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 Approval of Ohio Site Deployment of the Smart Grid Modernization Initiative and Timely Recovery of Associated Costs.	)	Case No. 09-1820-EL-ATA Case No. 09-1821-EL-GRD Case No. 09-1822-EL-EEC Case No. 09-1823-EL-AAM

FINDING AND ORDER

The Commission finds:

(1) Ohio Edison Company, The Cleveland Electric Illuminating Company (CEI), and The Toledo Edison Company (collectively, FirstEnergy or the Companies) are public utilities as defined in Section 4905.02, Revised Code, and, as such, are subject to the jurisdiction of this Commission.

(2) On January 21, 2009, the Commission approved the creation of an advanced metering infrastructure rider (Rider AMI) as a mechanism for the recovery of costs related to the deployment of smart grid and advanced metering infrastructure. *In re FirstEnergy*, Case No. 07-551-EL-AIR, et al., Opinion and Order (January 21, 2009) at 44-45.

(3) On July 31, 2008, as amended on February 19, 2009, FirstEnergy filed an application for a standard service offer pursuant to Section 4928.141, Revised Code. The application was for an electric security plan (ESP) in accordance with Section 4928.143, Revised Code. *In re FirstEnergy*, Case No. 08-935-EL-SSO (*FirstEnergy ESP Case*).

(4) On March 25, 2009, the Commission approved the stipulation filed in the *FirstEnergy ESP Case*. In the stipulation, FirstEnergy committed to developing a proposal to pursue federal funds that may be available for smart grid investment. The signatory parties also agreed that recovery for smart grid investment would be through an unavoidable rider. *FirstEnergy ESP Case*, Second Opinion and Order (March 25, 2009) at 13.

(5) In furtherance of FirstEnergy's commitment, FirstEnergy submitted its Smart Grid Modernization Initiative to the Department of Energy (DOE) on August 6, 2009.[1] FirstEnergy was notified that its Smart Grid Modernization Initiative was selected for award negotiations from DOE on October 27, 2009.

(6) On November 18, 2009, FirstEnergy filed an application in this proceeding for approval of the following:

(a) the proposed Ohio Site Deployment, a three-year pilot program involving 44,000 customers in CEI's service territory, as part of FirstEnergy's Smart Grid Modernization Initiative;

(b) the Peak Time Rebate Rider (Rider PTR);

(c) recovery from CEI customers, except Rate GT customers, of any revenue shortfall resulting from the application of Rider PTR;

(d) recovery of actual costs incurred, but that are not reimbursed by DOE, for implementing and maintaining the Ohio Site Deployment through revised Rider AMI;

(e) Revised Rider AMI;

(f) the energy savings achieved and expected peak demand reductions obtained from the Ohio Site Deployment for inclusion as part of CEI's compliance with the energy efficiency and peak demand reduction benchmarks, as well as the recovery of any associated lost distribution revenues; and

(g) any necessary deferrals associated with the Ohio Site Deployment.

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1 FirstEnergy filed a copy of its DOE Application regarding its Smart Grid Modernization Initiative with the Commission on August 14, 2009, in Case No. 07-646-EL-UNC.

(7) Motions to intervene in this proceeding have been filed by Ohio Partners for Affordable Energy (OPAE), Ohio Energy Group (OEG), the Ohio Consumers' Counsel (OCC), Industrial Energy Users-Ohio (IEU-Ohio), Nucor Steel Marion, Inc., (Nucor), Citizen Power, Inc., (Citizens Power), and The Kroger Company (Kroger). No party opposed the motions to intervene. The Commission finds that the motions to intervene are reasonable and should be granted.

(8) Motions for admission *pro hac vice* have been filed on behalf of David C. Rinebolt, Theodore Robinson, Garett A. Stone, and Michael K. Lavanga. The Commission finds that the motions for admission *pro hac vice* are reasonable and should be granted.

(9) By entry dated December 30, 2009, the attorney examiner established time periods for the filing of comments and reply comments in this proceeding. Comments were timely filed by OEG, IEU-Ohio, Kroger, OPAE, the Citizens Coalition (Coalition), OCC, Nucor, and Staff. Reply comments were filed by Citizen Power, OPAE, Kroger, OCC, FirstEnergy, and the Coalition.

(10) In its comments, OCC noted that the United States Department of Energy (USDOE) did not conduct a prudency review of FirstEnergy's project when it awarded a grant to FirstEnergy for the project. Moreover, OCC and Citizens Power argued that the proposed meter costs in the application are very high when compared to the industry average and that the proposed feeder costs appear to be very high when compared to other utilities in Ohio. OCC also claimed that the application does not sufficiently address operation benefits that should be netted against the costs of the smart grid project implementation. Similarly, the Coalition recommended that a thorough cost benefit analysis be conducted regarding the pilot project.

Moreover, OCC claimed that the application does not provide a clear and consistent detail of Ohio costs beyond broad categories. OCC further alleged that the application does not show detailed costs or benefits, by beneficiary, and that the application provides insufficient evidence for collecting costs from customers.

OCC and Kroger contended that the application does not justify allowing only customers in one service territory to benefit from the smart grid deployment while charging customers in all service territories for the costs of the deployment. In addition, OCC stated that implementation of the pilot program may be better suited to a city in which the distribution system could better accommodate an expansion of the program.

