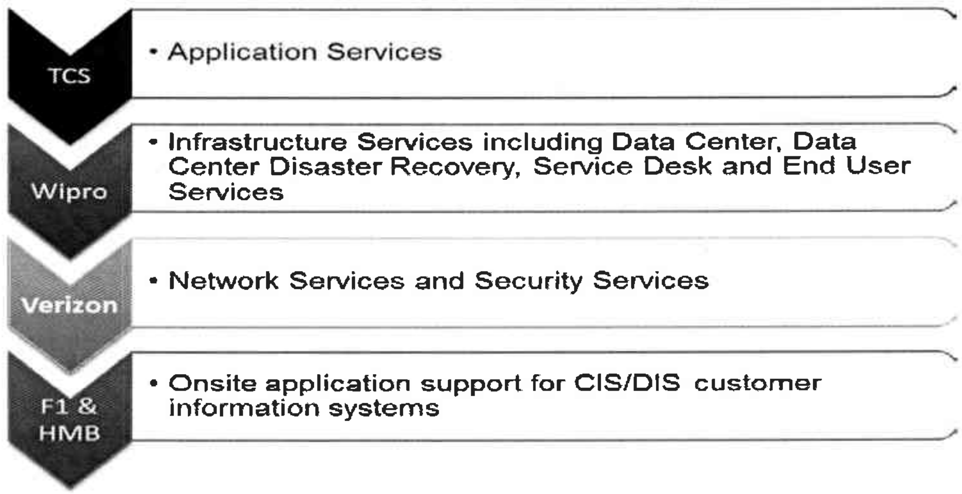
IT Audit's IT Steady State Execution Review (Phase 1) noted the following:

- **Relevant IT Service Management processes have been assigned to internal personnel with resident contractual activities in place.**
- **Role definitions and the creation/enablement of IT process execution documentation for designated IT personnel were still in the process of being completed as of the review timing.**
- **IT management is implementing an industry standard IT services management framework (ITIL v3) to address improvement opportunities identified via a 3rd party IT functional capabilities assessment performed in Q1 2018.* Since ongoing execution of the ITIL v3 adoption program are key in maintaining IT delivery continuity amongst all of NiSource's IT service providers, IT Audit will monitor progress of this effort and include findings of relevant risk areas in our follow-up IT Steady State Execution Review (Phase 2) commencing in July 2018.**

* See Appendix B. (Slide 10) for the June 2018 status of ITIL v3 adoption activities, which are planned for completion by December 31, 2018.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing, whereby a summary of HIGH and/or MODERATE findings will be provided to the NiSource Audit Committee. NiSource IT Audit would like to thank IT management for their cooperation and time in support of this effort.

The following graphic depicts the 2018 NiSource steady-state IT operating environment by service area. Three IT Service Providers (TCS, Wipro, Verizon) are net new as of Q4 2017 while two (F1 & HMB) have legacy operating history with NiSource.



To better manage the contracted services provided by NiSource's IT Service Providers, NiSource IT management created an internal IT Services Management tower in December 2017. In early 2018, NiSource IT then commenced adoption of an industry standard IT service management framework, ITIL v3, for ongoing service management operations. This IT Audit Steady State Review (Phase 1) aligns with the initial rollout of the NiSource IT Service Management tower and the supporting processes/procedures leveraged for both execution and governance in the steady state environment.

Audit Scope and Approach

For testing purposes, IT Audit reviewed the following:

- Delivery model setup of NiSource IT Service Management
- Governance standards documentation created for IT Service Management
- Contractual documentation (both NiSource and IT Service Provider) related to IT Service Management
- IT Services Management process/procedure documentation for ongoing execution

IT Audit also attended monthly IT Service Provider governance briefings and had dedicated meetings with relevant IT Service Management personnel throughout the course of this assessment.

Objective 1: Review risk factors related to process/procedure enablement around IT Service Management model initiation.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess provider/partner risk factors in enabling IT Service Management model design, setup activities and risk mitigating plans/activities. Provide a perspective on what efforts NiSource IT Management Team is using to analyze and action the risk management of Providers and Partners, including internal NiSource, NiSource to 3rd party vendor(s), and 3rd party vendor to 3rd party vendor.	**No Findings Noted**
2	Assess both oversight and governance activities instituted by NiSource IT Management for asset and configuration management activities performed by the new IT Service Providers. Provide a perspective on what efforts NiSource IT Management is using to ensure process integrity, accuracy and timeliness of inventory updates and reports extracted from the IT asset management system of record, as prescribed within the IT Service Provider contracts.	**No Findings Noted**

Audit Scope and Approach (cont'd)

Objective 2: Review process/procedure/activities around IT Service Management delivery model execution.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Determine alignment of NiSource IT responsible activities, as specified in the IT Service Provider contracts, with documented IT management personnel position roles and responsibilities.	**No Findings Noted**
2	Determine process owner assignment, role definitions/expectations, and communications/engagement by the NiSource IT Service Management team for IT service management processes prescribed within the IT Service Provider contracts.	**No Findings Noted**

Objective 3: Review both NiSource IT project management methodology and portfolio management activities supporting project delivery teams.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess the alignment of project management methodology and portfolio management activities as specified between the IT Service Provider contracts and existing NiSource IT policy and procedures.	**No Findings Noted****
2	Determine process/activity ownership, role definitions/expectations, of related project delivery and support activities as prescribed by NiSource IT policy and IT Service Provider contracts.	**No Findings Noted**
3	Assess ongoing NiSource IT Project Management Office (PMO) communication and engagement with NiSource IT project delivery teams, IT Service Providers and internal NiSource business partners regarding delivery support activities and integration with IT Service Management processes.	**No Findings Noted****

Audit Scope and Approach (cont'd)

Objective 4: Review process/procedure/activities around IT Identity and Access Management (IAM) .		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Determine whether the current state access provisioning process is functioning as expected and controls are both in place and being executed to ensure access is appropriately, accurately and timely provisioned.	**No Findings Noted**
2	Assess if access reviews are being performed, along with the quality of those reviews, and ensure any issues found during these reviews are being addressed.	**No Findings Noted**
3	Ensure ongoing alignment exists between NiSource IT Compliance and SOX Compliance and verify the remediation of the risks identified from IT Audit's previous IT Service Provider Transition – Program Closure Review.	**No Findings Noted**

Objective 5: Review process/procedure/activities around the IT Demand and Request IT (RIT) process.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Determine whether NiSource IT and the new IT Service Providers are able to appropriately estimate, evaluate and process the demands for IT services within the new service provider model.	**No Findings Noted *****
2	Review the NiSource BASC/IT Investment Committee process/cadence and determine if changes have been made or should be made to align with the IT Demand and RIT changes.	**No Findings Noted *****

Audit Scope and Approach (cont'd)

Objective 6: Review process/procedure/activities around the Service Level Agreement (SLA) process.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Verify the SLAs created for the new service providers are being tracked and appropriately reviewed by responsible NiSource IT management personnel.	**No Findings Noted**
2	Determine how changes needed to the SLAs are identified and being addressed.	**No Findings Noted**
3	Review the SLA escalation/issue resolution process, determine if it is consistent across all three (3) service providers, and who's responsible/engaged on both the NiSource and service providers.	**No Findings Noted**

Report Distribution

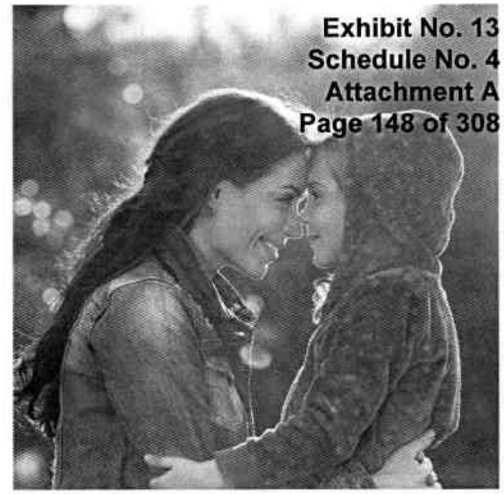
Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*

Appendix B

LEGEND:
Red - past due deliverable
Green - deliverable met
N/A - not applicable
Grey - not due yet

		Q1				Q2	Q3				Q4
Stage	IT Services Model Process	ITIL Process Owner Assigned for NiSource	TCS OLM Present	Wipro OLM Present	Verizon OLM Present	Process Assessment Results & Process Overview	ITIL Foundations Certification - Owner	ITIL Foundations Certification - Lead	ITIL Foundations Certification - Secondary	Updated Process Manual	CSI Identified and Implemented
Operation	Access Management	Y	Y		Y	Y	Y	N		Y	N
Transition	Application Development & Customization	Y	Y	N/A	N/A	Y	Y	Y	Y	N	N
Operation	Application Management	Y				Y	Y	Y	Y	N	N
Design	Architecture Management	Y	Y		Y	Y	Y	Y		N	N
Transition	Asset Management - Infrastructure	Y	N/A	Y	N/A	Y	Y	Y	Y	Y	N
Transition	Asset Management - Network	Y	N/A	N/A	Y	Y	Y	N	N	Y	N
Transition	Asset Management - Software	Y		N/A	N/A	Y	Y	Y		Y	N
Design	Availability Management	Y	Y		Y	Y	Y	Y		N	N
Strategy	Business Relationship Management	Y	Y		Y	Y	Y	N/A		N	N
Design	Capacity Management	Y	Y	Y		Y	Y			N	N
Transition	Change Management	Y		Y		Y	Y	Y	Y	Y	N
Strategy	Communication Management	Y	Y			Y	N/A			N	N
Design	Compliance Management	Y	Y			Y	Y	N		N	N
Operation	Configuration Management	Y			Y	Y	Y	Y	Y	Y	N
Design	Continuity Management	Y	Y			Y	Y	Y		N	N
Strategy	Demand Management	Y	Y			Y	N	N		Y	N
Operation	Event Management	Y			Y	Y	Y		Y	Y	N
Operation	Facilities Management	Y	N/A			Y	Y			N	N
Strategy	Financial Management	Y	Y			Y	N/A	N		Y	N
Operation	Incident Management	Y	Y	Y	Y	Y	Y		Y	Y	N
Operation	Information Management	Y			Y	Y	Y			N	N
Design	Information Security Management	Y			Y	Y	Y	N		N	N
Operation	IT Operations Management	Y			Y	Y	Y	Y	Y	N	N
Transition	Knowledge Management	Y	Y		Y	Y	Y	Y	Y	Y	N
Transition	Organizational Change Management	Y				Y	N/A			N	N
Operation	Problem Manangment	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Transition	Project Management	Y	Y		Y	Y	Y	Y		N	N
Transition	Release & Deployment Management	Y	Y			Y	Y	Y	Y	Y	N
Operation	Request Fulfillment Management	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Design	Risk Management	Y	Y		Y	Y	Y	N		N	N
Design	Service Catalog Management	Y			Y	Y	Y	Y	Y	N	N
Design	Service Level Management	Y		Y	Y	Y	Y	Y		Y	N
Strategy	Service Portfolio Management	Y			Y	Y	Y	Y		N	N
Transition	Service Validation and Testing Management	Y	Y		Y	Y	Y	Y		N	N
Design	Supplier Management	Y	Y			Y	Y	Y		Y	N



2017 Pension Trust and Benefits

July 31, 2018

To: Rick Bond, VP of Human Resources

From: Sal Alshuqairi, Audit Manager
Lin Koh, Audit Director

NiSource®

Executive Summary

The purpose of this audit was to assess the accuracy of the plan benefit payments for the period from January 1, 2017 through December 31, 2017.

Based on our review of 24 benefit payments, we concluded that benefit payments were accurately calculated and disbursed to the plan beneficiaries for the period under review.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided. IA would like to thank NiSource staff and management for their cooperation and time in support of this audit.

Background

On an annual basis, Internal Audit performs a review of the Pension Trust Fund to assess different elements of the plan. During this year review, our work was designed to assess the accuracy of the plan benefit payments for the period under review.

Pension benefits are maintained by the Alight Solutions, an outside provider. In February 2017, Aon Hewitt sold their benefits and human resources platform to Blackstone. The benefits and human resources group was renamed Alight Solutions in June 2017. There were no significant changes in how pension benefits are managed and maintained for NiSource by the new vendor.

Audit Scope and Approach

The purpose of this audit was to assess the accuracy of the plan benefit payments for the period from January 1, 2017 through December 31, 2017.

Business Objective 1: Assess the accuracy of the benefit payments for the period under review.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Review the accuracy of prior year annuity payments.	**No Findings Noted**
2	Perform a benefit payment recalculation on a sample selected by Deloitte & Touche.	**No Findings Noted**

Report Distribution

CC:

J. Hamrock

D. E. Brown

C. J. Hightman

M. Kempic

C. W . Levander

V. Sistovaris

P. A. Vegas

S. K. Surface

M. J. Finissi

P. T. Disser

S. Anderson

M. Downing

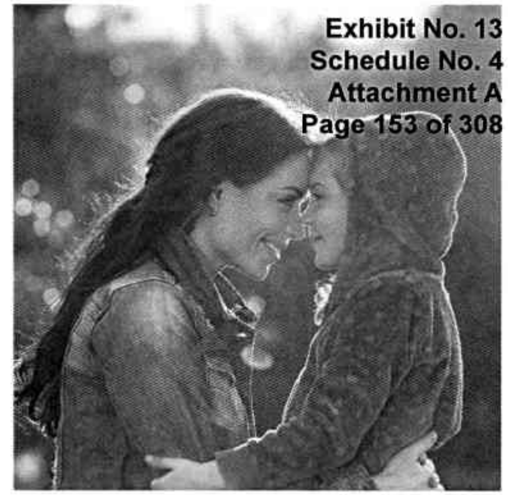
G. Shoemaker

T. L. Tucker

Deloitte & Touche

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



NiSource Incentive Plans

August 29, 2018

To: Teresa Smith, VP Human Resources

From: Adrian Serles, Senior Internal Auditor
Sal Alshuqairi, Manager of Internal Audit
Lin Koh, Director of Internal Audit

NiSource®

Executive Summary

Internal Audit performed an evaluation of the NiSource Corporate Incentive Plans (the Short Term Incentive or CIP) as well as the Performance Share Award Agreements and Restricted Stock Unit Award Agreements (collectively the Long Term Incentive Plans or LTIP). Internal Audit evaluated the accuracy of the metrics used in the 2017 payout levels, assessed the process for reviewing and approving payouts, and reviewed changes to the 2018 plans. Based on our audit procedures, Internal Audit noted no findings during this review.

- Internal Audit reviewed the metrics used in the computation and payout of the 2017 incentive plans. We reviewed and recalculated (where applicable) the measures for Net Operating Earnings per Share (NOEPS); JD Power; Customer Satisfaction (CSAT); Days Away, Restricted, or Transferred (DART); and the National Safety Council (NSC) Barometer Survey without exception.
  - The measures of NOEPS, JD Power, CSAT, and the NSC survey are provided or reviewed by 3rd parties. Therefore, a conflict of interest does not exist for these metrics.
  - There is the possibility for underreporting DART injuries, both at the employee level and at the management level. However, through review and recalculation of the metrics, Internal Audit is comfortable that the metrics are accurate, are supported, and have not been manipulated.
- Internal Audit reviewed the process for the short term incentive plan payouts. We reviewed and, on a sample basis, recalculated payouts without exception.
  - Human Resources (HR) controls and limits access to the Lotus Notes tool.
    - HR will open the tool for a limited time to allow employees' leaders to enter their incentive payout recommendations, and when the tool is closed, further changes can only be made by HR when adequate supporting documentation is provided.
  - Incentive plan payout recommendations are subject to multiple layers of review.
    - The employees leader(s) will make the initial recommendation in the tool, and multiple management approvals are required within each functional area before being reviewed by HR.
    - The VP of Human Resources performs an overall review and approves total amounts by Executive Council members before the incentive plan payouts are made.
- In addition, Internal Audit reviewed the changes to the CIP and LTIP plans in 2018 compared to the 2017 plan to provide a summary of these changes. The changes were well-defined and measurable. Please refer to the Background section of this report for a description of these changes.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, has been provided. Internal Audit would like to thank staff and management for their cooperation and time in support of this audit.

Background

The NiSource Inc. 2010 Omnibus Incentive Plan is the governing plan that sets forth the Corporate Incentive Plans (CIP) and the Long Term Incentive Plans (LTIP). There is a CIP for employees and an additional plan for executives. The Corporate Incentive Plans are exercised annually. Executives are also eligible for the Long Term Incentive Plans. These include the restricted stock unit awards and performance share awards, which, for 2018, include the customer value metrics. The Long Term Incentive Plans cover a three-year timeframe.

For 2017, the employee CIP is based on three performance measures: 1) Earnings per Share (EPS), 2) JD Power score, and 3) Customer Satisfaction (CSAT) score. The executive CIP includes two additional performance measures for a total of five: 4) Days Away, Restricted, or Transferred (DART), and 5) the National Safety Council (NSC) Barometer Survey. There are three levels of performance for each measure – trigger, target, and stretch – each with higher incentive rewards, respectively.

For the executive LTIP, the Restricted Stock Unit Awards are granted and vest after the passing of time. The Performance Share Awards are based on two performance measures: 1) the Cumulative Net Operating Earnings per Share for the three-year timeframe, and 2) the Company's Relative Total Shareholder Return ("RTSR"). RTSR is the annualized growth in the dividends and share price of the Company's common stock benchmarked against the performance of a peer group of companies.

Internal Audit reviewed the 2018 plans for changes compared to the 2017 plans. The following is a summary of these changes:

Corporate Incentive Plans Changes:

For the short term incentive plans, the changes consisted of adjustments to the targets for the metrics (EPS target levels, the JD Power levels, etc.). See page 5 for these metrics.

Long Term Incentive Plans Changes:

For 2018, the total shares awarded in the long term incentive plans are broken down as 80% performance awards and 20% restricted award. The 80% for performance awards is broken down as 65% NOEPS target based and 15% related to customer value metrics.

- ***Performance Awards:***
  For the performance awards, the target for cumulative NOEPS changed from 2017 to 2018. In addition, the way the awards are affected by Relative Total Shareholder Return (RTSR) has changed.
  - For 2017, 50% of the performance shares awarded vested based on NOEPS. The other 50% vested based on the RTSR ranking.
  - For 2018, the shares vest based on cumulative NOEPS and Customer Value measures. The cumulative NOEPS performance shares vest based on the NOEPS targets and can be adjusted up 25% or down 25% based on the RTSR ranking.

Background (Cont.)

Long Term Incentive Plans Changes (continued):

- ***Performance Awards (continued):***
  - The 2018 long term plans include a new metric related to the Customer Value Transformation (CVT). The last 15% of the total shares awarded vest according to the individual's contribution to the Company's Customer Value Framework, as determined at the end of the performance period.
  - Individual payout percentages for the CVT vesting shares may range from 0%-200%, as determined by the executive's EC member, the CEO and the Compensation Committee.
  - The components of the Company's Customer Value Framework consist of the following areas of focus:
    - Safety
    - Customer Satisfaction
    - Financial
    - Culture
    - Environmental
  - Each executive eligible for 2018 LTIP is evaluated against a scorecard which defines the goals for the focus areas mentioned above.
    - Each EC member will make a recommendation to the CEO for the plan participants under their area of operation.
    - For EC members, the CEO will make the recommendations to the Compensation Committee, but ultimately the award is determined by the Compensation Committee at its sole discretion.

- ***Restricted Awards:***
  The restricted awards were introduced into the program in 2018, and are solely time based.

Below are definitions of the metrics mentioned above:

1. **Net Operating Earnings per Share:** NOEPS is pulled from Schedule 1 - Reconciliation of Consolidated Income from Continuing Operations to Net Operating Earnings (Non-GAAP).
2. **JD Power:** The JD Power score is reported by "Brand," which for NiSource is by operating company. JD Power surveys customers who have signed up to be surveyed by JD Power and have self-identified as a NiSource (or subsidiary) customer.
3. **Customer Satisfaction***:* CSAT or Customer Satisfaction is a metric that is provided by the MSR Group, a market research company based in Omaha.
4. **Days Away, Restricted or Transferred:** DART is a safety metric used by the Occupational Safety and Health Administration (OSHA) to represent how many workplace injuries and illnesses occur.
5. **National Safety Council (NSC) Barometer Survey:** This survey allows NiSource to score the overall health of its safety program to see what it's doing well and what needs improvement. Scores are benchmarked against the NSC's database of 820+ organizations worldwide.

Background (Cont.)

2017 and 2018 CIP Goals

2017 Goals			2018 Goals	
2017 Goal		2017 Result		
NOEPS			NOEPS	
Stretch %	$1.18	$1.21	Stretch %	$1.35
Target %	$1.15		Target %	$1.28-1.30
Trigger %	$1.12		Trigger %	$1.23
JD Power Score			JD Power Score	
Stretch %	715	733	Stretch %	2017 Year End NiSource Weighted Score + [Sum of 2018 Weighted LDC Segment Changes x 2]
Target %	705		Target %	Midpoint between trigger and stretch
Trigger %	695		Trigger %	2017 Year End NiSource Weighted Score + [Sum of 2018 Weighted LDC Segment Changes] + 2
CSAT			CSAT	
Stretch %	89%		Stretch %	91%
Target %	87%	88%	Target %	90%
Trigger %	85%		Trigger %	89%
DART			DART	
Stretch	.22	.43	Stretch	.20
Target	.44		Target	.41
Trigger	.66		Trigger	.43
NSC Safety Barometer Survey Percentile			NSC Safety Barometer Survey Percentile	
Stretch %	80%	89%	Stretch %	95%
Target %	78%		Target %	92%
Trigger %	75%		Trigger %	89%

Audit Scope and Approach

Internal Audit performed an evaluation of the NiSource Corporate Incentive Plans (CIP) as well as the Performance Share Award Agreements and Restricted Stock Unit Award Agreements (collectively the Long Term Incentive Plans or LTIP). This audit evaluated the accuracy of the metrics used in the 2017 payout levels, the process for review and approval of payouts, and changes the 2018 plans.

Objective 1: Obtain the plan documents for the 2017 incentive plans. Assess if the metrics used in computing the 2017 payout levels are properly validated.

#	Procedure	Findings Summary (Refer to Appendix A for rating scale)
1	Obtain the plan documents for the 2017 incentive plans. Verify that the metric data can be traced back to source documentation.	**None**
2	Evaluate whether adequate controls exist to mitigate risk including any conflict of interest risk (using inaccurate/misstated metrics due to conflict of interest risk).	**None**

Objective 2: Evaluate the process for review and approval of payouts.

#	Procedure	Findings Summary (Refer to Appendix A for rating scale)
1	Obtain and evaluate any process policies for the review and approval of payouts. Evaluate if the 2017 payout was accurately calculated and adequately documented in accordance with the process procedures.	**None**
2	Evaluate whether the process utilizes segregation of duties and employs multiple layers of review and approval.	**None**

Audit Scope and Approach

Internal Audit performed an evaluation of the NiSource Corporate Incentive Plans (CIP) as well as the Performance Share Award Agreements and Restricted Stock Unit Award Agreements (collectively the Long Term Incentive Plans or LTIP). This audit evaluated the accuracy of the metrics used in the 2017 payout levels, the process for review and approval of payouts, and changes the 2018 plans.

Objective 3: Review changes made to the 2018 plans and assess the process for complexity and ambiguity.

#	Procedure	Findings Summary (Refer to Appendix A for rating scale)
1	Obtain the plan documents for the 2018 incentive plans. Assess if changes have been made to the plans.	**None**
2	Assess if the changes made are well defined and easily measurable.	**None**

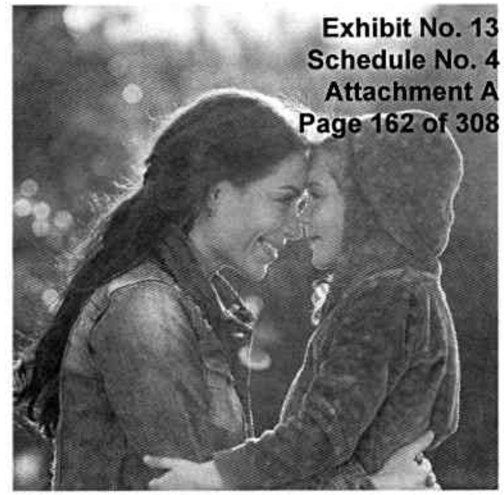
Report Distribution

CC:

J. Hamrock
D. E. Brown
C. J. Hightman
M. Kempic
C. W. Levander
V. Sistovaris
M. J. Finissi
P. A. Vegas
P. T. Disser
S. K. Surface
T. L. Tucker
M. Hooper
M. Downing
G. Shoemaker
Deloitte & Touche

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



Operating Earnings Adjustment – Weather Calculation

October 8, 2018

To: June Konold, Vice President Regulatory Strategy and Support
Joe Mulpas, Vice President and Chief Accounting Officer
Carla Donev, Chief Information Security Officer

From: Shelley Duling, Senior Auditor
Jaclyn Callahan, Manager Internal Audit
Ryan Binkley, Director Internal Audit

NiSource®

Executive Summary

Internal Audit reviewed the monthly weather letter calculation prepared by Regulatory Management and used by Financial Reporting to normalize non-GAAP operating earnings for patterns in weather that vary from normal, historical trends. NiSource currently defines normal weather, for purposes of the weather adjustment, as the average daily temperatures for the ***35*** year period ended 2010.

Audit procedures*:

1) Verify that the monthly weather adjustment to normalize operating earnings for patterns in weather that vary from historical trends appears to be accurately calculated in accordance with Regulatory Management's methodology.
2) Determine that the monthly weather calculation amounts are accurately included as an adjustment to non-GAAP operating earnings in the quarterly earnings release.

Summary Conclusions:

Internal Audit reviewed the weather adjustment calculation for Columbia Gas of Pennsylvania (CPA) and NIPSCO Electric for January and February 2018. The calculation appears to be accurately calculated in accordance with Regulatory Management's methodology which was supported through discussions with Regulatory Management. Internal Audit agreed the input data driving the weather adjustment calculation to supporting data sources. In addition, Internal Audit verified that the Quarter 1 2018 operating earnings adjustment related to weather agreed to the calculation prepared by Regulatory Management.

Internal Audit identified (2) Moderate and (1) Low Risk audit findings as summarized on ***Pages 3 and 4***.

****Internal Audit did not assess the Company's overall theory / methodology of determining the weather adjustment; the current methodology was developed by Regulatory Management to explain revenue variances due to "abnormal" weather (weather that varies from historical trends).***

Executive Summary (Cont'd)

Summary Conclusions (Cont'd):

Internal Audit identified *(2) Moderate Risk* audit findings related to the review of the overall weather adjustment calculation and the Information Technology platform that maintains the data and query used in the weather calculation adjustment:

- Regulatory Management does not maintain documented policies and procedures to support all assumptions/logic used in the weather adjustment calculation. Internal Audit also noted through discussions with Regulatory and Financial Reporting Management, there appear to be informal assessments / reviews of the monthly weather adjustment to determine the reasonableness of the calculation (i.e. comparison of the amount to prior months and years). However, Regulatory and Financial Reporting Management do not currently maintain formalized, documented policies and procedures related to the review of the weather adjustment calculation to ensure the calculation is not materially misstated.

  - Recommendation: With the overall importance of the weather adjustment as part of quarterly and annual reporting of operating earnings through public disclosures, as well as the complex nature of the calculation, Internal Audit is making a recommendation to enhance the control environment related to the monthly review of the weather adjustment calculation (i.e. "Weather Letter"). Regulatory Management and Financial Reporting should collaborate to formalize controls for the review of the monthly weather adjustment to ensure the calculation is not materially misstated. The developed controls should include:

    - Documentation of the assumptions/logic utilized in the weather adjustment calculation at an appropriate level of detail to ensure reliance on the calculation; and
    - A formal approval process to approve any changes to the assumptions used in the weather adjustment calculation. (Approval should be required of Regulatory and Financial Reporting Management.)

