BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Commission's Review of the Participation of The Cleveland Electric Illuminating Company, the Ohio Edison Company And the Toledo Edison Company in the May 2012 PJM Reliability Pricing Model Auction	**)**	**Case No. 12-814-EL-UNC**

COMMENTS
by
THE OHIO CONSUMER AND ENVIRONMENTAL ADVOCATES

I. INTRODUCTION

The undersigned Ohio Consumer and Environmental Advocates ("OCEA")[1] respectfully submit these comments in response to the Public Utility Commission of Ohio's ("PUCO" or "Commission") February 29, 2012 Entry ("Entry") to review the potential for participation of the Cleveland Electric Illuminating Company, the Ohio Edison Company, and Toledo Edison (jointly the "Companies" or "FirstEnergy") in the May 2012 PJM Reliability Pricing Model Auction ("Auction") in the ATSI zone of PJM. These comments also address the Companies' brief response filed on March 29, 2012. The Companies "have an obligation to take all reasonable and cost-effective steps to avoid unnecessary RPM price increases for their customers."[2] The Commission is concerned about price increases for FirstEnergy's customers if the Companies do not take steps to reduce generation requirements, improve energy efficiency,

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[1] The Ohio Consumer and Environmental Advocates joining this pleading are Sierra Club, Citizen Power, Environmental Law and Policy Center, and Natural Resources Defense Council.

[2] Commission Entry at page 1, item (4).

and expand demand response resources.[3] FirstEnergy's response does not adequately address this concern or related issues; the PUCO should thus use its substantial authority to provide a solution that will prevent potential and entirely predictable rate increases to FirstEnergy customers.

The Entry identifies concerns resulting from the announced closure of ten coal generating units by FirstEnergy Solutions ("FES") in the ATSI zone. Subsequently, there was also an announcement by GenOn Energy, Inc. ("GenOn") to close three more coal generating plants in the same region.

Specifically, on January 26, 2012, FirstEnergy Solutions, a subsidiary of FirstEnergy, announced its plans to retire the following coal-fired generation in the Ohio portion of the ATSI region:[4]

- Bay Shore Units 2–4 (Bay Shore Unit 1 is not included in the announcement.)
- Eastlake
- Ashtabula
- Lake Shore

FES has requested PJM approval for shutdown of these plants in September 2012. According to the RPM Resource Model spreadsheet for 2015/16 (02/02/2012),[5] these plants total 1,992 MW of the 12,494 MW in the ATSI area. FES also retired the 74 MW Burger 3 in September 2011, a mere three months after requesting approval from PJM to retire the unit, leaving little time to evaluate and address reliability and/or capacity shortfall concerns.

In addition to the FES announced closures, GenOn, announced on February 29, 2012, the retirement of the following plants in the ATSI region:[6]

- Niles in June 2012

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[3] See the Commission's Entry at page 1, item (3).

[4] See Commission Entry at page 1.

[5] http://www.pjm.com/markets-and-operations/rpm/~/media/markets-ops/rpm/rpm-auction-info/2015-2016-rpm-resource-model.ashx.

[6] http://www.genon.com/news.aspx

- Avon Lake in April 2015
- New Castle in April 2015

The RPM Resource Model reports that the coal and diesel units at these GenOn plants total 1,280 MW.

Ohio's electricity industry is at a turning point. Since passage of SB 221, all four electric distribution companies operating in Ohio have indicated a commitment to conduct auctions for generation services and therefore are committed to the regional market. Enforcement of emissions standards, changes in the economics of operating and maintaining aging resources, and the development of cleaner energy alternatives have precipitated the closure of a number of coal-fired power plants which are no longer economic to run.[7]

The closures at issue here are long overdue. Most of the First Energy Solutions and GenOn generating units being retired began operation in the 1950s or early 1960s, making them 50 or more years old, and raising the likelihood that substantial capital investment and maintenance would be needed to keep such units operating. Closure of these units will save customers' money given that FirstEnergy would need to install major pollution controls on those units if they were to continue operating. And closure will be a boon to public health and the environment, as it is the quickest and most effective way to eliminate the tens of millions of tons of carbon dioxide emissions, and tens of thousands of tons of other pollutants the units would emit each year. As such, OCEA strongly supports First Energy Solutions and GenOn's proposed plant retirements, and we encourage the Commission to take all appropriate steps needed to ensure that such retirements can occur in a timely fashion and without threatening reliability or costing FirstEnergy's customers extra money.

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[7] For example, see the work papers of Philip J. Nelson filed in American Electric Power's 11-346-EL-SSO re-filing for a list of 4,132 MW's of plants to be retired by the end of 2015. Additionally, The plants discussed here are just a portion of the 106 other coal plants, 319 various sized coal boilers, and approximately 43,000 MWs of coal throughout the U.S. that have announced retirement.

To date, Ohio electricity generators have announced the expected retirement of over 8,000 MWs of aging coal plants. Because of Ohio's commitment to the auction process, its electricity supply is integrally linked to the regional power market, and not just the generating capacity that exists in Ohio. Many more coal plant closures will occur from other utilities.

These comments are offered to the Commission in an effort to point the way toward policies and practices which will provide the greatest protection for all FirstEnergy customers from unnecessary cost increases, while at the same time achieving several other desirable outcomes, notably the creation of more Ohio jobs and the lowest cost solution to reducing the potential environmental impacts caused by the provision of electricity service to FirstEnergy customers. Over 850 concerned citizens in Ohio have supported energy efficiency in this docket by submitting public comments asking for all cost-effective efficiency to be implemented in Ohio.

