STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

ILLINOIS POWER AGENCY	:	
	:	No. 09-0373
Petition for approval of	:	
Procurement Plan	:	

COMMONWEALTH EDISON COMPANY'S
RESPONSES TO COMMISSIONER ELLIOTT'S
QUESTIONS TO THE PARTIES

Commonwealth Edison Company ("ComEd") submits the following Responses ("Response") to Commissioner Elliott's Questions to the Parties ("Questions") pursuant to the procedural ruling issued by the Administrative Law Judges on November 2, 2009. ComEd's Response is limited to the first four of the six Questions posed by Commissioner Elliott as the last two Questions are directed to the Ameren Illinois Utilities.

Dated: November 6, 2009

Respectfully submitted,

COMMONWEALTH EDISON COMPANY

By: _____

One of the Attorneys for
Commonwealth Edison Company

Darryl Bradford
Senior Vice President, Regulatory Policy & Rates and General Counsel
Anastasia M. O'Brien
Thomas J. Russell
COMMONWEALTH EDISON COMPANY
440 S. LaSalle Street, Suite 3300
Chicago, Il 60605
(312) 894-7541
Darryl.Bradford@exeloncorp.com
Anastasia.Obrien@exeloncorp.com
Thomas.Russell@exeloncorp.com

E. Glenn Rippie
Carla Scarsella
FOLEY & LARDNER LLP
321 North Clark Street
Suite 2800
Chicago, Illinois 60602
(312) 832-4500
grippie@foley.com
cscarsella@foley.com

Question 1

On page 3 of Commonwealth Edison's (ComEd) comments on the procurement plan, the following statement was made:

> 'Under the PJM RPM process, PJM effectively procures capacity, including demand resources, for utilities three years in advance through an auction process. RPM prices from the most recent annual auctions held by PJM are listed in the table above. These are the prices paid to generators and Curtailment Service Providers (CSP), *i.e.* demand-response providers, for capacity that they have committed to provide in each planning year. The load serving entities, such as ComEd, are billed for capacity for a particular year based on their share of the PJM load. To determine the amount of capacity that must be purchased, PJM uses an econometric model that incorporates load data going back to 1998. To affect the PJM load forecast, any demand resources procured through the IPA process would have to be implemented (not just available) during the time of the PJM peak load each year. In addition, because PJM's load forecasting process is based on many years of historical data, the impact of new demand-reduction resources would not be fully reflected for a number of years into the future.'

It is my understanding of PJM's RPM construct that estimates for capacity to meet future demand are indeed based upon a forecast process as described in ComEd's comments. However, it is also my understanding that the allocation of capacity costs within the ComEd zone when the delivery year occurs is based upon the ratio of that customer's peak usage of the five highest coincident peak demands in the prior calendar year. It is also my understanding that the methodology to recover the annual RPM capacity cost divides the cost over 365 days to determine a capacity cost per megawatt day, in essence spreading the capacity costs for the peak period equally over each day of the year and effectively reducing the actual cost of capacity during the peak period and increasing the cost of capacity over the off-peak period compared to a more market-based construct.

Given the above context, if the economic cost of a megawatt (MW) of demand response (DR) was higher than the averaged RPM cost per MW day, but lower than the actual cost of a MW of capacity for the peak period, would it meet the criteria for a lower cost alternative to a MW of RPM capacity?

Response

There are two separate issues to respond to in this question:

(1) Can an additional DR resource that has annual costs that are less than RPM annual costs be a lower cost alternative given the PJM requirement to purchase capacity three years in advance?

(2) Does the PJM practice of amortizing capacity costs over the entire year impact whether a resource is found to be the lowest cost alternative?

In ComEd's view, the answer to both questions is no.

The clearest and most direct way to explain why the answer is no may be with an illustrative example (these numbers are not actual costs and capacity obligations, but simplified values that are consistent with the premises of the Question and illustrate the analysis).

