APPENDIX F – BILLING METRICS

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A – INTRODUCTION

BILLING DOMAIN GENERAL SUMMARY

The billing domain in Pennsylvania (PA) consists of six metrics with a total of 13 sub-metrics in the PA Carrier-to-Carrier Guidelines adopted in June 2003. The metrics and the number of sub-metrics are:

- **BI-1:** Timeliness of Daily Usage Feeds (1)
- **BI-2:** Timeliness of Carrier Bill (1)
- **BI-3:** Billing Accuracy and Claims Processing (5)
- **BI-6:** Completeness of Usage Charges (2)
- **BI-7:** Completeness of Fractional Recurring Charges (2)
- **BI-8:** Non-Recurring Charge Completeness (2)

For purposes of the Pennsylvania Performance Assurance Plan (PA PAP), only one Billing sub-measure is included. This is BI-1-02 percent Daily Usage Feed (DUF) in four days, which is reported for both Unbundled Network Element (UNE) and Resale.

To the extent possible throughout the Verizon PA review, DCI attempted to recreate Verizon PA results from source data all the way through to the computation and reporting of metrics. In the billing domain, the amount of the data involved, such as DUF files, made it impractical to perform a "cradle to grave" metric evaluation. DCI also assumed from our previous experience that the billing systems would have received a great deal of attention during the Operations Support System (OSS) testing which was a 'cradle to grave" review. Further, much of the data originates in legacy systems, in particular the Carrier Access Billing Systems (CABS) and Customer Record Information System (CRIS) both of which are difficult to extract data from for sampling purposes. DCI was able to utilize data from the Data Mart to replicate Verizon PA results. DCI was able to validate substantially all Verizon PA reported results. This involved a review of all algorithms used by Verizon PA, DCI Structured Query Language (SQL) coding to replicate the Verizon PA data, validation of exclusions and calculation of aggregate and sample Competitive Local Exchange Carriers (CLEC) specific metrics where possible.

DCI also relied upon CLEC input to determine if there were problems in the billing domain requiring additional scrutiny. DCI solicited from all the cooperating CLECs (see Chapter XI – CLEC participation for a list) and received input from several. No CLEC reported issues or concerns with the Billing Metrics, or billing in general, and the answering CLECs responded definitively that they had no problems in the billing area.[1]

[1] However after completing the review, some CLECs described DUF issues.

April/May – June Plan Changes

Two sub-metrics were added to the billing domain in the June plan. These two metrics are:

- **BI-3-04:** % CLEC Billing Claims Acknowledged within two Business Days
- **BI-3-05:** % CLEC Billing Claims Resolved within 28 Calendar Days After Acknowledgement

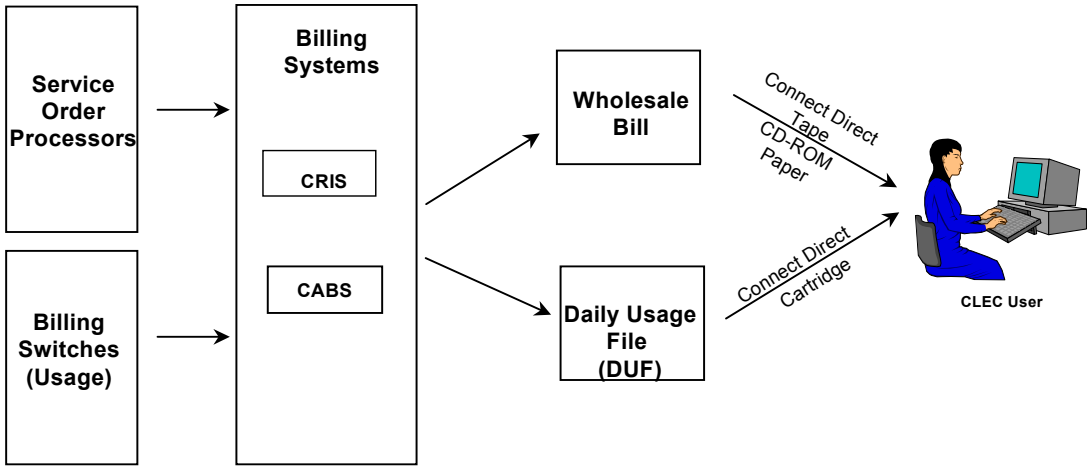
Six sub-metrics were dropped from the plan in June. These metrics were:

- **BI-1-01:** Customer Service Record – Electronic Data Interchange (EDI)
- **BI-1-03:** Customer Service Record - WEB Graphical User Interface (GUI)
- **BI-1-04:** % DUF in 8 Business Days
- **BI-4-01:** Address Validation -CORBA
- **BI-4-02:** % Corrected Usage Records Delivered On Time
- **BI-5-01:** % Accuracy of Mechanized Bill Feed

Systems Overview

All of the billing domain metrics derive initially from either Service Order Processors or Billing Switches which are captured in CRIS and CABS billing systems. CABS and CRIS generate the Wholesale Bills and also the Daily Usage Feeds (DUF). A simplified chart of this is shown on Table F-1.

Table F-1 – Simplified Bill Metric Flow[2]



CLEC Comments On Billing

As noted in the summary section, DCI requested comments from participating CLECs regarding billing issues, error and concerns. Most CLECs did not respond, but those that did indicated that there were no issues of note.[3]

[2] Billing Workshop- Doc1a-Billing Process Flows –Verizon PA Confidential

[3] AT&T responded that "At this time, AT&T has not had any significant billing problems in PA with Verizon PA wholesale billing system."

B – SPECIFIC METRICS

BI-1: TIMELINESS OF DAILY USAGE FEEDS

Definition

The sub-metrics within BI-1 report the number of business days from the creation of the billing message to the date that the information is made available by Verizon PA to the CLEC(s) via a Daily Usage Feed (DUF). In Pennsylvania the only sub-metric reported within BI-1 is DUF presented within four business days. The Standard is 95% of DUFs reported in 4 Business Days.

The calculation process starts with collection of the data from the switch.[4] For CLECs requesting this service, usage records are to be provided each business day. However, not all offices poll usage every business day. Also, weekend and holiday usage is captured on the next business day. Usage for all CLECs is collected at the same time as Verizon PA.

Sub-Metrics

- **BI-1-02:** % DUF in Four (4) Business Days

Formula

BI-1-02: Carrier-to-Carrier (C2C) formula is defined as: (Total usage records in "y" days divided by the total records on files) multiplied by 100. "y" = 4

The Carrier Metric Algorithm (CMA) further defines the formula as:

- **Numerator:** Number of usage records on daily usage feed tapes processed during the month, where the difference between current date and call date is four (4) days or less.

- **Denominator:** Number of usage records on DUF tapes processed during the month.

DCI Derived Metric Statement

For BI-1-02, DCI sought to validate the count of usage records on the daily usage feeds for three months. This was to determine if all records required to be processed were being included in metric calculations. DCI also verified that the program was properly calculating the difference between the recorded call date and the measurement date which is defined as being four days or less. DCI then verified the calculations against the total number of DUF records processed for one month.