II. COMMENTS

1. Financial Risks FirstEnergy's Ohio Customers

A. The Potential Supply Problem in the ATSI Zone and the Relationship between Plant Retirements and the Capacity Market

As a result of the retirements discussed above, the ATSI zone has changed from simply being part of the "RTO pricing area" (the part of PJM that is not subject to transmission constraints in the capacity market) to being a separate Locational Deliverability Area ("LDA"), which can have a higher price than the RTO area. Once ATSI is identified as an LDA, PJM will determine the ATSI capacity price by comparing supply offered in the ATSI zone (local generation, demand response, energy efficiency, and imports from other parts of PJM) to a price

curve that sets the capacity price higher than the assumed cost of new generation in a shortage situation, gradually declining as the amount of supply increases.

In the updated 2015/2016 RPM Base Residual Auction Planning Period Parameters spreadsheets, PJM reports that the transmission objective ("CETO") for ATSI will be 5,280 MW, while the actual transmission limit ("CETL") is expected to be 5,418 MW, just 1% higher than the CETO. All other PJM zones are expected to have transmission limits at least 15% above their transmission objectives, the threshold at which PJM merges zones into the RTO area.[8]

The 2015/2016 RPM Base Residual Auction Planning Period Parameters report (February 2, 2012) explains that the ATSI "CETO increased as compared to the 2014/2015 model due to the removal of several generators totaling about 2,200 MW that have notified PJM of their intent to deactivate. The CETL for the ATSI LDA decreased primarily due to the loss of reactive support associated with the deactivating generation." The 2,200 MW's of retirements does not include the additional 1,280 MW's of GenOn retirements. GenOn announced those retirements after the initial parameters report was released.

The shortfall in transmission is due to two effects of the First Energy Solutions and GenOn retirements. First, the ATSI CETO increased 1,610 MW from 3,670 MW in the 2014/2015 BRA to 5,280 MW in the 2015/2016 BRA. Second, the CETL initially fell by more than 700 MW, from over 4,221 MW reported for the 2014/2015 BRA, to 3,517 MW in the initial 2015/2016 BRA parameters, but rose to 5,418 MW once PJM modeled short-term transmission improvements.

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8 PJM does not report the CETL for zones with CETL higher than 115% of CETO, except for those that have been below 115% in recent auctions. Of those latter areas, CETL-CETO ratios for 2015/16 are 119% for southern Delmarva, 138% for PSEG, 142% for northern PSEG, 178% for PEPCo, 180% for southwestern MAAC (most of Maryland), and 235% for eastern MAAC (mostly New Jersey).

The shortage of transmission presents a significant problem, in terms of both reliability and the price of capacity in the market. In the 2014/2015 Base Residual Auction, the Public Service Electric and Gas Company ("PSEG") North region had a CETL 12% above its CETO, but resulted in a capacity price 65% higher than surrounding zones. In the 2013/2014 Base Residual Auction, the Mid-Atlantic Area Council ("MAAC") region had a CETL 6% above its CETO, but resulted in a capacity price eight times the RTO price. In the 2012/2013 Base Residual Auction, the MAAC region had a CETL 14% above its CETO, but still had a capacity price 8.5 times the RTO price; the PSEG region, with a CETL only 1% above its CETO, had a capacity price 9.9 times the RTO price.

While FirstEnergy Solutions has proposed to build 800 MW of new peaking generation at East Lake, and may bid some or all of that capacity into the 2015/2016 BRA, this additional capacity may not even offset the loss of the GenOn capacity detailed above, let alone replace the FirstEnergy Solutions retirements. The 2012 BRA auction for 2015/2016 will be conducted on May 7th, 2012.[9] Given the short lead time, it is not clear to what extent any other new generation will be able to bid into this auction.

B. Economic Implications in 2015/2016

The price of capacity in 2015/2016 for the ATSI zone will be determined by a Variable Resource Requirement Curve ("VRRC") set by PJM, the amount of capacity bidding into the area, and the import constraint. The VRRC will be interpolated from the following points ("UCAP" refers to Unforced Capacity): [10]

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9 http://www.pjm.com/markets-and-operations/rpm/~/media/markets-ops/rpm/rpm-auction-info/communication-regarding-2015-2016-bra-deadlines-for-planned-resources.ashx

10 http://www.nyiso.com/public/webdocs/products/icap/ucap/ucap_technical/ucap_primer_ver1.pdf

UCAP Bid, MW	UCAP Price, $/MW-Day
15,457.3	$537.33
16,020.2	$358.22
16,583.1	$71.64

The price will decline 32¢/MW-day for each additional MW bid from 15,457 MW up to 16,020 MW, and 52¢/MW-day for each additional MW bid above 16,020 MW. This decline at first glance may seem like a small change, but it is multiplied by the number of MW's clearing in the auction and then by 365 days per year. The total capacity bill to load in the ATSI area in 2015/2016 would be:

UCAP Bid, MW	Total Capacity Charge, $M
15,457.3	$3,032
16,020.2	$2,095
16,583.1	$434

As illustrated above, 16,583.1 MW is the level of capacity which is expected to result in a capacity cost which would be average within the region, and a capacity bill of $434 million in the ATSI area. If only 16,020.2 MWs are bid into the ATSI auction, there would be a shortfall of 562.9 MWs resulting in a cost to FirstEnergy customers of approximately $2.1 billion. If the UCAP Bid into ATSI is 15,457.3 MWs, the charge increases to over $3.0 billion.

The addition of about 1,100 MW of new resources would reduce the cost to customers by about $2.6 billion in that one year (2015/16).[11] Each MW of additional resources bid into the market will reduce the total capacity bill by approximately $1.8 million in the 15,457–16,020 MW range, and by approximately $3.0 million per MW above 16,020 MW. Not bidding peak demand savings into the May auction presents significant risks to FirstEnergy's distribution customers in Ohio and the Commission is wise to investigate potential risk mitigation strategies.

