



Duquesne Light
Our Energy... Your Power

411 Seventh Avenue
16th Floor
Pittsburgh, PA 15219

Tel 412-393-1541
Fax 412-393-1418
gjack@duqlight.com

Gary A. Jack
Assistant General Counsel

November 14, 2008

VIA OVERNIGHT MAIL

James J. McNulty, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120

**Re: Investigation of Conservation, Energy Efficiency
Activities, & DSR by Energy Utilities & Ratemaking
Mechanisms to Promote Such Efforts
Docket No. M-00061984**

Dear Secretary McNulty:

Enclosed for filing is the Testimony of Duquesne Light Company in connection with the PUC's hearing on November 19, 2008 in this matter. The Testimony is provided by Nancy J. Krajovic, who will be present at the hearing on November 19 as the Duquesne witness. Duquesne is also filing Responses to the Commission's questions contained within Secretarial Letters previously issued in the above-referenced case.

Please do not hesitate to contact us if you have any questions.

Sincerely yours,

Gary A. Jack
Assistant General Counsel

Enclosures

c: Administrative Law Judge David Salapa (w/enc.) – email and hard copy
Tom Charles, Manager – Communications (w/enc.) – email and hard copy

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Energy Efficiency and Conservation Program
And EDC Plans

Docket No. M-2008-2069887

**TESTIMONY OF
DUQUESNE LIGHT COMPANY**

Good morning/afternoon. My name is Nancy Krajovic. I am Manager of Commercial & Industrial Customer Care at Duquesne Light Company and appreciate the invitation to be here today.

Duquesne has two major issues unique to it that it would like highlight here.

First, the legislation requires reductions in consumption and demand of retail customers. Duquesne is unique from other EDCs in that it has experienced some of the highest levels of shopping in the United States and certainly the highest in Pennsylvania. In our control area, nearly HALF of the electric power consumed is sold by electric generation suppliers other than Duquesne. Duquesne Light believes that the reductions mandated by Act 129 should not be based on load supplied by Electric Generation Suppliers (EGS). While no EDC has ultimate control over the energy a customer demands or consumes, Duquesne believes it will have less influence over a customer's consumption of a commodity that it purchases from another entity. The EGS has certain financial goals, including an inherent desire to increase its own sales. The EDC, on the other hand, has the countervailing incentive due to the new legislation. Duquesne would not be aware of the contractual terms that have been agreed to between the EGS and the customer, including quantity, demands, pricing and other important contractual

components, yet Duquesne is under the obligation to shift or influence the usage of that product sold from a third party EGS. If the targeted reductions are to come from all retail customers, Duquesne will face a heightened challenge in achieving those targets.

In Illinois, whose efficiency and conservation legislation language is very similar to Pennsylvania's Act 129, reductions in consumption and demand are required only from "eligible retail customers," or those who purchase their energy supply from the regulated EDC. Duquesne recommends that the same logic be applied in Pennsylvania. We recommend that the PUC clarify, similar to what is done in Illinois, that individual EDCs are responsible for their own generation-supplied customers and not responsible for customers over whom they have little influence and no contractual generation relationship.

However, if the Commission does not agree with our position, and consequently applies the required reductions to all customers in Duquesne's service territory, including customers that purchase their generation from others, then another critical unique issue is raised for our Company and its customers.

Act 129 limits the total cost for the EDCs plans to 2% of the 2006 total annual revenue. In 2006, 46.5% of Duquesne's load was served by EGSs. No other Pennsylvania EDC had more than 4.5% load shopped at that time. In other words, the basis for Duquesne's investment in energy efficiency and conservation plans has significantly less generation revenues than the other PA EDCs due to the competitive shopping occurring in the Duquesne service territory. At the very least an upward adjustment is required to Duquesne's 2006 retail generation revenues in order to provide the same level of investment in these programs for the customers in our service territory

as will occur with other customers across Pennsylvania. Failure to make an adjustment will penalize the success of the competitive market in the Duquesne territory.

A second unique issue for Duquesne is the rate structure offered to commercial and industrial customers. Our default service offering for large C & I customers is a day-ahead hourly priced service – a pricing mechanism that results in conservation and peak load reduction measures already because the customer can currently adjust its consumption based on the day-ahead price indicators, if it is so inclined. It is important to note also that that 91% of our large C&I customers shop. Energy supply contracts offered by EGSs to large C & I customers are typically based on a per kwh charge, with no monthly demand charges to the retail customer. At the request of many parties, and with Commission support, Duquesne eliminated its demand charges in both its large and medium size default service C & I rates primarily as a stimulus to the competitive market and to make comparisons of price easier and more transparent. Because of both the default service rate structure and the typical EGS price offerings in the Duquesne zone, there will be little current financial incentive for any of our commercial and industrial customers to shift or reduce load.