DCI Derived Metric Statement (SQL) BI-1-02-2030 CLEC Numerator UNE

```
select a11.TEST_ACC_IND TEST_ACC_IND,
a11.STATE_CODE STATE_CODE,
```

[4] IR B-022 and C2C guidelines

```
a11.REPORT_PERIOD REPORT_PERIOD,
a11.NMP_CLEC_ID NMP_CLEC_ID,
sum(a11.UNE_COUNT) BI102_C_N1
from TB_DM_BIL_MBF_DUF_DTL_FMT a11
where ((a11.TEST_ACC_IND = 'N'
or a11.TEST_ACC_IND = 'V')
and a11.NMP_CLEC_ID <> 'RTL9'
and a11.DAY_COUNT_UNE = 4
and to_char(a11.FILE_SENT_DATE,'YYYYMM') =
a11.REPORT_PERIOD
and a11.SYSTEM_ID in ('A', 'P')
and a11.REC_TYPE in (35))
group by a11.TEST_ACC_IND,
a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.NMP_CLEC_ID
```

DCI Derived Metric Statement (SQL) BI-1-02-2030 CLEC Numerator 2 Reseller

```
select a11.TEST_ACC_IND TEST_ACC_IND,
a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.NMP_CLEC_ID NMP_CLEC_ID,
sum(a11.RESELLER_COUNT) BI102_C_N2
from TB_DM_BIL_MBF_DUF_DTL_FMT a11
where ((a11.TEST_ACC_IND = 'N'
or a11.TEST_ACC_IND = 'V')
and a11.NMP_CLEC_ID <> 'RTL9'
and a11.DAY_COUNT_RESELLER = 4
and to_char(a11.FILE_SENT_DATE,'YYYYMM') =
a11.REPORT_PERIOD
and a11.SYSTEM_ID in ('A', 'P')
and a11.REC_TYPE in (35))
group by a11.TEST_ACC_IND,
a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.NMP_CLEC_ID
```

DCI then summed the CLEC numerators as shown in the following.

DCI Derived Statement For The Summary Numerator:

```
BI-1-02-2030 CLEC Numerator 1 + Numerator 2
DCI Derived Metric Statement (SQL)
VW_BI_1_02_PA0503_C_NS
select nu.TEST_ACC_IND,
nu.STATE_CODE,
nu.REPORT_PERIOD,
nu.NMP_CLEC_ID,
sum(nu.BI102_C_NU) BI102_C_NS
from VW_BI_1_02_2030_PA0503_C_NU nu
WHERE nu.BI102_C_NU IS NOT NULL
GROUP BY
nu.TEST_ACC_IND,
nu.STATE_CODE,
nu.REPORT_PERIOD,
nu.NMP_CLEC_ID
```

DCI then derived the denominator for both CLEC UNE and Reseller.

DCI Derived Metric Statement (SQL) BI-1-02-2030 CLEC Denominator 1 UNE

```
select a11.TEST_ACC_IND TEST_ACC_IND,
a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.NMP_CLEC_ID NMP_CLEC_ID,
sum(a11.UNE_COUNT) BI102_C_D1
from TB_DM_BIL_MBF_DUF_DTL_FMT a11
where ((a11.TEST_ACC_IND = 'N'
or a11.TEST_ACC_IND = 'V')
and a11.NMP_CLEC_ID <> 'RTL9'
and a11.DAY_COUNT_UNE = 0
and to_char(a11.FILE_SENT_DATE,'YYYYMM') =
a11.REPORT_PERIOD
and a11.SYSTEM_ID in ('A', 'P')
and a11.REC_TYPE in (35))
group by a11.TEST_ACC_IND,
a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.NMP_CLEC_ID
```

DCI Derived Metric Statement (SQL) BI-1-02-2030 CLEC Denominator 2 Reseller

```
select a11.TEST_ACC_IND TEST_ACC_IND,
a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.NMP_CLEC_ID NMP_CLEC_ID,
sum(a11.RESELLER_COUNT) BI102_C_D2
from TB_DM_BIL_MBF_DUF_DTL_FMT a11
where ((a11.TEST_ACC_IND = 'N'
or a11.TEST_ACC_IND = 'V')
and a11.NMP_CLEC_ID <> 'RTL9'
and a11.DAY_COUNT_RESELLER = 0
and to_char(a11.FILE_SENT_DATE,'YYYYMM') =
a11.REPORT_PERIOD
and a11.SYSTEM_ID in ('A', 'P')
and a11.REC_TYPE in (35))
group by a11.TEST_ACC_IND,
a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.NMP_CLEC_ID
```

DCI then summed the CLEC denominators as shown in the following.

DCI Derived Statement For The Summary Denominator:

```
BI-1-02-2030 CLEC Denominator 1 + Denominator 2
DCI Derived Metric Statement (SQL)
VW_BI_1_02_PA0503_C_DS
select du.TEST_ACC_IND,
du.STATE_CODE,
du.REPORT_PERIOD,
du.NMP_CLEC_ID,
```

```
sum(du.BI102_C_DU) BI102_D_DS
from VW_BI_1_02_2030_PA0503_C_DU du
WHERE du.BI102_C_DU IS NOT NULL
GROUP BY
du.TEST_ACC_IND,
du.STATE_CODE,
du.REPORT_PERIOD,
du.NMP_CLEC_ID
```

The results of the DCI derived SQL metric calculation and division are shown on Table F-2:

Table F – 2 – DCI Derived Metric Results[5]

	Numerator	Denominator	Result
April	157191579	172675039	91.03%
May	170945573	174403969	98.02%
June	177862191	178459599	99.67%

Report Dimension

BI-1: CLEC Aggregate And Specific

- April/May PA PAP MOE Resale, MOE UNE
- June MOE Resale, Mode of Entry (MOE) UNE-P

Exclusions

The only exclusions are Verizon PA test orders.

Performance Standard

The performance standard of BI-1 is 95% DUF files delivered within four business days
For the review period, the following were the results for PA aggregate, as shown on Table F-3:

Table F – 3

	April	May	June
Standard	95%	95%	95%
Verizon PA Reported	91.03%	98.02%	99.67%
DCI Calculated	91.03%	98.02%	99.67%

Metric Creation

Usage data for CLEC customers is collected via polling from Verizon PA switches. A subsystem of CRIS, the Bell Atlantic Usage Interface (BAUI) is responsible for distribution of Resale, UNE and UNE Access DUF files. Information is sent daily to Network Metric Platform (NMP) where all the

[5] DCI file BI-1-02-2030.xls

Verizon PA metric calculations are performed. The entire process is automated with no intervention with the exception of Post Completion Discrepancies (PCDs) which require manual intervention.

The NMP files for BI-1 are:

- SO.BAUI101.DUFDTL.DLY.TXT
- SO.BAUI102.DUFDTL.DLY.TXT
- SO.BAUI103.DUFDTL.DLY.TXT
- SO.BAUI104.DUFDTL.DLY.TXT

All of these files are received daily.