2. Risk Mitigating Options

A. Energy Efficiency

FirstEnergy began initiating efficiency program activity in 2009 following the passage of SB 221. The Companies' portfolio of programs is less developed and proportionally smaller than all three of the other Ohio distribution utilities. Nevertheless, both its current programs and future programs, which should be more aggressive and effective than the Compnaies' initial offerings, have the potential to partially insulate First Energy's ratepayers from both reliability risks and the potential for substantial capacity market price spikes – but only if the Company bids the peak savings from its programs into the market. To date, FirstEnergy has declined to bid the peak demand savings from its energy efficiency programs into PJM's capacity market. The Companies' decision will have two major adverse consequences for its customers:

1. FirstEnergy customers will forgo a substantial revenue stream from an investment for which they are already committed to pay; and

2. FirstEnergy's customers will pay much more for capacity than they would otherwise need to pay because they will have to acquire capacity that will be redundant with the capacity savings produced by First Energy's efficiency programs and, more importantly, because the failure to bid efficiency resources into the market on a "price-taking basis" will cause

[11] These costs do not reflect the load in the ATSI zone that is served by non-restructured municipal and co-op utilities with their own generation, who will not be protected from the increase in market prices.

the market clearing price for capacity – i.e. the price that will be paid to all capacity that clears the market – to be significantly higher than it otherwise would have been.

OCEA agrees with the Commission's efforts in this proceeding to encourage FirstEnergy, through participation in the PJM auction process, to mitigate these adverse effects.

B. Peak Demand Benefits under Current Ohio Efficiency Savings Trajectory

FirstEnergy's customers currently benefit from efficiency programs offered by FirstEnergy. One of the benefits of those programs, now and in the future, is reductions in peak demand. However, at least in the short term, the full value of the peak demand reduction benefit will only be realized if the savings are bid into PJM's capacity market.

It is important to emphasize that the value of the peak demand savings is significant. As noted above, the market clearing price for the ATSI area is likely to be between about $72 and $537 per MW-Day.[12] PJM allows efficiency savings to receive capacity payments for four years. If prices for the following three years stayed within the range defined by the PJM price curve for 2015/2016 for four years, the total payment for a MW of efficiency savings would likely be between about $300 and $2,100 per MW-Day. By comparison, data from First Energy's 2010 annual status report suggests it spent about $464 per MW-Day of peak capacity savings from efficiency programs.[13] In other words, it is possible that capacity payments alone could cover the costs of FirstEnergy's efficiency programs.[14]

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12 As noted above, PJM has defined the price curve for the ATSI region as being between $71.64 per MW-day if 16,583.1 MW are bid and $537.33 per MW-day if only 15,457.3 MW are bid. This is the best available signal of the likely price per unit of capacity.

13 The sum of spending on the Community Connections, Home Energy Analyzer and Mercantile Customer programs, across all three FirstEnergy subsidiary companies, was $11.158 million (Ohio Edison, The Cleveland Electric Illuminating Company and The Toledo Edison Company, "Energy Efficiency & Peak Demand Reduction Program Portfolio Status Report for the Period January 1, 2010 through December 31, 2010, May 23,

As Table A shows, OCEA conservatively estimates that FirstEnergy's efficiency programs can be expected to generate 331 MW's of peak demand savings by 2015,[15] 224 MW's of which could be reasonably bid into the 2015/2016 BRA.[16] Thus, if FirstEnergy were prepared to bid the peak capacity savings from its efficiency programs into the PJM market, the Compnanies would likely have been able to earn revenues of between $6 and $44 million as a result. Again, it should be emphasized that those revenues are for just one year. Most efficiency measures last much longer than a year and PJM allows efficiency measures to receive capacity payments for up to four years, after which PJM assumes that the efficiency savings have been reflected in load forecasting, and are therefore automatically built into capacity expectations.

Table A: Peak Savings from Efficiency That Could Be Bid into PJM Capacity Market
(Current Ohio Efficiency Requirements Scenario)[17]

2011, Dockets 11-2956-EL-EEC, 11-2958-EL-EEC, and 11-2959-EL-EEC, Exhibit 4). Peak demand savings from the same programs was 65.9 MW. $11,158,000 / (66 * 365) = $464.

14 We cannot say whether capacity prices in subsequent years will be as high as in 2015/2016. However, even if they are not, the capacity benefits of efficiency programs could still offset their costs. Most efficiency measures provide peak demand savings for much longer than four years, so their peak savings may ultimately indirectly provide additional value in the form of lower capacity prices as their impacts on historic loads begin to affect PJM load forecasts. Of course, they also provide other benefits, such as energy savings, reductions in the market clearing price for energy, reductions in distribution system investments, etc.

15 This estimate is conservative for a couple of reasons. First, we assume that the statutory savings targets are met, but not exceeded. FirstEnergy initially planned to exceed its targets, to give itself a margin of error. FirstEnergy has estimated that its actual aggregate savings in 2010, across all three of its subsidiary companies, exceeded its aggregate 2010 target by 32%. Second, for simplicity, our analysis assumed that the MWh savings target in 2011 and beyond would be based on the same baseline sales levels as the 2010 target. Thus, to the extent that sales increase, our GWh savings estimates (and therefore our peak MW savings estimates) would be low. Finally, we have assumed that the MWh to peak MW ratios that the company achieved in 2010 would remain unchanged in future years. However, FirstEnergy's 2010 efficiency savings were less "peaky" than some other efficiency program portfolios with which we are familiar. Put another way, it should be possible for the Company to improve the load factor of its efficiency savings over time.