  NOTE: While we have made a recommendation for specific IT related controls as noted one the next page, adequate manual review controls over data input, modification and change management should be developed to ensure users of the information may rely on the outputs of the weather letter.

Executive Summary (Cont'd)

Summary Conclusions (Cont'd):

(2) Moderate Risk audit findings (Cont'd):

- The VM/CMS platform maintains a significant amount of the input data used in the monthly weather adjustment calculation, including the SAS query used to generate the weather adjustment. The VM/CMS platform is not being tracked and monitored by Information Technology to ensure proper controls (i.e. access, change control, etc.) over the data maintained in VM/CMS.

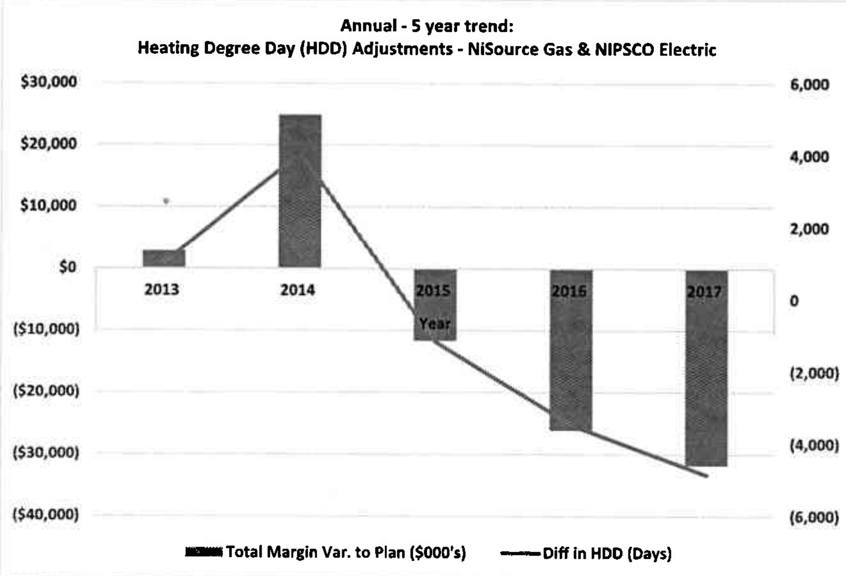
  - Recommendation: Information Technology with the assistance of Regulatory Management should assess the VM/CMS platform to ensure appropriate Information Technology controls are implemented. At a minimum, controls should include access and change control policies to ensure appropriate awareness to users of the weather adjustment information.

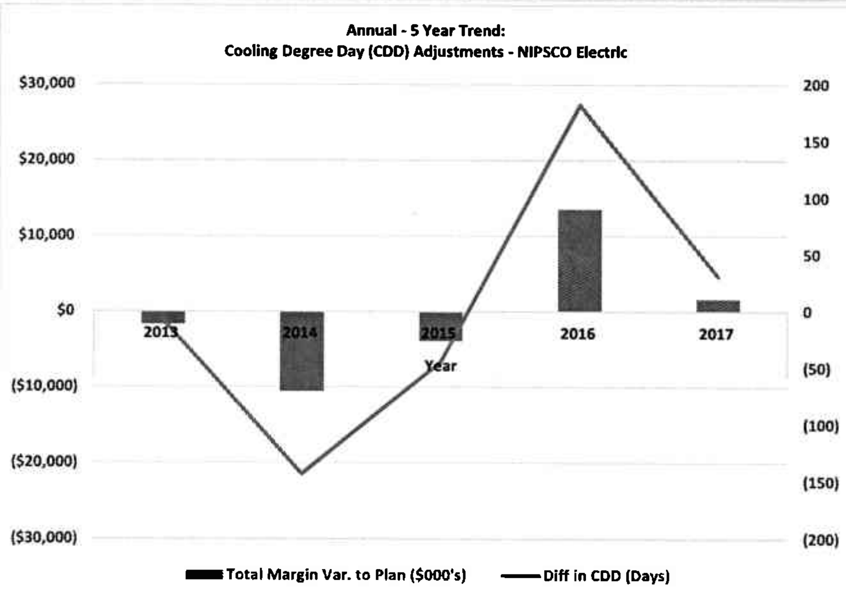
Internal Audit identified *(1) Low Risk* audit findings as noted below:

- Regulatory Management uses the number of residential customers in each weather station area (by state) to assign a weight to the daily temperature value for each weather station (i.e. customer count for a weather station divided by total customer count for the business segment multiplied by the daily temperature for weather station). The sum of the weighted temperature values of each weather station is used as the daily temperature value in the weather adjustment calculation for the related state (and segment for NIPSCO). It was noted that the customer data used in the calculation of weather temperature values has not been recently refreshed and does not reflect the most current residential customer distribution.

  - Recommendation: Regulatory Management should periodically update the weather station weights using current residential customer data to ensure the most accurate daily temperature values are utilized for each state and segment (as applicable).

Background





*Reported Weather – Compared to Normal**

	Year				
	2013	2014	2015	2016	2017
Net Annual NiSource OE Adjustment(s) ($ Millions)	$ (1.2)	(14.2)	15.5	12.5	$ 30.2

Overview: Revenue Effect of Weather – compared to normal

The Revenue Effect of Weather has been historically utilized by NiSource as an adjustment to GAAP to determine NOE. The abnormal impact of weather is included in management's policy (Controller's letter).

Management has outlined the methodology in determining the quarterly adjustment to normal due to abnormal weather as documented in the "Weather Letter". Each state requires a separate calculation, accounting for various weather activity and the particular state's weather sensitive load.

- **All NiSource Gas Companies** – Weather is measured using monthly Heating Degree Days (HDD). Normal HDD is defined as the average of the 35 years ended 2010. The calculated adjustment is determined by applying actual volumes to the difference between Normal HDD and actual HDD.
- **NIPSCO Electric Company** – Weather is measured using monthly Heating Degree Days (HDD) and Cooling Degree Days (CDD). Normal HDD and CDD are defined as the average of the 35 years ended 2010. The calculated adjustment includes the difference between actual KWH per customer to actual HDD and CDD to normal.

High-Level Analytics

Internal audit plotted weather and margin impact activity for the last five years (2013-2017). All HDD and CDD activity is presented separately (as noted in the graphs to the left) to present comparable activity. Overall, it appears the trends in HDD and CDD variances from normal tend to follow the annual margin adjustments over time *(E.g. a negative diff in HDD days to normal = warmer than normal = less revenue than expected = positive adjustment to OE; the opposite is true for margin effect of CDD differences from normal)*

** Amounts noted were compiled by Internal Audit over the prior 5 annual reporting periods; amounts of the adjustment are the inverse of actual activity ($$) as presented in our graphs as the intent of the adjustment is to remove the impact of weather.*

Audit Scope and Approach

Internal Audit conducted a review of the monthly adjustment to normalize operating earnings for patterns in weather that vary from normal, historical trends. The adjustment is calculated by Regulatory Management (Demand Forecasting) and provided to Financial Reporting for consideration as an operating earnings adjustment.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided. Internal Audit would like to thank members of the Regulatory and Financial Reporting departments for their cooperation and time in support of this follow-up review.

Objective 1: Determine that the monthly weather adjustment to normalize operating earnings due to patterns in weather that vary from historical trends appears to be accurately calculated in accordance with Regulatory Management's methodology and accurately reflected in the quarterly earnings release.				
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)		
1	Verify that the monthly weather adjustment to normalize operating earnings for patterns in weather that vary from historical trends appears to be accurately calculated in accordance with Regulatory Management's methodology.	Finding #1 See Page 7	Finding #2 See Pages 8 - 9	Finding #3 See Page 11
2	Determine that the monthly weather calculation amounts are accurately included as an adjustment to non-GAAP operating earnings in the quarter earnings release.	No Findings Noted		

Findings

Objective #1, Procedure #1: Verify that the monthly weather adjustment to normalize operating earnings for patterns in weather that vary from historical trends appears to be accurately calculated in accordance with Regulatory Management's methodology.	Risk Rating
Finding #1: Regulatory Management uses the number of residential customers in each weather station area (by business segment) to assign a weight to the daily temperature value for each weather station (i.e. customer count for a weather station divided by total customer count for the business segment multiplied by the daily temperature for weather station). The sum of the weighted temperature values of each weather station is used as the daily temperature value in the weather adjustment calculation for the related business segment. It was noted that Regulatory Management is using customer data from many years ago, thus the weighted temperature values are not being based on current residential customer distribution.	Low

Process Owner: Vice President Regulatory Strategy and Support

Executive Council Member Responsible: Donald Brown, Chief Financial Officer

Observation

Criteria: Regulatory Management uses the number of residential customers in each weather station area (by business segment) to assign a weight to the daily temperature value for each weather station (i.e. customer count for a weather station divided by total customer count for the business segment multiplied by the daily temperature for weather station). The sum of the weighted temperature values of each weather station is used as the daily temperature value in the weather adjustment calculation for the related business segment. Management should be using current residential customer distribution to ensure accurate weighted temperature values in accordance with their methodology.

Condition: It was noted that the customer data used in the calculation of weather temperature values has not been recently refreshed and does not reflect the most current residential customer distribution.

Risk/Impact: Depending on weather patterns and shifts in residential customer count by weather station, there could be a significant variance in the temperature values used in the weather adjustment calculation when using historical customer data versus current customer data.

Recommendation

Regulatory Management should periodically update the weather station weights using current residential customer data to ensure the most accurate daily actual temperature values are utilized for each state and segment (as applicable).

Management Response

Not Required for Low Risk Findings

Findings

Objective #1, Procedure #1: Verify that the monthly weather adjustment to normalize operating earnings for patterns in weather that vary from historical trends appears to be accurately calculated in accordance with Regulatory Management's methodology.	Risk Rating
Finding #2: Documentation supporting all assumptions/logic used in the weather adjustment calculation was not maintained by Regulatory Management.	**Moderate**
Process Owner: Vice President Regulatory Strategy and Support and Vice President and Chief Accounting Officer	
Executive Council Member Responsible: Donald Brown, Chief Financial Officer	

Observation A

Criteria: Regulatory Management should maintain documented policies and processes related to the weather adjustment calculation that support assumptions used in the calculation.

Condition: Regulatory Management does not maintain documented policies and procedures to support all assumptions/logic used in the weather adjustment calculation. Refer below to one example noted by Internal Audit.

The average temperature sensitive volume per heating degree day at NIPSCO Electric for a given month/year (i.e. February 2018) is based on the average of the temperature sensitive volume per heating degree day for the same month for the prior three years (i.e. February 2015, 2016, 2017). However, for the month of October the temperature sensitive volume is based on the prior November (i.e. November 2017 is used for October 2018). Regulatory Management has not maintained documented support for the assumptions utilized in calculating the average temperature sensitive volume per heating degree day in terms of why a three year average is appropriate for every month except October (for electric only) and why using the prior November is reasonable for October.

Risk/Impact: If assumptions and logic utilized in the weather adjustment calculation are not properly documented and retained by Regulatory Management, knowledge of the assumptions/logic may not be properly transitioned upon employee turnover. Knowledge of the assumptions/logic are necessary to ensure it is calculated in accordance with Regulatory Management's methodology and to ensure accuracy and review of the calculation – we have made a recommendation associated with this observation but have combined our recommendations with the procedures completed as explained on the next page

Findings

Objective #1, Procedure #1 (Cont'd): Verify that the monthly weather adjustment to normalize operating earnings for patterns in weather that vary from historical trends appears to be accurately calculated in accordance with Regulatory Management's methodology.	**Risk Rating**
Finding #2 (Cont'd): Regulatory and Financial Reporting Management do not have formalized, documented controls for the review of the monthly weather adjustment calculation to ensure it is not materially misstated.	**Moderate**

Process Owner: Vice President Regulatory Strategy and Support and Vice President and Chief Accounting Officer

Executive Council Member Responsible: Donald Brown, Chief Financial Officer

Observation B

Criteria: Regulatory and Financial Reporting Management should have formalized, documented policies and controls in place to ensure adequate review of the weather adjustment calculation.

Condition: Through discussions with Regulatory and Financial Reporting Management, it appears the calculation of the monthly weather adjustment is assessed for reasonableness; however, Regulatory and Financial Reporting Management have not established formalized, documented controls for the review of the weather adjustment calculation to ensure the calculation is not materially misstated.

Risk/Impact: The operating earnings adjustment for weather may be misstated if controls are not formally established.

Recommendation for Observations A and B

With the overall importance of the weather adjustment as part of quarterly and annual reporting of operating earnings through public disclosures, as well as the complex nature of the calculation, Internal Audit is making a recommendation to enhance the control environment related to the monthly review of the weather adjustment calculation (i.e. "Weather Letter"). Regulatory Management and Financial Reporting should collaborate to formalize controls for the review of the monthly weather adjustment to ensure the calculation is not materially misstated. Related to the observations noted on the prior page, the developed controls should include:

- Documentation of the assumptions/logic utilized in the weather adjustment calculation at an appropriate level of detail to ensure reliance on the calculation; and
- A formal approval process to approve any changes to the assumptions used in the weather adjustment calculation. (Approval should be required of Regulatory and Financial Reporting Management.)

While we have made a recommendation for specific IT related controls on ***Slide 11***, adequate manual review controls over data input, modification and change management should be developed to ensure users of the information may rely on the outputs of the weather letter.

Findings

Objective #1, Procedure #1 (Cont'd): Verify that the monthly weather adjustment to normalize operating earnings for patterns in weather that vary from historical trends appears to be accurately calculated in accordance with Regulatory Management's methodology.	**Risk Rating**
Finding #2 (Cont'd): Regulatory and Financial Reporting Management do not have formalized, documented controls for the review of the monthly weather adjustment calculation to ensure it is not materially misstated.	**Moderate**

Process Owner: Vice President Regulatory Strategy and Support and Vice President and Chief Accounting Officer

Executive Council Member Responsible: Donald Brown, Chief Financial Officer

Management Response & Timing

REG-POL-01 (Definition of Weather Policy) has been completed and approved by the VP, Regulatory Strategy & Support, the VP & Chief Accounting Officer and the VP, Planning & Analysis. This Regulatory Policy will be reviewed annually by the Manager and Director of Demand Forecasting. REG-POL-01 is attached in Appendix B. REG-PRO-01-01 (Weather Letter Logic) was drafted in November 2017 and is also included in Appendix B. Regulatory will review these procedures and update, as needed. Additional detailed procedures will be drafted in late-2018 and 2019. Some of these procedures will be formalized and SOX Tests and will be developed to ensure that the Weather Letter Logic is followed.

Findings

Objective #1, Procedure #1: Verify that the monthly weather adjustment to normalize operating earnings for patterns in weather that vary from historical trends appears to be accurately calculated in accordance with Regulatory Management's methodology.	**Risk Rating**
Finding #3: The VM/CMS platform maintains a significant amount of the input data used in the monthly weather adjustment calculation, including the SAS query used to generate the weather adjustment. The VM/CMS platform is not being tracked and monitored by Information Technology ensuring proper controls over data maintained in VM/CMS.	**Moderate**

Process Owner: Vice President and Chief Information Security Officer

Executive Council Member Responsible: Donald Brown, Chief Financial Officer

Observation

Criteria: The VM/CMS platform should be adequately monitored by Information Technology to ensure appropriate Information Technology controls exist.

Condition: The VM/CMS platform is currently not being monitored/tracked by Information Technology, thus appropriate controls (i.e. access, change control) over supporting data files and the SAS query generating the weather adjustment calculation does not appear to currently exist.

Risk/Impact: The weather adjustment calculation could be misstated due to improper edits to supporting data files or the SAS query generating the weather adjustment calculation that are maintained in the VM/CMS platform.

Recommendation

Information Technology with the assistance of Regulatory Management should assess the VM/CMS platform to ensure appropriate Information Technology controls are implemented. At a minimum, controls should include access and change control policies to ensure appropriate awareness to users of the weather adjustment information.

Management Response & Timing

The IT Application team and the IT Compliance team will work together with the Regulatory Management and the Financial Reporting teams to document out all of the IT general controls associated with the VM/CMS platform. The IT Application and Compliance teams will be completed with our assessment and documentation of controls during Q1 2019. The identified controls will be tested on at least an annual basis.

Report Distribution

CC:

- J. Hamrock
- D.E. Brown
- C.J. Hightman
- M. Kempic
- C.W. Levander
- V. Sistovaris
- P.A. Vegas
- P.T. Disser
- S.K. Surface
- M.J. Finissi
- A. Efland
- P.A. Strauss
- M.A. Rozsa
- N. Drew
- T.L. Tucker
- S. Anderson
- K.L. Lee
- Deloitte & Touche, LLP

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*

Appendix B includes the following attachments

I. Regulatory – Demand Forecasting - Definition of Weather Policy [REG-POL-DF-01]

II. The Weather Letter Logic - Procedures Related to the Weather Letter [REG-PRO-DF-01-01]

TO: *Ann Ruff, Director Corporate Communications*
Royce Workman, Director Customer Experience Strategy
FROM: **Internal Audit**
DATE: *December 13, 2018*
SUBJECT: **Consultative Review Re: Customer Notifications/Communications**

Internal Audit performed a consultative review over customer notifications/communications efforts (referred to herein as "communications") for Columbia Gas of Virginia ("CGV"), Columbia Gas of Pennsylvania ("CPA"), and Columbia Gas of Maryland ("CMD"). The review focused on identifying the various communications that occur both prior and/or subsequent to work being performed on a customer's premise by NiSource employees or third party contractors.

(Note: The original scope of work included the evaluation of customer communication efforts across the NiSource organization to provide insight and compare and contrast each jurisdiction's communication efforts. However, the work of the audit team was re-directed due to the Merrimack Valley incident and all states were not able to be covered in our work).

Approach/Methodology
Internal Audit performed interviews with 32 employees across the following departments; Communications, Operations, Capital Construction, Engineering, Integration Center, and Compliance.

In an attempt to capture the communication efforts occurring in each respective company, Internal Audit utilized these interviews to summarize communication activities identified by interviewees. (Note: No additional verification procedures were performed to validate the implementation or execution of the specific activities identified.)

Results
Please see accompanying schedule which summarizes the communication efforts for CGV (Page 2) and CPA/CMD (Page 3). The summary contains the following fields:

- Subject - Activities or topics of communication
- Why – Reason for the communication
- Location – Company location in which the communication method is utilized
- Expected Frequency – How often the communication should occur
- Departments Involved – Listing of involved departments
- Type of Communication – Form used (i.e. door hanger, letter)
- Special Requirements – General notes (i.e. commission driven)

In addition, Internal Audit provided a summary (Page 4) of key comments made from individuals during the interview process.

CGV

Subject	Why	Location	Expected Frequency	Departments Involved in Communication	Type of Communication	Special Requirements
AOC Communications	Inform Customers an AOC Inspection occurred and potentially remediation required.	All 3 Op Centers	Door Hanger - Operations, excluding System Ops Letter - All remediation work	IC, Operations	**Door Hanger** - Left after AOC inspection **Letter** - Sent out by IC for remediation work	Door hangers driven by state commission. System Ops would have difficulties completing work if they tagged every house.
Construction	Communicate work related to relocation, betterment, and replacement of main and service lines.	All 3 Op Centers	Completed on a JO basis	Construction Department and Communications	**Postcard** - Sent typically 1 month before work **Factsheet/FAQ/Restoration Info Letter** - Sent ~1-2 weeks before work **Door Hanger** - Left a couple days before work begins **Social Media** - If large project will target zip code with communication	
Major Projects	Initial communication of upcoming work to those impacted by it.	All 3 Op Centers	Any work that impacts traffic around project	Major Projects, Communications	**Door Hanger** - Left with business card of project manager. **Town Hall** - While rare (5 or 6 last 5 years not just CGV) if there are road closures will set up a town hall meeting to discuss purpose and plans	
GPS	Informs Customers what the collection process looks like.	All 3 Op Centers	Work Dependent	Communications	**Social Media** - Targeted Facebook posts showing video of GPS data collection	
Crossbore	Informs customers about the process	All 3 Op Centers	Work Dependent	Communications, Operations	**Letter** - Sent explaining process and directs to website which shows contractor work **Door Hanger** - Based on municipalities, will leave door hanger with contactors contact information during the initial work	
Leak Inspectors	Informing customer we need access to our system so will be installing a gate on fence	All 3 Op Centers	Ad Hoc, rare	Communications	**Letter** - Provides information	
Right of Way	What to expect when in your area, importance of clearing.	All 3 Op Centers	Ad Hoc	Communications	**Social Media** - Targeted Facebook posts **Email** - Provides information **Bill** - Insert Provides information **Customer Newsletter** - Spot in quarterly letter	
Meter Access	Asking them to trim plants or we can do it. Result of AOC Inspection finding.	All 3 Op Centers	All VAAOCD (CGV AOC Job Type Code) JOs	IC	**Letter** - Part of the process under AOC Communications.	
Customer Contact	All employees working on a premise for typically over ~5-10 minutes will try to make contact with the customer before or after work explaining what is going on	All 3 Op Centers	Informal every JO	All in the field	Informal knock on the door (process just started)	
Abandonment	Informing customer at premise that the service will be abandoned	All 3 Op Centers	Abandonment JOs completed by the Construction Group under Operations	Construction Department	Door Hanger	
Field Audits & QA/QC on Utility Tickets	Letting the customer know of audit work	All 3 Op Centers	Review work done by other departments and line locators	Damage Prevention	Verbal communication to the customer	
Propane Communication	Communication required for maintenance work done every 3 years	All 3 Op Centers	For two propane subdivisions every three years	System Operations	**Letter** - Same letter on file is utilized	
Leakage access	Leakage inspections for condos and homes that we do not have access to perform leakage inspections.	All 3 Op Centers	When access is needed	System Operations	Phone or Letters can be sent	
Engineering	Site visits when planning work with the customer	All 3 Op Centers	Job specific	Engineering	**Verbal** - No formal communication	
New Business	New Business has a defined process with multiple client contact points, however once work is scheduled the communication process for Home Owners (i.e. not developers or builders) would follow the construction process outlined above.					
Shutoff for both failure to pay and SOII (Service Order for Inaccessible Inspection)/CGI (Couldn't Get In)	Each operating center has a defined communication process that generally includes phone calls, letters, and door hangers which are usually driven by state and local municipality requirements.					

Legend

Subject:	Activities or topics of communication
Why :	Reason for the communication
Location:	Company location in which the communication method is utilized
Expected Frequency:	How often the communication should occur
Departments Involved:	Listing of involved departments
Type of Communication:	Form used (i.e. door hanger, letter)
Special Requirements:	General notes (i.e. commission driven)

CPA/CMD						
Subject	Why	Location	Expected Frequency	Departments Involved in Communication	Type of Communication	Special Requirements
Construction (Infrastructure Replacement Program)	Communicate work related to capital construction work	All Op Centers	Completed on a JO basis	Construction Department and Communications	**Door Hanger** - Left on the door of houses **Letter** - Communication Team will send letter for larger projects **Door Hanger for Infrastructure Replacement** - Hangers that explain process, including restoration **CPA ONLY 30 Day Notice Letter** - For all meter move outs, hand delivered **72 Hour Notice Door Hanger** - Notice that gas will be shut off	Tariff Requirement on 30 day notice 72 Hour Notice creates Log that communication was made for state commission All communication by construction coordinator includes their business card
Major Projects	Initial communication of upcoming work to those impacted by it.	All Op Centers	Any work that impacts traffic around project	Major Projects, Communications	**Door Hanger** - Left with business card of project manager. **Town Hall** - While rare (5 or 6 last 5 years not just CPA/CMD) if there are road closures will set up a town hall meeting to discuss purpose and plans	
GPS	Informs Customers what the collection process looks like.	All Op Centers	Periodic	Communications	**Letter** - PSID Driven **Door Hanger** - Has been used, gives number to call center and GPS Website	
Meter Protection (currently on hold with plans to resume)	Communication that was left at the customers site saying it was 3 days before we would be back	PA North 2017 and PA South	Work Dependent	Contractors	**Letter** - Sent explaining process **Door Hanger** - Contractor driven with their name and number of when they will perform work	Regulatory Recommendation
Riser Replacement	Informing customer of upcoming riser replacement, total of 26k risers to replace, multi-year program	PA East	Work Dependent	Operations Communications	**Letter** - Typically goes out ~2 weeks before work Call - Precision Pipeline will call to schedule	
Farm Tap Inspections	Letter informing them of upcoming inspections	All Op Centers	Work Dependent	Operations Communications	Letter	
Outage/Dig In/Reconnection	Depending on issue communication to the public is made	All Op Centers	Event driven	Communications	**Social Media** **Door Hanger - On reconnects** **Customer Email**	
Leak Repair	Communication to schedule leak repair	PA East	Job specific	Operations	**Verbal or Door Hanger** - Will go out and communicate with customer to schedule a time to work or leave a door hanger, at a minimum they have to give 3 days	3 day rule commission driven
Engineering	Site visits when planning work with the customer	All Op Centers	Job specific	Engineering	**Verbal** - No formal communication	
Locates	Communication may be required if the locator needs to go inside	PA East	Locate specific	Operations	**Door Hanger** - Will be left if they need access to the inside of the house to finish locate.	Informal and manual
Scattered Services	Communication on plant work on new or replacement services	PA East	Based on the JO	Operations	Employee will access situation leave no parking where applicable and talk with the customer or leave card	
Shutoff for both failure to pay and SOII (Service Order for Inaccessible Inspection)/CGI (Couldn't Get In)	Each operating center has a defined communication process that generally includes phone calls, letters, and door hangers which are usually driven by state and local municipality requirements.					

Legend

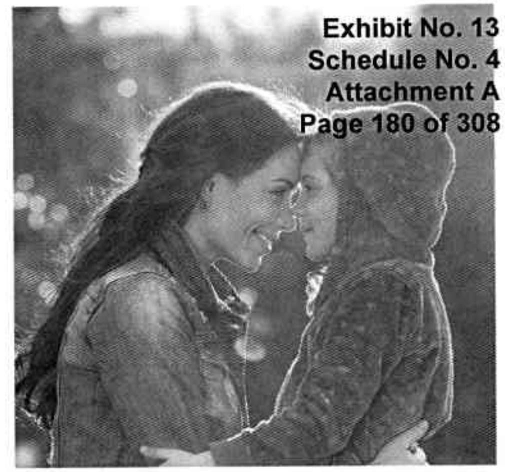
Subject:	Activities or topics of communication
Why:	Reason for the communication
Location:	Company location in which the communication method is utilized
Expected Frequency:	How often the communication should occur
Departments Involved:	Listing of involved departments
Type of Communication:	Form used (i.e. door hanger, letter)
Special Requirements:	General notes (i.e. commission driven)

Note:	Comments below were made from individuals during the interview process. Internal Audit summarized the information to provide further perspective on customer communication activities.

All	"For shut offs we do not have a form/door hanger that says we tried to shut off your gas today please call back. This could potentially increase bill payments as people realize someone actually was here to shut off service as oppose to notices received."

CGV	"On scattered new service and replacements we communicate to the customer that is getting the service line (Construction Communication Flow). There are situations where the main may be on the other side of the street and we are required to dig in the yard of the customer not receiving the new line and they will not receive any form of communication. It would be a challenge to identify these instances."
CGV	"In some areas of CGV South they previously used trifold signs in areas that had outages."
CGV	"Customers have brought up cases where they had an AOC and a Leak. Work on them were at separate times and since there is an AOC communication process they were informed of that work but not the grade 2 or 2+ even though that generally digs up more of a customers lawn."

CPA	"There is a large amount of door hangers (rough estimate ~25) that could be narrowed down. Door hangers in question relate to the normal scenarios Operations and Construction run into while at customers premise (i.e. Need access to relight, CGI, Meter Access, Nobody Home)."
CPA	"Streamline the shutoff tags, a lot of tags for the different scenarios, maybe have fewer tags with checkbox."
CPA	"If the field was aware of what the IC was sending and vice versa. Also if the call center was aware of all the communication."