BI-2 TIMELINESS OF CARRIER BILLS

Definition

The percent of carrier bills sent to the carrier, unless the CLEC requests special treatment, within 10 business days of the bill date. The bill date is the end of the billing period for recurring, non-recurring and usage charges. The start date for the metric is the next business day following the close of the billing cycle.[6] Wholesale and retails bills are combined within a cycle. (i.e. there are no Wholesale cycles)

Sub-metrics

- **BI-2:** There are no sub-metrics within BI-2.

Formula

Both the PA April/May CMA and the PA April/May C2C guidelines provide the following formula.

- **Numerator:** Number of carrier bills sent to CLEC within 10 business days of bill date
- **Denominator:** Number of carrier bills distributed

DCI Derived Metric Statement

DCI validated the algorithms used to calculate BI-02 by validating the number of carrier bills sent within 10 business days of the bill date against the total number of bills distributed for the month.

DCI first extracted Numerator 1 and Denominator 1 for UNE and then did the same for numerator 2 and denominator 2, which are for Resale.

[6] Interview B-022

Table F-4 – DCI Derived Metric Statement (SQL)

BI-1-02-2030 CLEC Numerator 1	BI-1-02-2030 CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(distinct a11.ACC_KEY||a11.STATE_CODE||a11.NMP_CLEC_ID||to_char(a11.BILL_DIST_DATE,'MMDDYYYY')||a11.BILL_MEDIA||a11.BILL_TYPE) BI201_C_N1 from TB_DM_BIL_TIMELINESS_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (14) and to_char(a11.BILL_DIST_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.SYSTEM_ID in ('E', 'F', 'G', 'N', 'S') and ((a11.BILL_MEDIA in ('D', 'P') and a11.STATE_CODE = 'PN') or (a11.BILL_MEDIA = 'P' and a11.STATE_CODE = 'PA')) and a11.BILL_PERIOD_IND = 'Y' and a11.PRODUCT_IND = 'U' and a11.EBILL_IND = 'N') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(distinct a11.ACC_KEY||a11.STATE_CODE||a11.NMP_CLEC_ID||to_char(a11.BILL_DIST_DATE,'MMDDYYYY')||a11.BILL_MEDIA||a11.BILL_TYPE) BI201_C_N2 from TB_DM_BIL_TIMELINESS_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (14) and to_char(a11.BILL_DIST_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('E', 'F', 'G', 'N', 'S') and ((a11.BILL_MEDIA in ('D', 'P') and a11.STATE_CODE = 'PN') or (a11.BILL_MEDIA = 'P'and a11.STATE_CODE='PA')) and a11.BILL_PERIOD_IND = 'Y' and a11.EBILL_IND = 'N') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI then summed the numerators using:

BI-2-01-2030 CLEC Numerator 1 + Numerator 2

```
select nu.TEST_ACC_IND,
nu.STATE_CODE,
nu.REPORT_PERIOD,
nu.NMP_CLEC_ID,
sum(nu.BI201_C_NU) BI201_C_NS
from VW_BI_2_01_2030_PA0503_C_NU nu
WHERE nu.BI201_C_NU IS NOT NULL
GROUP BY
nu.TEST_ACC_IND,
nu.STATE_CODE,
nu.REPORT_PERIOD,
nu.NMP_CLEC_ID
```

Table F-5 - DCI Derived Metric Statement (SQL)

BI-1-02-2030 CLEC Denominator 1	BI-1-02-2030 CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(distinct a11.ACC_KEY||a11.STATE_CODE||a11.NMP_CLEC_ID||to_char(a11.BILL_DIST_DATE,'MMDDYYYY')||a11.BILL_MEDIA||a11.BILL_TYPE) BI201_C_D1 from TB_DM_BIL_TIMELINESS_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (14) and to_char(a11.BILL_DIST_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.SYSTEM_ID in ('E', 'F', 'G', 'N', 'S') and ((a11.BILL_MEDIA in ('D', 'P') and a11.STATE_CODE = 'PN') or (a11.BILL_MEDIA = 'P'and a11.STATE_CODE ='PA')) and a11.PRODUCT_IND = 'U' and a11.EBILL_IND = 'N') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(distinct a11.ACC_KEY||a11.STATE_CODE||a11.NMP_CLEC_ID||to_char(a11.BILL_DIST_DATE,'MMDDYYYY')||a11.BILL_MEDIA||a11.BILL_TYPE) BI201_C_D2 from TB_DM_BIL_TIMELINESS_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (14) and to_char(a11.BILL_DIST_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('E', 'F', 'G', 'N', 'S') and ((a11.BILL_MEDIA in ('D', 'P') or a11.STATE_CODE = 'PN') or (a11.BILL_MEDIA = 'P' and a11.STATE_CODE='PA')) and a11.EBILL_IND = 'N') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI then summed the CLEC denominators using the following SQL statement.

BI-2-01-2030 CLEC Denominator 1 + Denominator 2

DCI Derived Metric Statement (SQL)
VW_BI_2_01_PA0503_C_DS

```
select du.TEST_ACC_IND,
du.STATE_CODE,
du.REPORT_PERIOD,
du.NMP_CLEC_ID,
sum(du.BI201_C_DU) BI201_D_DS
from VW_BI_2_01_2030_PA0503_C_DU du
WHERE du.BI201_C_DU IS NOT NULL
GROUP BY
du.TEST_ACC_IND,
du.STATE_CODE,
du.REPORT_PERIOD,
du.NMP_CLEC_ID
```

DCI Calculations For BI-2-01-2030 CLEC Aggregate

DCI then took the sum of the numerators and divided by the sum of the denominators and multiplied times 100 with the following result:

Table F-6 – BI-2-01-2030 CLEC Aggregate

	April	May	June
Verizon PA Reported	100%	100%	100%
DCI results	100%	100%	100%

DCI Derived Metric Statement (SQL) For BI-2-01-2030 Individual CLECs

DCI also developed a metric statement for individual CLEC results, but since BI-2 is not reported at an individual level, no comparison was performed at that level.

Report Dimension

BI-2 CLEC aggregate is reported in the C2C report for April , May and June but is not included in the PAP.

Exclusions

Verizon PA test orders are excluded.

Performance Standard

The performance standard for BI-2 is 98% within ten business days.

Metric Creation

BI-2 is a totally automated metric with no intervention in the calculation. Primary systems and subsystems are CABS and Bill Reformat System (BRS). These systems supply the data for the FACT Table TB_DM_BIL_TIMELINESS_FACT. All of the actual metric calculations are then performed within NMP.

BI-3: BILLING ACCURACY & CLAIMS PROCESSING

BI-3 Billing Accuracy and Claims Processing have five sub-metrics which fall into one of the two categories. Sub metrics BI- 1,2 and 3 measure billing accuracy including dollar magnitude and the absolute number of adjustments. BI-4 and 5 measure claims processing or more accurately, Verizon PA responsiveness to claims and their processing.

Definition

For sub-metrics BI-3-01, BI-02 and BI-3-03 the definition is the percentage of carrier bill Verizon PA charges adjusted due to billing errors. Performance is reported by CLEC based upon bill of record.

For sub-metrics BI-3-04 and BI-3-05 These sub-metrics measure the promptness with which Verizon PA acknowledges and resolves CLEC billing adjustment claims.

