

FILE

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STATE OF OHIO
BEFORE THE
PUBLIC UTILITIES COMMISSION

CASE NO. 14-1297-EL-SSO

IN THE MATTER OF THE APPLICATION OF
OHIO EDISON COMPANY, THE CLEVELAND ELECTRIC
ILLUMINATING COMPANY, AND THE TOLEDO EDISON
COMPANY FOR AUTHORITY TO PROVIDE FOR A STANDARD
SERVICE OFFER PURSUANT TO R.C. 4928.143 IN THE FORM OF
AN ELECTRIC SECURITY PLAN

DIRECT TESTIMONY OF
DENNIS W. GOINS, Ph.D.
ON BEHALF OF NUCOR STEEL MARION, INC.

December 22, 2014

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**BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO**

IN THE MATTER OF THE APPLICATION OF OHIO EDISON	§	
COMPANY, THE CLEVELAND ELECTRIC ILLUMINATING	§	
COMPANY, AND THE TOLEDO EDISON COMPANY FOR	§	CASE No. 14-1297-EL-SSO
AUTHORITY TO PROVIDE FOR A STANDARD SERVICE	§	
OFFER PURSUANT TO R.C. 4928.143 IN THE FORM OF AN	§	
ELECTRIC SECURITY PLAN	§	

**DIRECT TESTIMONY OF
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ON BEHALF OF
NUCOR STEEL MARION, INC.**

INTRODUCTION AND QUALIFICATIONS

1
2 **Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS**
3 **ADDRESS.**

4 **A.** My name is Dennis W. Goins. I operate Potomac Management Group, an
5 economics and management consulting firm. My business address is 5801
6 Westchester Street, Alexandria, Virginia 22310.

7 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND**
8 **PROFESSIONAL BACKGROUND.**

9 **A.** I received a Ph.D. degree in economics and a Master of Economics degree
10 from North Carolina State University. I also earned a B.A. degree with
11 honors in economics from Wake Forest University. Following graduate
12 school I worked as a staff economist at the North Carolina Utilities
13 Commission (NCUC). During my tenure at the NCUC, I testified in
14 numerous cases involving electric, gas, and telephone utilities, and also
15 served as a member of the Ratemaking Task Force in the national Electric
16 Utility Rate Design Study sponsored by the Electric Power Research

1 Institute (EPRI) and the National Association of Regulatory Utility
2 Commissioners (NARUC).

3 Since leaving the NCUC, I have worked as an economic and
4 management consultant to firms and organizations in the private and
5 public sectors. My assignments focus primarily on market structure,
6 policy, planning, and pricing issues involving firms that operate in energy
7 markets. For example, I have conducted detailed analyses of product
8 pricing, cost of service, rate design, and interutility planning, operations,
9 and pricing issues; prepared analyses related to utility mergers,
10 transmission access and pricing, and the emergence of competitive
11 markets; evaluated and developed regulatory incentive mechanisms
12 applicable to utility operations; and assisted clients in analyzing and
13 negotiating interchange agreements and power and fuel supply contracts.

14 I have submitted testimony and affidavits and provided technical
15 assistance in more than 200 proceedings before state and federal agencies
16 as an expert in cost of service, rate design, competitive market issues,
17 regulatory policy, and utility planning and operating practices. These
18 agencies include the Federal Energy Regulatory Commission (FERC), the
19 Government Accountability Office, state courts in Iowa, Montana, and
20 West Virginia, and regulatory agencies in Alabama, Arizona, Arkansas,
21 Colorado, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Kansas,
22 Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota,
23 Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio,
24 Oklahoma, South Carolina, Texas, Utah, Vermont, Virginia, West
25 Virginia, Wyoming, and the District of Columbia.

26 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS**
27 **PROCEEDING?**

28 **A.** I am testifying on behalf of Nucor Steel Marion, Inc., which is located in
29 Marion, Ohio. The Nucor facility—a large retail industrial consumer

1 served by Ohio Edison Company—produces steel by recycling steel scrap
2 in electric arc furnaces.