PowerPlant Upgrade SDLC - Test & Deploy Phases

To: Jennifer Tipton, VP – Enterprise Applications
Walt Wojcik, Director – IT Applications
Steve Brown, Program Manager - IT Applications

From: John Manfreda, Project Manager - Infor. Systems Audit
Greg Wancheck, Director - Infor. Systems Audit

January 8, 2019

NiSource IT Audit conducted our PowerPlant Upgrade SDLC assessment for the project's Test & Deploy phases between July 2018 and November 2018 to provide an independent perspective around ongoing project governance, delivery service activities and inclusion of relevant solution control considerations. This Test and Deploy phase analysis was directly preceded by IT Audit's PowerPlant Upgrade SDLC - Design & Build phase review that was released in July 2018 and provided a perspective on the project's earlier phase gate activities. This review is IT Audit's second (and final) project SDLC review for the NiSource PowerPlant Upgrade project.

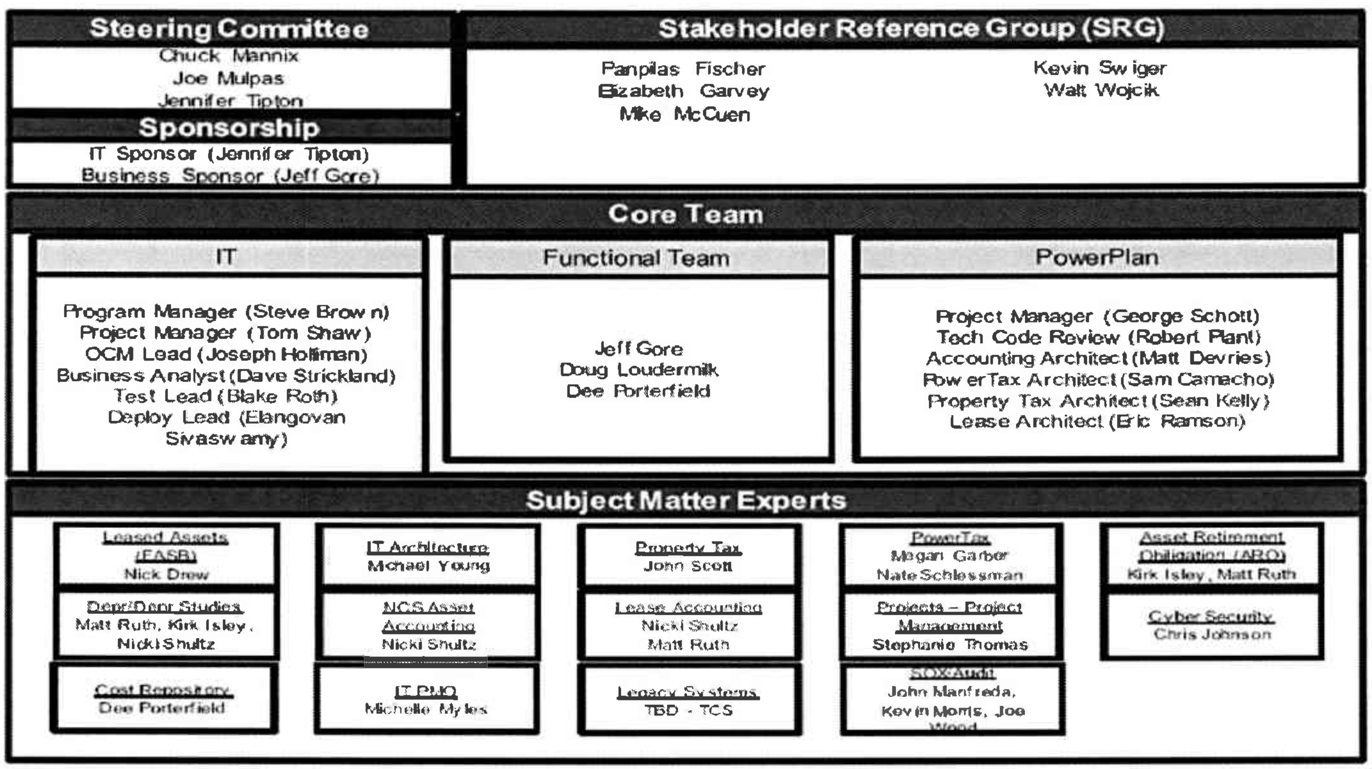
IT Audit's PowerPlant Upgrade SDLC - Test & Deploy phase assessment noted the following:

- **The PowerPlant Upgrade project team implemented and executed appropriate solution-based controls for the Test and Deploy phases to address project delivery risk.**
- **Sarbanes Oxley Act (SOX) control considerations were included as part of both PowerPlant Upgrade and Lease Module application testing and deployment, including appropriate engagement of related NiSource assurance personnel.**
- **The PowerPlant Upgrade project team performed appropriate activities to deploy project deliverables within both agreed-to time and quality objectives.**

This audit conforms with the International Standards for the Professional Practice of Internal Auditing, whereby a summary of HIGH and/or MODERATE findings will be provided to the NiSource Audit Committee. NiSource IT Audit would like to thank both IT and Finance/Accounting management for their cooperation and time in support of this effort.

Beginning in November 2017, NiSource commenced an initiative to upgrade the enterprise's application version of Powerplant that currently enables functional Asset Management and Corporate Tax process execution. In addition, NiSource concurrently deployed an upgrade to the PowerPlant Asset and Tax system in November 2018 to maintain system currency and enable Power Plant's new Lease Accounting suite to support new FASB (Financial Accounting Standards Board) lease accounting mandates which go into effect starting January 1, 2019.

The PowerPlant Upgrade initiative incorporated the following project team structure to perform ongoing project management and delivery activities.



Audit Scope and Approach

For testing purposes, IT Audit reviewed the following:

- Governance standards enablement and adherence
- Delivery model execution
- IT SOX control identification and engagement

IT Audit additionally attended regular project status and governance meetings along with having as-required meetings with relevant personnel over the course of the review period.

Objective 1: Review NiSource PowerPlant Upgrade program delivery-based controls to provide a perspective on organizational risk inherent in project delivery.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess whether project scope, cost and schedule controls continue to operate and comply with NiSource's IT Project Management Methodology (PMM).	**No Findings Noted**
2	Assess whether project quality controls over solution conformance to requirements are operating as designed.	**No Findings Noted**
3	Assess whether controls over communications and stakeholder alignment are operating as designed.	**No Findings Noted**
4	Review on-going project user acceptance, approval activities, third-party service provider management, and deployment plans/activities (where applicable) to provide reasonable assurance NiSource corporate policy and/or program standards are followed.	**No Findings Noted**

Audit Scope and Approach (cont'd)

Objective 2: Review NiSource PowerPlant Upgrade program solution-based controls to provide a perspective on any nonconformance risks associated with corporate control requirements.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess whether business process controls (automated and manual) were included in testing and deployment processes for the NiSource PowerPlant Upgrade project with relevant stakeholder engagement on fit for use status.	**No Findings Noted**
2	Assess whether interface controls were considered and included in the test and deployment processes for the NiSource PowerPlant Upgrade project with relevant testing results documentation and stakeholder engagement on fit for use status.	**No Findings Noted**
3	Assess on-going NiSource enterprise IT change management compliance for the NiSource PowerPlant Upgrade project.	**No Findings Noted**

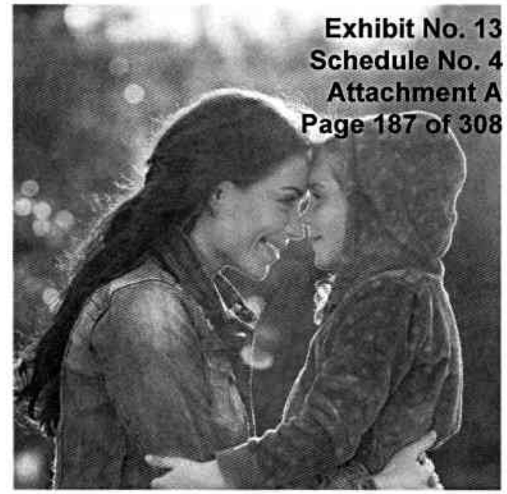
Objective 3: Review overall NiSource PowerPlant Upgrade project team conduct in helping to achieve project objectives.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Monitor on-going integration, alignment and communications between the NiSource PowerPlant Upgrade Project Team, IT Project Management Office (PMO), Third-Party Providers and Business Stakeholders to provide feedback on both project approach and process execution during the review period.	**No Findings Noted**

Report Distribution

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



NiSource Capitalization Audit

February 13, 2019

To: Matt Ruth, Manager Asset Accounting (Columbia Companies)
Kirk Isley, Manager Asset Accounting (NIPSCO)

From: Shelley Duling, Senior Auditor
Natalie Ladd, Lead Auditor
Jaclyn Callahan, Manager Internal Audit
Ryan Binkley, Director Internal Audit

NiSource®

Executive Summary

Internal Audit performed a review for all NiSource companies to determine whether capital additions during the audit period adhered to the Plant/Fixed Asset Capitalization Policy issued on January 1, 2017 and the Software Capitalization Policy updated on July 1, 2016.

Audit Procedure:
For a sample of ***60*** selections, determine that the expense is properly classified as capital in accordance with the Plant/Fixed Asset Capitalization Policy and the Software Capitalization Policy.

Summary Conclusions:

Internal Audit randomly selected ***60*** additions to capital for the period January 1, 2017 through May 31, 2018 spread across all NiSource companies based on their proportionate share of total additions. Internal Audit reviewed support for each selection (invoice, work order system support, etc.) and verified that the amount was properly capitalized. Internal Audit identified 1 Low Risk recommendation for management as a result of our procedures as noted below:

- Internal Audit identified ***3*** instances where items were improperly capitalized; however, the total amount of the exceptions was deemed immaterial (less than ***$10,000***). Further there were no identifiable trends related to the exceptions as they were spread across various states (Kentucky and Pennsylvania) and cost elements (other materials and supplies, meters and instrumentation, etc.). Internal Audit classified this audit finding as ***low*** and issued the following recommendation:

    Recommendation: Fixed Asset Accounting Management should consider reinforcing capitalization policies; however, even with reinforcement, there is some inherent risk of inaccurate interpretation of the policies by the employees coding or approving expense transactions that may result in items being improperly capitalized or expensed.

Audit Scope and Approach

Internal Audit performed a review to determine whether capital additions during the audit period adhered to the Plant/Fixed Asset Capitalization Policy issued on January 1, 2017 in addition to the Software Capitalization Policy updated on July 1, 2016 for all NiSource Companies.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided. Internal Audit would like to thank Accounting staff and management for their cooperation and time in support of this follow-up review.

Objective 1: Determine that expenses are properly classified as capital in accordance with capitalization policies.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	For a sample of 60 capital additions, determine that the expense is properly classified as capital in accordance with the Plant/Fixed Asset Capitalization Policy or Software Capitalization Policy.	Finding #1 See Slide #4

Findings

Objective #1, Procedure #1: For a sample of ***60*** capital additions, determine that the expense is properly classified as capital in accordance with the Plant/Fixed Asset Capitalization Policy or Software Capitalization Policy.	**Risk Rating**
Finding #1: There were ***3*** selections that were improperly capitalized in accordance with capitalization policies; however, the total amount of these instances was deemed immaterial (less than ***$10,000***). The exceptions were spread across various states and expense types.	Low

Process Owner: Asset Accounting Managers

Executive Council Member Responsible: Donald Brown, Executive Vice President and Chief Financial Officer

Observation

Criteria: Expenses should be classified as capital when the purchased items meet the capitalization criteria as outlined in the Plant/Fixed Asset Capitalization policy issued on January 1, 2017 or the Software Capitalization Policy updated on July 1 2016.

Condition: Internal Audit selected a sample of ***60*** capital additions for the period January 1, 2017 through May 31, 2018 spread across all NiSource companies based on their proportionate share of the total capital additions. There were ***3*** instances that were improperly capitalized in accordance with policy. These instances were deemed immaterial (less than ***$10,000***) and were spread across various states (Kentucky and Pennsylvania) and cost elements (meters and instrumentation, other materials and supplies, etc.) as such there were no trends identified related to the exceptions.

Risk/Impact: Financial statements could be misstated if items are improperly classified as capital or operating and maintenance expense.

Recommendation

Fixed Asset Accounting Management should reinforce capitalization policies; however, even with reinforcement, there is an inherent risk of inaccurate interpretation of the policies by the employees coding or approving expense transactions that could result in items being improperly capitalized or expensed.

Management Response

Not Required for Low Risk Findings

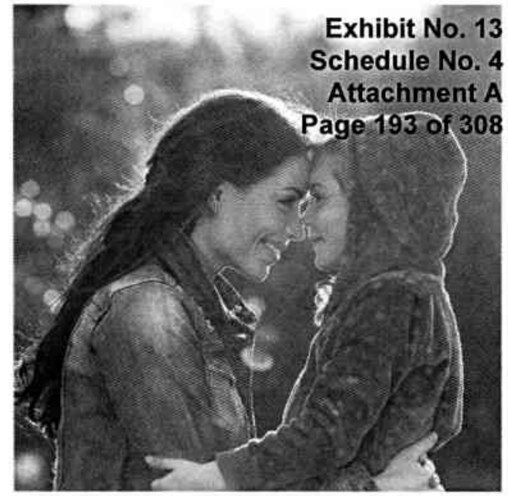
Report Distribution

CC:

J. Hamrock	B.K. Archer
D.E. Brown	D.A. Creekmur
C.J. Hightman	H.A. Miller
V. Sistovaris	S. Anderson
P.A. Vegas	S.H. Bryant
P.T. Disser	N. Drew
S.K. Surface	S. Jain
J.W. Mulpas	Deloitte & Touche
M.A. Huwar	

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



Inside and Inaccessible Meter and Pipeline Inspection Follow-Up - CKY, CVA, CPA and CMD

March 6, 2019

To: All NiSource Gas Distribution Presidents
All NiSource Gas Distribution General Managers
Kimra Cole, VP Distribution Operations

From: Shelley Duling, Senior Auditor
Jaclyn Callahan, Manager Internal Audit
Ryan Binkley, Director Internal Audit

NiSource®

Executive Summary

The Columbia Companies perform inspections for both atmospheric corrosion and leakage simultaneously for process efficiency. As such, the frequency of inspections must align with the shortest cycle outlined within the Department of Transportation (DOT) regulation (Code of Federal Regulations, Title 49, Section 192: Subpart I (*Requirement for Corrosion Control*) and Subpart M (*Maintenance*)). In addition, required frequency of performing inspections (meeting the cycle timeframe for both atmospheric corrosion and leakage) on inside and inaccessible meter sets and pipelines is based on whether the site is located in a business district or a non-business district.

See the chart below which outlines the required cycle timeframes:

Business District	Non-Business District
Once each calendar year (not to exceed 15 months)	Once every 3 years (not to exceed 39 months)

As part of a review performed in 2018, Internal Audit issued *a* ***moderate*** risk audit finding related to non-compliance with inside and inaccessible meter and pipeline inspections for Columbia Gas of Virginia (CVA), Columbia Gas of Kentucky (CKY), Columbia Gas of Pennsylvania (CPA) and Columbia Gas of Maryland (CMD). The recommended action item and result of Internal Audit's testing are summarized below (continued on ***Slide 3***):

2018 Audit Finding: As a December 31, 2017, there were non-compliant inside and inaccessible meter and pipeline inspections at CVA, CKY, CPA and CMD.

Recommendation: Integration Center Management in collaboration with Operations should develop a plan and process to address the non-compliant locations at CVA, CKY, CPA and CMD and ensure ongoing compliance of all inside and inaccessible meters and pipelines.

Executive Summary (Cont'd)

Internal Audit Conclusion: A summary of a COGNOS dashboard* created by the Integration Center to monitor non-compliant inside and inaccessible meters and pipelines is provided to Integration Center and Operations management on a weekly basis for CVA, CKY, CPA, and CMD. Internal Audit reviewed the dashboard data provided by Integration Center management as of December 26, 2018 and compared the number of non-compliant accounts to the amounts previously reported as of December 31, 2017. Internal Audit noted that CVA was in full compliance with inside and inaccessible meter and pipeline inspections as of December 26, 2018. Refer to the table below for the status of the remaining companies:

		12/31/2017		12/26/2018	
	# of Accounts Requiring Inspection (1)	# of Non-Compliant Accounts	%	# of Non-Compliant Accounts	%
CPA	66,294	3,061	4.6%	820	1.2%
CKY	10,164	1,494	14.7%	807	7.9%
CMD	6,033	475	7.9%	129	2.1%

(1) There was not a significant fluctuation in the number of accounts requiring inspection for the two time periods reviewed. As such, Internal Audit used the December 31, 2017 amounts for the percentage calculations in the table.

Given the reduction in non-compliant accounts and monitoring procedures in place, Internal Audit considers that the ***action plan has been adequately addressed by Integration Center and Operations Management***. As such, Internal Audit will close the prior finding. No additional findings were noted during the review.

*Internal Audit did not verify the criteria of the COGNOS dashboard as part of this review; however, through corroboration with Integration Center management, it was confirmed that the report was generated using the same criteria that is used for the COH dashboard, which was verified by Internal Audit as part of the COH Inside and Inaccessible Meter and Pipeline Inspection Review performed in 2017.

Audit Scope and Approach

Internal Audit has completed audit procedures to follow-up on *1* moderate risk audit finding identified as part of an audit performed in 2018 related to inside and inaccessible meter and pipeline inspections at COH and the other NiSource Companies using DIS. Internal Audit verified that the non-compliant inspections at CVA, CKY, CPA and CMD have been resolved and Integration Center Management is monitoring ongoing compliance.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided. Internal Audit would like to thank the Integration Center and Operations staff and management for their cooperation and time in support of this follow-up review.

Objective 1: Determine that inside and inaccessible meter and pipeline inspections are performed timely for Columbia Gas of Virginia (CVA), Columbia Gas of Kentucky (CKY), Columbia Gas of Pennsylvania (CPA) and Columbia Gas of Maryland (CMD).		
#	Procedures	Findings Summary (Refer to Appendix A)
1	Verify that non-compliant inside and inaccessible meter and pipeline inspections at CVA, CKY, CPA and CMD have been addressed along with a monitoring process to ensure ongoing compliance	**No Findings noted.**

Report Distribution

CC:

J. Hamrock
D.E. Brown
C.J. Hightman
V. Sistovaris
P.A. Vegas
P.T. Disser
S.K. Surface
D.T. Williamson
M. Downing
N. Drew
S. J. Jain
K.H. Cole
S. Anderson
G. Shoemaker
Deloitte & Touche, LLP

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *<u>Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.</u>*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *<u>Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.</u>*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *<u>Internal Audit does not perform follow-up review procedures on low risk findings.</u>*

2018 Abnormal Operating Conditions (AOC) - Columbia Gas of Pennsylvania and Maryland

March 11, 2019

To: All NiSource Gas Distribution Presidents
All NiSource Gas Distribution General Managers
K. H. Cole, VP Distribution Operations

From: L. Black, Senior Internal Auditor
C. Marlatt, Lead Auditor
J. Callahan, Manager Internal Audit
R. Binkley, Director Internal Audit

NiSource®

Executive Summary

Internal Audit conducted a review of the processes and controls in place for Columbia Gas of Pennsylvania (CPA) and Columbia Gas of Maryland (CMD) to identify Abnormal Operating Conditions (AOC), recorded through the use of the NiSource Field Application Survey Tool (NiFAST), and to ensure identified AOCs are remediated within timeframes set forth by management and/or in accordance with regulatory requirements.

The focus of the review was to ensure that AOCs identified from January 1 to December 31, 2017 properly interfaced from NiFAST into the Work Management System (WMS) or the appropriate system report as designed by NiFast Programming Rules*. Additionally, Internal Audit will verify that appropriate job orders are created and completed to remediate AOCs identified based on results of leakage and corrosion inspections.

Summary Conclusions:

As a result of our procedures, it appears that the NiFast application is functioning as designed and NiFast survey data is properly interfacing to WMS or the appropriate system report (i.e. Exception Report or Further Action Needed (FAN) Report).

Internal Audit identified **1 High Risk** audit finding related to the remediation of identified encroachments as follows:

- Formal policies, processes and procedures have not been established and implemented to ensure the risk-based resolution of encroachments (over both main and service lines) in a timely manner.
    - **Recommendation:** As determining resolution of encroachment AOCs involves input from various departments, NiSource Management should form cross–functional teams to develop policies and procedures for resolving identified encroachments in a manner which adequately defines appropriate timelines to address the associated safety and compliance risks. Roles and responsibilities should be defined for each department involved.

      Note: *Internal Audit previously conducted a review on COH processes in addition to this current CPA & CMD review, resulting in a similar finding specific to encroachments. As was noted in the previous finding, Internal Audit recommends that NiSource management develop and implement a consistent process across **all NiSource Gas Companies**.*

    - **Management Response:** Management will adopt the encroachment process that was implemented in Ohio during Q1 2018 across all states by the end of Q4 2019. This is a process that assigns clear roles and responsibilities for the process, develops a prioritized list of encroachments with time and cost estimates, and provides a consistent process across NiSource.

* During the period of January 1, 2017 – December 31, 2017, programming changes were made within NiFast to align with three (3) versions of the NiFast Programming Rules. Additionally, Internal Audit noted that a subsequent version was created in May 2018. To complete this review, Internal Audit utilized the criteria set forth in the NiFast Programming Rules effective in the application as of November 18, 2017.

Executive Summary

Summary Conclusions (Cont'd):

Internal Audit identified 2 Moderate Risk audit findings related to the remediation of AOCs as follows:

- Formal policies, processes and procedures have not been established to address AOCs identified on customer-owned service lines for **CPA**.
    - **Recommendation:** As communicating and addressing AOCs on customer-owned service lines (reported on the Customer Notification List) involves input from various departments, CPA Management should form cross–functional teams to develop risk-based policies and procedures for addressing these types of AOCs. Roles and responsibilities should be defined for each department involved.

      Note: *CPA is the only NiSource Gas Company with customer-owned service lines.*

    - **Management Response:** Management and IT will be submitting a RIT for the April IT demand meeting to notify customer through automated process. This process will entail Identifying a customer in NiFAST and sends a communication in letter format that notifies them to take certain actions. The solution will be linked to NiFAST: When a customer is identified, letter needs to be triggered. After letter is sent, it needs documented and recorded as such in NiFAST. This IT solution will be in place by the end of the 3rd quarter.

      This change in process will be used when the condition is not deemed to be hazardous. In addition to the IT automated notification, Management will also be putting together a cross-functional team consisting of Regulatory, Legal, Compliance, System Operations and the Integration Center to design the appropriate communication message for any possible AOC on a customer owned service line.

- Internal Audit identified certain process gaps regarding the mitigation of AOC's. These gaps have been consolidated into one recommendation as follows:
    - Formal policies, processes and procedures have not been established and implemented to ensure the resolution of "Possible Theft of Gas/Vandalism" AOCs in a timely manner
    - Based on progress to-date, AOCs sent to the Further Action Needed (FAN) Report** may not be incorporated into current and future work plans to ensure compliance with established commit dates; AND
    - Based on progress to-date, AOCs sent to the Exception Report** may not be incorporated into current and future work plans
    - Formal processes to address the impact of go-forward programming changes on non-remediated populations of previously identified AOCs have not been established

** While the scope of this review was limited to AOCs identified during 2017, Internal Audit noted that the recommendation below would apply to all outstanding AOCs identified since the inception of NiFast at CPA/CMD in 2015.

Executive Summary

Summary Conclusions (Cont'd):

Moderate risk audit findings – Cont'd:

- **Recommendation:** IC Management and NiSource Gas Operations across the various states should work together to ensure resolution of identified "Possible Theft of Gas/Vandalism" AOCs in a manner which adequately addresses the associated safety and compliance risks. Roles and responsibilities should be defined for each department involved. While this review focused on CPA & CMD, Internal Audit recommends that NiSource Management develop and implement a consistent process across **all NiSource Gas Companies**.

- **Management Response:** NiSource Management agreed with the need to develop a NiSource-wide strategic approach to risk-ranking and remediating AOCs.

  NiSource Management agrees to utilize the SMS framework and process to evaluate and rank risk identified AOCs. The SMS team, working with compliance and standards, will recommend appropriate changes to Gas Standards that incorporate a common view of compliance requirements for AOCs. By end of Q2 2020 the AOCs will be ranked and included in the risk register.

  In addition, NiFast AOC data is not currently available in the data warehouse, creating challenges and risks to visibility and management of this body of work. This process will require an IT solution to be completed to get data out of NiFast into the data warehouse for additional reporting requirements to align with other systems, i.e. WMS, DIS, Maximo, CIS. The required IT solution will be presented at the March Demand meeting with a delivery date of the solution by end of Q4 2019.

  Once the analysis of the work and the priority is established, a plan will be developed to work backlog and maintain compliance in the future.

  A new IT solution was installed at the end of December 2018 that automatically generates a WMS work order for Level 0 AOCs identified in NiFast. This new tool was put into use in mid-January. In addition the Integration Center has implement a process where all Level 0 exceptions are verified or escalated appropriately to assure they are worked. The coordinators will verify that an order was worked for the Level 0 or they will escalate to the appropriate ops scheduling leader. This will be documented on each occurrence in NiFast so that we have an audit trail.

** While the scope of this review was limited to AOCs identified during 2017, Internal Audit noted that the recommendation below would apply to all outstanding AOCs identified since the inception of NiFast at CPA/CMD in 2015.

Background

CPA and CMD implemented NiFast, a survey application tool, in February and April 2015, respectively, to replace the legacy paper based process of conducting and documenting leak inspections in the field. Additionally, the NiFast application allows for the systematic identification and tracking of abnormal operating conditions (AOCs) identified during the course of the inspection. The Code of Federal Regulations, Title 49, Section 192: Subpart I (*Requirements for Corrosion Control*) defines an abnormal operating condition as a condition identified by the operator that may indicate a malfunction of a component or deviation from normal operations that may: (a) indicate a condition exceeding design limits; or (b) result in a hazard(s) to persons, property, or the environment.

To complete an inspection, NiFAST prompts the inspectors to answer standard questions to confirm or deny the existence of AOCs. The answers to each survey question are recorded within NiFast and transmitted to WMS nightly. The NiFAST application is programmed according to criteria set forth in the NiFast Programming Rules created by CPA/CMD Field Operations & Compliance and maintained by Technology and Application Support. Based on the types of AOCs identified during the inspection process, the NiFast application is programmed to classify remediation work into the following four (4) categories:

1. Automatic WMS Job Order: Certain AOCs identified will result in the systematic creation of a WMS job order wherein the target date and commit date are assigned to ensure timely remediation of the identified AOC and the charge code is set to ensure the proper allocation of associated costs (i.e. operating vs. capital).

2. Further Action Needed (FAN): Specific types of AOCs are sent to the FAN Report and are assigned target dates and commit dates as set forth in the NiFAST Programming Rules; however, work orders are manually scheduled by the Integration Center based on location work load availability and timeframes set by management.

3. Exception Report: NiFAST sends certain AOCs to the Exception List as Integration Center associates must apply judgement to determine the necessary next steps for remediation of the identified AOCs.

> NOTE: Exception Report items are not assigned target dates and commit dates as the types of AOCs assigned to this report should represent conditions that may not have the same path to resolution and require judgement.

4. Customer Notification List: AOCs identified on customer-owned service lines are also recorded within NiFAST; however only leaks have a formal communication process established. If there is a leak identified on a customer-owned service line, a post card will be sent to the customer and a Distributive Information System (DIS) order will be manually created for a service technician to follow up and ensure repairs were completed.

* Field personnel other than Leakage Inspectors may still identify AOCs during the course of their work; however as they do not have access to the NiFAST application, they are instructed to report an AOC to the Integration Center through the MDT system, phone call, or manual paper form.