- Business hours for receipt of billing claims are Monday through Friday, 8:00AM until 5:00PM, excluding Verizon PA legal holidays;

- CLEC billing adjustment claims received outside these business hours shall be considered received at 8:00AM on the first business day thereafter.

- Day of receipt shall be considered Day zero (0) for computing acknowledgement performance.

- Day of acknowledgement of a billing claim is considered Day zero (0) for computing resolution performance.

Sub-Metrics

- **BI-3-01:** % Billing Adjustments- Paper Bills (CRIS & CABS combined)
- **BI-3-02:** % Billing Adjustments – Number of Adjustments
- **BI-3-03:** % Billing Adjustments- Electronic Bills
- **BI-3-04:** % CLEC Billing Claims Acknowledged within two (2) Business Days
- **BI-3-05:** % CLEC Billing Claims Resolved within 28 Calendar Days After Acknowledgement

Formula

Table F-7

Metric	Numerator	Denominator
BI-3-01	Count of dollars adjusted for billing errors on paper bill	Total Dollars Billed on paper bill
BI-3-02	Count of adjustments for billing errors	Total Bills
BI-3-03	Count of dollars adjusted for billing errors on electronic bill	Total Dollars Billed on electronic bill
BI-3-04	Number of billing claims acknowledged during the month within two business days.	Total number of valid/complete billing adjustment claims acknowledged during the month.
BI-3-05	Number of billing adjustment claims during the month resolved within 28 calendar days after acknowledgement.	Total number of billing adjustment claims resolved during the month.

DCI Derived Metric Statement

BI-3-01:

Table F-8 – DCI Derived Metric Statement

BI-3-01-2030 CLEC Numerator 1	BI-3-01-2030 CLEC Numerator 2
SELECT A11.TEST_ACC_IND TEST_ACC_IND, A11.STATE_CODE STATE_CODE, A11.REPORT_PERIOD REPORT_PERIOD, A11.NMP_CLEC_ID NMP_CLEC_ID, SUM(ABS(A11.ADJ_AMT)) BI301RESALEN, SUM(ABS(A11.ADJ_AMT)) BI301_C_N1 FROM TB_DM_BIL_ADJ_FMT A11 WHERE ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and ((a11.STATE_CODE <> 'PA' and a11.REC_TYPE in (22, 23)) or (a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22))) and (a11.STATE_CODE not in ('PA', 'NJ') or (a11.STATE_CODE in ('PA', 'NJ') and a11.EBILL_IND = 'N')) and a11.STATE_CODE in ('NJ', 'PA') and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.ADJ_AMT)) BI301UNENUME, sum(ABS(a11.ADJ_AMT)) BI301_C_N2 from TB_DM_BIL_ADJ_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and (a11.STATE_CODE not in ('PA', 'NJ') or (a11.STATE_CODE in ('PA', 'NJ') and a11.EBILL_IND = 'N')) and ((a11.STATE_CODE <> 'PA' and a11.REC_TYPE in (22, 23)) or (a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22))) and a11.STATE_CODE in ('NJ', 'PA') and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W') and a11.PRODUCT_IND = 'U') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-9 – DCI Derived Metric Statement

BI-3-01-2030 CLEC Denominator 1	BI-3-01-2030 CLEC Denominator 2
SELECT A11.TEST_ACC_IND TEST_ACC_IND, A11.STATE_CODE STATE_CODE, A11.REPORT_PERIOD REPORT_PERIOD, A11.NMP_CLEC_ID NMP_CLEC_ID, SUM(ABS(A11.ADJ_AMT)) BI301RESALEN, SUM(ABS(A11.ADJ_AMT)) BI301_C_N1 FROM TB_DM_BIL_ADJ_FMT A11 WHERE ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and ((a11.STATE_CODE <> 'PA' and a11.REC_TYPE in (22, 23)) or (a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22))) and (a11.STATE_CODE not in ('PA', 'NJ') or (a11.STATE_CODE in ('PA', 'NJ') and a11.EBILL_IND = 'N')) and a11.STATE_CODE in ('NJ', 'PA') and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.ADJ_AMT)) BI301UNENUME, sum(ABS(a11.ADJ_AMT)) BI301_C_N2 from TB_DM_BIL_ADJ_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and (a11.STATE_CODE not in ('PA', 'NJ') or (a11.STATE_CODE in ('PA', 'NJ') and a11.EBILL_IND = 'N')) and ((a11.STATE_CODE <> 'PA' and a11.REC_TYPE in (22, 23)) or (a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22))) and a11.STATE_CODE in ('NJ', 'PA') and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W') and a11.PRODUCT_IND = 'U') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-10 – DCI Derived Metric Statement

BI-3-01-2030 Verizon Numerator	BI-3-01-2030 Verizon Denominator
elect a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.ADJ_AMT)) BI301RETAILN, sum(ABS(a11.ADJ_AMT)) BI301_V_N1 from TB_DM_BIL_ADJ_FMT a11 where (a11.NMP_CLEC_ID = 'RTL9' and ((a11.STATE_CODE <> 'PA' and a11.REC_TYPE in (22, 23)) or (a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22))) and (a11.STATE_CODE not in ('PA', 'NJ') or (a11.STATE_CODE in ('PA', 'NJ') and a11.EBILL_IND = 'N')) and a11.STATE_CODE in ('NJ', 'PA') and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W') and a11.PRODUCT_IND = 'E') group by a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_AMT)) BI301RETAILD, sum(ABS(a11.BILL_AMT)) BI301_V_D1 from TB_DM_BIL_DETAIL_FMT a11 where (a11.NMP_CLEC_ID = 'RTL9' and (a11.STATE_CODE not in ('PA', 'NJ') or (a11.STATE_CODE in ('PA', 'NJ') and a11.EBILL_IND = 'N')) and ((a11.STATE_CODE <> 'PA' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17)) or (a11.STATE_CODE = 'PA'and a11.REC_TYPE in (11, 12, 13, 17))) and a11.STATE_CODE in ('NJ', 'PA') and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W') and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'E') group by a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI was able to exactly replicate Verizon PA reported results for both Verizon PA and CLECs.

BI-3-02:

Table F-11 – DCI Derived Metric Statement

CLEC Numerator 1	CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(a11.ACC_KEY) BI302RESALEN, count(a11.ACC_KEY) BI302_C_N1 from TB_DM_BIL_ADJ_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22, 23) and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	BI-3-02-2030 CLEC Numerator 2 DCI Derived Metric Statement (SQL) VW_BI_3_02_PA0503_C_N2 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(a11.ACC_KEY) BI302UNENUME, count(a11.ACC_KEY) BI302_C_N2 from TB_DM_BIL_ADJ_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22, 23) and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-12 – DCI Derived Metric Statement

CLEC Numerator 1	CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(distinct a11.ACC_KEY||a11.STATE_CODE||a11.NMP_CLEC_ID||to_char(a11.BILL_DATE,'MMDDYYYY')) BI302RESALED, count(distinct a11.ACC_KEY||a11.STATE_CODE||a11.NMP_CLEC_ID||to_char(a11.BILL_DATE,'MMDDYYYY')) BI302_C_D1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PA' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(distinct a11.ACC_KEY||a11.STATE_CODE||a11.NMP_CLEC_ID||to_char(a11.BILL_DATE,'MMDDYYYY')) BI302UNEDENO, count(distinct a11.ACC_KEY||a11.STATE_CODE||a11.NMP_CLEC_ID||to_char(a11.BILL_DATE,'MMDDYYYY')) BI302_C_D2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PA' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI then summed the numerators and denominators and divided using excel spreadsheet commands. DCI was able to exactly replicate Verizon PA reported CLEC results.