3 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

4 **A.** The purpose of my testimony is to present my evaluation of and
5 recommendations as to the provisions of the Stipulation and
6 Recommendation (Stipulation) filed on December 22, 2014 related to
7 Rider ELR and standard service offer time-of-day rates.

8 **Q. WHAT INFORMATION DID YOU REVIEW IN CONDUCTING**
9 **YOUR EVALUATION?**

10 **A.** I reviewed FirstEnergy's August 4, 2014 application (Application), the
11 Stipulation, responses to certain discovery requests in this case, and case-
12 related information available on the Commission's website. I also
13 reviewed testimony and the Commission's decisions in FirstEnergy's
14 previous ESP and market rate offer (MRO) proceedings (Case Nos. 08-
15 935-EL-SSO, 08-936-EL-SSO, and 09-906-EL-SSO) in which I testified.
16 Finally, I reviewed publicly available information related to the issues in
17 my testimony.

18 **CONCLUSIONS AND RECOMMENDATIONS**

19 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND**
20 **RECOMMENDATIONS.**

21 **A.** The Stipulation includes two major improvements to FirstEnergy's ESP 4
22 as filed related to interruptible and time-of-use rates. First, unlike the filed
23 ESP 4, the Stipulation includes a strong retail interruptible rate option
24 (Rider ELR) through the term of ESP 4. The continued availability of a
25 retail interruptible rate option is critical not only to interruptible
26 customers—including Nucor—that have been interruptible for many
27 years, but also provides substantial system benefits. The Rider ELR

1 recommended in the Stipulation is similar in structure and economics to
2 *the currently effective Rider ELR, except that customers will be required*
3 *to curtail service on 30 minutes notice for curtailments called by PJM*
4 *instead of two hours notice, will no longer be subject to Economic Buy-*
5 *Through (EBT) Option Events, and will be allowed to shop for generation*
6 *supply rather than having to take generation service from FirstEnergy*
7 *under the SSO. These improvements in the revised Rider ELR enhance*
8 *the reliability, cost avoidance, and economic development benefits under*
9 *the current Rider ELR. As a result, I recommend that the Commission*
10 *approve continuation of Rider ELR for ESP 4 with these improvements.*

11 Second, the Stipulation also continues FirstEnergy's current time-of-
12 day rate (TOD) offering under the SSO. This time-of-day rate provides
13 better, more cost-based price signals to customers, and also gives
14 customers incentives to shift usage from on-peak hours when energy costs
15 are highest to lower-cost off-peak hours. I recommend that the
16 Commission approve continuation of FirstEnergy's SSO time-of-day rates
17 for ESP 4.

18 In past decisions the Commission has recognized the value of
19 interruptible and time-of-day rate options to FirstEnergy's customers. The
20 Stipulation ensures the continued availability of these two key rate options
21 that are important benefits of the Stipulation.

22 **RIDER ELR**

23 **Q. WHAT IS INTERRUPTIBLE SERVICE?**

24 **A.** Interruptible service is a separately identifiable nonfirm utility product that
25 allows a supplier to interrupt or curtail customer loads when reliability is
26 impaired.

1 **Q. DOES FIRSTENERGY CURRENTLY OFFER INTERRUPTIBLE**
2 **SERVICE UNDER RIDER ELR?**

3 **A.** Yes. Rider ELR was first approved in Case No. 08-935-EL-SSO to
4 replace various interruptible rates offered by FirstEnergy's operating
5 companies. Rider ELR has been incorporated—subject to
6 modifications—in each of FirstEnergy's subsequent ESPs.