Internal Audit reviewed the processes and controls in place for Columbia Gas of Pennsylvania (CPA) & Columbia Gas of Maryland's (CMD) identification of Abnormal Operating Conditions (AOC), recorded through the use of the NiSource Field Application Survey Tool (NiFAST), to ensure identified AOCs are remediated within timeframes set forth by management and/or in accordance with regulatory requirements. Internal Audit reviewed AOCs identified from January 1 to December 31, 2017 to ensure that the AOCs properly interfaced from NiFAST into WMS. Additionally, Internal Audit verified that appropriate job orders were created and completed based on the inspection results.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided. Internal Audit would like to thank the Integration Center and Field and System Operations staff and management for their cooperation and time in support of this follow-up review.

Objective 1: Review the monitoring processes and controls over the AOC population to ensure the AOCs identified are properly addressed and WMS job orders were executed in accordance with CPA/CMD requirements.

#	Procedures	Findings Summary (Refer to Appendix A)
1	Review CPA/CMD survey data generated from NiFAST for the period January 1, 2017 - December 31, 2017 to verify that AOCs identified properly interfaced to WMS or the appropriate system report (i.e. FAN Report, Exception Report, or Customer Notification List) in accordance with the criteria outlined in the applicable* NiFAST Programming Rules.	**No Findings Noted.**
2	Verify that job orders created automatically in WMS as a result of AOCs identified in NiFast were completed within the commit dates established within the NiFAST Programming Rules.	**No Findings Noted.**
3	Review the processes in place to notify customers of identified AOCs on customer-owned service lines (i.e. Customer Notification List).	**Finding #1 - See page 6**
4	Analyze the population of AOCs sent to the FAN Report to determine whether they have been remediated in accordance with the NiFAST Programming Rules.	**Finding #2 – See pages 8-12**
5	Analyze and sample the population of AOCs sent to the Exception Report to determine whether they have been remediated in accordance with the NiFAST Programming Rules.	[redacted]

* During the period of January 1, 2017 – December 31, 2017, programming changes were made within NiFast to align with three (3) versions of the NiFast Programming Rules. Additionally, Internal Audit noted that a subsequent version was created in May 2018. To complete this review, Internal Audit utilized the criteria set forth in the NiFast Programming Rules effective in the application as of November 18, 2017.

Findings

Objective 1, Procedure #3: Review the processes in place to notify customers of identified AOCs on customer-owned service lines (i.e. Customer Notification List).	**Risk Rating**
Finding #1: Formal policies, processes and procedures have not been established to address AOCs identified on customer-owned service lines for CPA.	**Moderate #1**
Process Owner(s): Michael Davidson, VP & GM CPA/CMD, Kimra Cole, VP Distribution Operations **Executive Council Member(s) Responsible:** Pablo Vegas, EVP & President Gas Utilities [Operations] & Donald Brown, EVP & Chief Financial Officer [IT]	**Target Remediation Date** **Q3 2019**

Observation:

Criteria: Customers are notified of AOCs identified on their service lines.

Condition: AOCs identified on customer-owned service lines in CPA are recorded on the Customer Notification List. Per discussion with the Integration Center, consistent processes have not been established to ensure that customers are notified of all identified AOCs on their lines.

Note: Per discussion with the Integration Center, only identified leaks are communicated to customers via postcard.

Risk/Impact: Customers may not be aware of and may not remediate AOCs on customer-owned service lines, which could pose a risk to public safety or asset integrity.

Recommendation: As communicating and addressing AOCs on customer-owned service lines (reported on the Customer Notification List) involves input from various departments, CPA Management should form cross–functional teams to develop risk-based policies and procedures for addressing these types of AOCs. Roles and responsibilities should be defined for each department involved.

Management Response: Management and IT will be submitting a RIT for the April IT demand meeting to notify customer through automated process. This process will entail Identifying a customer in NiFAST and sends a communication in letter format that notifies them to take certain actions. The solution will be linked to NiFAST: When a customer is identified, letter needs to be triggered. After letter is sent, it needs documented and recorded as such in NiFAST. This IT solution will be in place by the end of the 3rd quarter.

This change in process will be used when the condition is not deemed to be hazardous. In addition to the IT automated notification, Management will also be putting together a cross-functional team consisting of Regulatory, Legal, Compliance, System Operations and the Integration Center to design the appropriate communication message for any possible AOC on a customer owned service line.

Findings (Cont'd)

Objective 1, Procedure #4: Analyze the population of AOCs sent to the FAN Report to determine whether they have been remediated in accordance with the NiFast Programming Rules.	**Risk Rating**
Finding: Based on progress to-date, AOCs sent to the Further Action Needed (FAN) Report may not be incorporated into current and future work plans to ensure compliance with established commit dates.	**Moderate #2** **(See Page 12)**

Process Owner(s): All Presidents and General Managers & Kimra Cole, VP Distribution Operations

Executive Council Members: Pablo Vegas, EVP & President Gas Utilities [Operations] & Donald Brown, EVP & Chief Financial Officer [IT]

Observation:

Criteria: AOCs sent to the FAN Report are remediated in accordance with the timeframes set forth in the NiFast Programming Rules.

Condition: Internal Audit obtained a listing of all AOCs sent to the FAN Report during 2017 (based on programming in place at the time the AOC was identified within NiFast). Using the commit dates set forth in the NiFast Programming Rules (effective in the application as of November 18, 2017), Internal Audit noted that all but 1 of the FAN Report AOCs will not be required to be remediated until 2022 (i.e. 5 years from the date of identification).

Internal Audit compared the number of FAN Report AOCs ***identified*** to the number of FAN Report AOCs ***worked*** (as of the date of the query pull as of July 26, 2018), noting that the majority of the population have not been remediated. (Refer to **Appendix B** for the types of 2017 AOCs sent to the FAN.)

2017 FAN Report AOCs			
	# Identified	# Worked	% Worked
CPA	4,777	7	0.1%
CMD	499	-	0.0%

Risk/Impact: The work plan may not currently incorporate FAN Report AOCs that require remediation in future years to ensure compliance with established commit dates.

Note: AOCs will continue to be identified through additional inspections performed in the following years. Additionally, once a location with an outstanding AOCs comes upon its next inspection cycle (either a 1 year or 3 year period), there is a risk of duplicate identification.

Recommendation: Since the number of AOCs could increase over time as additional inspections are performed, Field Operations, System Operations, the Integration Center, and Planning should continue to assess the risk related with each AOC type and develop a risk-based work plan to ensure remediation of both FAN Report AOCs in accordance with established commit dates.

Internal Audit identified certain process gaps regarding the mitigation of AOCs as noted on slides 8-11. These gaps have been consolidated into one overall moderate finding and management has responded with an overall strategic approach as noted on slide 12.

Management Response: Refer to ***page 12*** as NiSource Management is providing a strategic plan to address this risk at enterprise level.

Findings (Cont'd)

Objective 1, Procedure #5: Analyze and sample the population of AOCs sent to the Exception Report to determine whether they have been remediated in accordance with NiFAST Programming Rules.	Risk Rating
Finding: Based on progress to-date, AOCs sent to the Exception Report may not be incorporated into current and future work plans.	Moderate #2 (See Page 12)

Process Owner(s): All Presidents and General Managers & Kimra Cole, VP Distribution Operations

Executive Council Members: Pablo Vegas, EVP & President Gas Utilities [Operations] & Donald Brown, EVP & Chief Financial Officer [IT]

Observation:

Criteria: The workload created as a result of identified AOCs that are sent to the Exception Report is adequately monitored and managed.

Condition: Internal Audit obtained a listing of all AOCs sent to the Exception Report during 2017 (based on programming in place at the time the AOC was identified within NiFast).

Note: Exception Report items require judgement to resolve and do not have assigned commit dates within the NiFast Programming Rules.

Internal Audit compared the number of FAN Report AOCs ***identified*** to the number of FAN Report AOCs ***worked*** (as of the date of the query pull as of July 26, 2018), noting that the majority of the population have not been remediated. (Refer to **Appendix C** for further detail of the types of AOCs sent to the Exception Report during 2017.)

2017 Exception Report AOCs			
	# Identified	# Worked	% Worked
CPA	131,036	661	0.5%
CMD	2,992	-	0.0%

Risk/Impact: The work plan may not currently incorporate Exception Report AOCs that require remediation.

Recommendation: Since the number of AOCs could increase over time as additional inspections are performed, Field Operations, System Operations, the Integration Center, and Planning should continue to assess the risk related with each AOC type and develop a risk-based work plan to ensure timely remediation.

Internal Audit identified certain process gaps regarding the mitigation of AOC's as noted on slides 8-11. These gaps have been consolidated into one overall moderate finding and management has responded with an overall strategic approach as noted on slide 12.

Management Response: Refer to ***page 12*** as NiSource Management is providing a strategic plan to address this risk at enterprise level.

Findings (Cont'd)

Objective 1, Procedure #5: Analyze and sample the population of AOCs sent to the Exception Report to determine whether they have been remediated in accordance with NiFAST Programming Rules.	Risk Rating
Finding: Formal processes to address the impact of go-forward programming changes on non-remediated populations of previously identified AOCs have not been established.	Moderate #2 (See Page 12)

Process Owner(s): All Presidents and General Managers & Kimra Cole, VP Distribution Operations

Executive Council Members: Pablo Vegas, EVP & President Gas Utilities [Operations] & Donald Brown, EVP & Chief Financial Officer [IT]

Observation:

Criteria: Programming changes are made to ensure alignment with changes to the NiFast Programming Rules and existing AOC populations are assessed for the impact of the change.

Condition: During the period of January 1, 2017 – December 31, 2017, programming changes were made 3 times to align with changes made to the NiFast Programming Rules.

Upon review of the various versions of the NiFast Programming Rules, Internal Audit noted that changes within the Programming rules pertained to:

- Re-classifying certain AOCs within the four remediation categories (i.e. Automatic WMS Job Order, FAN Report, Exception Report, and Customer Notification List)
- Adding additional drop down options to provide more detail about specific AOCs
- Adjusting commit date timeframes

However, as programming changes are made on a go forward basis, Internal Audit inquired about how populations of previously identified AOCs would be addressed, noting that formal processes to assess the impact and make necessary adjustments to ensure alignment with current NiFast Programming Rules have not been established.

Please see **Appendix D** for examples of the risks created as a result of programming changes.

Risk/Impact: AOCs identified prior to programming changes may not be worked within commit dates established in the current NiFAST Programming Rules or duplicate efforts may occur to resolve identified AOCs.

Recommendation: When programing changes are made to NiFast, the impact of changes to the existing population of AOCs should be considered.

Internal Audit identified certain process gaps regarding the mitigation of AOC's as noted on slides 8-11. These gaps have been consolidated into one overall moderate finding and management has responded with an overall strategic approach as noted on slide 12.

Management Response: Refer to ***page 12*** as NiSource Management is providing a strategic plan to address this risk at enterprise level.

Findings (Cont'd)

Objective 1, Procedure #5: Analyze and sample the population of AOCs sent to the Exception Report to determine whether they have been remediated in accordance with NiFAST Programming Rules.	**Risk Rating**
Finding: Formal policies, processes and procedures have not been established and implemented to ensure the resolution of "Possible Theft of Gas/Vandalism" AOCs in a timely manner.	**Moderate #2** (See Page 12)

Process Owner(s): All Presidents and General Managers & Kimra Cole, VP Distribution Operations

Executive Council Members: Pablo Vegas, EVP & President Gas Utilities [Operations] & Donald Brown, EVP & Chief Financial Officer [IT]

Observation:

Criteria: Policies, processes, and procedures have been implemented to ensure the timely resolution of identified "Possible Theft of Gas/Vandalism" AOCs.

Condition: Per discussion with the Integration Center, Internal Audit noted that "Possible Theft of Gas/Vandalism" AOCs identified through NiFast do not have clearly defined processes and controls to ensure resolution.

- During 2017, CPA/CMD identified 9 "Possible Theft of Gas/Vandalism" AOCs within NiFast; however, 6 of the 9 did not have a service order created to resolve the AOC at the time of testing. Per discussion with IC Management, similar populations exist for the other NiSource Gas Companies utilizing NiFast.

Risk/Impact: The Company may not be adequately addressing "Possible Theft of Gas/Vandalism" AOCs, which could pose a risk to public safety or asset integrity.

Recommendation: IC Management and NiSource Gas Operations across the various states should work together to ensure resolution of identified "Possible Theft of Gas/Vandalism" AOCs in a manner which adequately addresses the associated safety and compliance risks. Roles and responsibilities should be defined for each department involved.

Note: While this review focused on CPA & CMD, Internal Audit recommends that NiSource Management develop and implement a consistent process across **all NiSource Gas Companies**. Field Operations, System Operations, the Integration Center, and Planning should continue to assess the risk related with each AOC type and develop a risk-based work plan to ensure timely remediation.

Internal Audit identified certain process gaps regarding the mitigation of AOC's as noted on slides 8-11. These gaps have been consolidated into one overall moderate finding and management has responded with an overall strategic approach as noted on slide 12.

Findings (Cont'd)

Objective 1, Procedure #5: Analyze and sample the population of AOCs sent to the Exception Report to determine whether they have been remediated in accordance with NiFAST Programming Rules.	**Risk Rating**
Finding: Formal policies, processes and procedures have not been established and implemented to ensure the resolution of "Possible Theft of Gas/Vandalism" AOCs in a timely manner.	**Moderate #2**
Process Owner(s): All Presidents and General Managers & Kimra Cole, VP Distribution Operations **Executive Council Members Responsible:** Pablo Vegas, EVP & President Gas Utilities [Operations] & Donald Brown, EVP & Chief Financial Officer [IT]	**Target Remediation Date** **Q2 2020**

Overall Strategic Management Response:

NiSource Management agreed with the need to develop a NiSource-wide strategic approach to risk-ranking and remediating AOCs.

NiSource Management agrees to utilize the SMS framework and process to evaluate and rank risk identified AOCs. The SMS team, working with compliance and standards, will recommend appropriate changes to Gas Standards that incorporate a common view of compliance requirements for AOCs. By end of Q2 2020 the AOCs will be ranked and included in the risk register.

In addition, NiFast AOC data is not currently available in the data warehouse, creating challenges and risks to visibility and management of this body of work. This process will require an IT solution to be completed to get data out of NiFast into the data warehouse for additional reporting requirements to align with other systems, i.e. WMS, DIS, Maximo, CIS. The required IT solution will be presented at the March Demand meeting with a delivery date of the solution by end of Q4 2019.

Once the analysis of the work and the priority is established, a plan will be developed to work backlog and maintain compliance in the future.

A new IT solution was installed at the end of December 2018 that automatically generates a WMS work order for Level 0 AOCs identified in NiFast. This new tool was put into use in mid-January. In addition the Integration Center has implement a process where all Level 0 exceptions are verified or escalated appropriately to assure they are worked. The coordinators will verify that an order was worked for the Level 0 or they will escalate to the appropriate ops scheduling leader. This will be documented on each occurrence in NiFast so that we have an audit trail.

Findings (Cont'd)

Objective 1, Procedure #5: Analyze and sample the population of AOCs sent to the Exception Report to determine whether they have been remediated in accordance with NiFAST Programming Rules.	**Risk Rating**
Finding #3: Formal policies, processes and procedures have not been established and implemented to ensure the risk-based resolution of encroachments (over both main and service lines) in a timely manner.	**High**
Process Owner(s): All General Managers & Kimra Cole, VP Distribution Operations **Executive Council Member Responsible:** Pablo Vegas, Chief Operating Officer	**Target Remediation Date:** Q4 2019

Observation:

Criteria: Policies, processes, and procedures have been implemented to ensure the timely resolution of identified encroachment AOCs.

Condition: Per discussion with Legal, Operations, Land and Survey, and the Integration Center, Internal Audit noted that formal and consistent policies, processes and procedures have not been implemented to ensure the resolution of all encroachments (i.e. both main and service line) AOCs in a timely manner.

- During 2017, CPA/CMD identified 109 encroachments over service lines within NiFast; however, none of the identified AOCs are shown as resolved in the system at the time of testing.
    - Per discussion with various members of NiSource Management across the Integration Center, Operations, Land and Survey and Legal, similar populations (including both main line and service line encroachments) exist for the other NiSource Gas Companies utilizing NiFast and processes to resolve these items is not risk-based and consistent.

Risk/Impact: The Company may not be adequately addressing encroachments, which could pose a risk to public safety or asset integrity.

Recommendation: As determining resolution of encroachment AOCs involves input from various departments, NiSource Management should form cross–functional teams to develop policies and procedures for resolving identified encroachments in a manner which adequately defines appropriate timelines to address the associated safety and compliance risks. Roles and responsibilities should be defined for each department involved.

Note: Internal Audit previously conducted a review on COH processes in addition to this current CPA & CMD review, resulting in a similar finding specific to encroachments. As was noted in the previous finding, Internal Audit recommends that NiSource Management develop and implement a consistent process across **all NiSource Gas Companies**.

Management Response: Management will adopt the encroachment process that was implemented in Ohio during Q1 2018 across all states by the end of Q4 2019. This is a process that assigns clear roles and responsibilities for the process, develops a prioritized list of encroachments with time and cost estimates, and provides a consistent process across NiSource.

Report Distribution

CC:

J. Hamrock
D.E. Brown
C.J. Hightman
P.A. Vegas
S.K. Surface
P.T. Disser
C.E. Shafer
R.D. Poe
D.T. Williamson
N. Drew
S.J. Jain
S.Anderson
M.S. Downing
T.J. Tokish
G. Shoemaker
D.L. Douglas
T.A. Dehring
M.D. Ramsey
D.L. Reynolds
D.A. Monte
R.V. Mooney
J.T. Croom
E.M. Fitzgerald
Deloitte & Touche

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*

2017 FAN Report AOCs - # Identified vs. # Worked

FAN Report AOCs - CMD				
Type of AOC	**# Identified**	**%**	**# Worked**	**%**
Metallic Riser Not Sleeved	493	98.8%	0	0.0%
Improper Regulator Vent near Electric Source	6	1.2%	0	0.0%
Total CMD Exception List AOCs - 2017	**499**	100.0%	**0**	0.0%

FAN Report AOCs - CPA				
Type of AOC	**# Identified**	**%**	**# Worked**	**%**
Meter Protection	5	0.1%	0	**0.0%**
Inadequate Meter Support	12	0.3%	0	**0.0%**
Buried Meter	30	0.6%	0	**0.0%**
Buried Meter Inlet Riser	2	0.0%	0	**0.0%**
Improper Regulator Vent Termination	233	4.9%	0	**0.0%**
Improper Regulator Vent by Forced Air Opening	26	0.5%	0	**0.0%**
Improper Regulator Vent near Electric Source	1,516	31.7%	5	**0.3%**
Metallic Riser Not Sleeved	1,492	31.2%	2	**0.1%**
Paint Meter Set	1,455	30.5%	0	**0.0%**
Damaged Coating	5	0.1%	0	**0.0%**
Pipeline Markers	1	0.0%	0	**0.0%**
Total CPA Exception List AOCs - 2017	**4,777**	99.0%	7	0.1%

2017 Exception Report AOCs - # Identified vs. # Worked

Exception Report AOCs - CMD				
Type of AOC	**# Identified**	**%**	**# Worked**	**%**
Field Assembled Riser	2,445	81.7%	0	0.0%
Exposed Service Line*	2	0.1%	0	0.0%
Damaged Coating*	10	0.3%	0	0.0%
Improper Regulator Vent near Electric Source*	25	0.8%	0	0.0%
Paint Meter Set*	510	17.0%	0	0.0%
Total CMD Exception List AOCs - 2017	**2,992**	100.0%	**0**	0.0%

Exception Report AOCs - CPA				
Type of AOC	**# Identified**	**%**	**# Worked**	**%**
Atmospheric Corrosion	670	0.5%	0	0.0%
Field Assembled Riser	36,539	27.9%	0	0.0%
Possible Theft of Gas or Vandalism	9	0.0%	0	0.0%
Encroachments	109	0.1%	0	0.0%
Buried Meter Inlet Riser*	2,857	2.2%	0	0.0%
Damaged Coating*	1,090	0.8%	0	0.0%
Exposed Service Line*	124	0.1%	0	0.0%
Improper Regulator Vent near Electric Source*	3,051	2.3%	**6**	**0.2%**
Metallic Riser Not Sleeved*	3,823	2.9%	0	0.0%
Meter Protection*	1,736	1.3%	0	0.0%
Paint Meter*	81,028	61.8%	**655**	**0.8%**
Total CPA Exception List AOCs - 2017	**131,036**	100.0%	**661**	**0.5%**

* Programming logic based on the version of the NiFast Programming rules in place at the time these AOCs were identified, required that these AOCs be sent to the Exception Report. In the last 2017 version and the current 2018 NiFAST Programming Rules, these AOCs are now directed to have an automatic WMS job order created or will be sent to the FAN Report with an established commit date. (Note: AOCs on customer-owned service lines will go to the Customer Notification list.) Refer to **Appendix D** for further information.

Risks Created Due to NiFast Programming Changes

During 2017, programming changes were implemented that changed the remediation category for several types of AOCs that had originally been programmed to go to the Exception Report.

- The first change moved AOCs that were originally going to the Exception Report with no defined commit date to the creation of an automatic WMS Job Order with an established commit date (all the items below moved to a 60 month time frame). Internal Audit noted that 9,642 AOCs created in 2017 would need to be adjusted to adhere to the subsequent programming changes. It does not appear that processes have been established to address how to handle this population of AOCs to ensure alignment with new NiFast Programming Rules.

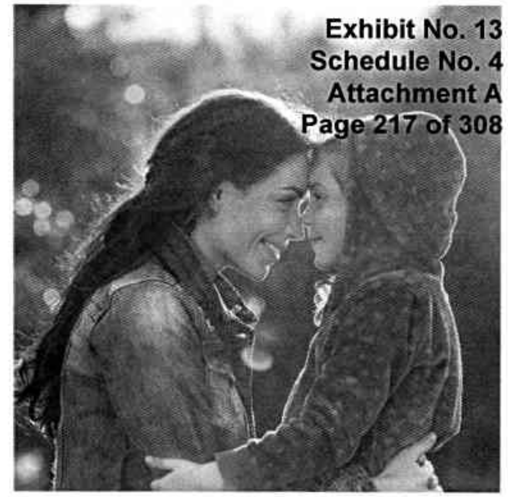
2017 Exception Report AOCs Now Going to WMS Job Order (CPA/CMD)	
Type of AOC	**# Identified**
Buried Meter Inlet Riser	2,857
Damaged Coating	1,100
Exposed Service Line	126
Metallic Riser Not Sleeved	3,823
Meter Protection	1,736
TOTAL 2017	9,642

- The second change moved AOCs that were originally going to the Exception Report with no defined commit date to the FAN Report with an established commit date. Internal Audit noted that 84,614 AOCs created in 2017 would need to be adjusted to adhere to subsequent programming changes. It does not appear that processes have been established to address how to handle this population of AOCs to ensure alignment with new NiFast Programming Rules.

2017 Exception Report AOCs Now Going to FAN Report (CPA/CMD)	
Improper Regulator Vent near Electric Source	3,076
Paint Meter	81,538
TOTAL 2017	84,614

Internal Audit noted that programming changes create the following risks specific to the population of AOCs existing prior to the date of the change:

- If a new commit date has been established, previously identified AOCs may not be addressed within the proper timeframe as they will still be attached to old programming criteria.
- If the subsequent inspection occurs before the previously identified FAN report AOC is resolved, a WMS job order could be auto-created, creating the possibility of duplicate efforts to resolve the same AOC once the Integration Center manually releases the first AOC from the FAN Report.



Meter Barrier Protection - NiSource Gas Distribution Companies

March 11, 2019

To: All NiSource Gas Distribution Presidents
All Nisource Gas Distribution General Managers
K. H. Cole, VP Distribution Operations

From: L. Black, Senior Internal Auditor
J. Callahan, Manager Internal Audit
R. Binkley, Director Internal Audit

NiSource®

Executive Summary

Internal Audit conducted a review of the processes and controls across the NiSource Gas Distribution Companies to ensure that residential and small commercial meters at risk of vehicular damage were protected in accordance with applicable Gas Standards for the audit period of September 1, 2016 through September 1, 2018.

The review focused on the processes and controls in place to assess the need for meter protection for both existing meters as well as new or replaced meters. Additionally, Internal Audit reviewed the population of damages to meters for the audit period to assess whether meters damaged by vehicles were subsequently protected after the initial damage.

Summary Conclusions:

Internal Audit identified 2 **moderate risk** audit findings* related to ensuring that there are processes established to include identified abnormal operating conditions (AOCs) in work plans to ensure timely resolution:

- Based on progress to-date, Meter Protection AOCs may not be incorporated into current and future work plans to ensure compliance with established commit dates.
  - **Recommendation:** Since the number of all types of AOCs could increase over time as additional inspections are performed, Field and System Operations, the Integration Center, and Planning should work together (identifying clear roles and responsibilities) to assess the risk related with each AOC type, including Meter Protection, and develop a risk-based work plan to ensure remediation of identified AOCs in accordance with established processes and commit dates.
  - **Management Response:** Management agrees to utilize the SMS framework and process to evaluate and rank risk identified AOCs, including Meter Protection. The SMS team, working with Compliance and Standards, will recommend appropriate changes to Gas Standards that incorporate a common view of compliance requirements for AOCs. By end of Q2 2020 the AOCs will be ranked and included in the risk register. In addition, NiFast AOC data is not currently available in the data warehouse, creating challenges and risks to visibility and management of this body of work. This process will require an IT solution to be completed to get data out of NiFast into the data warehouse for additional reporting requirements to align with other systems, i.e. WMS, DIS, Maximo, CIS. The required IT solution will be presented at the March Demand meeting with a delivery date of the solution by end of Q4 2019. Once the analysis of the work and the priority is established, a plan will be developed to work backlog and maintain compliance in the future. *[Note – this response is part of an overall strategic plan to address AOC's across all NiSource Gas Companies.]*

* While the scope of this review was limited to AOCs identified during September 1, 2016 through September 1, 2018, Internal Audit noted that the recommendations would apply to all outstanding AOCs identified since the inception of NiFAST across the NiSource Footprint.

Summary Conclusions (Cont'd):

- Meter Protection is not always installed after vehicular damage has occurred.

  - **Recommendation:** Management should utilize data related to damages to install protection in locations where vehicular damages have occurred and no changes have been made to the meter location.

  - **Management Response:** Management agrees to put in place a process that places the accountability on the Operation Center Manager to ensure that an order is created to install meter barrier protection any time a meter is damaged by a vehicle. This order will be assigned a commit date of 45 days.

Background

Columbia Gas Distribution Companies

All Columbia Gas Distribution Companies are subject to Gas Standard (GS) 3020.040: Meter Set Assembly Protection Residential and Small Commercial *. The standard sets forth the following requirements for protecting new, replaced, and existing residential and small commercial outside meter set assemblies (and service regulators):

> "Each meter and service regulator, whether inside or outside a building, shall be installed in a readily accessible location and be protected from corrosion and other damage, including, if installed outside a building, vehicular damage that may be reasonably anticipated."

Additionally, when it is determined that protection for existing meters does not meet the requirements of GS 3020.040 (e.g. no meter protection or inadequate meter protection, such as smaller bollards or inadequate bollard spacing), it is considered an AOC.

Each meter set is subject to inspection for leakage, atmospheric corrosion, and AOCs on a one or three year cycle based upon its placement in either a business district or non-business district. If it is determined during the inspection that an AOC exists related to meter protection, the Inspector will note the condition within the NiSource Field Application Survey Tool (NiFast), and resolution of the identified AOC will be scheduled according to standard timeframes established by Management.

NIPSCO

While not covered under a specific Gas Standard, NIPSCO Gas Engineering and/or Gas Operations will consider whether protection should be installed when completing a new or replacement service line job order. As with the Columbia Companies, each NIPSCO Gas meter set is subject to inspection for leakage, atmospheric corrosion, and AOCs; however, all survey results for NISPCO Gas are manually entered into spreadsheets by the Inspectors and any necessary follow up work is scheduled manually through the creation of job orders in NIPSCO's work management system, Maximo. NIPSCO Gas Operations has established an AOC matrix, which defines an AOC related to meter protection as a low priority.