16 This value does not include the roughly 3% adder typically used to covert energy efficiency's ICAP value to the UCAP value on which capacity market payments are made.

17 Annual energy savings target for 2009 and 2010 are from First Energy's 2010 annual report (Ohio Edison, The Cleveland Electric Illuminating Company and The Toledo Edison Company, "Energy Efficiency & Peak Demand Reduction Program Portfolio Status Report for the Period January 1, 2010 through December 31, 2010, May 23, 2011, Dockets 11-2956-EL-EEC, 11-2958-EL-EEC, and 11-2959-EL-EEC, Exhibit 2). Targets in subsequent years are simply ratios of annual energy savings % targets to the 2010 energy savings % target. MW savings are estimated from energy savings targets using the actual 2010 ratio of 8312 MWh per MW for efficiency programs (excluding T&D savings). Savings available to be bid into PJM's capacity market for

	2009	2010	2011	2012	2013	2014	2015	2016
Incremental Annual Energy savings %	0.30%	0.50%	0.70%	0.80%	0.90%	1.00%	1.00%	1.00%
Incremental Annual GWh savings	166	263	369	422	474	527	527	527
Cumulative Annual GWh savings	166	430	799	1,220	1,694	2,221	2,748	3,275
Incremental Annual MW Savings from EE	20.0	31.7	44.4	50.7	57.1	63.4	63.4	63.4
Cumulative Annual MW Savings from EE	20.0	51.7	96.1	146.8	203.8	267.2	330.6	394.0
Cumulative Annual MW Available to bid into PJM							223.5	239.8

In addition, beyond the revenue that could be generated by First Energy's efficiency programs, the peak savings from the programs could have a huge impact on the market clearing price that FirstEnergy's customers will pay for all peak capacity. As noted above, every MW of additional capacity bid into the market will likely reduce the total capacity bill to ratepayers by $1.8 to $3.0 million. Thus, if FirstEnergy were prepared to bid 224 MW's of efficiency savings into the market, it would likely have been able to save customers between $400 million and $670 million. Those savings are merely potential savings from bidding into the 2015/16 BRA. Substantial, additional savings may accrue from participation in future capacity auctions. Moreover, these benefits would be realized by FirstEnergy's customers without spending one cent more on efficiency programs than is already necessary to meet the state's statutory savings goals.[18]

C. Potential to Increase Benefits with More Aggressive Energy Efficiency Efforts.

2015/2016 are estimated to be the sum of 5/12ths of the incremental annual MW delivered in 2015 (to reflect the reality that capacity must be in place by June 1), all of the incremental annual savings from 2012 through 2014, and 7/12ths of the incremental annual savings from 2011. This calculation reflects the reality that PJM only allows capacity payments to be made for efficiency measures installed within four years of the time at which they are needed. As noted above, this value does not include the roughly 3% adder typically used to covert energy efficiency's ICAP value to the UCAP value on which capacity market payments are made.

18 Though no additional money would need to be spent on the programs themselves (i.e. to generate the savings), there will be some modest costs associated with participating in the capacity market, both in terms of management of the process and the conduct of related evaluation, measurement and verification activities. However, those costs should be very heavily outweighed by the revenues associated with participation.

The statutory savings targets in Ohio are well below those currently being pursued and achieved in leading jurisdictions. Ohio's 2012 target for 0.80% of sales is required to increase to only 1.00% in 2014 and will stay at that level for several years. In contrast, several states are already achieving savings of close to, or in excess of, 2.0% per year.

In Table B we present the results of a more aggressive ramp-up of efficiency savings that would put FirstEnergy on a path to match leading jurisdictions by 2015 or 2016. Specifically, OCEA has analyzed a scenario in which savings would grow from 0.8% in 2012 to 1.3% in 2013, 1.8% in 2014, 2.3% in 2015 and 2.5% in 2016. This ramp up schedule is similar to – though several years behind - the path already being taken in Massachusetts (which started at 0.84% in 2009, ramped up to 1.30% in 2010 and 1.74% in 2011, is committed to reach 2.32% in 2012, and is likely to go to 2.5% and higher in subsequent years).[19]

Table B: Peak Savings from Efficiency That Could Be Bid into PJM Capacity Market
(More Aggressive Ramp Up Scenario)

	2009	2010	2011	2012	2013	2014	2015	2016
Incremental Annual Energy savings %	0.30%	0.50%	0.70%	0.80%	1.30%	1.80%	2.30%	2.50%
Incremental Annual MWh savings	166	263	369	422	685	948	1,212	1,317
Cumulative Annual MWh savings	166	430	799	1,220	1,905	2,853	4,065	5,383
Incremental Annual MW Savings from EE	20.0	31.7	44.4	50.7	82.4	114.1	145.8	158.5
Cumulative Annual MW Savings from EE	20.0	51.7	96.1	146.8	229.2	343.3	489.1	647.6
Cumulative Annual MW Available to bid into PJM							333.9	437.9

As Table B shows, this more aggressive path would lead to a cumulative annual MW savings of nearly 489 MWs by the end of 2015, 334 of which could be reasonably bid into the PJM capacity market. Put another way, this more aggressive path would allow an additional 110 MW to be bid into the market in 2015/2016. Those additional savings would create an additional $3 to $22 million (for a total of $9 to $65 million) in revenue and lower the cost of capacity to

19 Note that the 2009, 2010 and 2011 figures cited here for Massachusetts are actual achievements which were very close to targets set for those years.

customers in the region by an additional $200 to $330 million (for a total reduction in costs to customers of roughly $600 million to $1 billion). Again, this represents one year's worth of capacity market benefits. There would likely be substantial capacity market savings in subsequent years. Of course, these efforts would also provide substantial additional benefits in the form of energy savings, reductions in the market clearing price for energy, deferred investments in the distribution system, etc.