7 **Q. PLEASE DESCRIBE THE CURRENT RIDER ELR IN MORE**
8 **DETAIL.**

9 **A.** Rider ELR (as approved in ESP 3) requires each participating customer to
10 curtail load above the customer's designated Firm Load on two-hours
11 notice during an Emergency Curtailment Event that endangers service
12 reliability to firm customers.¹ An Emergency Curtailment Event may be
13 called when (i) the particular FirstEnergy operating company, (ii) a
14 regional transmission organization (for example, PJM), and/or (iii) a
15 transmission operator (for example, ATSI) determines that an emergency
16 condition exists that may jeopardize the integrity of the distribution or
17 transmission system. Rider ELR also currently includes an EBT
18 component triggered by high market hourly prices.

19 Rider ELR customers currently receive a monthly \$5 per kW credit for
20 each kW of Curtailable Load under Rider ELR. They also receive a \$5
21 per kW monthly economic development credit under Rider EDR—
22 resulting in a total monthly credit of \$10 per kW. Rider ELR customers
23 are subject to significant penalties if they fail to curtail down to their
24 designated firm loads during an Emergency Curtailment Event. These
25 penalties include forfeiture of all Rider ELR credits received in the prior
26 year (including Rider EDR credits), and possible removal from Rider

¹ In another case, FirstEnergy has proposed shortening the interruption notice under Rider ELR to 30 minutes for emergency curtailments called by PJM, in order to comply with new PJM rules for demand response resources. See Case No. 14-2037-EL-ATA. FirstEnergy has incorporated the same approach in Rider ELR under the Stipulation.

1 ELR. Rider ELR customers are currently required to take generation
2 supply under FirstEnergy's SSO for the duration of the SSO plan.

3 **Q. DOES INTERRUPTIBLE LOAD PROVIDE TANGIBLE**
4 **CAPACITY, OPERATING, AND ECONOMIC BENEFITS?**

5 **A.** Yes. Interruptible load can and should be a significant element of any
6 electric utility's demand-response efforts. Interruptible load has long been
7 recognized as a means to avoid or defer the cost of adding generating and
8 transmission capacity. It provides reliability benefits by substituting for
9 such ancillary services as spinning and operating reserves. Interruptible
10 load expands the range of resources available to meet contingencies,
11 lowers customer costs, and can even be used to mitigate wholesale price
12 volatility and curb potential market power problems. Interruptible service
13 is also a form of insurance or safety net, protecting against emergency
14 situations if and when they occur. In addition, interruptible load can
15 create environmental benefits by avoiding the impacts of constructing and
16 operating fossil generation.

17 **Q. DOES INTERRUPTIBLE LOAD PROVIDE OTHER BENEFITS?**

18 **A.** Yes. A strong interruptible rate program can help states promote
19 economic development and manufacturing jobs retention. The availability
20 of an effective interruptible service option is often a key factor in
21 determining where a manufacturing facility is located, particularly
22 manufacturers with energy-intensive production processes. In addition,
23 the continuing long-term availability of a cost-effective interruptible rate
24 option can help keep established firms competitive and growing. And
25 finally, interruptible load also is an ideal resource for meeting the peak
26 demand reduction requirements under Ohio Revised Code, Section
27 4928.66.

1 **Q. HAS THE COMMISSION PREVIOUSLY RECOGNIZED THE**
2 **BENEFITS OF INTERRUPTIBLE LOAD AND THE NEED FOR**
3 **PROPERLY DEVELOPED INTERRUPTIBLE RATES IN**
4 **FIRSTENERGY'S STANDARD SERVICE OFFERS?**

5 **A.** Yes. The Commission has consistently recognized the need for and
6 benefits of viable interruptible rate options in FirstEnergy's SSO rate
7 plans. For example, in FirstEnergy's initial MRO filing (Case No. 08-
8 936-EL-SSO), I testified in favor of including interruptible (and time-of-
9 day) rates. The Commission found the following:

10 The Commission notes that the policy of the state, as codified in
11 Section 4928.02, Revised Code, requires the Commission to ensure
12 the availability of unbundled and comparable retail electric service
13 that provides customers with the supplier, term, price, conditions,
14 and quality options they elect to meet their respective needs.
15 Further, SB 221 amended Section 4928.02, Revised Code, to
16 specifically include the promotion of time-differentiated pricing as
17 a policy goal of this state. FirstEnergy has not demonstrated how
18 its proposed rate design advances these policy goals. In fact, the
19 record clearly indicates that FirstEnergy could have proposed a
20 rate design which would advance these goals. The Commission
21 agrees with Kroger that time-of-day rates would recognize that
22 some customers have a higher proportion of usage in lower-cost,
23 off-peak periods (Kroger Ex. 1 at 5). Likewise, the record
24 demonstrates that interruptible rates can be used to reduce
25 generation and transmission capacity needs (Nucor Ex. 1 at 11).
26 Moreover, the Commission notes that FirstEnergy has not
27 demonstrated that time-of-day rates or interruptible rates are
28 impractical or cannot be implemented as part of a competitive
29 bidding process (Tr. I at 159; Tr. V at 21). In fact, the record in
30 this proceeding demonstrates that FirstEnergy included both time-
31 of-day rates and interruptible rates in its prior request, in Case No.
32 07-796-EL-ATA, for a competitive bidding process (Nucor Ex. 1
33 at 5, 10). Therefore, because the Commission finds that
34 FirstEnergy has not demonstrated that its proposed rate design
35 advances the state policies enumerated in Section 4928.02, Revised
36 Code, the proposed rate design should not be adopted and
37 approved by the Commission.²

² Case No. 08-936-EL-SSO, Opinion and Order, at 24 (November 25, 2008).

1 **Q. HOW IS FIRSTENERGY'S INTERRUPTIBLE LOAD**
2 **CURRENTLY USED IN PJM?**

3 **A.** FirstEnergy bids Rider ELR interruptible load into PJM's capacity
4 auctions. ELR resources that FirstEnergy successfully bids into PJM's
5 capacity auctions:

- 6 ■ Displace higher-cost capacity resources—thereby helping to lower
7 capacity prices produced in the auctions.
- 8 ■ Produce capacity revenue payments from PJM to FirstEnergy that
9 FirstEnergy then passes back to customers through Rider DSE1.
- 10 ■ Enhance supply reliability for SSO and shopping customers since
11 PJM may call Rider ELR resources to curtail when a system
12 emergency occurs.

13 **Q. WAS INTERRUPTIBLE LOAD DEPLOYED DURING THE**
14 **POLAR VORTEX EARLIER THIS YEAR?**

15 **A.** Yes. According to FirstEnergy witness Steven Strah, Rider ELR
16 customers received a mandatory curtailment and multiple voluntary
17 curtailments notices during the Polar Vortex.³

18 **Q. SHOULD FIRSTENERGY CONTINUE TO OFFER**
19 **INTERRUPTIBLE RATES?**

20 **A.** Yes. As I discussed earlier, well-designed interruptible rates provide
21 reliability, cost savings, and economic development benefits. In addition,
22 recent developments in PJM have raised uncertainty regarding whether
23 and how demand response can participate in future PJM capacity
24 auctions.⁴ Uncertainty about the future of demand response in PJM's

³ Direct Testimony of Steven E. Strah at 9-10.

⁴ See *Electric Power Supply Association v. FERC*, 753 F.3d 216 (D.C. Cir. 2014) (decision vacating FERC Order No. 745 addressing compensation for demand response in organized wholesale energy markets); see also *FirstEnergy Service Co. v. PJM Interconnection, LLC*, Docket No. EL14-55-000 (filed May 23, 2014) (complaint asserting that demand response may not participate in the PJM capacity markets). Additionally, in FERC filings dated December 12,

1 wholesale markets dramatically increases the importance of continuing
2 strong interruptible rate programs at the retail level.