The final point that I would like to make relates to cost-effectiveness and cost recovery. Duquesne agrees that each utility plan must be meritorious and cost effective. Accordingly, Duquesne believes that the entire plan of programs for the EDC, including selection of Service Providers and cost benefit testing, must be evaluated in aggregate, rather than individually program-by-program. Goals achieved for compliance with the entire plan passing the defined cost benefit tests should be the measure. EDCs need a

level of certainty that the costs of developing and implementing these plans will be fully recovered with Commission approval of the plan.

I thank you for the opportunity to address you this morning/afternoon and am available to answer questions.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

HB 2200 EN BANC HEARING
November 13, 2008

Re: Investigation of Conservation, Energy Efficiency
Activities, & DSR by Energy Utilities & Ratemaking
Mechanisms to Promote Such Efforts

Docket No. M-00061984

DUQUESNE LIGHT COMPANY'S RESPONSES TO
QUESTIONS

In response to the questions posed by the Public Utility Commission in its Secretarial Letters in the above-referenced dockets, Duquesne Light Company provides the following responses.

1. Conservation Service Providers

- 1a. Question Should the EDCs collaborate/coordinate on contracting with conservation service providers?
- 1b. Question Are there enough common programs for the conservation service providers to provide effective measures across Pennsylvania?
- 1a. & 1b. Response *Duquesne believes that at this early stage in the interpretation of the terms of Act 129 and prior to the development of even broad plan components, it is premature to make a determination on collaboration with other EDCs or on the likelihood of program commonalities.*
- 1c. Question Does the provision providing for competitive bidding for all contracts with CSPs require the utility to competitively bid all energy efficiency and conservation services? If not, what energy efficiency and demand services should not be competitively bid?
- 1c. Response *It is Duquesne's belief that there could be exceptions to the general requirement that CSPs be competitively bid. While competitively bid contracts provide protection to the utility, they do not always result in the best providers being chosen or the lowest costs. There are some contractors that are very familiar with a particular utility – either due to geographical location or past history with the utility. These intangibles aren't factored into a competitively bid contract, yet are extremely important. It is*

Duquesne's recommendation that the PUC remain as flexible as possible in allowing procurement of services.

- 1d. Question Under definitions, a CSP is an unaffiliated entity providing information and technical assistance. Under 2806.1(A), however, a CSP is said to provide conservation services. How should this Commission interpret this apparent inconsistency?
- 1d. Response *It is Duquesne's belief that a CSP can do both. A CSP can provide information, technical assistance, and conservation services.*
- 1e. Question Under 2806.2, the Commission must establish a registry of approved CSPs. What basic business elements (better business bureau rating, bonding, for example) should be required to be registered?
- 1f. Question What experience and qualifications should be required of registered CSPs?
- 1e. & 1f. Response *Approved CSPs should meet only minimal requirements so that they are not excluded from consideration except for failing to meet legitimate baseline requirement. The only minimal requirement should be proper licensing.*

2. Measurement of Meeting Statutory Requirements

- 2a. Question. How would the *addition* of new load in an EDC territory (i.e. RCI new development/construction) be measured, and at what point do these additions meet the "extraordinary load" exceptions?
- 2b. Question How would one distinguish between *reductions* in consumption as a result of customer participation in technology programs in an EDC territory, implemented as part of an EDC's Energy Efficiency and Conservation Plan, as opposed to unrelated and independent consumer actions (i.e. manually adjust thermostat heat/cooling settings, turn lights off, etc.)?
- 2c. Question How will economic activity within Pennsylvania and an EDC's service territory be considered when measuring the performance of EE/DR programs? For example, an EDC's territory that is experiencing a recession may meet their goals from decreased economic activity from plant closures, business failures and worker migration out of the service territory.

2a., 2b. Response
& 2c.

The individual questions raised in a, b and c go directly to the heart of the challenge of the measurement issue. Will the definition and consideration of any or all of those factors – normal load growth, extraordinary load, economic activity, etc. – sufficiently segregate changes in demand and consumption that can be attributed to the energy efficiency and conservation measures implemented by the EDCs? In answer to that question, Duquesne submits the following discussion.