Assume for purposes of the example:

- Capacity Obligation: 1 MW
- Actual Peak Demand Capacity Cost: $365/MW
- Average RPM Capacity Cost: $1/MW-Day
- Additional DR Cost: $182/MW

As ComEd stated in its Objections, PJM effectively procures capacity, including demand resources, for utilities three years in advance through an auction process. Consequently, in this example, ComEd would have committed to purchase the 1 MW from PJM for $365 (paid on a daily basis of $1/MW-Day as noted in the question). If ComEd were to also procure the Additional DR for $182, the total amount paid for by customers for the year would be $547 ($365 to PJM and $182 to the Additional DR provider). Consequently, while the price of the Additional DR is lower than what cleared in the PJM auction, its purchase does not lower our capacity obligation to PJM and purchasing it outside of PJM would not be a "cost-effective" option as the total cost to customers would increase rather than decrease. While actual costs will differ from the example, the conclusion remains the same. Section 16-111.5(b)(3)(ii) requires not only that the DR cost less than the comparable capacity product, but also that the DR be "cost-effective".

In regard to the second part of the question, the decision by PJM to recover capacity costs on a daily average basis rather than only during the summer peak period (or some other period) does not effect this conclusion, as shown above. The question of when costs are recovered is one of rate design and does not change the cost of the resource. We would agree with the implication of the question that it would be inappropriate to compare an effectively annual provider of DR cost to a daily RPM value when performing an analysis and ComEd did not make such an inappropriate comparison when it reached the conclusion that this DR proposal would raise, rather than lower customer costs.

Question 2

Based on the above context, if DR was acquired, does the reduction in demand caused by the acquisition of the demand response become totally realized by the calculation of an end customers' pro-rata share in the following RPM delivery year? Or does the value of the DR capacity not become recognized anytime sooner than the fourth year from when the DR was actually implemented?

Response

If the additional DR was acquired, total customer costs would increase for the period already covered by RPM auctions (3 years) as described in the response to Question 1. However, it is not clear that the benefits of such DR would be "totally realized" even in the fourth year. This is because PJM bases its capacity obligation estimate on an econometric model with 10 years of data. Consequently, the benefit of the additional DR acquired outside of the PJM auction might be effectively "averaged down" by being combined with the other years of data. Also, the additional DR would have to be implemented, or called, on coincident peak days in order to have any effect on PJM's forecast of capacity obligations to in turn lower ComEd's capacity payments to PJM. Those peak days are not, however, known or identified as peak days in advance of when they occur; they can only be determined after the fact. Therefore, simply procuring additional DR does not guarantee that it will have any effect on lowering ComEd's capacity obligations or the costs of meeting those obligations to ComEd's customers.

Question 3

Based on the above context, it appears that even if the DR is acquired, ComEd is obligated to pay for RPM capacity costs for at least three years forward, based upon historic levels of peak demand contributions, even though ComEd's contribution to peak demand after the DR is procured would be reduced by that corresponding amount. Is this correct?

Response

Yes, this is correct (although, to be precise, the ComEd capacity obligation established by PJM is based on a PJM forecast, which in turn uses historical data). Also, as noted in the response to Question 2, ComEd's capacity obligation would not immediately, if ever, be fully reduced by the additional DR.

Question 4

In reference to demand response products purchased for ComEd, please have the parties address exactly how the DR value for both energy and capacity products are derived and settled between the Curtailment Resource Provider, PJM and ComEd and the ultimate end use customer, *i.e.*, how would each party be compensated and revenues recovered, through what settlement mechanisms? Please provide an example transaction where a resource bid might be accepted for a MW of DR capacity, how that capacity makes it into the PJM RPM auction and if that MW of DR capability is bid into the energy or ancillary services markets exactly how would the settlement process work between all affected parties including the end use customer?

Response

The following describes the current structure of participation in PJM administered programs by ComEd or an entity like it.

Capacity

Currently ComEd contracts with business customers for firm load reductions, and aggregates residential customers participating in our AC Cycling program to create a DR capacity resource. This resource is then registered in the PJM Interruptible Load for Reliability Program. PJM takes funds from retail suppliers' capacity purchases and compensates ComEd as the CSP. ComEd then uses these funds to compensate customers participating in the programs. In ComEd's program these terms are defined by Rider CLR.