BI-3-03

Table F-13 – DCI Derived Metric Statement

Not Applicable	

BI-3-04

Table F-14 – DCI Derived Metric Statement

BI-3-04-2030 CLEC Numerator 1	BI-3-04-2030 CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI304RESALEN, count(1) BI304_C_N1 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and a11.BUSINESS_DAYS_2_IND = 'Y' and to_char(a11.CREATE_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI304UNENUME, count(1) BI304_C_N2 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and a11.BUSINESS_DAYS_2_IND = 'Y' and to_char(a11.CREATE_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-15 – DCI Derived Metric Statement

BI-3-04-2030 CLEC Denominator1	BI-3-04-2030 CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI304RESALED, count(1) BI304_C_D1 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and to_char(a11.CREATE_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI304UNEDENO, count(1) BI304_C_D2 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and to_char(a11.CREATE_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI then summed the two numerators and the two denominators using excel spreadsheet formulas. DCI was able to exactly replicate Verizon PA reported CLEC results. Verizon PA does not report results for this metric.

BI-3-05

Table F-16 – DCI Derived Metric Statement

BI-3-05-2030 CLEC Numerator 1	BI-3-05-2030 CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI305RESALEN, count(1) BI305_C_N1 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and a11.BUSINESS_DAYS_28_IND = 'Y' and to_char(a11.RESOLUTION_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI305UNENUME, count(1) BI305_C_N2 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and a11.BUSINESS_DAYS_28_IND = 'Y' and to_char(a11.RESOLUTION_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-17 – DCI Derived Metric Statement

BI-3-05-2030 CLEC Denominator 1	BI-3-05-2030 CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI305RESALED, count(1) BI305_C_D1 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and a11.PRODUCT_IND = 'R' and to_char(a11.RESOLUTION_DATE,'YYYYMM') = a11.REPORT_PERIOD) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI305UNEDENO, count(1) BI305_C_D2 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and to_char(a11.RESOLUTION_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI then summed the two numerators and the two denominators using excel spreadsheet formulas. DCI was able to exactly replicate Verizon PA reported CLEC results. Verizon PA does not report results for this metric.

Report Dimension

All sub-metrics are reported at the CLEC Aggregate level. BI-301, BI-3-02 and BI-3-03 are reported at the CLEC specific level. All sub-metrics are reported at the Pennsylvania level.

Exclusions

For Sub-Metrics BI-3-01 Through BI-3-03: Adjustments that are not billing errors such as: charges for directories, incentive regulation credits, PA PAP Payments, out of service credits, special promotional credits.

For Sub-Metrics BI-3-04 And BI-3-05: CLEC claims for adjustments such as: charges for directories, incentive regulation credits, credits for performance remedies, out-of-service credits, and special promotional credits

Performance Standard

Table F-18

Metric	Standard
BI-3-01	Parity with Verizon PA Retail*
BI-3-02	No standard
BI-3-03	Parity with Verizon PA Retail*
BI-3-04	95% within two (2) business days
BI-3-05	95% within 28 days(after acknowledgement)

* excluding charges adjusted due to billing errors resulting from order activity post completion discrepancies.

DCI Analysis

BI-3-01: DCI Summed the numerator and denominator for the CLEC aggregate with the following result:

Table F-19 – DCI Calculated CLEC Results BI-3-01

	DCI Numerator Sum	DCI Denominator Sum	Results
April	$1,674,654.41	$63,748,071.25	2.63%
May	$1,236,914.03	$66,113,464.47	1.87%
June	$734,417.69	$64,284,167.52	1.14%

Table F-20 – DCI Results[7]

April	0.43
May	1.76
June	1.11

This replicates exactly the Verizon PA reported C2C results for both Verizon PA and CLECs.

BI-3-02: DCI Summed the numerator and denominator for the CLEC aggregate with the following result:

Table F-20 – DCI Calculated CLEC Results BI-3-02

	DCI Numerator Sum	DCI Denominator Sum	Results
April	339	502,113.00	**0.07%**
May	497	509,712.00	**0.10%**
June	175	521,593.00	**0.03%**

This replicates exactly the Verizon PA reported C2C results for CLECs. Verizon PA results are not reported on the C2C report for this metric.

BI-3-04: DCI Summed the numerator and denominator for the CLEC aggregate with the following result:

Table F-21 – DCI Calculated CLEC Results BI-3-04

	DCI Numerator Sum	DCI Denominator Sum	Results
April	148	148	100%
May	134	134	100%
June	158	158	100%

[7] Verizon calculations taken directly from DCI file, BI-3-01-2030.xls. No extra calculations made or shown.

This replicates exactly the Verizon PA reported C2C results for CLEC metrics and number of observations in each month. Verizon PA does not report Verizon PA results for this metric in the C2C.

BI-3-05: DCI Summed the numerator and denominator for the CLEC aggregate with the following result:

Table F-22 – DCI Calculated CLEC Results BI-3-04

	DCI Numerator Sum	DCI Denominator Sum	Results
April	46	46	100%
May	162	162	100%
June	124	124	100%

This replicates exactly the Verizon PA reported C2C results for CLEC metrics and number of observations in each month. Verizon PA does not report results for this metric.

Metric Creation

The BI-3 Metrics use data from CABS South, FBS, CAFS, CATS/WCIT and CATS. The files are:

- CABS Adjustment Detail
- CABS Bill Detail
- Legacy CRIS Bill Detail (from FBS)
- Legacy CRIS Adjustment Detail
- Acknowledged Claims, Acknowledged Claims(WCIT Interim) and Resolved Claims (WCIT Interim)

The files from these systems are all generated daily with the exception of the CATS files which are transmitted weekly.

BI-6: BILLING ACCURACY & CLAIMS PROCESSING

Definition

This measure captures the completeness of Verizon PA usage charges and Verizon PA usage billing errors that are itemized by date on the paper bill. It is derived by dividing the count of date itemized usage charges on the bill that were recorded during the last two billing cycles by the total count of date itemized usage charges that appear on the bill.

For Retail, Verizon PA may elect to perform this measurement by using a statistically valid sampling methodology.

Sub-Metrics

- **BI-6-01** % Completeness of Usage Charges – Including Order Activity Post Completion Discrepancy Delayed Charges
- **BI-6-02** % Completeness of Usage Charges – Excluding Order Activity Post Completion Discrepancy Delayed Charges

Formulas

Table F-23

	Numerator	Denominator
BI-6-01	Usage charges shown on the bill that were recorded during the last two billing cycles	Total usage charges shown on the bill
BI-6-02	Usage charges shown on the bill that were recorded during the last two billing cycles	Total usage charges shown on the bill

Plan Changes

The following changes were made to the BI 6 metrics in the June Plan .