Comparison of the metered consumption in one year versus the historic consumption in a benchmark year will provide no legitimate measure of the reductions gained through energy efficiency and conservation programs. A myriad of factors impact energy consumption – weather, economic upturn and decline, technology shifts, consumer behavior and attitude to name a few. Weather is probably the only factor that can be reasonably and effectively normalized in an effort to compare small percentage changes in consumption levels. To identify the root causes of 1 and 3% changes in consumption levels would require an in-depth and detailed analysis and understanding of each of the numerous factors that affect usage and changes in usage patterns. The other significant complicating factor is the EDCs inability to control the customer's actions. Peak-shaving and consumption reduction measures can be put into place, and "sold" to customers, but, given current conditions, the customer ultimately will make the behavioral, operational and financial decision of whether or not to conserve or curtail.

Any definition of "extraordinary load" will effectively exclude the cumulative impact of subtle changes in usage patterns that may be pervasive across customers in a given class, yet not "extraordinary" in nature. For instance, does a residential customer's participation in energy efficiency through the installation of CFL bulbs throughout the home guarantee that in the same period this customer would not add an appliance that would use more than the CFLs would save? Is there any data to support that interest in energy efficiency and carbon footprints will accompany a disinterest in bringing the latest and greatest piece of electronic entertainment, computing or home management equipment (or two) into homes in our service territory? For example, according to Home Energy magazine¹, 27 percent of new television sets sold in 2007 were in the 40- to 49-inch range. This clearly shows the upward trend in consumer preference when replacing older television sets, and, unfortunately, a 47-inch LCD may average 280 watts, or four times as much electricity as the

¹ <http://www.homeenergy.org/archive/hem.dis.anl.gov/eehem/99/990510.html>

previous norm. It is likely the socio-economic demographics of a service territory would also influence the extent to which residential customers are seeking reductions in usage and electric bills.

To what extent will customers purposely “use” the savings achieved through energy efficiency to source other applications at their service locations? For instance, perhaps a commercial customer installs an energy saving apparatus that now makes kWh available for a lighting enhancement that not been installed in the past in order keep the wraps on electricity consumption and bills. This type of neutralization of the effects of energy efficiency measures should not negate including those savings in the measurement of target achievement.

Concise reconciliation of the delta in consumption between two periods to extract out and quantify the reductions resulting from the energy efficiency measures would require identification and measurement of each use of energy at every service location in both the base period and the target period. Clearly this is a ridiculous premise, but at some level of usage or in some customer groups a detailed understanding of the usage would become imperative. Consider hospitals or academic research centers, which can represent a significant segment of large commercial customer group. Their usage can easily be driven by technological advances that do not necessarily translate to decreases in kWh used. Would it not be appropriate to account for increases from this segment in an effort to deconstruct the delta in consumption between two periods? A change in operations for a large industrial customer may measurably impact an EDC’s annual consumption and peak load. Identification of “extraordinary load” would require a definition of ordinary load. Is load in the base year assumed to be “ordinary”? If that’s so, then the EDC would need to have an understanding of the current operations for each large customer, in order to attempt a quantification of “extraordinary load” in the measurement period.

Opposite the discussion of factors that would increase overall consumption and load in a target period is the potential for a decline in consumption due to factors unrelated to any programs the EDCs might put in place. Utility costs are but one category of many in a household or business budget and all categories play a role in the overall operation of an entity. Economic downturn may be a greater incentive to conserve energy than any other and may affect all classes of customers, but accurately measuring the extent of that conservation would be next to impossible. It is clearly the

intent of the legislation to have EDCs implement energy efficiency and conservation plans that will influence conservation by its customers. Counting decreases in consumption caused by external factors is not a reasonable measure of the success of those programs.