In summary, there is a compelling case for the PUCO to require FirstEnergy to embark on a much more aggressive efficiency path.

D. Risks of Bidding Efficiency Resources into the Capacity Market

First Energy stated that it was not prepared to bid efficiency resources into the capacity market because of risks it would incur in doing so. The Companies cite uncertainty associated with the fact that its DSM plans for the future years have not been approved, uncertainty about whether the savings they will generate in future years would qualify as capacity resources under PJM's rules, and whether First Energy would be successful in securing sufficient customer participation to meet any obligations it makes. To be fair, there is some risk associated with each of these issues. However, those risks are entirely manageable.

First, while the Companies do not have an approved efficiency program plan for future years, current law requires FirstEnergy to continue to increase its energy efficiency results in the future. It is worth noting that utilities in similar positions in other states – such as Commonwealth Edison in Illinois (which also bids into PJM) and National Grid in Massachusetts (which bids into the New England ISO's market) – are active participants in regional capacity markets. Both of those utilities (and others like them) likely and necessarily

make assumptions regarding continued funding of efficiency programs in years beyond those for which their regulators have approved plans. It is assumed the bids are conservative in order to create bids to hedge against risks, but the rewards of participation are beneficial and should not be ignored.

Second, the Companies could ensure that its future efficiency programs focused on those types of resources that are eligible to participate in PJM's market. This means focusing just on customer end-use efficiency, as any savings from transmission and distribution ("T&D") efficiency improvements cannot be bid into the market.[20]

Finally, the risk of falling short of commitments made in the market is tantamount to the risk of falling short of meeting statutory savings goals. The Companies may simply build contingencies into its efficiency program plans to ensure that FirstEnergy has enough flexibility and resources to respond to and adjust for unexpected shortfalls in savings.

In short, the perceived risks of not bidding any efficiency resources into the capacity market are manageable through appropriate preparation – which is already necessary for meeting Ohio's statutory benchmarks. The stakes for FirstEnergy's customers are far too high – potentially in the many hundreds of millions of dollars.[21] It is unacceptable – and harmful to

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20 The PUCO should require FirstEnergy to focus its energy efficiency efforts on end-use efficiency. At the same time, it should require First Energy to make all cost-effective improvements to its transmission and distribution system – even if that means going beyond the minimum energy efficiency annual benchmarks. The Companies will be rewarded for transmission and distribution investments from the rate of return realized from capital investments.

21 We note that while the Companies' collective failure to bid energy efficiency resources into the capacity markets has a significant and deleterious impact on customers, it also has a correspondingly positive impact on the bottom line of FirstEnergy's unregulated generation affiliate. Absent action by the Commission, the increase in RPM prices experienced in Ohio will pad FirstEnergy Solutions' coffers. The Companies seek to distance themselves from this obvious linkage, asserting that "[a]lthough the Companies understand the Commission is interested in issues related to the electric generating assets of the Companies' affiliate, FirstEnergy Solutions Corp., the Companies are not the custodian of information related to those assets." Comments at 8. While perhaps neither the "custodian[s] of the information" or the owners of the generating assets, the Companies are well aware that their failure to pursue bidding energy efficiency resources into the RPM auction can have an impact on prices, and that higher prices redound to the benefit of FirstEnergy

FirstEnergy customers —for the Companies not to assess the potential benefits of bidding efficiency into the PJM capacity market and provide that assessment along with an articulation of concerns about risks to the Commission for discussion (early enough to allow thoughtful exploration of the issues without jeopardizing the ability to meet deadlines for bidding). If no bid is made, the Companies should be accountable for the financial harm done to its customers for the Company's failure to adequately anticipate, prepare for and participate in the Base Residual Auction.[22]

E. Demand Response

By the end of 2010, First Energy had already acquired over 200 MWs of interruptible demand reduction resources – a resource comparable in size to the efficiency resource the Company could bid into the market under its current efficiency savings trajectory. Thus, bidding of those demand response resources into the PJM capacity market could also significantly lower the market clearing price in the ATSI region, potentially saving FirstEnergy's Ohio customers hundreds of millions of dollars.

The Company has stated that it does not plan to bid such resources into the May 2012 BRA for the 2015/16 delivery year because the current Emergency Load Relief Rider officially

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Solutions to the extent the distribution companies are permitted to pass those higher prices along to their retail customers.

[22] A suitable "price" could be the disallowance of that portion of the RPM charges that are attributable to the Companies' failure to take all reasonable measure to pursue the bidding of energy efficiency into the capacity auctions. The PUCO Entry correctly states:

"Given their obligation to provide adequate service and reasonable and adequate facilities and instrumentalities, and consistent with state policy, the FirstEnergy electric distribution utilities in the ATSI zone, The Cleveland Electric Illuminating Company, the Ohio Edison Company, and The Toledo Edison Company (collectively, the Companies), have an obligation to take all reasonable and cost-effective steps to avoid unnecessary RPM price increases for their customers. Sections 4905.22, 4905.70, and 4928,02, Revised Code."

Due to the potential financial risks to customers, the failure of the Companies to position themselves to bid energy efficiency resources into the RPM, and the positive impact that this inaction has on FirstEnergy Solutions' bottom line (a subsidiary of FirstEnergy), the Commission may well conclude that the Companies' have not engaged in prudent planning. To the extent this is found to be the case, a disallowance of some portion of the RPM charges may be in order.

expires in May of 2014. As with the Company's explanation for why it has not bid efficiency resources into the PJM capacity market, this argument is highly problematic. If demand response resources are less expensive than alternative supply options – and the Company should be able to determine if that is the case based on its cost of acquiring and retaining such resources and the prices for peak capacity being offered in the May 2012 BRA – there is no risk to the Company (i.e. revenues from the auction will offset any costs of acquiring the resources bid).