Table F-24 – June Plan Changes

Metric	Old Plan	June Plan
BI-6-01-2030	Metric: BI-6-01-2030: % CLEC Billing Claims Resolved within 28 Calendar Days After Acknowledgment Standard: 95% within 28 Calendar Days	Metric: BI-6-01-2030: Completeness of Usage Charges - Including Order Activity Post Completion Discrepancy Delayed Charges Standard: No Standard
BI-6-01-2030	Verizon PA Formula….	Verizon PA algorithm removed
BI-6-02-2030	Metric: BI-6-02-2030: % CLEC Billing Claims Resolved within 28 Calendar Days After Acknowledgment Standard: 95% within 28 Calendar Days	Metric: BI-6-02-2030: Completeness of Usage Charges - Including Order Activity Post Completion Discrepancy Delayed Charges Standard: Parity with Verizon PA Retail

DCI Derived Metric Statement

DCI validated through algorithms and data extraction that Verizon PA sums the absolute value of the number of usage charges, including order activity post completion delayed charges (PCDs), that accrued during the last two bill periods and compares it to the total charges on the bill.

BI 6-01: For BI 6-01 DCI calculated separate numerators and denominators for CLEC resale and UNE and added the numerators and denominators for a combined result. As with all of the DCI metric replication efforts, this SQL code differed from Verizon PA CMA code and as such DCI

made certain assumptions. In this case the assumption was that the numerators and denominators are added together as per BI 2-01. (where separate numerators and denominators are defined and the calculation specified.)

DCI also calculated Verizon PA results but these are not reported in the C2C reports and are not shown here.

The DCI metric calculation for the numerators was as follows:

Table F-25 – BI-6-01-2030 DCI Derived Metric Statement (SQL)

CLEC Numerator 1 (resale	BI-6-01-2030 CLEC Numerator 2 (UNE
VW_BI_6_01_PA0503_C_N1 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_2_MTH)) BI601RESALEN, sum(ABS(a11.BILL_USAGE_2_MTH)) BI601_C_N1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and a11.STATE_CODE ='PA' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	VW_BI_6_01_PA0503_C_N2 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_2_MTH)) BI601UNENUME, sum(ABS(a11.BILL_USAGE_2_MTH)) BI601_C_N2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and a11.STATE_CODE ='PA' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

For the denominators, DCI used the following metrics:

Table F-26 – BI-6-01-2030 DCI Derived Metric Statement (SQL)

CLEC Denominator 1(resale)	BI-6-01-2030 CLEC Denominator 2 (UNE)
VW_BI_6_01_PA0503_C_D1 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_ITEMS)) BI601RESALED, sum(ABS(a11.BILL_USAGE_ITEMS)) BI601_C_D1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and a11.STATE_CODE ='PA' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	VW_BI_6_01_PA0503_C_D2 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_ITEMS)) BI601UNEDENO, sum(ABS(a11.BILL_USAGE_ITEMS)) BI601_C_D2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and a11.STATE_CODE ='PA' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI combined the CLEC numerators and denominators and summed each with the following results.

Table F-27 – BI 6-01 DCI CLEC Calculated Results

	Numerator	Denominator	Results
April	$422,035,565.00	$422,144,947.00	99.97%
May	$414,551,608.00	$414,657,301.00	99.97%
June	$404,661,507.00	$404,765,040.00	99.97%

BI-6-02: For BI 6-01 DCI calculated separate numerators and denominators for CLEC resale and UNE and added the numerators and denominators for a combined result. As with all of the DCI metric replication efforts, this SQL code differed from Verizon PA CMA code and as such DCI made certain assumptions.

Table F-28 - BI-6-02 DCI Denominators

BI-6-02-2030 CLEC Numerator 1	BI-6-02-2030 CLEC Numerator 2
DCI Derived Metric Statement (SQL) VW_BI_6_02_PA0603_C_N1 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_2_MTH)) BI602RESALEN, sum(ABS(a11.BILL_USAGE_2_MTH)) BI602_C_N1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	DCI Derived Metric Statement (SQL) VW_BI_6_02_PA0603_C_N2 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_2_MTH)) BI602UNENUME, sum(ABS(a11.BILL_USAGE_2_MTH)) BI602_C_N2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-29 - BI-6-02 DCI Denominators

BI-6-02-2030 CLEC Denominator 1	BI-6-02-2030 CLEC Denominator 2
DCI Derived Metric Statement (SQL) VW_BI_6_02_PA0603_C_D1 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_ITEMS)) BI602RESALED, sum(ABS(a11.BILL_USAGE_ITEMS)) BI602_C_D1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	DCI Derived Metric Statement (SQL) VW_BI_6_02_PA0603_C_D2 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_ITEMS)) BI602UNEDENO, sum(ABS(a11.BILL_USAGE_ITEMS)) BI602_C_D2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

The results for BI 6-02 are as follows.

Table F-30 – BI 6-02 DCI CLEC Calculated Results

	Numerator	Denominator	Results
April	422,034,053	422,143,433	99.97%
May	414,549,584	414,655,272	99.97%
June	404,659,294	404,762,827	99.97%

Report Dimension

Exclusions

CLEC claims for adjustments for charges for directories, incentive regulation credits, credits for performance remedies, out-of-service credits, and special promotional credits are excluded. Also usage charges that accrued prior to the last two billing cycles and whose billing was delayed because of an order activity post completion discrepancy are also excluded.

Performance Standard

- Metric BI-6-01: No standard.
- Metric BI-6-02: Parity with Verizon PA Retail.

For the review period, the following were the results:

Table F-31 – BI-6 Completeness of Usage Charges

	April	May	June
BI-6-01			
Standard	No Standard	No Standard	No Standard
Verizon PA Reported CLEC Results	99.97%	99.97%	99.97%
DCI Calculated CLEC Results	99.97%	99.97%	99.97%
BI-6-02			
Standard	Parity with Verizon PA Retail	Parity with Verizon PA Retail	Parity with Verizon PA Retail
Verizon PA calculated Verizon PA results	99.99%	99.96%	99.62%
Verizon PA calculated CLEC Results	99.97%	99.97%	99.97%
DCI calculated Verizon PA results	99.99%	99.96%	99.62%
DCI calculated CLEC Results	99.97%	99.97%	97.97%

CLEC Specific Results

DCI also compared a sampling of specific CLEC results reported by Verizon PA against NMP data. In all cases, DCI calculations resulted in the same results as reported.

Report Dimension

BI-6 is reported at both the CLEC Aggregate and CLEC Specific levels.

Metric Creation Filename

BI-6, uses CABS SOUTH for CABS Bill Detail and FBS to obtain CRIS bill detail from legacy systems. The NMP files used are:

PA.CABS01.BILDTL.DLY.TXT
PA.CABS02.BILDTL.DLY.TXT
PA.FBS01.BILDTL.DLY.TXT
PA.FBS02.BILDTL.DLY.TXT

All metric calculations are performed within NMP.