3 **Q. WHAT DOES THE STIPULATION PROVIDE WITH REGARD TO**
4 **INTERRUPTIBLE RATES?**

5 **A.** Under terms of the Stipulation, Rider ELR will continue largely in its
6 current form through the term of ESP 4, but with certain improvements.
7 The total monthly ELR credit will remain \$10 per kW of Curtailable Load,
8 and Rider ELR customers will remain subject to Emergency Curtailments
9 called by PJM, FirstEnergy, or ATSI. The recommended Rider ELR
10 reflects three principal improvements relative to the current rider. These
11 improvements are:

- 12 ■ Reducing the notice period for emergency curtailments called by
13 PJM from two hours to 30 minutes.
- 14 ■ Removing the Economic Buy-Through Option Event.
- 15 ■ Allowing ELR customers to take generation service either from a
16 competitive supplier or from FirstEnergy under its SSO.

17 **Q. HOW SHOULD INTERRUPTIBLE LOAD BE VALUED IN TERMS**
18 **OF SETTING AN INTERRUPTIBLE CREDIT?**

19 **A.** Because interruptible load can be used to avoid or defer the need for new
20 generation capacity, the starting point for determining an interruptible
21 credit should be the long-run avoided cost of generation capacity. In
22 PJM's capacity market construct, the long-run avoided cost of capacity is
23 represented by the cost of new entry (CONE)—an administratively-
24 determined value⁵ that is updated annually based on the methodology
25 proposed by PJM and approved by the FERC. The PJM CONE is
26 developed through a rigorous process based on expert analysis on behalf

2014, PJM proposed major tariff revisions affecting how demand response will be treated in its capacity markets. See Docket Nos. ER15-623-000 and EL15-29-000.

⁵ The PJM CONE is calculated based on the estimated annual cost of a new peaking generator.

1 of PJM and is a reasonable proxy for the avoided capacity component of
2 FirstEnergy's interruptible rate credit.

3 As shown in the following table, the PJM-wide CONE value has
4 increased from \$10.19 per kW-month for capacity delivery year 2013/14
5 to \$11.95 per kW-month for capacity delivery year 2017/18—a 17 percent
6 increase.

7

<u>Capacity Delivery Year</u>	<u>CONE (\$/MW-Yr)</u>	<u>CONE (\$/KW-Mo)</u>
2013/14	\$122,236	\$10.19
2014/15	\$128,226	\$10.69
2015/16	\$131,303	\$10.94
2016/17	\$139,392	\$11.62
2017/18	\$143,434	\$11.95

8

9 **Q. SHOULD AN INTERRUPTIBLE CREDIT BE BASED ON SHORT-**
10 **TERM CAPACITY PRICES SUCH AS THE AUCTION PRICES OF**
11 **CAPACITY BID INTO PJM MARKETS?**

12 **A.** No. Short-run market prices reflect current market conditions for existing
13 generating capacity, while long-run avoided costs reflect the cost of
14 adding new capacity to meet demand growth. Long-run—not short-run—
15 capacity costs more accurately reflect avoided cost savings attributable to
16 *interruptible service*. Short-run prices do not give a clear signal regarding
17 the cost of capacity to serve future peak demands. In addition, basing an
18 interruptible credit or price on short-run market prices is similar to relying
19 solely on spot market purchases to meet future energy needs—both
20 approaches increase consumer risks via unstable and unpredictable prices.
21 Moreover, interruptible rates that reflect short-term price fluctuations may
22 impede the development of robust and effective retail interruptible
23 programs. In my opinion, customers are less likely to make a long-term

1 commitment to be interruptible (including accepting the costs and risks
2 associated with such a commitment) if an interruptible credit they receive
3 varies dramatically from year to year. A stable credit reflecting long-run
4 avoided costs is the best way to secure a long-term commitment from
5 industrial customers willing to be interruptible.

6 Firm customers can also be negatively affected if interruptible credits
7 reflect short-run market prices—particularly during shortage periods when
8 short-run market prices can far exceed the long-run avoided cost of
9 generation capacity. Relying on spot prices is wonderful as long as excess
10 supply exists and prices are low. However, when generation supply
11 becomes scarce, short-run market prices can far exceed the cost of new
12 capacity that cannot be added immediately. A stable and effective
13 interruptible program requires prices that reflect the long-run avoided cost
14 of adding generation capacity—not a short-term value that reflects
15 capacity shortages.