F. Alternative Energy Resources Can Also Offset the Shortfall of Capacity

Given Ohio's commitment to the regional market for electricity supply, plus the large number of expected coal plant closures outlined above, OCEA believes that the minimum efficiency, renewable energy and advanced energy resources required by Ohio law will not adequately address potential, additional capacity shortfall in Ohio. The Commission recognized these other resources in its comments to FERC as one part of the solution in mitigating reliability risks associated with expected plant closures.[23]

i. Renewable Energy Resources

Solar photovoltaic generation ("PV") has a small carve-out from within Ohio's renewable energy benchmarks. While PV is not considered cost-effective in Ohio today, it is responsive to peak demand. In the Southwest United States, several states have issued regulatory

23 *Reliability Technical Conference*, FERC Docket No. AD12-1-100, Comments Submitted on Behalf of the PUCO at 15-16 (November 22, 2011).

determinations that PV is more affordable for ratepayers than new natural gas plants.[24] And PV prices have dropped 50% since 2007, making this resource more competitive.[25] The determination of the cost of peak capacity in Northern Ohio in the ATSI zone should be compared closely with the cost of PV as a peak energy resource.

For example, the Lazard 2011 levelized cost of energy report shows MWH costs for new PV installations at a high end cost of $192 per MWH, compared to natural gas peaking facilities in a range from $211 to $242. Natural gas combined cycle ranges from $69 to $97, clearly crossing the range with PV, which has a low of $73.[26] Given the likely costs of the Base Residual Auction, PV is likely to be extremely cost-effective, and is completely immune to fuel price volatility.

ii. Advanced Energy Resources

Existing Ohio law requires 25% of standard service offer load to be generated by alternative resources by 2025.[27] "Alternative resources" includes both "renewable resources" and "advanced resources."[28] Advanced resources, which may satisfy a portion of the required 25% alternative energy resource standard, includes Combined Heat and Power ("CHP").[29] The OCEA supports Combined Heat and Power ("CHP") and all its iterations, provided that the

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24 http://cleantechnica.com/2011/02/01/sce-buys-20-years-of-solar-power-for-less-than-natural-gas/ At the time this article was written natural gas prices were about 50% higher than they are today. Several similar decisions have been made in Arizona and California since then, in spite of plunging natural gas prices. Footnote 13 provides the basis for an assessment of the trend. Gas prices will only stay low if a strategic effort is made to use efficiency and electric renewables to avoid significant new consumption.

25 http://www.solarbuzz.com/node/3184

26 Lazard 2011 page 2.

27 R.C. 4928.64(B)

28 R.C. 4928.64(A)(1)

29 4928.01(A)(34)(b)

specific project results in actual, economic, efficiency benefits.[30] CHP is generally cheaper than new generation and is generally faster to develop, manufacture and install. This is another piece of the potential solution where urgent attention is needed, and where relatively quick and affordable reductions to the ATSI zone shortfall are likely to be found.

3. FirstEnergy's Response to the Commission's Entry is Inadequate and Does Not Provide Any Recommendation to Resolve the Issue as Presented by the Commission

FirstEnergy replied to the Commission Entry in a report filed on March 29, 2012 in this matter that the resources identified in the Commission Entry cannot be provided to the PJM Auction in part because "there is no guarantee that any (all) resources that are brought into this future plan will qualify as capacity resources under PJM tariffs."[31] As discussed previously, this is not a problem without resolution. The PJM definition for qualifying energy efficiency is available:

> Existing or planned Energy Efficiency resources may be offered in an RPM auction starting with the 2012/2013 delivery year and receive the relevant LDA or RTO resource clearing price. An EE resource is a project, including installation of more efficient devices or equipment or implementation of more efficient processes or systems, exceeding then current building codes, appliance standards, or other relevant standards, designed to achieve a continuous (during peak periods) reduction in electric energy consumption that is not reflected in the peak load forecast prepared for the delivery year for which the Energy Efficiency Resource is proposed, and that is fully implemented at all times during such delivery year, without any requirement of notice, dispatch, or operator intervention.[32]

This is a manageable definition that may be applied to current program offerings by FirstEnergy and more importantly, used to evaluate its offerings in the next Portfolio case. OCEA recommends that the Commission encourage the Companies to take steps to identify

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[30] Citizen Power does have concerns regarding the use of shale gas in CHP resources.

[31] FirstEnergy Response at 4.

[32] The Independent Market Monitor for PJM; *2011 State of the Market Report for PJM: Technical Reference for PJM Markets*, page 7 (March 10, 2011).

resources that will qualify for PJM submission, estimate the savings that will be realized from such programs, and submit these resources into subsequent PJM incremental auctions. As noted below, this could result in significant savings for customers, in addition to mitigating a portion of the lost capacity and reliability risk caused by plant closures. Conservative projections, which may be based on the results of previous FirstEnergy offerings, other Ohio utilities' offerings, and energy efficiency entries by other entities will minimize the risk feared by the Companies and benefit their customers.

4. The Commission's Authority

The Commission outlined its obligations and authority in a November 30, 2011 submission by the PUCO to the Federal Energy Regulatory Commission ("FERC") for a Reliability Technical Conference. In those comments, the Ohio Commission makes a number of important statements regarding its authority, including:

1. The PUCO has responsibility and expansive authority to forecast Ohio's energy needs and to ensure that each electric distribution company is able to meet the forecast needs of the customers within its certified territory.