BI-7: FRACTIONAL RECURRING CHARGES

Definition

This measure captures the completeness of Verizon PA fractional recurring charges shown on the carrier bill. Fractional recurring charges are those recurring charges that applied for only a portion of the particular carriers billing cycle. The CMA defines a "fractional recurring charge" as a recurring charge for a service that was subscribed to by a CLEC for only a portion of a billing cycle

(e.g., the monthly recurring charge for a service that was installed or terminated on 15th day of a 30 day bill cycle).

The measure is derived by dividing the fractional recurring charges shown on the bill that accrued in the last two billing cycles by the total fractional recurring charges shown on the bill. The two sub measures included in BI-7 differ only in that one of the measures, BI 7-01, includes "order activity completion discrepancy charges" or adjustments. The other, BI-7-02 excludes them.

For Retail, Verizon PA may elect to perform this measurement by using a statistically valid sampling methodology.

Sub-Metrics

Billing Domain –7 contains two sub-metrics.

- **BI-7-01:** Percent Completeness of Fractional Recurring Charges – Including Order Activity Post Completion Discrepancy Delayed Charges
- **BI-7-02:** Percent Completeness of Fractional Recurring Charges – Excluding Order Activity Post Completion Discrepancy Delayed Charges

Formula

Table F-32

Metric	Numerator	Denominator
BI-7-01- 2030	Fractional recurring charges shown on the bill that accrued in the last two billing cycles	Total fractional recurring charges shown on the bill
BI-7-02-2030	Fractional recurring charges shown on the bill that accrued in the last two billing cycles	Total fractional recurring charges shown on the bill

The C2C guidelines define the formula as:

[(Fractional recurring charges shown on the bill that accrued in the last two billing cycles) / (Total fractional recurring charges shown on the bill)] x 100

DCI Derived Metric Statements

BI-7-01: Since 7-01 has no standard, and Verizon PA did not report any results for the period, DCI did not perform any verifications on 7-01.

BI-7-02: DCI first calculated CLEC results using the following algorithms:

Table F-33 – DCI Derived Metric Statement (SQL)

BI-7-02-2030 CLEC Numerator 1	BI-7-02-2030 CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.FRACT_REC_CREDIT_2_MTH)) + sum(ABS(a11.FRACT_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.FRACT_REC_CREDIT_2_MTH)) + sum(ABS(a11.FRACT_REC_DEBIT_2_MTH))) BI702_C_N1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.FRACT_REC_CREDIT_2_MTH)) + sum(ABS(a11.FRACT_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.FRACT_REC_CREDIT_2_MTH)) + sum(ABS(a11.FRACT_REC_DEBIT_2_MTH))) BI702_C_N2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-34 – DCI Derived Metric Statement (SQL)

BI-7-02-2030 CLEC Denominator 1	BI-7-02-2030 CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.FRACT_REC_CREDIT)) + sum(ABS(a11.FRACT_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.FRACT_REC_CREDIT)) + sum(ABS(a11.FRACT_REC_DEBIT))) BI702_C_D1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.FRACT_REC_CREDIT)) + sum(ABS(a11.FRACT_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.FRACT_REC_CREDIT)) + sum(ABS(a11.FRACT_REC_DEBIT))) BI702_C_D2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Results for the CLEC Numerators and Denominators were then summed and divided as follows:

Table F-35

	Numerator	Denominator	Percent
April	$624,579.35	$759,549.19	82.23%
May	$609,909.66	$794,387.18	76.78%
June	$626,595.52	$635,768.86	98.56%

These results match those reported by Verizon PA. A slight variance was allowed for rounding.

Table F-36 – DCI Derived Metric Statement (SQL)

BI-7-02-2030 Verizon Numerator 1	BI-7-02-2030 Verizon Denominator 1
select a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.FRACT_REC_CREDIT_2_MTH)) + sum(ABS(a11.FRACT_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.FRACT_REC_CREDIT_2_MTH)) + sum(ABS(a11.FRACT_REC_DEBIT_2_MTH))) BI702_V_N1 from TB_DM_BIL_DETAIL_FMT a11 where (a11.NMP_CLEC_ID = 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'E' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.FRACT_REC_CREDIT)) + sum(ABS(a11.FRACT_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.FRACT_REC_CREDIT)) + sum(ABS(a11.FRACT_REC_DEBIT))) BI702_V_D1 from TB_DM_BIL_DETAIL_FMT a11 where (a11.NMP_CLEC_ID = 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'E' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

The calculated Verizon PA results are as follows:

Table F-37

	DCI Calculated Result
April	72.10%
May	63.42%
June	33.65%

These results match exactly the Verizon PA reported C2C results.

DCI also compared individual sample CLEC results as reported in C2C Guideline reports with data retrieved form the NMP. The sample results matched.

Report Dimension

Both 7-01 and 7-02 are reported at the aggregate and CLEC specific level in the C2C Guidelines. Neither are reported in the PA PAP.

Exclusions

CLEC claims for adjustments such as: charges for directories, incentive regulation credits, credits for performance remedies, out-of-service credits, and special promotional credits.

Performance Standard

The performance standards for BI-7 are:

- Metric BI-7-01: No standard.
- Metric BI-7-02: Parity with Verizon PA Retail.

As noted, no results were compared for 7-01. For 7-02 DCI results matched Verizon PA reported results at both the aggregate and CLEC specific levels.

Metric Creation

Data for BI-7 is collected in the Verizon PA CABS and FBS subsystem of CRIS. These files are sent to NMP daily. The primary source file used by DCI is TB_DM_BIL_DETAIL_FMT a11. All metric calculations for Verizon PA are performed within NMP and there are no manual calculations for BI-7.

BI-8: NON-RECURRING CHARGE COMPLETENESS

Definition

This measure captures the completeness of Verizon PA non-recurring charges shown on the carrier bill. The measure is derived by dividing the non-recurring charges shown on the bill that accrued in the last two billing cycles by the total non-recurring charges shown on the bill. Similar to BI-7, the two sub-metrics within BI-8 differ only in whether they include or exclude post completion activity. In this case, Post Completion Discrepancy Delayed Charges.

The C2C guidelines state that for Retail calculations, Verizon PA may elect to perform this measurement by using a statistically valid sampling methodology.

Sub-Metrics

There are two sub-metrics within BI-8.

- **BI-8-01:** % Completeness of Non-Recurring Charges – Including Order Activity Post Completion Discrepancy Delayed Charges
- **BI-8-02:** % Completeness of Non-Recurring Charges – Excluding Order Activity Post Completion Discrepancy Delayed Charges

Formulas

The formulas for BI-8-01 and BI-8-02 are identical. As discussed above the differences between the sub-metrics are whether there is an inclusion of the post completion discrepancies.

Table F-38

Metric	Numerator	Denominator
BI 8-01	Non-recurring charges shown on the bill that accrued in the last two billing cycles	Total non-recurring charges shown on the bill
BI 8-02	Non-recurring charges shown on the bill that accrued in the last two billing cycles	Total non-recurring charges shown on the bill

DCI Derived Metric Statement

DCI validated the algorithms used to in both BI-8-01 and BI 8-02. These DCI algorithms are shown below.

BI 8-01 has no standards and Verizon PA did not report results for the test period. Therefore, DCI validated the algorithms used for reporting CLEC results.