16 **Q. IS THE AVOIDED COST OF GENERATION CAPACITY THE**
17 **ONLY COST FACTOR THAT SHOULD BE CONSIDERED IN**
18 **DEVELOPING AN INTERRUPTIBLE CREDIT?**

19 **A.** No. An interruptible capacity credit should also reflect the avoided cost of
20 generation reserves and transmission losses offset by interruptible load.
21 Reflecting these factors in an interruptible credit would necessitate
22 increasing the estimated long-run avoided cost of generation capacity by
23 15 to 20 percent. A 15 percent increase in PJM's 2017/2018 CONE would
24 result in a value of \$13.74 per kW.

25 **Q. SHOULD OTHER NON-COST FACTORS BE TAKEN INTO**
26 **ACCOUNT IN SETTING RIDER ELR'S INTERRUPTIBLE**
27 **CREDIT?**

28 **A.** Yes. Interruptible rates also promote economic development and
29 manufacturing jobs retention. FirstEnergy recognized this objective by

1 putting part of its current ELR interruptible credit in Rider EDR. As I
2 noted earlier, the availability of cost-based interruptible service helps
3 attract and retain large, energy-intensive industrial customers that provide
4 jobs and tax revenues in Ohio's communities—a fact that should not be
5 forgotten in structuring FirstEnergy's interruptible program.

6 **Q. IN LIGHT OF THESE FACTORS, IS IT REASONABLE TO**
7 **CONTINUE THE \$10 PER KW-MONTH COMBINED RIDER ELR**
8 **INTERRUPTIBLE CREDIT AS RECOMMENDED IN THE**
9 **STIPULATION?**

10 **A.** Yes. My analysis supports a credit of at least \$10 per kW. As shown in
11 the table above, the proposed credit is less than the current and projected
12 PJM CONE values through at least the first two years of ESP 4. That is,
13 current and projected PJM CONE values support a credit of at least \$10
14 per kW based solely on the long-run avoided cost of generation capacity in
15 PJM during the term of ESP 4. In addition, the proposed ELR credit does
16 not fully reflect the substantial additional benefits (the avoided cost of
17 generation reserves, losses, and transmission, as well as economic
18 development and job retention) that interruptible load provides.

19 **Q. DO THE STIPULATION'S PROPOSED CHANGES IN RIDER ELR**
20 **REPRESENT SIGNIFICANT IMPROVEMENTS?**

21 **A.** Yes. In my opinion, the recommended changes substantially strengthen
22 Rider ELR. In particular:

23 ■ Moving from a 2-hour to a 30-minutes interruption notice should
24 enhance system reliability, which is why PJM now requires the
25 shorter notice for resources that continue to participate in its
26 capacity market.⁶ While the shorter notice may enhance system

⁶ *PJM Interconnection, LLC*, 147 FERC ¶61,103 at P 57 (May 9, 2014) indicates that "increasing operational flexibility and requiring demand response resources to achieve full load reduction within 30 minutes will lead to a more reliable system and a more efficient use of demand response resources."

1 reliability, it should also be recognized that it likely increases costs
2 to participating customers and makes compliance more difficult.
3 These increased costs and burdens to customers and benefits to the
4 system should be recognized in determining the reasonableness of
5 the revised Rider ELR.

- 6 ■ Allowing customers that shop to also participate in Rider ELR will
7 make this rate option more attractive to customers by ensuring that
8 they are not forced to take SSO supply if the CRES market
9 provides a better option. By making ELR more attractive,
10 customers will be less likely to migrate away from FirstEnergy's
11 interruptible program in order to shop—an outcome that could
12 potentially result in the loss of reliability benefits produced by
13 ELR. Allowing shopping customers to participate in Rider ELR
14 will also help to maintain FirstEnergy's retail interruptible
15 program—thereby reducing uncertainty that currently exists
16 regarding participation by demand response resources in PJM's
17 capacity auctions. Furthermore, allowing ELR customers to shop
18 improves the likelihood that economic benefits attributable to
19 participating ELR manufacturers are retained in Ohio.