Once the EDCs are offering legitimate and proven measures to enable customers to alter their consumption, the only thing that can be said with certainty is that the consumption in a target period would have been higher, BUT FOR the impact of the energy efficiency measures utilized by consumers. Without the ability and resources to 1.) control its customers demand for and use of energy and 2.) dissect and analyze the consumption and demand deltas between two periods, an EDC's success in achieving the statutory targets can only be measured by the statistically presumed ("deemed" savings, pre- and post-metering data, where appropriate, etc.) impact of plans, programs and measures that it has placed with its customers to install and use. Confidence in that measurement will be generated by the Commission oversight and approval of the plans and the integrity of the annual independent evaluations. Review of industry literature on the topic of impact evaluation (defined as the determination of the impacts – energy and demand savings that directly result from a program) reveals extensive discussion of measurement and verification, deemed savings and statistical analysis and sampling as the tools on which to rely for estimating "what was not consumed" or conversely, calculating savings. There is much expertise available from this literature and from the experience in other jurisdictions and agencies upon which Pennsylvania can rely. References include "National Energy Plan for Energy Efficiency (2007). Model Energy Efficiency Program Impact Evaluation Guide", "California Evaluation Framework (June 2004.)"

3. Evaluation

- 3a. Question. Should the Commission establish a standardized total resource cost manual to evaluate projects? If so, is there a state or utility this Commission should use as a starting point for discussion?
- 3a. Response *Duquesne strongly supports the use of standards in the evaluation of plans to be approved as well as in the measurement of results achieved. This will allow for greater confidence in common goals and expectations by all parties involved in these programs. While*

modifications may be necessary to appropriately encompass the exact circumstances that exist in Pennsylvania, the California Standard Total Resource Test is a sound and reasonable place to begin the discussion. It is a widely accepted tool and has been incorporated into energy efficiency plan analysis in other states already active in mandated EDC programs.

- 3b. Question What other cost benefit tests should the Commission use to achieve reduction in consumption requirements pursuant to Section 2806.1(C)(3).
- 3b. Response *The Total Resource Cost Test will sufficiently meet the statutory evaluation requirements in Pennsylvania. The introduction of other tests is not likely to add value to the process, but rather will weigh it down and create further challenges to the Commission and EDCs already facing rigorous time constraints.*
- 3c. Question Act 129 requires utilities to file a plan to assure quality assurance [includes evaluation, measurement and verification by independent parties to ensure quality of completed measures], and further requires an annual independent evaluation of cost effectiveness of the Plan. Given the exposure to penalties by EDCs for potential non-compliance on meeting statutory energy efficiency and conservation goals, what approaches are appropriate to ensure that such independent, third parties are free of coercion from the EDCs they evaluate?
- 3c. Response *Duquesne urges that the methodology for measuring the achievement of targets be as standardized as possible at the outset of program implementation. It will be the burden of the EDCs to provide surety that its plan was carried out in good faith, with implementation plans and activities that are verifiable. Essentially, the implementation of the energy efficiency and conservation plan must generate a comprehensive audit trail. Selection of professional, experienced independent evaluators whose reputation and commerce is dependent upon the preservation of their independence will ensure that their examination of that audit trail is not subject to external influence.*

4. Cost Recovery

- 4a. Question. What are the appropriate time frames to expense or amortize energy efficiency and demand response expenditures?
- 4a. Response *Energy Efficiency and DR should be expensed in the year the cost is incurred except for expenditures that are required or should be*

capitalized pursuant to normal accounting GAAP rules. In short, special accounting rules should not be developed for these plans. Normal GAAP accounting should continue to be used. The only exception should be the recovery of incremental costs to the EDCs incurred prior to program implementation, to develop and file the required plans. For Duquesne, the costs for compliance with Act 129 are novel and incremental to historic business function and should therefore be subject to current period deferral for amortization over the appropriate implementation period.

4b. Question How should this Commission ensure recovery of only “prudent and reasonable” costs? Is this established at the time of plan approval? Is it established only after quality assurance and performance is measured, verified, and evaluated, or is it established during the annual independent analysis?

4b. Response *Plans approved by the Commission should be considered to be prudent and reasonable and the costs thereof should be recoverable with the commencement of the plan implementation. Only upon subsequent discovery (through measurement, verification and evaluation and/or the annual independent review) of malfeasance, financial gross negligence or purposeful misallocation of those funds toward activities not associated with the implementation of the energy efficiency and conservation plans should any disallowance be made and refunds mandated.*

4c. Question If services are not competitively bid, how will this Commission determine such costs are reasonable and prudent?

4c. Response *The services required have general market level ranges. The PUC will be reviewing many different providers and the cost of the services provided. That information will provide the PUC and others good information on what are reasonable market level pricing for the services.*

5. Program Design

5a. Question. How should the statutory requirement be interpreted and implemented that requires energy efficiency and conservation measures be equitably provided to all classes of customers?