CSPs have also been able to monetize the capacity value of DR by bidding into the the PJM Base Residual Auction for capacity. MWs bid into this auction are compensated at the clearing price, in the planning period covered by the auction – three years forward. Same cash flow results; retail suppliers' capacity purchases to PJM are paid to CSPs for providing DR capacity resources, and a portion of these resources are used to compensate customers per the CSP / Customer agreement.

It is important to note that neither of these processes results in the lowering of the aggregate capacity obligation for retail suppliers, and if they did, funds would not be available to pay the DR resources. Simply put, that is because the same DR cannot be counted both as a reduction in load and an increase in supply.

Energy

Currently ComEd contracts with business customers for voluntary energy reductions in response to a customer defined strike price. These resources are submitted into the Economic Demand Response Program administered by PJM. When the customers strike price is reached, PJM will send a dispatch signal to the CSP (ComEd) to initiate a DR energy event. ComEd then notifies participating customers to reduce energy consumption. This reduced consumption results in a direct avoided cost benefit of the quantity reduced multiplied by the retail cost of generation from retail supplier's in the form of a lower bill. The retail supplier is then the beneficiary of the reduced energy, receiving a value equal to the quantity reduced multiplied by the real time

market price. PJM then bills the retail supplier a charge equal to the quantity reduced multiplied by the product of the real time market value less the marginal retail generation price.

Charge = Quantity x (Real Time Value – Retail Generation Rate)

This leaves the retail supplier in the same economic position it would have been if it had sold the energy at retail. PJM pays this quantity to the participating customers CSP (ComEd), who then compensates participating customer per the terms of the retail DR agreement. In ComEd's case these terms are defined by Rider VLR.

With this in mind, a high level generic example of DR related cash flows within the PJM settlement process follows. Assume for purposes of the example:

- ComEd purchases 10 MW of capacity through RPM auction for $10/MWD
- CSP Sells 1 MW capacity in the RPM auction for $10/MWD
- ComEd has 10 customers with 1 MW peak loads
- Capacity charges are illustrated.

a) ComEd pays PJM on a weekly basis. The charge for capacity for the 10 MW used by its customers would be $100/day.

b) The CSP receives the clearing price for 1 MW or $10/day from PJM.

c) Each customer pays to ComEd a capacity charge of $10/day for its peak load contribution (Industrial customers pay a demand charge, residential customers pay via a cents/kwh charge for their customer class).

d) To provide the DR capacity to PJM, the CSP signs an agreement with one or more customers to reduce load when called upon. For this example, assume one industrial customer agrees to drop its entire load (1MW) when called upon for an upfront payment of $500 and $1000 if called upon.

e) Assume the CSP is called upon two times for the year. The customer reduces their load and is paid $1000 each time. In future years, this customer's peak load contribution and that of ComEd will be the same because PJM calculates peak demand by adding back any DR that cleared in the auction.

Total annual DR cash flow:	ComEd pays PJM for capacity	($36,500)
	ComEd charges to customers	$36,500
		0
	PJM payments to the CSP	($ 3,650)
	PJM RPM payments to others	($32,850)
	PJM charges ComEd	$36,500
		0
	CSP payments to customer	($2,500)
	CSP revenue from RPM	$3,650
		$1,150
	1 DR customer pays ComEd	($ 3,650)
	1 DR customer receives from CSP	$ 2,500
		($ 1,150)

VERIFICATION

STATE OF ILLINOIS)
) SS.
COUNTY OF DuPAGE)

I, David R. Zahakaylo, having been duly sworn, do hereby say and depose under oath based on my personal knowledge as follows:

1. I am Director – Resource Adequacy and Procurement Strategy for Commonwealth Edison Company ("ComEd") and have responsibility for managing power procurement strategy to serve ComEd's retail and wholesale load obligations.

2. I swear and affirm that the facts stated in ComEd's Responses to Commissioner Elliott's Questions To The Parties are true and correct, to the best of my knowledge and ability.

FURTHER AFFIANT SAYETH NOT.

David R. Zahakaylo

SUBSCRIBED AND SWORN to before me
this 6th day of November, 2009.

Notary Public

OFFICIAL SEAL
Laura E. Borvan
Notary Public
State Of Illinois
My Comm Exp 3/16/10