- 20 ■ Eliminating EBT events (which do little to enhance system
21 reliability) focuses Rider ELR on its primary mission—supporting
22 system reliability. PJM does not require economic interruptions
23 for demand response resources that participate in its capacity
24 auctions. Moreover, continuing EBT events under Rider ELR
25 would justify an interruptible credit much higher than the
26 Stipulation's proposed \$10 per kW since the credit's capacity
27 component is already less than the long-run avoided cost of
28 generation capacity, without even consideration of the cost of EBT
29 events to ELR customers. In other words, EBT events serve to
30 further reduce the effective credit for interruptible service by
31 offsetting a portion of the credit value with the increased cost of

1 additional non-emergency interruptions or economic buy-throughs.
2 Finally, eliminating EBT events is a reasonable trade-off for
3 maintaining the credit at its current \$10 per kW level while
4 significantly shortening the notice for PJM-called curtailments.

5 **Q. SHOULD THE COMMISSION APPROVE THE STIPULATION'S**
6 **RECOMMENDED CONTINUATION OF RIDER ELR WITH**
7 **THESE IMPROVEMENTS?**

8 **A.** Yes.

9 **TIME-OF-DAY RATES**

10 **Q. DOES FIRSTENERGY CURRENTLY OFFER TIME-**
11 **DIFFERENTIATED RATES?**

12 **A.** Yes. Generation rates for all SSO customers currently served under Rider
13 GEN are seasonally-differentiated. Rider GEN also includes a time-of-
14 day option under which Rider GEN's seasonal rates are further
15 differentiated based on 3 TOD periods (Midday Peak, Shoulder Peak, and
16 Off-Peak).

17 **Q. UNDER THE STIPULATION, WILL FIRSTENERGY CONTINUE**
18 **TO OFFER TOD RATES?**

19 **A.** Yes. Under the Stipulation, the TOD option will remain available to SSO
20 customers.

21 **Q. IS CONTINUING THE CURRENT TOD RATE OPTION AS**
22 **RECOMMENDED IN THE STIPULATION APPROPRIATE AND**
23 **REASONABLE?**

24 **A.** Yes. TOD rates reflect daily cost variations that provide better price
25 signals to customers. Without time-of-day pricing, customers see uniform
26 hourly prices despite hourly variations in the cost of electricity supply. By
27 providing better price signals, TOD rates encourage customers to use

1 electricity more efficiently, and allow customers to save if they can shift
2 usage from the highest cost periods (that is, the Midday Peak period in
3 summer months and the Shoulder Peak period in nonsummer months) to
4 lower-cost time periods. In my opinion, SSO rates should provide a TOD
5 option even if TOD rates are offered in the market. By providing a price
6 signal for customers to shift usage from on-peak to off-peak periods, TOD
7 rates should help lower prices bid by SSO suppliers as well as lower real-
8 time market prices in PJM. TOD price signals can also provide a
9 reliability benefit by encouraging customers to shift usage from peak
10 periods when the grid is most likely to be stressed and susceptible to
11 emergency events—particularly in summer months. Finally, while the
12 number SSO customers currently served under TOD rates may be small,
13 FirstEnergy should continue providing such rates to customers that have
14 demonstrated their ability to respond to time-differentiated price signals.

15 **Q. SHOULD THE COMMISSION APPROVE THE STIPULATION'S**
16 **RECOMMENDED CONTINUATION OF THE TIME-OF-DAY**
17 **RATE OPTION?**

18 **A.** Yes. As the Commission has previously recognized, TOD rates provide
19 significant benefits and therefore should be continued in FirstEnergy's
20 ESP 4.

21 **Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**

22 **A.** Yes.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served upon the following parties of record or as a courtesy, via electronic mail on December 22, 2014.


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