Note: NIPSCO Gas Management noted that they are considering the future implementation of a data collection tool called "Collector" which would allow for the systematic recording of identified AOCs, similar to NiFast in the Columbia Companies.

* The audit period was determined as Gas Standard 3020.040 became effective June 1, 2016 and was considered fully implemented by September 1, 2016 for all Columbia Companies.

Audit Scope and Approach

Internal Audit reviewed the processes and controls established across the NiSource Gas Distribution Companies to verify the residential and small commercial meters at risk of vehicular damage were protected in accordance with applicable Gas Standards for the audit period of September 1, 2016 through September 1, 2018.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided. Internal Audit would like to thank the Integration Center and Field and System Operations staff and management for their cooperation and time in support of this follow-up review.

Objective: Review the processes and controls in place to ensure new, replaced (at the time of installation), and existing meters are properly protected. Additionally, verify action is taken to properly protect damaged meters from future damages.

#	Procedures	Findings Summary (Refer to Appendix A)
1	Assess the process and controls, and documentation/data related to determining the need for and installing meter protection across all of the NiSource Gas Distribution Companies.	**No Findings Noted.**
2	Obtain a listing of AOCs identified within NiFast specific to meter protection for the audit period and analyze the population to identify trends and assess compliance with established commit dates. (Columbia Companies only)	**Finding #1 – See page 6-7**
3	Obtain detail of damages across all of the NiSource Gas Distribution Companies monitored by the Damage Prevention Center of Excellence for the audit period. For each location where a damage to a meter occurred due to vehicular damage, determine whether adequate action was taken.	**Finding #2 – See page 8**

Findings (Cont'd)

Procedure #2: Obtain a listing of AOCs identified within NiFast specific to meter protection for the audit period and analyze the population to identify trends and assess compliance with established commit dates. (Columbia Companies only)

Risk Rating

Finding #1: Based on progress to-date, Meter Protection AOCs may not be incorporated into current and future work plans to ensure compliance with established commit dates.

Moderate

Process Owner(s):
K. H. Cole, VP Distribution Operations, All NiSource Gas Distribution Presidents and General Managers
Executive Council Member Responsible: Pablo Vegas, Chief Operating Officer

Target Remediation Date:

Q2 2020

Observation

Criteria: The workload created as a result of identified Meter Protection AOCs is adequately monitored and managed to ensure remediation in accordance with established commit dates.

Condition: **8%** of the Meter Protection AOCs **identified within NiFast** during the period of September 1, 2016 through September 1, 2018 **and eligible for remediation** for all of the Columbia Gas Companies have been remediated through the **execution of a WMS job order**.

	Eligible for Remediation	Executed	%	Past Due	%
COH	31,657	157	0.5%	17,435	57.3%
CKY	2,335	-	0.0%	24	1.1%
CMA	2,324	651	28.0%	279	12.0%
CPA	10,050	22	0.2%	45	0.4%
CMD	606	6	1.0%	-	0.0%
CGV	4,598	3,289	71.5%	52	1.6% *
TOTAL	51,570	4,125	8.0%	17,835	36.0%

Each of the Columbia Gas Companies utilizes different levels to classify Meter Protection AOCs identified, which determines the commit date, or the date required for remediation. Internal Audit noted **~18K (36%** of the **~52K** identified and eligible for remediation) of the Meter Protection AOCs noted above are past their required commit date as of December 31, 2018. Please refer to **Appendix B** and **Appendix C** for further details.

* CGV provided support for the status of all 52 accounts identified by Internal Audit. Upon review of the detail, Internal Audit noted that 48 of the 52 accounts related to Farm Taps, which CGV Management noted are scheduled to be addressed in 2019 as part of a program specific to Farm Tap locations.

Findings (Cont'd)

Procedure #2: Obtain a listing of AOCs identified within NiFast specific to meter protection for the audit period and analyze the population to identify trends and assess compliance with established commit dates. (Columbia Companies only)	**Risk Rating**
Finding #1: (Cont'd)	**Moderate**
Process Owner(s): All NiSource Gas Distribution Presidents and General Managers; K. H. Cole, VP Distribution Operations **Executive Council Members Responsible:** Pablo Vegas, EVP & President Gas Utilities [Operations]; Donald Brown, EVP & Chief Financial Officer [IT]	Target Remediation Date: **Q2 2020**

Observation (Cont'd)

Risk/Impact:

Damages due to vehicular damage may not be prevented if meter protection is not installed on at risk meters. Based on current remediation rates, the workplan may not currently incorporate identified Meter Protection AOCs that require remediation in future years to ensure compliance with established commit dates.

Note: Meter Protection AOCs will continue to be identified through additional inspections performed in the following years. Additionally, once a location with an outstanding Meter Protection AOC comes upon its next inspection cycle (either a 1 year or 3 year period), there is a risk of duplicate identification.

Recommendation: Since the number of all types of AOCs could increase over time as additional inspections are performed, Field Operations, System Operations, the Integration Center, and Planning should work together (identifying clear roles and responsibilities) to assess the risk related with each AOC type, including Meter Protection, and develop a risk-based work plan to ensure remediation of identified AOCs in accordance with established processes and commit dates.

Management Response: NiSource Management agrees to utilize the SMS framework and process to evaluate and rank risk identified AOCs, including meter barrier protection. The SMS team, working with compliance and standards, will recommend appropriate changes to Gas Standards that incorporate a common view of compliance requirements for AOCs. By end of Q2 2020 the AOCs will be ranked and included in the risk register.

In addition, NiFast AOC data is not currently available in the data warehouse, creating challenges and risks to visibility and management of this body of work. This process will require an IT solution to be completed to get data out of NiFast into the data warehouse for additional reporting requirements to align with other systems, i.e. WMS, DIS, Maximo, CIS. The required IT solution will be presented at the March Demand meeting with a delivery date of the solution by end of Q4 2019.

Once the analysis of the work and the priority is established, a plan will be developed to work backlog and maintain compliance in the future.

Findings (Cont'd)

Procedure #3: Obtain detail of damages across all of the NiSource Gas Distribution Companies monitored by the Damage Prevention Center of Excellence for the audit period. For each location where a damage to a meter occurred due to vehicular damage, determine whether adequate action was taken.	**Risk Rating**
Finding #2: Meter Protection is not always installed after vehicular damage has occurred or after a Meter Protection AOC has been identified by an Inspector.	**Moderate**
Process Owner(s): All NiSource Gas Distribution Presidents and General Managers; K. H. Cole, VP Distribution Operations **Executive Council Members Responsible:** Pablo Vegas, EVP & President Gas Utilities [Operations]	**Target Remediation Date:** **Q1 2019**

Observation

Criteria: Once it is determined that vehicular damage may be reasonably anticipated (i.e. after a damage due to a vehicle has occurred), bollards shall be installed to protect the meter set assembly.

Condition:

Internal Audit obtained the listing of all damages across all of the NiSource Gas Distribution Companies monitored by the Damage Prevention Center of Excellence and filtered to identify those damages that occurred as a result of vehicular damage at the meter. Internal Audit selected a sample of 40 to determine whether adequate action was taken to protect the meter subsequent to the damage. Internal Audit identified the following:

- 19 of the 40 locations did not have evidence that meter protection was installed subsequent to the damage occurring.

Additionally, Internal Audit also looked to see if any Meter Protection AOCs had been identified at locations where damages had occurred (both criteria occurring the period of audit). Internal Audit noted the following:

- 17 locations had Meter Protection AOCs identified prior to the damage occurring.

Risk/Impact: Damage to meter sets which, possibly could have been prevented if meter protection were installed.

Recommendation

Management should utilize data related to damages to install protection in locations where vehicular damages have occurred and no changes have been made to the meter location.

Management Response

Management agrees to put in place a process that places the accountability on the Operation Center Manager to ensure that an order is created to install meter barrier protection any time a meter is damaged by a vehicle. This order will be assigned a commit date of 45 days.

Report Distribution

CC:

- J. Hamrock
- D.E. Brown
- C.J. Hightman
- P.A. Vegas
- S.K. Surface
- P.T. Disser
- C.E. Shafer
- G. Shoemaker
- R.D. Poe
- D.T. Williamson
- N. Drew
- S.J. Jain
- S. Anderson
- M.S. Downing
- Deloitte & Touche
- D.L. Douglas
- T.J. Tokish
- M.D. Ramsey
- T.A. Dehring
- D.A. Eckstein
- J.T. Croom
- D.L. Reynolds
- D.A Monte
- R.V. Mooney
- E.M. Fitzgerald

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *<u>Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.</u>*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *<u>Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.</u>*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *<u>Internal Audit does not perform follow-up review procedures on low risk findings.</u>*

Appendix B - Meter Protection Levels and Commit Dates Utilized by Company

	A	B	C	D	E	F
	Level 0	**Level 1**	**Level 3**	**Level 4**	**Level 6**	**Level 7**
Commit Date	*Immediate Action*	*60 days*	*End of Next Year*	*Not Specified*	*Not Specified*	*60 months*
COH		X	X			
CKY		X	X			
CMA		X	X			
CPA	X		X	X	X	X
CMD	X		X	X		X
CGV			X			

A	Level 0s are uilized by CPA and CMD only. The Level description is noted as "Immediate Action - CALL Integration Center."
B	Level 1s are utilized by COH, CKY and CMA only. The Level Description is noted as "evidence of previous vehicle damage".
C	Level 3s were utilized by all companies during the audit period; however, Level 3 will only be available to COH, CKY, and CMA going forward. The Level Description is described as "Needs Protection".
D	Level 4s were utilized by CPA and CMD only during the audit period; however, this category has been eliminated going forward. Previously described as "DIMP" with no defined commit date timeframe.
E	Level 6s are utilized by CPA only to identify those AOCs on customer owned service lines. These are sent to the Customer Notification List but do not have a defined commit date timeframe.
F	Level 7s are utilized by CPA and CMD only. The Level Description is noted as "Needs Protection". The Commit date is noted as 60 months from the date of the inspection.

Appendix C – Summary of Past Commit

	Level 0				Level 1				Level 3				
Commit Date	*Immediate Action*				*60 days*				*End of Next Year*				
	Eligible for Remediation	***Executed***	***Past Commit***	***%***	***Eligible for Remediation***	***Executed***	***Past Commit***	***%***	***Eligible for Remediation***	***Executed***	***Past Commit***	***%***	
COH					266	154	112	42%	31,391	3	17,323	55%	
CKY					24	0	24	100%	2,311	0	0	0%	
CMA					293	163	130	56%	2,031	488	149	24%	
CPA	46	1	45	2%					4,914	0	*	0%	
CMD	0	0	0	N/A					406	0	*	0%	
CGV									4,598	3,289	52	1%	**
TOTAL	**46**	**1**	**45**	**2%**	**583**	**317**	**266**	**54%**	**45,651**	**3,780**	**17,524**	**8%**	

*Internal Audit excluded the Level 3 populations for CPA and CMD from the population of "Past Commit" as CPA and CMD will not use Level 3s going forward. CPA plans to utilize Level 7 with a commit date of 60 months (instead of the end of the next calendar year) to classify a meter which "Needs Protection". However, under the old commit dates, 5,365 Level 3 Meter Protection AOCs would be past due.

** CGV provided support for the status of all 52 accounts identified by Internal Audit. Upon review of the detail, Internal Audit noted that 48 of the 52 accounts related to Farm Taps, which CGV Management noted are scheduled to be addressed in 2019 as part of a program specific to Farm Tap locations.

Note: Level 4 and Level 6 Meter Protection AOCs do not have a defined commit date timeframe. Level 7s have a timeframe of 60 months; however, as the audit period started on September 1, 2016, none of the AOCs classified in that Level would be "past commit" as of December 31, 2018.

Procure-To-Pay SDLC - Core Release 1 (Design & Build Phases)

To: Jennifer Tipton, VP – Enterprise Applications
Dave Speas, Director – Dir. Procurement Operations
Ron Harper , Director – Work Planning

From: John Manfreda, Project Manager - Infor. Systems Audit
Greg Wancheck, Director - Infor. Systems Audit

March 12, 2019

NiSource IT Audit conducted our Procure-To-Pay SDLC (System Development Lifecycle) assessment for the solution's Core Release 1 Design & Build phases between September 2018 and January 2019 to provide an independent perspective around program/project governance, delivery service activities and inclusion of relevant solution control considerations. This Procure-To-Pay SDLC – Core Release 1 evaluation will be directly followed by a Procure-To-Pay SDLC - Core Release 2 (Buying and Invoicing) review that will provide a perspective on the program's subsequent activities.

IT Audit's Procure-To-Pay SDLC - Core Release 1 (Design & Build Phases) analysis noted the following three (3) findings:

High risk finding:

- **The existing NiSource enterprise IT solution delivery model does not include a comprehensive intake and on-going management process for non functional requirements.**

➢ Recommendation: NiSource IT Leadership should;

1. Help facilitate the alignment of applicable NiSource domain owners, both IT and business, in determining the current state of higher risk, non functional requirement criteria (cybersecurity, SOX, data, etc.) in the IT delivery model.
2. Coordinate the process of maturing relevant higher risk, non functional requirement criteria with appropriate NiSource domain owners (if required).
3. Absorb the higher risk, non functional requirements into the IT delivery model with appropriate responsibility/accountability.

Moderate risk finding (#1):

- **The current IT PMO delivery framework does not have a standardized governance model artifact/deliverable at the project and/or program level delineating accountability, scope of engagement, and responsibility to relevant stakeholders.**

➢ Recommendation: The NiSource IT PMO should align with the relevant IT Towers in creating and embedding a standardized project/program governance model into the current IT solutions delivery framework. This standardized governance artifact should lay out accountability, scope of engagement, and responsibility to all relevant project/program stakeholders, whether they be IT resources or members of the NiSource business.

Moderate risk finding (#2):

- **The NiSource IT PMO estimating and planning process does not account for potential SOX controls design and execution modifications required in the solution delivery process.**

➢ Recommendation: The NiSource IT PMO should enhance the existing IT PMO estimating and planning process to include considerations for SOX controls design and execution modifications. This would include engagement of external SOX control subject matter experts who would have the background to disposition relevant risks and develop mitigating solution specific controls.

Due to the nature of the findings noted above, IT Audit will continue to monitor the P2P Program Team's solution delivery activities and future alignment with the NiSource IT PMO in our subsequent P2P SDLC – Core Release 2 (NIPSCO) and 3 (NCS/Columbia) assessments.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing, whereby a summary of HIGH and/or MODERATE findings will be provided to the NiSource Audit Committee. NiSource IT Audit would like to thank both P2P Program Management and the NiSource IT PMO for their cooperation and time in supporting this effort.

Beginning in May 2018, NiSource commenced an initiative to transform the enterprise's Procure-to Pay (P2P) capabilities by implementing process, organizational and technology changes for both materials and services procurement. The initiative is focused on the deployment of the following two (2) externally hosted cloud, aka: Software-as-a-Service (Saas), applications for solution implementation.

- SAP-Ariba for materials and core procurement
- SAP-Fieldglass for services procurement enablement

NiSource's P2P initiative has the following goals over the program lifecycle:

- Re-engineered P2P processes that are aligned with updated operating model/roles enabled by Cloud/SaaS applications and will provide the desired efficiency to build appropriate P2P capability maturity
- Use of proper buying channels, services platform and preferred suppliers to maximize use of negotiated pricing, drive discounts / rebates, supplier self-service and to control spend leakage
- Use of electronic invoice submission and supplier self-service to drive automation and efficiency of payment
- Use of best-in-class payment terms to optimize working capital
- Availability of quality data harmonized by company/commodity to enable sourcing savings

IT Audit's on-going alignment with the P2P program initiative will continue throughout the remainder of 2019 and will center around subsequent phase execution activities of planned Core and Services Procurement module releases.

Audit Scope and Approach

IT Audit aligned with the P2P Program Team, the NiSource IT Project Management Office (PMO), and other P2P program stakeholders to review evidence on the setup of processes, procedures, and controls used to manage P2P program execution. The methods used by NiSource IT Audit may include (but are not limited to) interviews of key process owners, documentation review, observation and independent testing of appropriate, standards, metrics, and system configurations.

Review procedures included the following objective(s) and associated action steps listed within the results below:

Objective 1: Review P2P program delivery-based controls design and execution to provide a perspective on organizational risk inherent in delivering the solution.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess whether Project Scope, Cost and Schedule controls are in place and compliant with NiSource's IT Project Management Methodology (PMM).	**Finding #1 (see Slide 7)**
2	Assess whether Project Quality controls over solution conformance to requirements are in place and are operating as designed.	**No Findings Noted**
3	Assess whether controls over communications and stakeholder alignment are in place and are operating as designed.	**No Findings Noted**
4	Review project user acceptance, approval activities, third-party service provider management, and deployment plans (where applicable) to provide reasonable assurance NiSource corporate policy and/or program standards are followed.	**Finding #2 (see Slide 8)**

Audit Scope and Approach (Cont'd)

Objective 2: Review P2P program solution-based controls to provide a perspective on any nonconformance risks associated with corporate control requirements.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess whether business process controls (automated and manual) were included in the solution development, testing and deployment processes.	**Finding #3 (See Slide 10)**
2	Assess whether interface controls were considered and included in the solution development, test and deployment processes.	**No Findings Noted**
3	Assess whether data conversion activities controls (where applicable) were considered and included in solution deployment processes.	**No Findings Noted**

Objective 3: Review overall Program Team conduct in helping to achieve project objectives.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Monitor on-going integration, alignment and communications between the NiSource P2P Program Team, IT Project Management Office (PMO), Third-Party Providers and NiSource P2P Business stakeholders to provide feedback on the approach and execution process during the review period.	**No Findings Noted**

Findings

Objective #1, Procedure #1: Assess whether scope, cost and schedule controls are designed, in place and compliant with NiSource's IT Project Management Methodology (PMM).	**Risk Rating**
Finding: The current IT PMO delivery framework does not have a standardized governance model artifact/deliverable at the project and/or program level delineating accountability, scope of engagement, and responsibility to relevant stakeholders.	**Moderate**
Process Owner(s): Sandeep Hattarki (Manager Methodology – PMO), Greg Kovacs (Director – PMO), Kevin Johannsen (VP – IT Services)	**Target Remediation**
Executive Council Member Responsible: Donald Brown (Chief Financial Officer)	**Q3 2019**

Observation

Criteria: To provide key project and program stakeholders with a detailed description of accountability, scope of engagement definition, and responsibility.

Condition: The existing IT PMM framework allots for only the Project Charter being the high-level artifact whereby roles and scope of the project/program are defined. Each NiSource IT project/program can further define its own governance structure, stakeholder reporting mechanism and delivery standards/practices.

Risk/Impact: Without a clear delineation of stakeholder scope, accountability, and roles/responsibilities in a universal governance model structure, each NiSource project and/or program are reliant on a Program Managers' experience to provide ongoing delivery governance. This approach could lead to the risk of inconsistent solution delivery management and decision-making authority.

Recommendation

The NiSource IT PMO should align with the relevant IT Towers in creating and embedding a standardized project/program governance model into the current IT solutions delivery framework. This standardized governance artifact should lay out accountability, scope of engagement, and responsibility to all relevant project/program stakeholders, whether they be IT resources or members of the NiSource business.

Management Response

IT Management aligns with this recommendation. The IT PMO team will create a program governance structure that will cover role definitions, RACI and templates with a plan to roll-out by end of Q3 2019.

Findings

Objective #1, Procedure #4: Review user acceptance, approval activities, third-party service provider management, and deployment plans (where applicable) to provide reasonable assurance NiSource corporate policy and/or program standards are followed.	**Risk Rating**
Finding: The existing NiSource enterprise IT solution delivery model does not include a comprehensive intake and on-going management process for non functional requirements.	**High**
Process Owner(s): Mike Rozsa (CIO) **Executive Council Member Responsible:** Donald Brown (Chief Financial Officer)	**Target Remediation** **Q4 2019**

Observation

Criteria: To provide NiSource IT Service Delivery practitioners with a comprehensive intake and on-going management model for non functional requirements to reduce the inherent risk(s) of delivering ineffective and/or non compliant solutions.

Condition: The existing NiSource enterprise IT solution delivery model does not include a comprehensive intake and on-going management process for non functional requirements.

Risk/Impact: Not having a comprehensive intake and on-going management process for non functional requirements may lead to ineffective solution delivery and/or delivery of non-compliant solutions.

Recommendation

NiSource IT Leadership should:

1. Help facilitate the alignment of applicable NiSource domain owners, both IT and business, in determining the current state of higher risk, non functional requirement criteria (cybersecurity, SOX, data, etc.) in the IT delivery model.
2. Coordinate the process of maturing relevant higher risk, non functional requirement criteria with appropriate NiSource domain owners (if required).
3. Absorb the higher risk, non functional requirements into the IT delivery model with appropriate responsibility/accountability.

Findings

Management Response

All policies and standards for non-functional requirements (Cybersecurity, SOX, etc) will be placed into a common repository and a link to this repository will be obtained from the PMO site. Additionally, each IT project will be assigned a Technical Solution Owner (normally the assigned Solution Architect) who will have accountability and responsibility for adherence to comply with these requirements.

Findings

Objective #2, Procedure #1: Assess whether business process controls (automated and manual) were considered and included in the solution design, development, testing and deployment processes.	**Risk Rating**
Finding: The NiSource IT PMO estimating and planning process does not account for potential SOX controls design and execution modifications required in the solution delivery process.	**Moderate**
Process Owner(s): Kevin Johannsen (VP- IT Services) **Executive Council Member Responsible**: Donald Brown (Chief Financial Officer)	**Target Remediation**
	Q4 2019

Observation

Criteria: To prevent delivery of IT solutions without the consideration and inclusion of SOX risks and relevant controls at the appropriate stage of delivery.

Condition: The NiSource IT PMO estimating and planning process does not account for potential SOX controls design and execution modifications required in the solution delivery process.

Risk/Impact: Lack of appropriate estimating and planning for potential SOX controls design and execution modifications may lead to both non-conforming solutions and related re-work risks.

Recommendation

The NiSource IT PMO should enhance the existing IT PMO estimating and planning process to include considerations for SOX controls design and execution modifications. This would include engagement of external SOX control subject matter experts who would have the background to disposition relevant risks and develop mitigating solution specific controls.

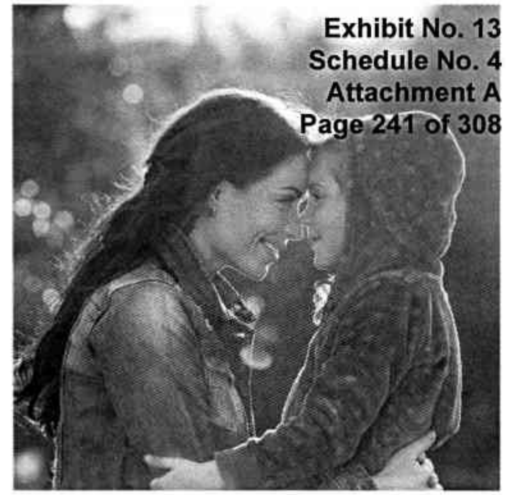
Management Response

Through engagement with key stakeholders, NiSource IT Services will define an approach to assess potential SOX impacts and consider associated effort and cost in the defined project estimation model and process. The defined enhancements will roll-out by the end of Q4 2019.

Report Distribution

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



NiSource Corporate Services Company Cost Allocation Audit

May 6, 2019

To: Adolfo Acevedo, Director Shared Services Center, Corporate Accounting

From: Chris Marlatt, Audit Project Manager
Jaclyn Callahan, Manager Internal Audit
Ryan Binkley, Director Internal Audit

NiSource®

Executive Summary

Internal Audit performs an annual review of the accounting systems, source documents, allocation methods, and billing procedures used by NiSource Corporate Services Company (NCSC) to allocate costs/expenses to the various subsidiary companies ("affiliates"), including the holding company.

The focus of the audit includes the following procedures:

- Determine that costs are fairly and equitably allocated to all subsidiary companies, including the holding company; and
- Verify procedures are in place to ensure that all costs have been allocated monthly and are accurately reflected in the FERC Form 60 Financial Report.

Summary Conclusions:

Based on our audit results, the methods and procedures used to allocate costs/expenses and bill subsidiary companies, including the holding company, are reasonable. Amounts reported as convenience and contract billing payments in the FERC Form 60 appear appropriate.

Note: there is an inherent risk related to the proper application of these methods by employees (i.e. manual application of billing pool codes to invoices or timesheets).

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided to Corporate Accounting Management. Internal Audit would like to thank NCSC staff and management for their cooperation and time in support of this audit.

Background

- In February 2006, the Public Utility Holding Company Act (PUHCA) was repealed and replaced with the PUHCA of 2005. Prior to this date, NiSource Corporate Services Company (NCSC) was required to obtain prior approval from the Securities and Exchange Commission on new allocation methods used to allocate costs and expenses. The PUHCA of 2005 is primarily a "books and records" statute and provides the Federal Energy Regulatory Commission (FERC) with the authority over the books and records, the ability to prescribe standards, and gives access to the books and records of the holding company to the public utility commissions, but only to the extent relevant to the costs of the subsidiaries.

- NCSC uses various allocation methods to assign expenses to companies (including the holding company), or groups of companies, to classify and disclose expenses in the financial statements. Such allocation methods are defined in the service agreements ("agreements") between NCSC and the affiliates. Affiliates are billed by NCSC via contract and convenience billings. Contract billings represent labor and expenses billed to an affiliate. The allocation between affiliates is based on a billing pool which is a four digit code that identifies the company or company's benefiting from the charge. Convenience billings are accommodation payments that are rendered when NCSC makes a payment to a vendor for goods or services that are for the benefit of more than one or all affiliates, and can be made for an affiliate who may not have the means to wire money to outside vendors. Each affiliate is billed monthly for their proportional share of the payments made in that respective month.

Audit Scope and Approach

Internal Audit has completed a review of the accounting systems, source documents, allocation methods, and billing procedures used by NCSC to allocate costs/expenses to the various subsidiary companies, including the holding company, for the period January 1, 2018 through December 31, 2018.

NOTE: *Costs associated with the Merrimack event were included in the population of allocated NCSC costs and subject to our audit procedures. We will be issuing a separate memo regarding the processes of ensuring certain Merrimack event costs (I.e. internal labor) were properly recorded to CMA.*

Objective 1: Costs are fairly and equitably allocated to all subsidiary companies including the holding company.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Determine if allocation factors are updated regularly to reflect current statistical data to ensure that NCSC charges are billed relative to current operations.	**No Findings Noted.**
2	Verify contract and convenience billings are properly billed to affiliates.	**No Findings Noted.**
3	Verify holding company costs incurred are properly segregated and paid by the holding company.	**No Findings Noted.**
4	Verify executive time allocation accurately reflects the companies benefiting from their services.	**No Findings Noted.**
5	Verify costs charged by department are in accordance with the NCSC cost allocation guidelines.	**No Findings Noted.**

Objective 2: Processes and procedures are in place to ensure that all costs have been allocated monthly and are accurately reflected in the FERC Form 60 Financial Report.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Determine that all costs are appropriately allocated to affiliates.	**No Findings Noted.**
2	Verify that contract billings and accommodation payments are accurately reported in the FERC Form 60 Financial Report.	**No Findings Noted.**

Report Distribution

CC:

J. Hamrock
D.E. Brown
C.J. Hightman
V. Sistovaris
P.A. Vegas
S.K. Surface
P. Disser
J.W. Mulpas
M. Kempic
B.K. Archer
D.A. Creekmur
M.A. Huwar
H.A. Miller
D.L. Douglas
S. Anderson
M.S. Downing
N. Drew
S.J. Jain
Deloitte & Touche, LLP

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*

Corporate Credit Cards Expense Review & Analytics (2018 Annual Period)

June 19, 2019

To: A. Acevedo, Director Shared Services Center

From: L. Black, Senior Auditor
M. Eich, Lead Data Analyst
J. Callahan, Manager Internal Audit
R. Binkley, Director Internal Audit

NiSource

NiSource®

Executive Summary

Internal Audit conducted an audit of expense transactions incurred by employees on behalf of NiSource to analyze trends in employee spending and aid in identifying instances of non-compliance during the period of January 1, 2018 to December 31, 2018*. Refer to the chart below for a breakdown of spend by the various card types in use during 2018.