2. The PUCO has responsibility and expansive authority to ensure that each electric distribution company meets, and in some instances surpasses, statutory benchmarks for alternative energy, energy efficiency, and peak demand reduction.

3. The PUCO has authority to work directly with high use customers within the State of Ohio to achieve alternative energy, energy efficiency, and peak demand reduction goals of the State.

4. The PUCO has adopted and has the competence to adjust, nimbly and as necessary, net metering and interconnection rules to promote and support Ohio's policy to encourage implementation of distributed generation.

5. The PUCO and the Ohio Power Siting Board have positive relationships with sister state of Ohio agencies that possess additional authorities which may be marshaled to ascertain, initiate and implement unit-specific reliability solutions in the face of plant retirements.

6. The PUCO may alert the Governor of the State of Ohio who may declare a state of emergency when the health, safety, or welfare of the residents of this state or of one or more counties of this state is so imminently and substantially threatened by an energy shortage that immediate action of state government is necessary to prevent loss of life, protect the public health or safety, and prevent unnecessary or avoidable damage to property.[33]

The PUCO expressed its willingness to exercise its authority to mitigate the "reliability risk presented by impending and expected power plant closures."[34] This is re-emphasized in another section of the FERC comments:

> "Even though Ohio is a restructured state, every electric distribution company is mandated to "furnish necessary and adequate service and facilities" and each is directed to "furnish and provide with respect to its business such instrumentalities and facilities, as are adequate and in all respects just and reasonable. **The PUCO has responsibility for general supervision over electric distribution companies including authority to examine their operations with regard to the adequacy afforded by their service. The PUCO may initiate an investigation to determine whether an electric distribution company's service is or will be insufficient or inadequate or cannot be obtained. If the PUCO determines that an electric distribution company's service is or will be insufficient, "in order to secure adequate service or facilities, the commission may make and serve an appropriate order directing that such repairs, improvements, or additions be made within a reasonable time and in a manner specified in such order** (Emphasis added) .[35]

Given FirstEnergy's inadequate response, the exercise of this authority by the Commission is necessary. In exercising its authority, the Commission should place greatest emphasis on increasing investment in those resources that provide the greatest economic benefit to ratepayers: energy efficiency.

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33 *Reliability Technical Conference*, FERC Docket No. AD12-1-100, Comments Submitted on Behalf of the PUCO at 13-21 (November 22, 2011).

34 *Reliability Technical Conference*, FERC Docket No. AD12-1-100, Comments Submitted on Behalf of the PUCO at 5 (November 22, 2011).

35 *Reliability Technical Conference*, FERC Docket No. AD12-1-100, Comments Submitted on Behalf of the PUCO at 23 (November 22, 2011).

Ohio law requires the PUCO to "initiate programs that will promote and encourage conservation of energy and a reduction in the growth rate of energy consumption, promote economic efficiencies."[36] It also charges the Commission with the broad authority to "…Initiate programs that will promote and encourage conservation of energy and a reduction in the growth rate of energy consumption, promote economic efficiencies, and take into account long-run incremental costs."[37] These requirements are separate from and not limited by the minimum benchmark requirements presented in SB 221. Thus, Ohio law provides the Commission with the authority to encourage and facilitate the acquisition of energy and peak demand savings above those required by the SB 221 benchmarks if appropriate and necessary to minimize costs to ratepayers associated with addressing reliability issues, expectations of high capacity market prices and/or other related objectives.

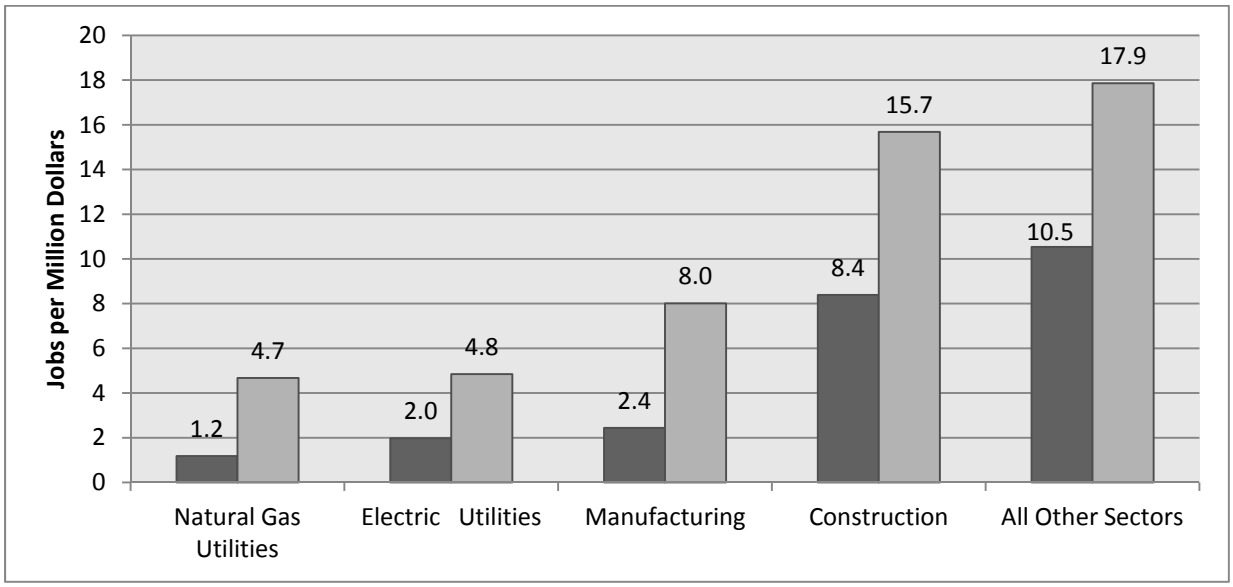
5. Economic Development and Jobs

In addition to reducing capacity prices, many of the solutions discussed in these comments – energy efficiency, demand response, renewable energy, and combined heat and power – could create much-needed jobs in the ATSI zone. Energy efficiency programs create jobs because they shift money that otherwise would be spent on energy bills to the broader Ohio economy, including manufacturing and construction sectors. Electric and natural gas utilities are among the least job-intensive sectors of the Ohio economy per investment dollar, producing around 4.8 total jobs per-million dollars of investment. The broader Ohio economy, in comparison, generates 17.9 jobs per million dollars of investment.[38] Energy efficiency programs produce jobs from the activity that the programs directly pay for – retrofitting lighting systems,