Table F-39 – DCI Derived Metric Statement (SQL) BI-8-01

BI-8-01-2030 CLEC Numerator 1	BI-8-01-2030 CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND,a11.STATE_CODE STATE_CODE,a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) BI801_C_N1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) BI801_C_N2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-40 – DCI Derived Metric Statement (SQL) BI-8-01

BI-8-01-2030 CLEC Denominator 1	BI-8-01-2030 CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) BI801_C_D1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) BI802_C_D2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

The results produced by the DCI algorithms were then summed with the following results.

Table F-41

	Numerator	Denominator	Result
April	$846,791.30	$1,588,387.48	53.31%
May	$2,352,026.35	$2,362,532.70	99.56%
June	$999,735.35	$1,006,997.40	99.28%

The numbers match Verizon PA reported C2C Guideline numbers exactly in April and May. In June, Verizon PA results are reported as 95.50% while DCI calculated 99.28%. Given that the standard is not included in the PA PAP and that there is no standard for this metric, DCI did not pursue this minor and non-affecting difference.

Table F-42 – DCI Derived Metric Statement (SQL) BI-8-02

BI-8-02-2030 CLEC Numerator 1	BI-8-02-2030 CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) BI802_C_N1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) BI802_C_N2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-43 – DCI Derived Metric Statement (SQL) BI-8-02

BI-8-02-2030 CLEC Denominator 1	BI-8-02-2030 CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) BI802_C_D1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) BI802_C_D2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI calculated results from these metrics are as follows.

Table F-44

	Numerator	Denominator	DCI Result	Verizon PA Reported
April	681,633.59	1,417,468.10	48.09%	48.09%
May	2,287,087.76	2,294,566.06	99.67%	99.67%
June	965,545.14	969,628.46	99.58%	99.81%

As shown although DCI was able to duplicate April and May results exactly, June results could not be exactly duplicated. This does not affect PA PAP payments and Verizon PA remains out of parity as reported in the June C2C report.

Table F-45 – DCI Derived Metric Statement (SQL) BI-8-02

BI-8-02-2030 Verizon Numerator	BI-8-02-2030 Verizon Denominator
select a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) BI802_V_N1 from TB_DM_BIL_DETAIL_FMT a11 where (a11.NMP_CLEC_ID = 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'E' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) BI802_V_D1 from TB_DM_BIL_DETAIL_FMT a11 where (a11.NMP_CLEC_ID = 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'E' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

The results of the DCI analysis matched Verizon PA reported results exactly.

Table F-46 – Verizon PA Results

	Verizon PA Reported	DCI Calculated
April	99.98%	98.98%
May	98.01%	98.01%
June	99.01%	99.01%

Report Dimension

- CLEC Aggregate
- CLEC Specific

Exclusions

CLEC claims for adjustments such as: charges for directories, incentive regulation credits, credits for performance remedies, out-of-service credits, and special promotional credits.

Performance Standard

- **BI-8-01:** No Standard
- **BI-8-02:** Parity with Verizon PA retail

For the review period, the following are the summarized results:

Table F-47 – BI 8-01-2030

	April	May	June
Standard	NA	NA	NA
Verizon PA Reported CLEC Results	53.31%	99.56%	99.5%
DCI Calculated Results	53.31%	99.56%	99.28%

Table F-48 – BI 8-02-2030

	April	May	June
Standard	Parity w/Verizon PA Retail	Parity w/Verizon PA Retail	Parity w/Verizon PA Retail
Verizon PA Reported CLEC Results	48.09%	99.67%	99.81%
DCI Calculated CLEC Results	48.09%	99.67%	99.58%
Verizon PA Reported Verizon PA Results	99.98%	98.01%	99.01%
DCI Calculated Results	99.98%	98.01%	99.01%

Metric Creation

Primary source systems for 8-01 and 8-02 are FBS and CABS-South. Like the other billing metrics, the actual data collection and metric calculation is a totally automated process. The primary record fields are as follows.

Record fields for 8-01 are:

Non-PCD, Total Bill Charges,
Non-PCD, Usage
Non-PCD, Bill total + total current charges
PCD, Usage
PCD, Fractional and Non-Recurring charges
PCD, Total Bill Charges

Record filed for 8-02 are:

Non-PCD, Total Bill Charges,
Non-PCD, Usage
Non-PCD, Bill total + total current charges
PCD, Total Bill Charges

Filename

All actual metric calculations are performed within NMP.

C – FINDINGS

BI-1 FINDINGS

1. DCI Was Able To Replicate The Verizon PA Reported Results

Using the SQL statements shown above and the process described, DCI was able to exactly replicate the Verizon PA reported results for both Verizon PA and CLECs. A sampling of individual CLEC results was also verified by DCI.

BI-2 FINDINGS

1. DCI Was Able To Replicate Verizon PA Aggregate And CLEC Specific Results For April, May And June.

Using the SQL statements shown above and the process described, DCI was able to exactly replicate the Verizon PA reported results for both Verizon PA and CLECs. A sampling of individual CLEC results was also verified by DCI.

BI-3 FINDINGS

1. April/May CMA Documentation Is Inadequate For Certain Of The Billing Metrics.

The April/May CMA did not provide documentation on how to handle multiple numerators and denominators on the CLEC calculations (UNE and Resale) for BI-3-01-2030, BI-2-04-2030, BI-3-05-2030 and BI-6-01-2030. DCI "borrowed" a formula from BI 2-01-2030 and was able to replicate Verizon PA results.

BI-6 FINDINGS

1. DCI Was Able To Replicate Verizon PA C2C Reported Aggregate Results For The Test Period For Metrics BI-6-01 And BI-6-02.

DCI was able to replicate Verizon PA reported results for BI-6-01 and BI-6-02 to the second decimal point. Although DCI SQL code appears somewhat different from the original Verizon PA code, DCI code produced exactly the same mathematical result as the Verizon PA code.

BI-7 FINDINGS

1. DCI Calculated Results Match Verizon PA Reported Results Exactly For The Review Period For CLEC And Verizon PA Results.

No results were compared for BI-7-01. For BI-7-02, DCI results matched Verizon PA reported results at both the aggregate and CLEC specific levels.

BI-8 FINDINGS

1. DCI Could Verify All Metric Calculations Except For Two June Metrics Where The Difference Was Deemed Insignificant.

DCI was unable to verify precisely the June reported results for Verizon PA data for metric BI-8-01. DCI was also unable to exactly replicate metric BI-8-02 data reported for June CLEC results. The precise reason for the slight difference could not be determined but parsing problems with the date field were observed and could have caused the very minor difference. Neither difference was deemed significant and neither altered PA PAP payments.

D – RECOMMENDATIONS

BI-3 RECOMMENDATIONS

1. The CMA Should Be Updated For All Billing Metrics (Refer to 1, BI-3).

CMA documentation should be updated to show the correct mechanics for all BI metric calculations, as described herein.

Note: This Appendix has presented detailed findings which support and amplify on findings in Chapter IV – Measurement Calculations and Chapter V – Measurement Calculation Results. Potential recommendations, other than the one listed above, are included with recommendations located in either or both of those chapters. Some may be subsumed within broader recommendations.