Card Type	Administrator	Total 2018 Spend (MM)	Total 2017 Spend (MM)	Variance (MM)	% of Change
Employee Expense Cards**	American Express JPMorgan Chase "One Card" Visa	$ 50.4	$ 26.0	$ 24.4	94%
Purchasing Cards	Citibank	$ 27.7	$ 23.4	$ 4.2	18%
Fuel Cards	ARI/WEX	$ 17.5	$ 14.3	$ 3.3	23%
Fleet Cards	ARI	$ 0.0	$ 0.0	$ 0.0	17%
Total Corporate Credit Card Spend		$ 95.6	$ 64	$ 32	50%

The focus of the audit includes the following procedures:

- Analyze corporate card and other reimbursable expenses to identify any unusual items and/or trends;
- Determine whether corporate card and other reimbursable expenses are processed in accordance with corporate policy and Internal Revenue Service (IRS) guidelines; and
- Determine whether corporate card and other reimbursable expenses incurred as a result of the Greater Lawrence Incident were processed in accordance with corporate policy and IRS guidelines.
    - On September 13, 2018, a series of fires and explosions occurred in Lawrence, Andover and North Andover, Massachusetts related to the delivery of natural gas by Columbia of Massachusetts (CMA), referred to herein as the "Greater Lawrence Incident" (GLI). Employees from all of the NiSource companies assisted in the efforts to replace the gas pipeline system in the affected area and restore service to affected customers. As these efforts resulted in additional expense transactions totaling ~$44 million, Internal Audit applied a higher level of focus on the expenses incurred as a result of the Incident.

*Expense population determined by utilizing the GL Extraction Date, the date the expense posted to the General Ledger.

** Employees who are not issued corporate credit cards or who incur out of pocket expenses may still incur legitimate reimbursable business expenses. These expenses are submitted within the MySpend expense reporting system and are included in the Employee Expense Cards total referenced above.

Executive Summary

Summary Conclusions:

Refer to **Appendix B** for a summary of the total number and amount of selections reviewed by Internal Audit as well as the breakdown between GLI expenses and Non-GLI. The results of the selection testing is noted below:

Non-GLI Expense Selections:

Internal Audit identified minor exceptions to corporate policies related to providing cash or cash equivalent gifts to non-employee. (Refer to **Appendix C** for transaction details.) As a result, Internal Audit created one (1) **Low Risk** Finding, recommending that Accounts Payable, Tax Department and the P2P team provide clarification and additional guidance to all NiSource employees to ensure employees understand to whom cash or cash equivalent gifts can be provided.

GLI Expense Selections:

Internal Audit noted that the GLI expenses reviewed were properly supported when required (i.e. receipts and business purpose provided); however, Internal Audit did identify the following minor policy deviations:

- Cash equivalents (gift cards) were provided to customers (non-employees); and
- Cash was provided to customers to compensate for the customer's product loss as a result of GLI

While these transactions were exceptions to company policy, Internal Audit declined to include these transactions in the finding noted above as the extenuating circumstances created as a result of the GLI necessitated being able to quickly address customer losses.

Additionally, Internal Audit noted other unique transactions (e.g. expenses related to dog boarding or overnight babysitting for employees who were working in CMA). While these transactions were unique as compared to the types of transactions typically expensed for business purposes, the employees documented the business need and the expenses were properly approved by their supervisor. As such, Internal Audit declined to create an audit finding.

Background

During 2018, NiSource consolidated the types of cards employees could use to make purchases on the Company's behalf. As a result, the JPMorgan Chase Visa "One Card" replaced the American Express (AMEX) Cards and Citibank Purchasing Cards (Pcards).

Refer to the chart below for a breakdown of each card type and the period utilized:

Card Type	Administrator	Time Period Available in 2018
Employee Expense Cards	American Express – "AMEX"	January 1, 2018 - September 7, 2018
	JPMorgan Chase Visa - "One Card"	August 27, 2018 - December 31, 2018
Purchasing Cards*	Citibank – "PCard"	January 1, 2018 - December 31, 2018
Fuel Cards	ARI/WEX	January 1, 2018 - December 31, 2018
Fleet Cards	ARI	January 1, 2018 - December 31, 2018

To align with the changes in card types, NiSource also updated the corporate policy related to employee expenses. The NiSource Corporate Credit Card policy was effective for the audit period of January 1, 2018 through August 26, 2018 and the updated Business Expense Policy was effective for the audit period of August 27, 2018 through December 31, 2018.

Employee Expense Corporate Cards

AMEX cards were available for employees to utilize from January 1, 2018 - September 7, 2018 to pay for appropriate business expenses. As the Company transitioned to the use of the JPMorgan Visa One Card, all AMEX card accounts were closed as of September 7, 2018. Final AMEX expense reports were required to be submitted by August 31, 2018.

All charges incurred through AMEX or "One Cards" were auto-fed into the NiSource expense reporting system, Concur Expense Solutions (referred to herein as "MySpend") and then processed by individual employees.

*Supply Chain noted that all Purchasing Cards, with the exception of two (2), were closed as of November 22, 2018. The remaining two (2) cards were utilized solely for GLI expenses (managed by Supply Chain personnel) and were closed as of February 22, 2018.

Background (Cont'd)

Employee Expense Corporate Cards (Cont'd)

Accounts Payable performs pre-payment audits on expense reports meeting programmed criteria within MySpend, including audits of all Officer Expense statements. Additionally, MySpend allows for "hard stops" which will generate an automatic system response if a transaction does not meet specific criteria and will not allow the expense report to be processed until all required criteria has been entered.

- **Note:** Subsequent to the GLI, an increased amount of expense transactions were incurred to support employee travel to and from CMA and the rebuild efforts. Accounts Payable noted that the receipt requirements within MySpend were lifted for a two month period between September 14, 2018 through November 14, 2018 to expedite the expense report payment process and to ensure that maximum credit limits were not exceeded. The receipt requirements were lifted again two more times for roughly ten minutes each time to allow Supply Chain to process cards which were utilized to incur large volumes of GLI expenses.

Purchasing Cards

Prior to the transition to "One Card", P-Cards were used as a payment method for small purchases (usually less than $1,000 per transaction) of materials, supplies, and certain services. Once expenses were incurred, cardholders were responsible for providing a monthly packet (including matching receipts) to their supervisors for approval (evidenced via manual signature). Approved packets were then sent to an outside vendor, 3SG, for review.

This process was manually intensive, lacked automated controls and quality assurance/quality control processes. As part of an audit conducted in 2017, Internal Audit reviewed expense transactions processed through P-Cards which deviated from Company policy, resulting in the creation of a moderate risk audit finding to address the risk created as a result of the process.

To address the audit finding, NiSource made the decision to stop using Citibank P-Cards. All P-Cards were scheduled to be closed as of September 21, 2018; however, as a result of the need for employees to be able to quickly incur expenses related to GLI, the deactivation of the cards was delayed until November 22, 2018.

Background (Cont'd)

Purchasing Cards (Cont'd)

All P-Cards, with the exception of two (2), were closed as of November 22, 2018. The remaining two (2) cards were utilized solely for remaining GLI expenses (managed by Supply Chain personnel) and closed as of February 22, 2019. Supply Chain collected 99% of the required packets and passed further pursuit of the $79.7k remaining missing packets for 2018. See **APPENDIX E** for further detail.

- **NOTE:** Internal Audit noted that expenses incurred using Employee Expense and P-Cards are subject to supervisor approval, and supervisors are responsible for performing an adequate review and ensuring expenses align with company policy. A supervisor's assessment of the reasonableness of the expense in accordance with policy is limited to the information available for review.

Fuel Cards

Fuel cards are used to purchase fuel or very limited vehicle-related expenses (e.g. a car wash, quart of oil, or diesel additive). Fuel cards are restricted using the Merchant Category Code (MCC) to limit the types of purchases that can be made using the card. Cards are assigned to a vehicle within a NiSource company and must remain with the vehicle at all times. Each card is assigned a cost accounting code and changes to the code require management approval.

In order to use a Fuel card, an employee must sign the NiSource Automotive Resource International (ARI) Wright Express Card User Agreement and submit the form with manager approval to the NiSource Credit Card Program Administrator. Employees are then assigned a unique PIN number which allows purchases to be traced to the individual employee using a vehicle card.

Background (Cont'd)

Fuel Cards (Cont'd)

ARI monitors spend for compliance with NiSource policy and potential fraud and will communicate with the Fleet Administration team when transactions need further review. In addition to the controls outlined above, exception reporting is also available to supervisors of employees using Fuel cards. Each supervisor may determine what criteria they would like to monitor related to fuel spend and the Fleet Administration team will communicate the results of the daily exceptions to the supervisors. Examples of exception reports are (but not limited to): cardholders with more than 3 transactions per day, transactions greater than $150, cardholders who made a purchase in gallons which exceeded the vehicle's tank capacity, and a purchase of premium fuel when vehicle calls for regular.

Fleet Cards

Fleet cards are not credit cards but they do contain ARI billing information which allow users to make purchases at automotive parts stores via a purchase order process managed for NiSource by ARI. Purchases under $50 don't require approval, however, any purchase over $50 is required to go through an ARI approval process. Cardholders are instructed to only use the incidental card for small items (i.e. lights bulbs, oil, windshield wipers) as a way to be cost effective and not use a garage for replacing the items.

Note: Cardholders who incur Fuel and Fleet (incidental) spend are not required to submit receipts or "process" expenses. ARI (Wright Express) maintains the detail of all spend transactions and monitors spend on a daily basis.

Audit Scope and Approach

Internal Audit performed an audit of the processes and controls in place related to the use of NiSource Corporate Cards and other employee expense reimbursements. The purpose of the audit is to assess overall compliance with the requirements of the corporate policies for the period January 1, 2018 through December 31, 2018.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, was provided to Management. Internal Audit would like to thank Accounts Payable, Supply Chain, and Tax Management for their cooperation and time in support of this audit.

Objective 1: Analyze corporate card and other reimbursable expenses to identify any unusual items and/or trends.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Analyze a two-year period of corporate card expenses and examine historical spending patterns to detect significant variations over time.	**Refer to Appendix D**
2	Analyze the current audit period's corporate card expenses to identify outliers, anomalies, or potential fraud indicators.	**Refer to Objective 2 & 3**

Audit Scope and Approach

Objective 2: Determine whether corporate card and other reimbursable expenses are processed in accordance with corporate policy and IRS guidelines.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Review the procedures performed by Accounts Payable and Supply Chain to monitor spend and/or periodically audit transactions incurred by cardholders.	**No Findings Noted**
2	Using a risk-based approach, review selected corporate card expense transactions identified as part of our analytic procedures in Step 3 of Objective 1 and evaluate their compliance with corporate policies. *NOTE: Upon reviewing the controls and processes in place to monitor Fuel and Fleet spend and performing an independent analysis of the Fuel and Fleet transactions to identify potential fraud indicators and/or significant outliers, Internal Audit noted that additional sample testing was not necessary to assess the risk related to Fuel and Fleet transactions. As such, the sample testing performed herein focused on transactions from Employee Expense Cards (AMEX & One Card) and P-Cards.*	**Findings #1 – See Page 11**
3	Review procedures followed to identify expenses incurred on behalf of the cardholder's spouse and ensure proper treatment for tax purposes.	**No Findings Noted**
4	Verify that taxable travel has been identified and properly included in income as required by IRS reporting requirements for employees with unique working arrangements, including travel with the use of the Company-leased aircraft for compliance.	**No Findings Noted**

Audit Scope and Approach

Objective 3: Determine whether corporate card and other reimbursable expenses incurred as a result of the Greater Lawrence Incident were processed in accordance with corporate policy.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Review the procedures to ensure that expenses incurred as a result of the Greater Lawrence Incident were properly supported (e.g. all required documentation submitted).	**No Findings Noted**

Findings

Objective 2, Procedure #2: Review selected corporate card expense transactions identified as outliers, anomalies, or potential fraud indicators and evaluate their compliance with corporate policies.	Risk Rating
Finding #1: Expenses incurred deviated from established policy requirements.	Low

Process Owner(s): Adolfo Acevedo (Director Shared Services Center)

Executive Council Member Responsible: Donald Brown (Chief Financial Officer)

Observation

Criteria:

Employee expenses are for valid business purposes, are adequately supported and reviewed, and are in compliance with corporate policy.

Condition:

As a result of reviewing 164 selections (Refer to **Appendix C** for further detail on the selection process), Internal Audit identified 4 minor deviations from the established policy requirements:

- Four (4) transactions classified under various gift categories did not properly indicate a cash or cash equivalent was given, as is required for proper tax treatment. Internal Audit noted that these cash or cash equivalents were incurred through crowdfunding websites, such as GoFundMe or We Pay. The beneficiaries of the transactions appeared to be non-employees, which is an exception to corporate policy.

Risk/Impact:

Expenses may not be properly classified within MySpend to ensure accurate reporting and inclusion within the established tax assessment and income reporting processes.

Recommendation:

Internal Audit recommends that the Accounts Payable, Tax Department and the P2P team provide clarification and additional guidance to NiSource employees to ensure employees understand to whom cash or cash equivalent gifts can be provided.

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*

Report Distribution

CC:	J. Hamrock	K. Cole
	D.E. Brown	S. Diener
	P.T. Disser	S. Anderson
	C.J. Hightman	M. Downing
	C.W. Levander	J.M. Konold
	V. Sistovaris	J.W. Mulpas
	S.K. Surface	M.D. McCuen
	P.A. Vegas	N. Drew
	B. Archer	S.J. Jain
	D. Creekmur	R.L. Bond
	M. Huwar	T.M. Smith
	M Kempic	R.C Rosenbrock
	H. Miller	Deloitte & Touche

IA Selections							
Payment Type	**Total Spend by Payment Type**	**NON-GLI $**	**NON-GLI #**	**GLI $**	**GLI #**	**Total $ Tested**	**Total # Tested**
Cash	$ 2,893,549	$ 5,392	9	$ 2,506	11	$ 7,898	20
AMEX	$ 11,988,174	$ 53,814	39	$ -	0	$ 53,814	39
One Card	$ 35,529,948	$ 9,203	25	$ 531,086	40	$ 540,290	65
P-Card	$ 27,659,112	$ 8,088	38	$ 29,455	2	$ 37,543	40
Total	**$ 78,070,783**	**$ 76,496**	**111**	**$ 563,048**	**53**	**$ 639,544**	**164**

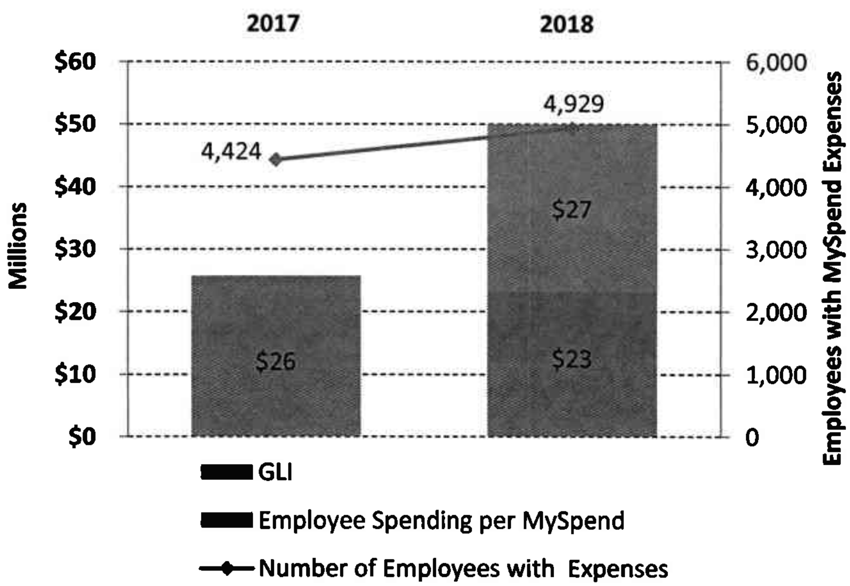
Note: Internal Audit made a sample using a risk based approach, including 53 selections of transactions incurred as a result of GLI.

Minor Policy Deviations			
Amount	**Category Selected by Employee Who Processed Expense**	**Recipient of Crowdfunding Donation**	**Exception Identified**
$100	Bereavment - Flowers / Food	Family of a deceased employee	Cash donation not properly identfied for tax purposes
$150	Safety Award - Non Taxable		
$15	Safety Award - Non Taxable		
$100	Bereavement - Flowers / Food	Family member of current employees	Cash donation not properly identfied for tax purposes

$365 TOTAL of Identified Policy Deviations

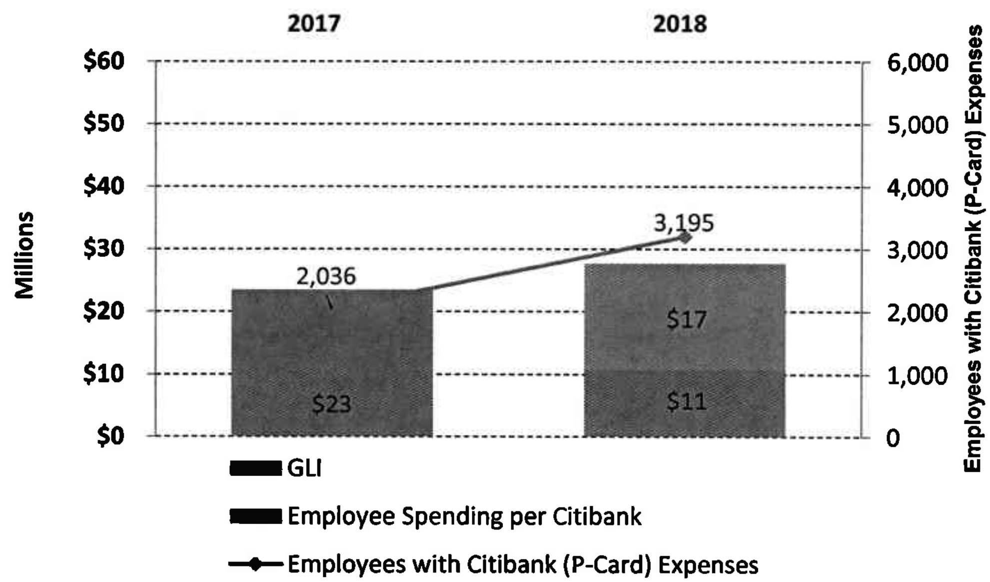
NiSource Employee Expense Cards (MySpend) and P-Card Expenses 2017-2018

MySpend



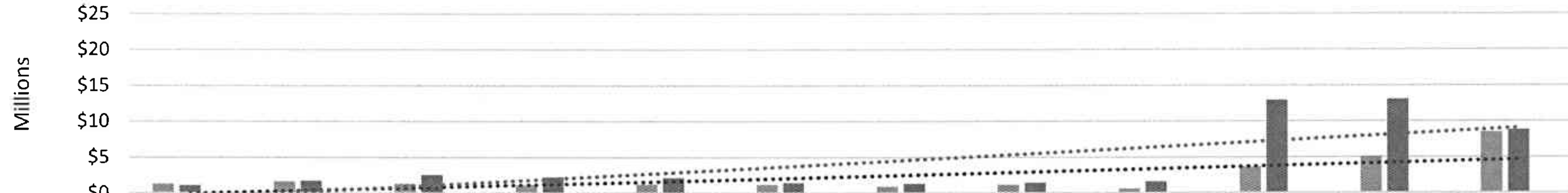
Overall total MySpend expenses increased ~95% from 2017 to 2018. The primary driver of this increase was spend resulting from the Greater Lawrence Incident. The total number of employees submitting expenses increased by ~ 11% during 2018 (4,424 – 4,929).

Purchasing Cards



Overall total Purchasing Card spending increased ~18% from 2017 to 2018. The primary driver of this increase was spend resulting of the Greater Lawrence Incident. The total number of employees submitting expenses increased ~ 57% during 2018 (2,036 – 3,195).

Total 2018 MySpend vs PCard Spend
Trend by Month
(GLI included)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pcard 2018	$1.3	$1.6	$1.3	$1.1	$1.3	$1.2	$0.9	$1.1	$0.6	$3.6	$5.1	$8.5
MySPend 2018	$1.1	$1.7	$2.5	$2.2	$2.1	$1.5	$1.3	$1.4	$1.6	$12.9	$13.1	$8.8
Total	$2.4	$3.4	$3.9	$3.4	$3.4	$2.7	$2.2	$2.6	$2.2	$16.6	$18.1	$17.3

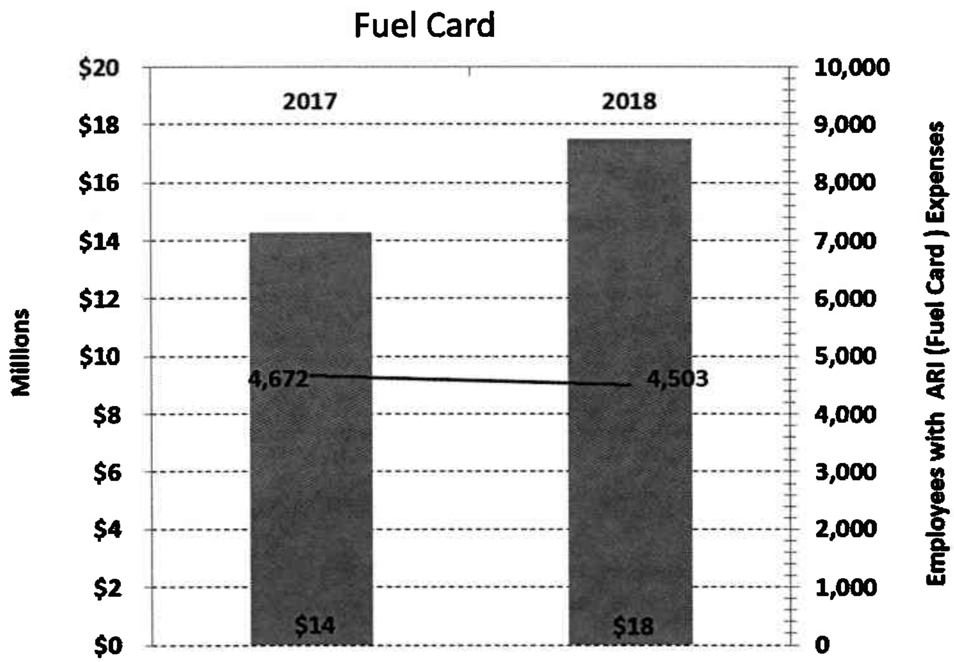
Total 2018 MySpend vs PCard Spend
Trend by Month
(GLI not included)

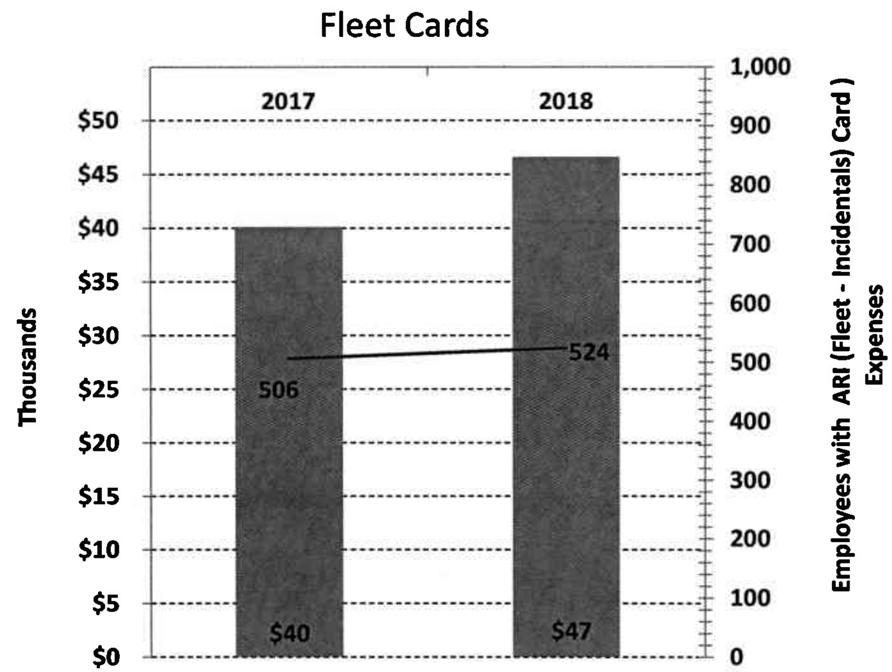
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pcard 2018	$1.3	$1.6	$1.3	$1.1	$1.3	$1.2	$0.9	$1.1	$0.6	$0.1	$0.1	$0.0
MySPend 2018	$1.1	$1.7	$2.5	$2.2	$2.1	$1.5	$1.3	$1.4	$1.3	$2.0	$2.6	$3.4
Total	$2.4	$3.4	$3.9	$3.4	$3.4	$2.7	$2.2	$2.6	$1.9	$2.1	$2.7	$3.4

Note: The 2018 MySpend total consists of the following types of transactions AMEX, One Card and Cash Reimbursable (out of pocket).

Appendix D – Fuel and Fleet Card Analysis

**NiSource Fuel Card and Fleet Card Expenses
2017-2018**

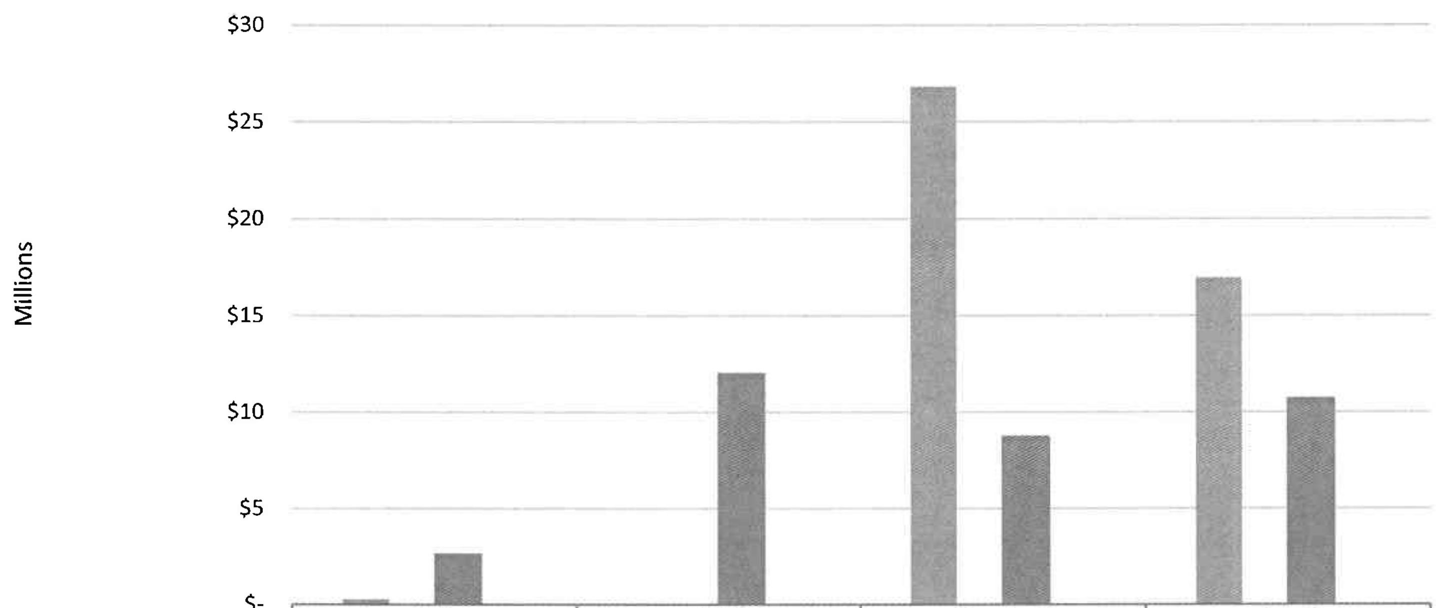




Overall total Fuel Card Expense spending increased ~23% from 2017 to 2018. The total number of employees submitting expenses decreased by ~ 4% during 2018 (4,672 – 4,503).