5a. Response *Duquesne believes this requirement was made so that all the conservation or demand side reductions were not centered on a particular customer class. In other words, a utility's plan should have programs available to all rate classes served by the EDC.*

Some customer classes and individual programs will obviously be more productive than others. That is fine. But a utility should not focus its program on just one particular customer class to achieve the necessary goals and reductions.

5b. Question Should all EDCs be required to implement the same type of EE/DR programs? Is it likely that programs will be equally cost effective in every EDC territory?

5b. Response *Requiring all EDCs to implement the same type of energy efficiency and demand response measures at the outset of these programs may stifle opportunities for a wider variety of measures being introduced to consumers. Perhaps in the annual analysis of the status of the programs, intelligence can be gleaned from others and applied in instances where some measures may not be performing as expected and may need to be modified or replaced. Not all EDCs have identical technology infrastructure today. To be required to implement the same type of programs would cause the considerable capital investments of some EDCs to match those with more advanced systems already in place.*

5c. Question Which programs are most cost effective if implemented on a statewide basis?

5c. Response *See above. At this early juncture, Duquesne is not recommending statewide programs.*

6. Reporting Requirements

6a. Question. What additional information should the Commission require the EDCs to report under Section (I)(1)(IV)?

6b. Response *The information required at Section (I)(1)(IV) will provide a comprehensive database for initial evaluation and does not need to be augmented at this time.*

7. The EDCs already have some DSR programs available to various customer classes. They have developed these programs voluntarily without any mandates.

7a. Question. Please provide a brief overview of current EDCs' DSR programs.

7a. Response *Duquesne has a pilot residential DSR program targeted to air conditioning. It is a Direct Load Curtailment program launched in the summer of 2002, which continues to be offered in*

Duquesne's service territory for residential and small commercial customers. Under the terms of the program, air conditioning units are shut off or cycled during periods of high heat in exchange for monthly bill credits.

The current hourly priced supply option for Duquesne's large and commercial and industrial customer provides load management alternatives and financial incentives for this group of customers. Many are active in PJM's DSR programs, including PJM's curtailment program. Duquesne had a voluntary curtailment program for large C&I customers at one point but ceased offering it in 2008 due to lack of interest. No customers had enrolled in the program since 2006. Moreover, the POLR hourly priced service provides real time opportunities for this large group of customers to manage their consumption and costs.

- 7b. Question What has been your experience with customer interest and participation levels in current programs?
- 7b. Response *Duquesne currently has about 120 customers on this program out of approximately 530,000 eligible customers.*
- 7c. Question What level of weather-normalized peak load and demand consumption reductions have been achieved under the current programs?
- 7c. Response *About one half megawatt reduction in peak load for up to four hours, eight days a year at peak program enrollment.*
- 7d. Question What types of new programs or changes to existing programs, if any, would be needed to achieve the targets contained in Act 129?
- 7d. Response *The existing program is a pilot with limited interest. Duquesne will essentially be starting from the beginning to develop its programs and plan.*
- 7e. Question What is the projected level of customer interest or savings in these new programs?
- 7e. Response *Unknown.*
- 7f. Question Please provide references to any market research pertaining to specific EDC programs in PA.
- 7f. Response *No market research has been conducted on Duquesne's DSR program.*

8. In reference to question 1(e) above, the PA Treasury Department already offers the Keystone Home Energy Loan Program (Keystone HELP™). The Department refers to this as Pennsylvania's official streamlined, lower rate financing program for ENERGY STAR™ rated and other high efficiency and renewable energy improvements.

8a. Question. To what extent will there be overlap and duplication between this program and Act 129 programs?

8a. Response *Duquesne believes that at this juncture it is too early to determine the extent to which duplication may exist between its programs and those offered by the Keystone HELP program.*

8b. Question The Treasury Department already has an application process established for customer enrollment and contractor registry. To what extent could this process be used as a model under Act 129 compliance?

8c. Question The Treasury already has a registry of certified contractors. Customers are able to input a zip code to find certified contractors in their area. To what extent could these contractors' qualifications be used to register CSPs?

8b. & 8c. Response *Duquesne has not had an opportunity to review these processes in detail but agrees that if potential synergies exist, they should be evaluated and considered as part of the development of the regulatory framework that will surround the energy efficiency and conservation programs. Any instances where existing processes or information can be appropriately relied upon will allow for more efficient use of the limited dollars available for this new initiative.*