[36] R.C. 4905.70
[37] R.C. 4905.70
[38] Ohio data for 2010 from http://www.implan.com.

insulating attics, designing new production processes – and from the reinvestment of savings in the Ohio economy. In a forthcoming paper written by Skip Laitner at the American Council for an Energy Efficient Economy, with assistance from NRDC and OEC, it is estimated that the energy efficiency standard in Revised Code Section 4928.66 has already created 3,800 jobs through the end of 2011 and will create more than 32,000 jobs when fully implemented in 2025. Cost-effective energy savings additional to those required by law would create even more jobs.

Table C: Energy Efficiency Creates More Jobs per Investment Dollar Than Spending Money on Electric Utility Service



III. Summary of Recommendations

OCEA urges the PUCO to explore efficiency opportunities above those minimums required by Ohio law. The Commission can address reliability issues through the use of proper utility incentives to focus on commercial and industrial lighting, all HVAC efficiency, and numerous other residential, small business, commercial, and industrial measures that can decrease FirstEnergy's daytime summer peak season electricity requirements.

The Companies should be required to work with its collaborative working group to develop an energy efficiency portfolio that is focused on peak demand reductions for presentation to the Commission for approval no later than July 31, 2012 as detailed in the Entry. Any revenues earned from the Companies as a result of bidding the peak demand reductions into the Auction should be used to fund additional cost-effective energy efficiency, further reducing costs for customers.

If FirstEnergy completes the preparations for a bid into the PJM auction, the Commission could also potentially mitigate these risks and therefore encourage less conservative bids by giving direction to FirstEnergy to bid into the market under specific assumptions about budgets for efficiency programs in future years, with the customers absorbing that risk if those budgets were to be reduced by the Commission at no fault to the Companies. This approach was used by the Vermont Public Service Board to encourage Efficiency Vermont to be more aggressive in its bids into the New England capacity market.

Finally, the Commission should explore the use of a third party administrator for developing and implementing energy efficiency programs throughout the FirstEnergy service territory in Ohio. The Companies have continued to provide limited information with little to no time to its collaborative members, allowing inadequate time for comprehensive feedback on program designs and to make suggestions for changes. In order to ensure that the Companies "file timely updates to their portfolio plans that meet or exceed their cumulative energy efficiency and peak demand reduction benchmarks for 2015"[39] the Commission should explore the use of a third party administrator to implement energy efficiency in the FirstEnergy Ohio service territory.

[39] Entry at item 5.

IV. CONCLUSION

The Commission's Entry is timely and OCEA is appreciative of the opportunity to provide a response. The risk posed to FirstEnergy's customers is due to a number of factors, including perhaps poor planning on the part of FirstEnergy's electric distribution utilities. The FirstEnergy distribution utilities serve an area heavily dependent on coal. Despite the slow development of new federal standards and announced coal plant closures all over the U.S., FirstEnergy was unable to provide the Commission with any analysis or resolutions in their response to the Entry, other than for the short-term and immediate barriers that comprise the Companies' reluctance to pursue bidding into the near-term or future PJM auctions.

The PUCO requires the Companies to take all reasonable and cost effective steps to mitigate price increases. As noted above, the Commission has broad authority at its disposal to begin mitigating the risks detailed in its Entry. What is essential is a clear view of the full array of options that should be employed to develop a solution to capacity problems that will affect Ohio utility customers. Energy efficiency is unquestionably the most economical solution, and will remain so even if FirstEnergy must raise the price of a saved KWH by 100% or more. That is not likely to be necessary, but it is in the interest of FirstEnergy's customers to find out where the price parity point for efficiency is, compared to generation resources. A clear connection between maximum opportunities for utility earnings and the best economic outcome for customers must be established.

FirstEnergy should be provided a clear indication that its overall rate of return will be lowered if it foregoes opportunities to save energy, to obtain inexpensive energy from innovative sources, and generally fails to conduct its business to the benefit of its customers. OCEA supports incentives for good performance with efficiency programs and believes full cost

recovery for prudently incurred costs, timely filing for program budgets and a clear indication of fair treatment are essential.

The dynamics which led to this inquiry should be swiftly addressed, but are just the tip of the iceberg. Many more coal plants must either be retired or have expensive pollution controls added, unless Ohio can pick up the pace of clean energy development considerably. The issues facing FirstEnergy and the ATSI zone are just one facet of the larger picture. OCEA respectfully requests the Public Utilities Commission of Ohio to consider and adopt the above recommendations as applicable.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing *Comments by the Ohio Consumer and Environmental Advocates* has been filed with the Public Utilities Commission of Ohio and has been served upon the following parties via electronic mail on April 10, 2012.

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Summary: Comments electronically filed by Mr. Christopher J Allwein on behalf of Ohio Environmental Council and The Sierra Club and Natural Resources Defense Council and Citizen Power and Environmental Law and Policy Center