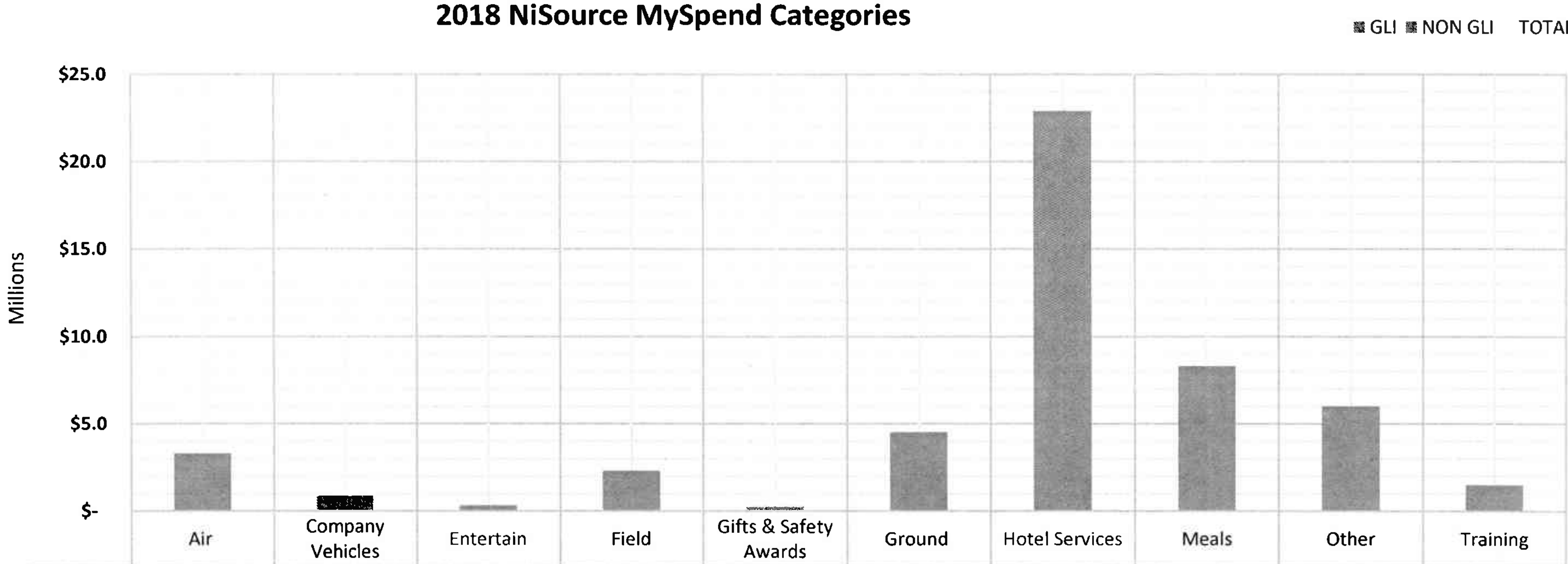
Overall total Fleet (incidental) spending increased ~16% from 2017 to 2018. The total number of employees submitting expenses increased by ~ 4% during 2018 (506 – 524).

2018 NiSource All MySpend Payment Types



	Cash	AMEX	One Card	Pcard
GLI	$274,968	$-	$26,804,050	$16,967,617
GLI % of Total Spend	10%	0%	75%	61%
NON GLI	$2,618,581	$11,988,174	$8,725,897	$10,691,495
NON GLI % of Total Spend	90%	100%	25%	39%

2018 NiSource MySpend Categories



	Air	Company Vehicles	Entertain	Field	Gifts & Safety Awards	Ground	Hotel Services	Meals	Other	Training
TOTAL	$3.3	$0.9	$0.3	$2.3	$0.2	$4.5	$22.9	$8.3	$6.0	$1.5
NON GLI	$2.4	$0.9	$0.3	$1.6	$0.2	$3.5	$5.2	$5.3	$2.4	$1.5
GLI	$0.9	$0.0	$0.0	$0.8	$0.0	$1.0	$17.7	$3.0	$3.6	$0.0

Total MySpend Expenses Category 2018

	2018 MySpend Categories		
Expense Categories	GLI	Non-GLI	Grand Total
Air Transportation	$ 943,559	$ 2,368,988	**$ 3,312,547**
Communications	$ 13,469	$ 46,162	**$ 59,630**
Company Vehicles	$ 2,937	$ 876,393	**$ 879,329**
Entertainment	$ 219	$ 316,569	**$ 316,788**
Field	$ 740,118	$ 1,186,886	**$ 1,927,004**
Gifts/Safety Awards	$ 7,061	$ 232,356	**$ 239,417**
Ground Transportation	$ 951,057	$ 3,518,366	**$ 4,469,423**
Hotel Services	$ 17,734,866	$ 5,236,230	**$ 22,971,097**
Meals	$ 3,043,959	$ 5,337,096	**$ 8,381,055**
Meetings	$ 27,479	$ 325,584	**$ 353,063**
Office	$ 320,446	$ 1,072,552	**$ 1,392,998**
Other	$ 3,257,740	$ 903,658	**$ 4,161,398**
PAC	$ -	$ 4,091	**$ 4,091**
Safety/Clothing	$ 29,946	$ 362,491	**$ 392,438**
Training, Dues & Memberships	$ 6,162	$ 1,545,232	**$ 1,551,394**
Grand Total	**$ 27,079,018**	**$ 23,332,653**	**$ 50,411,671**

NOTE: New Expense Descriptions were created during 2017 to provide further clarity on the type of transactions purchased and related tax implications. Additionally, in August of 2018, New Expense Descriptions were created as a result of the Company's decision to move to a One Card for business expenses. As a result, a comparison to prior year(s) spend by expense description is not meaningful. Internal Audit re-grouped some of the MySpend categories for analytical purposes.

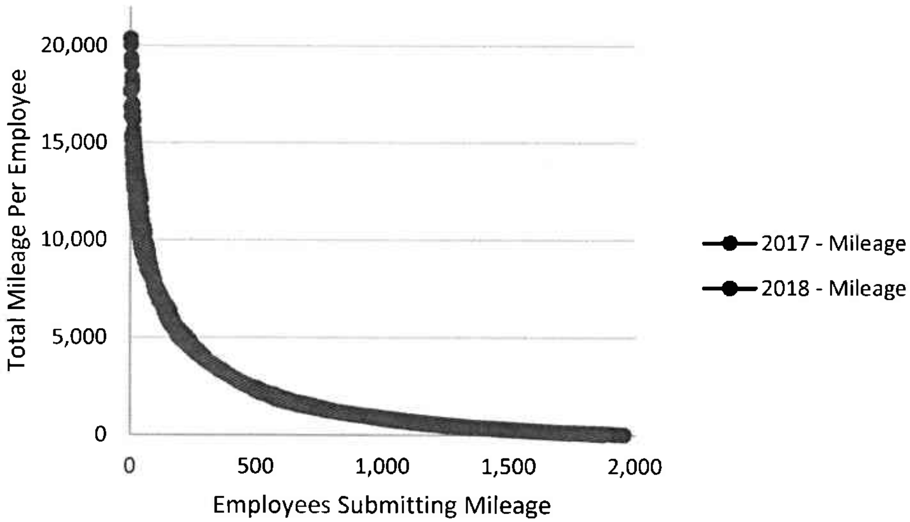
Total "Gift" MySpend Expenses Category 2017 - 2018

TOTAL MySpend GIFT TRANSACTIONS			
Expense Description	2017 My Spend	2018 My Spend	% Change Y/Y
TOTAL MySpend GIFT TRANSACTIONS	$ 465,937	$ 239,417	(49%)

TOTAL MySpend GIFT TRANSACTIONS			
Expense Description	2018 GLI	Non-GLI	Total
Bereavement (Flowers, Food, etc.)		$ 26,776	$ 26,776
Employee - Flowers		$ 5,039	$ 5,039
Employee - Gift Card / Certificate		$ 13,312	$ 13,312
Employee - Merchandise		$ 26,476	$ 26,476
Employee - NiSource Raffle		$ 813	$ 813
Employee - Retirement Gift Card		$ 967	$ 967
Employee - Retirement Merchandise		$ 2,805	$ 2,805
Gifts / Safety Awards	$ 1,370	$ 141,558	$ 142,928
Non Employees - Merchandise	$ 691	$ 10,987	$ 11,677
Pre-Paid Cards	$ 5,000	$ -	$ 5,000
Safety Award - Non-Taxable		$ 2,387	$ 2,387
Safety Award - Taxable		$ 1,236	$ 1,236
TOTAL MySpend GIFT TRANSACTIONS	**$ 7,061**	**$ 232,356**	**$ 239,417**

NOTE: New Expense Descriptions were created during 2017 to provide further clarity on the type of gift purchased and related tax implications. Additionally, in August of 2018, New Expense Descriptions were created as a result of the Company's decision to move to a One Card for business expenses. As a result, a comparison to prior year(s) spend by expense description is not meaningful. Internal Audit did note that the Gift Transactions for the years of 2014 – 2018 the expenses averaged of ~$383k.

2017 vs 2018 MySpend Mileage Submissions



Miles Submitted for Reimbursement	2017 Number of Employees	2018 Number of Employees
1 - 100	150	126
101 - 500	557	530
501 - 1,000	335	308
1,001 - 5,000	692	719
5,001 - 12,000	179	172
> 12,000 *	43	21
Total number of Employees Submitting Mileage	**1,956**	**1,876**

* The Vehicle Policy states "An employee ***is eligible*** to be assigned a passenger type Company vehicle if the position requires that the employee travel in excess of 12,000 business miles on an annual basis or if the employee's job duties make the use of a personal vehicle unreasonable". Internal Audit provided a list of the twenty-one (21) employees noted above who submitted more than 12,000 miles to Fleet Management to determine eligibility for a fleet vehicle. Fleet Management noted that there are plans to increase the mileage threshold to 14,000 miles, which would result in nine (9) employees during 2018 exceeding the new proposed limit.

NOTE: The Vehicle Policy was revised effective March 20, 2019; which states in Section 2 Eligibility: "2.2. An employee may be eligible to be assigned a Company vehicle if such employee's job function requires a vehicle to perform the job function and the employee will travel at least 14,000 business miles on an annual basis."

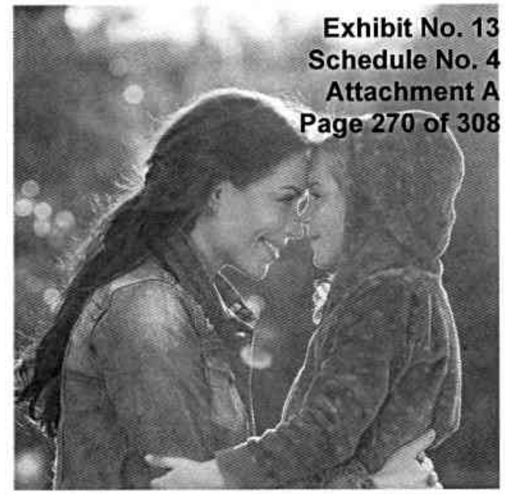
2018 – Missing PCard Packets No Longer Pursued

Citibank 2018 (payments):	Total	Packets Not Required*	Packets Required	Missing Packets	Percentage of Required Packets Collected
Sep	$ 569,039	$ 44,618	$ 524,421	$ 39,791	92%
Oct	$ 3,636,930	$ 1,429,654	$2,207,275	$ 35,656	98%
Nov	$ 5,065,080	$ 2,588,934	$2,476,146	$ 4,278	100%
Dec	$ 8,482,936	$ 3,978,202	$4,504,733	$ -	100%
Grand Total	**$ 17,753,984**	**$ 8,041,409**	**$9,712,576**	**$ 79,725**	99%

*Packets not required:

UniGrp
Uniforms
HR Incidents
IT
CPA Tech Depot
Corporate Services
Supply Chain-Merrimack Valley Incident

Note: Internal Audit noted the chart (above) and the following was statement was provided by Supply Chain Management: "Since the majority of the required packets as per the amount of spend have been received, we will no longer be pursuing missing packets. We are scheduled to move all packets on 3SG to Open Text by the end of March 2018. 3SG will maintain the data for the month of April. At the end of April, once NiSource has approved, 3SG will destroy all information they have relating to packets".



Abandonment of Service Line Facilities

Columbia Gas of Kentucky (CKY)
Columbia Gas of Ohio (COH)
Columbia Gas of Pennsylvania (CPA)
Columbia Gas of Maryland (CMD)
Columbia Gas of Virginia (CGV)

September 25, 2019

To: NiSource Gas Distribution Presidents
NiSource Gas Distribution General Managers
Don Eckstein, Senior Vice President Gas Support Services

From: J. Callahan, Manager Internal Audit
R. Binkley, Director Internal Audit

NiSource®

Executive Summary

Internal Audit conducted a review of the processes and controls in place related to the abandonment of service line facilities across the NiSource Gas Distribution Companies utilizing the Distribution Information System (DIS)* in accordance with both federal and state regulatory requirements as well as any internal Gas Standards. The review focused on the processes and controls in place to perform the following:

- Assessment for the prospect of future use at service locations in Inactive, Idle, or Pre-New Set Status;
- Response to changes at those locations (e.g. demolition); and
- Execution of a service line abandonment in accordance with NiSource Gas Standards.

Summary Conclusions:

Internal Audit identified 2 moderate risk audit findings related to ensuring that there are processes established to complete abandonments in accordance with NiSource Gas Standards:

- Internal Audit identified instances where the use of a "Paper Abandon" may not have been appropriate. Refer the to scenarios below:
  - 1 instance where a "Paper Abandon" job order was executed in WMS where the service was identified as "unlocatable" (e.g. "House Not Here").
  - Multiple instances where a "Paper Abandon" job order was executed in WMS on a service identified as a single service in the system but no additional information was provided as to why a "paper" execute was appropriate.

    - **Recommendation:** NiSource Management should establish a process which outlines how to address "unlocatable" services when eligible for abandonment, including which resources and methods to locate should be attempted and how decisions should be made and documented. NiSource Management should also ensure that "paper abandons" are reviewed for proper execution and that the documentation in the systems of record support the use of the "paper abandon".

* NIPSCO Gas and Columbia Gas of Massachusetts (CMA) utilize the Customer Information System (CIS) to track information related to services. As such, those companies will be reviewed separately during 2019.

<u>Summary Conclusions (Cont'd):</u>

- **Management Response:** The state specific audit findings (referenced on the previous slide) have been assigned to the State Presidents/COOs for resolution by **December of 2019.** The SMS asset management team will utilize our risk-informed decision making model to prioritize the audit finding and determine the appropriate mitigation schedule. The asset management team will then work with internal SMEs, GMs, and State Presidents/COOs to develop a holistic mitigation plan to include appropriate layers of protection that will help prevent future occurrences; incorporating findings from each state. This action will be entered in CAP and assigned to the asset management team within SMS. The action plan will be developed by **November of 2019.**

- A population of ~**22K** Inactive, Idle, or Pre-New Set services have not been abandoned in accordance with the 60 month timeframe outlined in NiSource Gas Standards.

  - **Recommendation:** NiSource Management should work to resolve the population of services in Inactive, Idle or Pre-New Set Status that are past the timeframe for abandonment as established in NiSource Gas Standards. Additionally, NiSource Management should establish a process going forward to monitor Inactive, Idle, or Pre-New Set locations to ensure that they are abandoned in accordance with NiSource Gas Standards.

  - **Management Response:** The SMS asset management team will utilize our risk-informed decision making model to prioritize the audit finding and determine the appropriate mitigation schedule. The asset management team will then work with internal SMEs, GMs, and State Presidents/COOs to develop a holistic mitigation plan to include appropriate layers of protection that will help prevent future occurrences; incorporating findings from each state. This action will be entered in CAP and assigned to the asset management team within SMS. The action plan will be developed by **November of 2019.**

Additional Items Noted During the Audit: While performing testing procedures, Internal Audit identified instances of inaccurate or incomplete data within company systems of record related to the following key fields:

- Inaccurate or Blank Disconnect Dates
- Inaccurate or Blank Service Line Install Dates
- Duplicate PSIDs assigned to one service location
- Inaccurate Master Tap Codes (indicates when a manifold meter or split service exists)
- Inaccurate Meter Location Codes

Internal Audit discussed these items with Management and provided examples for their review.

Background

The Pipeline and Hazardous Materials Safety Administration's (PHMSA) Code of Federal Regulations (CFR) § 192.727 (d) states the following:

Whenever service to a customer is discontinued, one of the following must be complied with:

1. The valve that is closed to prevent the flow of gas to the customer must be provided with a locking device or other means designed to prevent the opening of the valve by persons other than those authorized by the operator.
2. A mechanical device or fitting that will prevent the flow of gas must be installed in the service line or in the meter assembly.
3. The customer's piping must be physically disconnected from the gas supply and the open pipe ends sealed.

The NiSource Gas Standard 1740.010 outlines the conditions requiring abandonment specific to Meters and Service Lines. (Note: Some of the requirements below are self-imposed while others are required by individual state commissions.) Refer to the chart below:

<table>
<tr><th>State</th><th>Meter Removal Requirement</th><th>Abandonment Requirement</th></tr>
<tr><td>OH</td><td rowspan="4">Meter may remain in place for up to 24 months after the gas service has been discontinued. The meter may continue to remain in place if circumstances indicate it is appropriate.</td><td rowspan="5">Service lines that have gas discontinued should be evaluated for the prospect of future use by the end of the 24th month from the day the gas service was discontinued. If no prospect for future use can be determined, then the service line shall be abandoned. Service Lines shall be abandoned not later than the end of the 60th month from either the date that the gas service was discontinued or when the service line was placed in service for a new service line that has not had a meter installed.</td></tr>
<tr><td>PA</td></tr>
<tr><td>MD</td></tr>
<tr><td>KY</td></tr>
<tr><td>VA</td><td>Meters and meter set assemblies <u>should be left in place until full abandonment</u> of the service line can occur.</td></tr>
</table>

Audit Scope and Approach

Internal Audit reviewed the processes and controls in place related to the abandonment of service line facilities across the NiSource Gas Distribution Companies utilizing DIS in accordance with both federal and state regulatory requirements as well as any internal company Gas Standards.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided to NiSource Management.

Objective 1: Review the population of inactive, idle, and pre-new set services to determine if the NiSource Gas Companies' systems of record indicate compliance with both federal and state regulatory requirements as well as any Gas Standards.

#	Procedures	Findings Summary (Refer to Appendix A)
1	Assess processes and controls established to evaluate services for future use, to respond to changes at those locations (e.g. demolition), and to abandon in accordance with NiSource Gas Standards.	**Finding #1 – See page 6**
2	Obtain the DIS population of all service locations with premise statuses of Inactive, Idle, and Pre-New Set (Service Line Installed) and assess for compliance with both federal and state regulatory requirements as well as any internal Gas Standards.	**Finding #2 – See page 8**

Objective 2: Review available data associated with service lines eligible for abandonment, completed abandonments, and facility damages to identify trends.

#	Procedures	Findings Summary (Refer to Appendix A)
1	Obtain a listing of all damages included in the Damage Prevention Tracking System (DPTS) for the period of 1/1/17 - 4/17/19. Using this data, identify damages which occurred on inactive or idle services and assess the associated risk.	**Refer to Appendix B**
2	To determine how frequently a new service is installed after performing an abandonment, obtain all locations with a completed abandonment job order during the period of 1/1/2015 – 3/31/2019, then identify any subsequent new service line install for those same locations.	**Refer to Appendix C**

Findings (Cont'd)

Objective #1, Procedure #1: The process of completing "paper" abandonments within WMS when the service is "unlocateable" results in the possibility of removing a live line from the system of record.	**Risk Rating**
Finding #1: Services may still exist at locations where "paper abandon" job orders were executed in WMS (thereby removing the service from company records) when services were identified as "unlocatable."	**Moderate**
Process Owner(s): All NiSource Gas Distribution Presidents and General Managers; Don Eckstein, Senior Vice President Gas Support Services **Executive Council Members Responsible:** Pablo Vegas, EVP & President Gas Utilities	**Target Remediation Date:** **Q4 2019**

Observation

Criteria: The company shall maintain accurate and complete records for all service lines.

Condition: Internal Audit identified the following:

- 1 instance where a "Paper Abandon" job order was executed in WMS where the service was identified as "unlocatable" (e.g. "House Not Here").
- Multiple instances where a "Paper Abandon" job order was executed in WMS on a service identified as a single service in the system but no additional information was provided as to why a "paper" execute was appropriate.

Internal Audit noted there are scenarios when utilizing the paper abandon process is appropriate (refer to NOTE below); however, it is difficult to ensure the capture of the complete population of "Paper Abandon" job orders for risk analysis and review as the phrase is manually typed into Job Order Summary within WMS and there are often differences in how the user references it (e.g. Paper Abandon, Paper ABN, Paper ABDN, PPR ABNDN, Execute Only, EXC Only).

NOTE: The process of "paper abandoning" was originally created to represent instances where a job order needed to be completed to ensure accurate records but where no work was actually performed on the service line. See below for the following examples of when utilizing the paper abandon process is appropriate:

- If service to the primary account on a manifold setting needed to be abandoned, the service line could not physically be cut as it still serviced the remaining accounts on the manifold. As a result, a "paper abandonment" would be completed by executing a 566 job order (service line abandonment) and including the term "Paper" or "Execute Only" in the Job Order Summary Description field within WMS.
- In certain cases, if a mainline is retired and moved to another location, the services associated with the original main would have "paper abandonments" completed as there was not a need to physically cut the services from the main as the main was no longer in service. These job orders would also include the term "Paper" or "Execute Only" in the Job Order Summary Description field within WMS.

Risk/Impact: Improperly executed "paper abandon" job orders create the risk that there is no longer a record of a service line which could potentially still be attached to a live main.

Findings (Cont'd)

Objective #1, Procedure #1: The process of completing "paper" abandonments within WMS when the service is "unlocateable" results in the possibility of removing a live line from the system of record.	**Risk Rating**
Finding #1: Services may still exist at locations where "paper abandon" job orders were executed in WMS (thereby removing the service from company records) when services were identified as "unlocatable."	**Moderate**
Process Owner(s): All NiSource Gas Distribution Presidents and General Managers; Don Eckstein, Senior Vice President Gas Support Services **Executive Council Members Responsible:** Pablo Vegas, EVP & President Gas Utilities	**Target Remediation Date:** **Q4 2019**

Recommendation

NiSource Management should establish a process which outlines how to address "unlocatable" services when eligible for abandonment, including which resources and methods to locate should be attempted and how decisions should be made and documented.

NiSource Management should also ensure that "paper abandons" are reviewed for proper execution and that the documentation in the systems of record support the use of the "paper abandon".

Management Response

The state specific audit findings (referenced on the previous slide) have been assigned to the State Presidents/COOs for resolution by **December of 2019.** The SMS asset management team will utilize our risk-informed decision making model to prioritize the audit finding and determine the appropriate mitigation schedule. The asset management team will then work with internal SMEs, GMs, and State Presidents/COOs to develop a holistic mitigation plan to include appropriate layers of protection that will help prevent future occurrences; incorporating findings from each state. This action will be entered in CAP and assigned to the asset management team within SMS. The action plan will be developed by **November of 2019.**

Findings (Cont'd)

Objective 1, Procedure #2: Obtain the DIS population of all service locations with premise statuses of INACTIVE, IDLE, and Pre-New Set (Service Line Installed) and assess for compliance with both federal and state regulatory requirements as well as any internal Gas Standards.	**Risk Rating**
Finding #2: Inactive, Idle, or Pre-New Set services have not been abandoned in accordance with the 60 month timeframe outlined in NiSource Gas Standards.	**Moderate**
Process Owner(s): All NiSource Gas Distribution Presidents and General Managers; Don Eckstein, Senior Vice President Gas Support Services Executive Council Member Responsible: Pablo Vegas, EVP & President Gas Utilities	Target Remediation Date: **Q4 2019**

Observation

Criteria: Services are abandoned in accordance with the timeframes set forth in the NiSource Gas Standards.

Condition: **19%** of the service locations in Inactive, Idle or Pre-New Set status are past the **60** month requirement for abandonment as established in NiSource Gas Standard 1740.010.

Company	Services in Status Eligible for Abandonment	Services Past 60 Month Abandonment Standard	% of Total Services in Eligible Status
Ohio	73,516	11,635	16%
Kentucky	15,200	6,636	44%
Virginia	12,647	2,294	18%
Pennsylvania	15,305	1,893	12%
Maryland	2,579	264	10%
TOTAL	119,247	22,722	19%

*These populations represent services with premise statuses of Inactive, Idle, or Pre-New Set as of a point in time (March 31, 2019). Subsequent changes at service locations (e.g. re-activation of service) would result in adjustments to the populations above.

** Manifold accounts were included in the population past the 60 month requirement noted above if there were no active related accounts.

Based on the data pulled as of March 31, 2019, the company could expect an additional **~5.6K** and **~7.0K** services to come due for abandonment in the next 12 and 24 months, respectively.

Refer to the following slide for an aging analysis of the **~22K** noted above based on the Disconnect Date (Inactive or Idle Status) or Install Date (Pre-New Set Status).

Findings (Cont'd)

Objective #1, Procedure #2: (Cont'd)	Risk Rating
Finding #1: (Cont'd)	Moderate
Process Owner(s): All NiSource Gas Distribution Presidents and General Managers; Don Eckstein, Senior Vice President Gas Support Services Executive Council Member Responsible: Pablo Vegas, EVP & President Gas Utilities	Target Remediation Date: Q4 2019

Observation – Condition (Cont'd)

Disconnect Date (Inactive or Idle) Install Date (Pre-New Set)	Ohio	Kentucky	Virginia	Pennsylvania	Maryland	ALL COMPANIES
Date Blank or Invalid	1,560	381	144	318	64	2,467
1950s	7			1	-	8
1960s	12	-	1	1	-	14
1970s	9	1	-	3	-	13
1980s	946	244	66	107	7	1,370
1990s	2,142	464	152	258	18	3,034
2000s	3,911	3,504	510	506	62	8,493
2010s	3,048	2,042	1,421	699	113	7,323
TOTALS	**11,635**	**6,636**	**2,294**	**1,893**	**264**	**22,722**

Risk/Impact:

- The company may incur facility damages on inactive service lines, which could have been avoided had the abandonment been completed timely.
- Changes to service locations (e.g. demolition) are more likely to occur the longer the account is not active. If the company is not notified that a demolition occurred or if the company does not respond, it may result in difficulty to locate company assets.
- The company may incur potential fines or penalties if found to be out of compliance with NiSource Gas Standards.

Findings (Cont'd)

Objective #1, Procedure #2: (Cont'd)	**Risk Rating**
Finding #1: (Cont'd)	**Moderate**
Process Owner(s): All NiSource Gas Distribution Presidents and General Managers; Don Eckstein, Senior Vice President Gas Support Services Executive Council Member Responsible: Pablo Vegas, EVP & President Gas Utilities	**Target Remediation Date:** **Q4 2019**

Recommendation: NiSource Management should work to resolve the population of services in Inactive, Idle or Pre-New Set Status that are past the timeframe for abandonment as established in NiSource Gas Standards. Additionally, NiSource Management should establish a process going forward to monitor Inactive, Idle, or Pre-New Set locations to ensure that they are abandoned in accordance with NiSource Gas Standards.

Management Response: The SMS asset management team will utilize our risk-informed decision making model to prioritize the audit finding and determine the appropriate mitigation schedule. The asset management team will then work with internal SMEs, GMs, and State Presidents/COOs to develop a holistic mitigation plan to include appropriate layers of protection that will help prevent future occurrences; incorporating findings from each state. This action will be entered in CAP and assigned to the asset management team within SMS. The action plan will be developed by **November of 2019.**

Report Distribution

CC:

J. Hamrock
D. E. Brown
C. J. Hightman
P. T. Disser
C. W. Levander
V. Sistovaris
P. A. Vegas
S. K. Surface
K. E. Keener
C.E. Shafer
T. J. Tokish
R. D. Poe
D. T. Williamson
D. D. Schmelzer
S. J. Jain
S. Anderson
M. S. Downing
D. Douglas
Deloitte & Touche

S. W. Sylvester
B. K. Archer
P. D. Wilson
E. M. Fitzgerald
L. A. Carmean
D. A. Creekmur
R. V. Mooney
D. A. Monte
M. A. Huwar
M. J. Davidson
K. H. Cole
R. M. Kitchell
M. D. Ramsey
J. T. Croom
D. L. Reynolds
C. J. Anstead
M. Kempic
M. G. Poulin

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*

Appendix B – Facility Damages on Locations Past the 60 Month Abandonment Requirement

Internal Audit obtained the population of 3rd party damages on service lines from the period of January 1, 2017 through April 17, 2019 to analyze trends related to damages at locations in Inactive, Idle or Pre-New Set status. Out of the total 4,029 damages that occurred during the period review, 9 related to locations which were past the 60 month period for abandonment, resulting in additional costs of ~$12K. Refer to the chart below:

Company	# SL Damages	# Damages on Inactive/Idle/Pre-New Set	Past the 60 Month Period for Abandonment	Cost of Damage
Ohio	2,917	27	1	$ 895.14
Kentucky	307	12	6	$ 7,593.74
Virginia	368	9	1	$ 1,445.06
Pennsylvania	390	4	1	$ 3,009.76
Maryland	47	3	-	N/A
ALL COMPANIES	**4,029**	**55**	**9**	**$ 12,944**

Appendix C – New Service Line Install Subsequent to Abandonment

As it can be difficult to accurately predict the prospect for future use, Internal Audit performed an analysis to determine how frequently a NiSource company installed a new service line less than one year after abandoning a service line at that same location. As noted in the table below, this scenario occurred after ~**7%** of the completed abandonments.

Company	# SL Abandonments	New SL Install < 1 Year from Abandonment	%
Ohio	58,025	4,524	8%
Kentucky	4,561	143	3%
Virginia	4,336	187	4%
Pennsylvania	8,835	563	6%
Maryland	1,184	78	7%
ALL COMPANIES	**76,941**	**5,495**	**7%**

Robotics Process Automation (RPA) Design

To: Andy Zupfer, IT Program Manager – IT Applications – Ent/Corp.
Jennifer Tipton, VP – IT Applications

From: Goranka Kasic, Project Manager - Infor. Systems Audit
Greg Wancheck, Director - Infor. Systems Audit

October 8, 2019

NiSource®

NiSource Information Technology (IT) Audit aligned with NiSource's Robotics Process Automation (RPA) Project Team to provide an independent, consultative perspective on RPA's initial design integration into existing IT Service Delivery procedures/processes and the organization's current technology stack. IT Audit also evaluated RPA's alignment with NiSource's experimental Agile delivery model aspirations, including adherence to NiSource IT Project Management Methodology (PMM) controls and requirements where deemed applicable.

IT Audit's assessment over RPA Controls Design noted a single (1) LOW Risk Finding:

- **NiSource's enterprise IT solution delivery execution model has not yet been modified to absorb emerging IT technologies. As a result, NiSource IT project delivery teams engaged in the emerging technologies space, including RPA, are forced to develop and implement their own governance model and risk management/control structure unique from what NiSource has available to leverage from its traditional IT solution delivery methodology.**

    - Although understanding and supportive of the flexibility required to bring emerging IT technologies into the NiSource enterprise environment, IT Audit recommends management engage an external Subject Matter Expert (SME) who specializes in emerging technology support model development and establishment of relevant IT controls. This SME engagement for how to best introduce emerging IT technologies into NiSource would provide coaching expertise and industry-specific best practices for our internal IT practitioners and business stakeholders to leverage – specifically targeted around appropriate emerging IT technology governance models, risk awareness, and timing of IT controls adoption.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing, whereby a summary of HIGH and/or MODERATE findings will be provided to the NiSource Audit Committee. NiSource IT Audit would like to thank NiSource IT Applications, NiSource IT Project Management Office (PMO), SOX, and other RPA business stakeholders and management teams for their cooperation and time in supporting this effort.

Robotic Process Automation (RPA) is a robotics solution software, commonly referred to as a "robot" or "bot", whose function is to capture, emulate, and integrate human actions within IT applications/or systems and execute business processes. As such, this emerging technology allows organizations to automate a variety of high-volume, repetitive, and mundane business process tasks and simultaneously reduce costs. Governed by structured inputs and business rules, RPA bots can process a transaction, manipulate data, trigger responses as well as communicate with other IT applications and systems. For instance, RPA processes can range from a simple scenario such as the creation of an automatic response to an email, to the deployment of thousands of bots programmed to automate jobs in an ERP system.

RPA was initiated at NiSource in October 2018, with an objective to "establish the infrastructure, software, and governance framework to rapidly identify, develop, and deploy Robotics Process Automation (RPA) processes and bots that can automate existing manual tasks and redirect those manual efforts to innovation and more strategic tasks." Additionally, RPA was selected to be the first "pilot" project and an "early adaptor" of NiSource IT's transformational Agile delivery model, with an intent to collaborate with the NiSource IT PMO in exploring tools and deliverables applicable to an Agile methodology.

In October 2018, NiSource 's RPA Project Team also entered into a contractual agreement with UiPath, an industry leading RPA platform software provider, with an intent to utilize UiPath's primary product suite (Studio, Robot, and Orchestrator) to design, schedule, deploy and manage automation processes.

IT Audit has been aligned with the RPA project since November 2018 and continues to provide an ongoing advisory input/feedback to the RPA Project Team as an early adaptor of Agile delivery practices. As of June 2019, the RPA Project Team has been able to automate 22 NiSource business processes in the Finance, Customer, and IT departments.

Audit Scope and Approach

IT Audit aligned with NiSource IT Applications, NiSource IT Project Management Office (PMO), SOX, and other RPA business stakeholders to review evidence on processes, procedures, and controls used to actively manage the RPA project. The methods used by NiSource IT Audit may include (but are not limited to) interviews of key process owners, documentation review, observation and independent testing of appropriate standards, metrics, and system configurations.

Review procedures included the following objective(s) and associated action steps listed within the Results below:

Objective 1: Review RPA project delivery processes, and any corresponding controls, to provide a perspective on the organizational risk inherent in delivering project releases.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Assess whether scope, cost and schedule process design and change controls are in place and compliant with NiSource's IT Project Management Methodology (PMM) framework and SOX (where applicable) requirements/controls.	**No Findings Noted**
2	Assess whether RPA project quality assurance controls over solution conformance to requirements are in place and are operating as designed.	**No Findings Noted**
3	Assess and evaluate the RPA project governance model and evaluate its alignment with NiSource's enterprise policies, procedures, and standards. Assess the definition of roles and responsibilities how the Project Team is managing accountability for RPA deliverables.	Finding #1 (see Slide 6)
4	Evaluate and test the execution of RPA project's user acceptance approval activities and deployment plans to provide reasonable assurance NiSource corporate policy and/or program standards are being followed as the solution is being delivered to business stakeholders.	**No Findings Noted**
5	Assess the alignment of RPA Agile Pilot Methodology with NiSource's IT Project Management Methodology (PMM) framework and best practices, especially those related to SOX requirements.	**No Findings Noted**

Audit Scope and Approach (Con't)

Objective 2: Review the overall RPA project team conduct in helping to achieve project objectives.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Monitor and evaluate on-going integration, decision-making, alignment, governance, and communications between the RPA Project Team, IT Project Management Office (PMO), IT Applications, SOX, Finance, Customer Insights, Executive Stakeholders, vendors, and other key stakeholders to provide feedback on the approach and execution process during IT Audit's review period.	**No Findings Noted**
2	Review Lessons Learned activities performed post each Sprint completion, as well as staged Go-Live deployments, and determine how items identified are being addressed within the future/remaining RPA deployments.	**No Findings Noted**

Objective #1, Procedure #3: Assess and evaluate the RPA project governance model and evaluate its alignment with NiSource's enterprise policies, procedures, and standards. Assess the definition of roles and responsibilities how the Project Team is managing accountability for RPA deliverables.	**Risk Rating**
Finding #1: NiSource's enterprise IT solution delivery execution model has not yet been modified to absorb emerging IT technologies. As a result, NiSource IT project delivery teams engaged in the emerging technologies space, including RPA, are forced to develop and implement their own governance model and risk management/control structure unique from what NiSource has available to leverage from its traditional IT solution delivery methodology.	**Low**
Process Owner(s): Jennifer Tipton (VP – IT Applications) **Mike Rozsa (CIO)**	

Criteria: To provide NiSource IT's emerging technology program/project delivery teams, including RPA, with a governance support model and standardized operating framework that enforces accountability, consistency, and standardization.

Condition: Since both operating model and delivery execution standard(s) have not yet been defined for emerging IT technology introduction into NiSource, the RPA Project Team had to develop their own governance model and IT risk management criteria as part of its process automation deployment strategy.

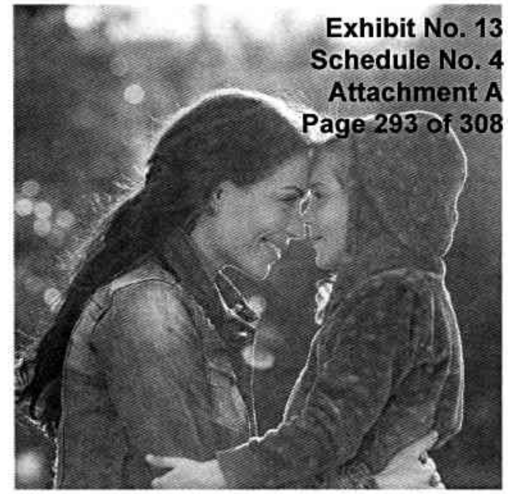
Risk/Impact: Without a defined emerging technology delivery approach and adoptable standards which address risk and control considerations, there is potential for cyber risk exposure, inadequate solution functionality, and scalability challenges.

Recommendation
Although understanding and supportive of the flexibility required to bring emerging IT technologies into the NiSource enterprise environment, IT Audit recommends management engage an external Subject Matter Expert (SME) who specializes in emerging technology support model development and establishment of relevant IT controls. This SME engagement for how to best introduce emerging IT technologies into NiSource would provide coaching expertise and industry-specific best practices for our internal IT practitioners and business stakeholders to leverage – specifically targeted around appropriate emerging IT technology governance models, risk awareness, and timing of IT controls adoption.
Management Response
NiSource IT welcomed Audit to participate in our RPA roll-out acknowledging that processes and control structures would be evolving. We are pleased that 22 business processes have been automated in our first year which you also highlighted in your review. A working steering committee has been established including business participants. This group assists with program direction and prioritization, following Nisource standard practice. In addition, IT engaged a consultant to assist with further definition of the RPA governance structure in order to develop a scalable model for the enterprise. Technical development and deployment follow IT best practice change management processes ensuring bot deployment does not create new risk. Certain control points, already present in our PMM methodology, will be further developed for RPA/Agile, and we expect this to mature and evolve through 2020.

Report Distribution

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



2018 Pension Trust and Benefits

September 20, 2019

To: Jillian Hansen, Director of Benefits

From: Tammy Frazier, Internal Audit Lead
Lin Koh, Director Internal Audit

NiSource®

Executive Summary

Internal Audit performed an audit to assess the accuracy and completeness of pension plan information and payments for the period from January 1, 2018 through December 31, 2018.

Based on procedures performed, Internal Audit noted one moderate risk finding:

- For one NiSource participant, there was an error in Alight Solutions' qualified vs nonqualified account balance calculation.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing. A summary, along with detailed observations, have been provided. IA would like to thank NiSource staff and management for their cooperation and time in support of this audit.

Background

On an annual basis, Internal Audit performs a review of the Pension Trust Fund. During this year's review, our work was designed to assess the accuracy of plan benefit payments as well as demographic data for the period under review.

Pension benefits are maintained by Alight Solutions, an outside provider. There were no significant changes in how pension benefits are managed and maintained for NiSource during 2018.

Once a NiSource participant has met the annual contribution limits set by the IRS for qualified plans, they have the option to contribute to a non-qualified plan. Contributions to a non-qualified plan are unlimited. Non-qualified plans are supplemental benefits on top of those provided by a company's qualified retirement plans and are not guaranteed as they are not required to meet ERISA standards regarding eligibility, participation, documentation and vesting.

Audit Scope and Approach

The purpose of this audit was to assess the accuracy of the plan benefit payments for the period from January 1, 2018 through December 31, 2018.

Business Objective 1: Assess the accuracy of the benefit payments for the period under review.		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Perform a benefit payment recalculation on a sample selected by Deloitte & Touche.	**Finding #1 – See Page 5**
2	Review the accuracy of prior year annuity payments.	**No Findings Noted**

Audit Scope and Approach

The purpose of this audit was to assess the accuracy of the plan benefit payments for the period from January 1, 2018 through December 31, 2018.

Business Objective 2: Validation of Information through Demographic Testing		
#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Validate participant's demographic information by comparing information provided by Hewitt to PeopleSoft.	**No Findings Noted**

Findings

Objective 1: Perform a benefit payment recalculation on a sample selected by Deloitte & Touche.	**Risk Rating**
Finding #1: A small portion of one participant's benefit payment, out of a sample of 24, was incorrectly paid out from the qualified rather than the non-qualified account.	**Moderate**
Process Owner(s): Jillian Hansen, Director of Benefits	**Target Remediation Date:**
Executive Council Member: Responsible: Ken Keener, SVP & CHRO	**March 31, 2020**

Observation

Criteria: Pension benefits are calculated with complete and accurate information and are paid accordingly.

Condition: There was an error in Alight Solutions' qualified vs nonqualified account balance calculation. This resulted in approximately $1500 of the participant's benefit ($1.3M total) being incorrectly paid out of the qualified rather than non-qualified account. The error was a result of the February 2011 deferred performance based pay not being recorded in Alight's system for this participant. A reconciliation between PeopleSoft and Alight for all other participants with deferred performance based pay for February 2011 was performed and no additional discrepancies were noted.

Risk/Impact: Payment of non-qualified benefits from the qualified account could result in potential violation of funding rules established by ERISA.

Recommendation

Internal Audit recommends that benefits for participants contributing to a non-qualified plan be subject to additional review requirements.

Management Response

The error made in the qualified vs non-qualified balance of the participant in question was made back in 2011, prior to the implementation of an annual audit process of the non-qualified pension benefit which commenced around the 2015 time frame. The audit on the non-qualified pension benefit occurs annually and ensures the participant's deferred compensation for said year is accurately reflected in Alight's system. Additionally as a result of this issue, a further review of the deferred compensation was recently added to the monthly Retirement/Earnings review to ensure all deferred compensation is accurately reflected at commencement. A comprehensive review of all participants with an outstanding non-qualified benefit (approximately 100 participants) will be completed by March 31, 2020.

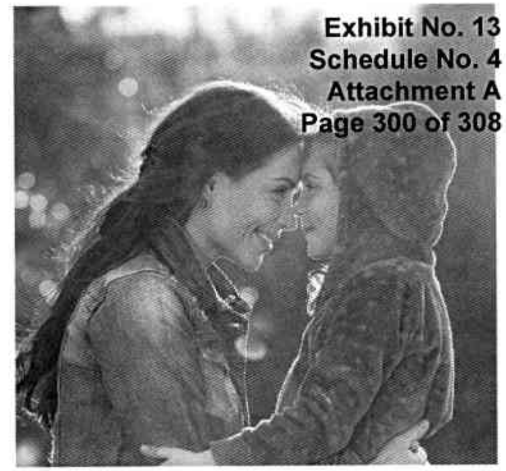
Report Distribution

CC:

- J. Hamrock
- D.E. Brown
- C.J. Hightman
- V. Sistovaris
- P.A. Vegas
- K.E. Keener
- P.T. Disser
- S.K. Surface
- M. Downing
- G. Shoemaker
- N. Drew
- Deloitte & Touche

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*



2019 Disaster Recovery

To: Katy Perez, Manager – IT Infrastructure, DC & End User Delivery
Ishreth M Sameem, Director – IT Infrastructure, DC & End User Delivery

From: Brett Welsch, Project Manager – Infor. Systems Audit
Greg Wancheck, Director - Infor. Systems Audit

September 11, 2019

NiSource®

NiSource

NiSource IT Audit conducted our 2019 Disaster Recovery (DR) Exercise review between May 2019 and July 2019. The purpose of IT Audit's assessment was to verify the capability to recover data center operating hardware, operating systems, and applications and establish network connectivity to the NiSource enterprise from the Sungard recovery facility. IT Audit reviewed various planning, status and final reports created in order to gain an understanding of results associated with the June 2019 Disaster Recovery Exercise. In addition to interviewing key individuals associated with the NiSource IT Disaster Recovery program, IT Audit reviewed contracts, presentations and other relevant documentation as a means to further understand the WIPRO / Sungard agreement.

IT Audit's 2019 Disaster Recovery Exercise analysis noted one (1) LOW risk finding:

Low Risk Finding (#1):

- **A review of the Disaster Recovery Exercise Runbook showed that while the Runbook contains enough information to assist relevant personnel in the recovery of both NiSource mainframe and open systems applications, there is an opportunity to enhance the Runbook with supplemental data. Additionally, although status reports distributed during the June 2019 DR Exercise contained some of the relevant exercise information, these can also be enhanced based on the details in the Recommendation below.**

➢ Recommendation: NiSource IT Management should engage with relevant DR support teams, vendors, business and IT application owners to determine whether additional information would be useful to the overall DR exercise planning and execution process. Included in this information could be:

- A detailed listing of responsibilities between NiSource, Sungard, WIPRO, and other major disaster recovery exercise participants, coupled with a more thorough contact information summary for DR exercise participants
- Additional clarity around the DR exercise objectives - both primary and secondary if applicable - and who is responsible for meeting each of those objectives including contact information for support personnel
- More detailed exercise timelines and the Recovery Point Objective (RPO) & Recovery Time Objective (RTO) for each application or component
- Tasks completed within the exercise timelines and timing of upcoming tasks to assist application and business participants with their involvement

Additionally, the NiSource IT DR Management team should have follow-up discussions with all recipients of the exercise status reports to determine whether information on the status report is useful or if more - or possibly less - information would be beneficial to include within the reports.

This audit conforms with the International Standards for the Professional Practice of Internal Auditing, whereby a summary of HIGH and/or MODERATE findings will be provided to the NiSource Audit Committee. NiSource IT Audit would like to thank the NiSource IT DR Management Team for their cooperation and time in support of this effort.

Background

The NiSource IT Disaster Recovery program is commissioned to support the NiSource enterprise by identifying, defining, documenting and testing recovery plans that would be executed in the event of an unforeseen interruption in computing services.

The goal of NiSource's Disaster Recovery Exercise is to validate appropriate procedures are in place and adequately provide direction for the recovery of critical NiSource computing applications. The agreed to scope, objectives and type of exercise determines the extent to which the Disaster Recovery Exercise simulates the conditions of an actual disaster situation. By verifying the documented backup and recovery procedures, the Disaster Recovery Exercise is designed to identify gaps and areas for procedural improvement to ensure the company is prepared for a true disaster scenario.

NiSource, through its agreement with WIPRO, contracts with Sungard to provide the facilities, infrastructure and computing hardware required in the event of a disaster or prolonged service interruption. Twice a year, NiSource IT Management and WIPRO plan a joint exercise to test the viability of recovery plans for a defined set of applications.

The June 2019 Disaster Recovery Exercise was conducted between June 17 - 20, 2019 with an overall goal to recover eleven (11) Mainframe applications and twenty-one (21) Distributed applications.

During the June 2019 Disaster Recovery Exercise, NiSource recovered the Mainframe environment utilizing Sungard's hot-site rapid recovery procedure while the twenty-one (21) applications residing on the Distributed platform were recovered via tape backup.

Audit Scope and Approach

For testing purposes, IT Audit verified NiSource IT's capability to recover data center operating hardware, operating systems, and applications and establish network connectivity to the enterprise from the Sungard recovery facility, as specified in the Disaster Recovery Exercise Runbook, created by WIPRO.

Objective 1: Verify the adequacy, efficiency, and effectiveness of the IT disaster recovery plan, support personnel, and contracted services in restoring critical mainframe and distributed systems, related business applications, and network connectivity as required to meet management's expectations in the event of a prolonged IT service disruption.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Review management's objectives and expectations regarding the continuity of business operations to ensure they are clearly defined and communicated. Additionally, review user responsibilities to ensure responsibilities meet management's objectives.	Finding #1 (See Slide #7)
2	Ensure adequate human resources are assigned to the DR exercise team.	No Findings Noted
3	Verify timely and appropriate exercise status reports are completed and distributed reflecting issues or problems to be resolved in a quick and efficient manner to minimize plan disruption.	No Findings Noted
4	Review recovery issues, irregularities and other anomalies encountered during the exercise for adequate documentation to perform a post recovery review and adjust recovery plans as needed.	No Findings Noted
5	Ensure Recovery Time Objectives (RTOs) and Business Criticality are defined for each business application and ensure RTOs are met during the Disaster Recovery Exercise. Assess the process commenced by NiSource IT Disaster Recovery Management to evaluate (and update where needed) RTO's through alignment with NiSource business application owners.	No Findings Noted

Audit Scope and Approach (Cont'd)

Objective 2: Evaluate the Wipro Disaster Recovery services obligations, as detailed in the WIPRO Master Services Agreement (MSA), and compare covered applications with the status of NiSource tested applications.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Ascertain the full population of applications covered in the WIPRO contract to determine what applications are available to test.	**No Findings Noted**
2	Of those applications determined above, identify applications that have been tested and when was the last test conducted.	**No Findings Noted**
3	Of those applications determined in step 1 above, identify applications which have never been tested along with rational as to why.	**No Findings Noted**

Objective 3: Evaluate the WIPRO Disaster Recovery services obligations to determine requirements and ownership of documents related to recovery test "scripts" and application recovery procedures.

#	Procedures	Findings Summary (Refer to Appendix A for rating scale)
1	Determine if recovery test "scripts" and application recovery procedures are documented and readily available from PlanningIT.	**No Findings Noted**
2	Assess the process by which recovery test "scripts" and application recovery procedures are determined to be up-to-date and re-evaluated on a periodic basis.	**No Findings Noted**
3	Identify who is responsible for ownership and maintenance of the recovery test "scripts" and application recovery procedures.	**No Findings Noted**
4	Determine if a process or procedure exists to have Business / Application owners update PlanningIT in a timely manner to ensure disaster recovery (and other application information) is being kept current.	**No Findings Noted**
5	Ensure key PlanningIT application fields for both recovery planning and executive reporting are utilizing change management procedures to minimize unauthorized updates.	**No Findings Noted***

*** In the second half of 2019, NiSource IT is starting an initiative to incorporate the APM (Application Program Management) module into ServiceNow. This module will replace Planning IT as the repository for applications and their properties. IT Audit will be engaged in this effort with the project team to ensure that the application data within PlanningIT is reviewed, updated, and 'cleaned' before the information is entered into the new SNOW APM module, with processes implemented to keep the APM information current.**

Findings

Objective #1, Procedure #1: Review management's objectives and expectations regarding the continuity of business operations to ensure they are clearly defined and communicated. Additionally, review user responsibilities to ensure responsibilities meet management's objectives.	**Risk Rating**
Finding: Review of the communication sent both prior to and during the exercise showed that there is an opportunity for enhancement in the information being communicated by both the NiSource and support teams. A review of the exercise runbook showed that while the runbook contains enough information to assist in the recovery of the mainframe and open systems applications, there is an opportunity to expand the runbook with additional information. Additionally, while status reports sent during the exercise have some of the relevant exercise information, these can also be enhanced to include additional information.	Low
Process Owner(s): Katy Perez (Manager IT Infrastructure), Ishreth Sameem (Director IT Infrastructure), Greg Skinner (VP – IT Infrastructure)	**Target Remediation** N/A

Observation

Criteria: The Disaster Recovery Exercise Runbook (Plan) is a complete document with all the information needed to ensure that participants know the exercise objectives, responsibilities and other useful information that will assist in the successful execution of the exercise.

Condition: The Disaster Recovery Exercise Runbook (Plan) is incomplete, leading to confusion about responsibilities, objectives or timing of activities.

Risk/Impact: The Disaster Recovery Exercise participants could be unsure of their objectives or responsibilities leading to an incomplete or unsuccessful recovery test.

Recommendation

NiSource IT Management should engage with relevant support teams, vendors, business and IT application owners to determine whether additional information would be useful to the overall exercise planning and execution process. Included in this information could be:

- A detailed listing of responsibilities between NiSource, Sungard, WIPRO, and other major disaster recovery exercise participants, coupled with a more thorough contact information summary for DR exercise participants
- Additional clarity around the DR exercise objectives - both primary and secondary if applicable - and who is responsible for meeting each of those objectives including contact information for support personnel
- More detailed exercise timelines and the Recovery Point Objective (RPO) & Recovery Time Objective (RTO) for each application or component
- Tasks completed within the exercise timelines and timing of upcoming tasks to assist application and business participants with their involvement

Additionally, the NiSource IT DR Management team should have follow-up discussions with all the recipients of the exercise status reports to determine if the information on the status report is useful or if more - or possibly less - information would be beneficial to include within the reports.

Management Response

The Disaster Recovery Management team will ensure to review the Communication Plan and the DR Exercise Run Book with all parties well in advance to ensure that all parties are in agreement with the timing and delivery of the communication channels during the DR exercise. As part of the planning the teams are working to ensure that more detailed listing of responsibilities as well as clear objectives are identified from all parties.

Report Distribution

Appendix A

Rating Scale for Audit Findings	
High	Requires corrective action due to high risk of one or more of the following: safety risk; material financial statement impact or fraud; significant violation of established policies and procedures; process/control environment breakdown for critical business processes; high likelihood of legal/regulatory fines or penalties for non-compliance; or significant brand/reputational exposure. *High risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform independent effectiveness validation testing of a Management remediated, high risk finding prior to official closure.*
Moderate	Requires corrective action due to moderate risk of one or more of the following: safety risk; potential for significant financial statement impact or fraud; process/control design deficiency; process/control not operating effectively; moderate likelihood of legal/regulatory fines or penalties; or potential for negative publicity/brand impact. *Moderate risk findings require an auditee Management Response coupled with a Target Implementation Date for remediation.* *Internal Audit is required to perform an independent process design review of a Management remediated, moderate risk finding prior to official closure.*
Low	Requires minimal attention: no material financial or operational impact; low probability of residual risk; process/controls operating below optimal levels. *Low risk findings do not require an auditee Management Response nor a Target Implementation Date for remediation.* *Internal Audit does not perform follow-up review procedures on low risk findings.*

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

19. List extraordinary property losses as a separate item, not included in operating expenses or depreciation and amortization. Sufficient supporting data must be provided.

Response:

Columbia Gas of Pennsylvania, Inc. has no extraordinary property losses.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

27. Submit a schedule for gas producing units retired or scheduled for retirements subsequent to the test year showing station, units, Mcf capacity, hours of operation during test year, net output produced and cents/Mcf of maintenance and fuel expenses.

Response:

None.