(11) OPAE and the Coalition, as well as OCC, argued that FirstEnergy should not be permitted to collect lost distribution revenues in the pilot program. OPAE also argued that the application does not contain sufficient information defining the costs which will be recovered from customers and how savings generated from the pilot project by reductions in peak demand and increased efficiency will pass through to customers.

Finally, OPAE claimed that the application fails to provide for deployment of devices in customers' homes that permit changes in usage in response to price signals. However, FirstEnergy noted that customers will be provided the opportunity to choose devices such as a programmable thermostat, an in-home display device, or an electronic switch that can be used for direct load control.

(12) IEU-Ohio recommended in its comments that Rider AMI be modified. IEU-Ohio argued that the costs associated with the smart grid project should be allocated between customer classes based upon their proportional responsibility for base distribution revenues and that any costs allocated to the commercial and industrial rate schedules should be recovered through either an increase in the monthly customer charge or an increase in the monthly distribution demand charge. Nucor and OEG supported the exclusion of General Service-Transmission customers from Rider AMI.

OCC replied that smart grid deployment charges should be allocated to each customer class based upon the dollar benefits each customer class will obtain from increased reliability of the grid. OCC claimed that reliability is the major customer benefit of smart grid deployment and that commercial and industrial customers will benefit far more from the increased reliability resulting from smart grid deployment. Citizens Power also recommended that costs be allocated on a per kWh basis rather than customers' proportional responsibility for base distribution revenues.

(13) In its comments, Kroger argued that smart grid deployment costs should not be recovered through a flat energy charge but should be based on proper distribution cost allocation and rate design principles. Kroger recommended that deployment costs be classified as demand-related and/or customer-related, depending on the cost item being recovered. Further, once deployment costs are properly allocated to customer classes, these costs should be recovered through class-specific charges that allow each customer class to recover its allocated costs without inter- or intra-class subsidization. Moreover, Kroger stated that the charges designed to recover the costs of smart grid deployment should be allocated to each FirstEnergy operating company based upon the amount of investment made in that company's service territory.

Kroger also recommended that the cost recovery mechanism for AMI deployment be based on a fixed customer charge consistent with standard distribution cost recovery for metering costs.

Moreover, Kroger stated that customers must have access to real-time energy consumption data directly from their meters at no additional charge. Further, Kroger argued that FirstEnergy should commit to developing rate designs that maximize the advantages of smart grid deployment. Kroger believes that these rates should encourage customers to reduce electric consumption during peak or high demand periods. FirstEnergy responded that customers will be given access to real time data and that the Companies have elected to use peak time rebate pricing for the dynamic pricing component of the pilot project.

(14) In its comments, Staff noted that, because this is a limited pilot project, Staff does not believe that there will be a large amount of operational savings resulting from the project. However, Staff recommended that any operational savings which do occur should be credited against the revised Rider AMI.

Further, Staff concluded that the geographical area selected for the Companies' smart grid project is appropriate. In addition, Staff determined that the distribution automation equipment and field devices selected by the Companies and the volt/VAR controls to be installed are appropriate and that that the Companies' distribution automation and the voltage/VAR cost estimates are reasonable.

Moreover, Staff stated that the maintenance activities associated with distribution automation are reasonable. Staff also concluded that the use of single-phase tripping is appropriate for this project. Staff found that the use of high-speed bus differential protection is an appropriate part of the pilot project; further, Staff determined that the design of the controllers, number of switches, and their locations is reasonable. Finally, Staff concluded that setting target values for the reliability indices in the pilot project area is appropriate.

(15) Further, Staff proposed that approval of the application be subject to the following recommendations:

(a) The Companies should create a database of customer-specific momentary interruption data.

(b) Only those actual costs that are incremental and reasonable with respect to the pilot project should be recovered.

(c) The Companies should keep the accounting records for the Ohio Site Deployment actual costs separate, to facilitate review and verification.

(d) The Companies should set target values for CAIDI and SAIFI in the project area and report to Staff at the completion of the pilot project.

(e) The Companies should be required to demonstrate that any CEI labor and capital costs incurred for the Ohio Site Deployment are incremental costs.

(f) The recoverable cost of newly installed smart grid plant that replaces existing plant should be the cost of the new plant less the net book value of the replaced plant.

(g) A true-up to actual pilot project costs occur no more frequently than annually to allow for enough time to perform meaningful cost analysis.

(h) The capital asset cost recovery associated with the project should occur over the used and useful life of the assets.

(i) Carrying charges on deferred balances should be allowed, using the most recent Commission-approved cost of debt rate component included in the rate of return calculation used in a CEI proceeding.

(j) The revised Rider AMI rate should be developed based on the Staff's recommended revenue requirement for the pilot.

(k) The Rider AMI charge should be a fixed monthly charge rather than a usage sensitive charge.

(l) The AMI/smart grid revenue requirement should be allocated solely to CEI's rate schedules using the stipulated revenue distribution from the Company's most recent distribution rate case.

(m) The metrics to determine the success of the pilot that are being developed by the Company in negotiations with the USDOE should be shared with the Staff and the Commission.

(n) The Companies should be required to report assessment results of the information and outcomes learned from the initial 5,000 meter deployment.

(o) Staff recommends that the Commission should determine whether or not the pilot project has been successful and will go forward beyond the pilot period.

(p) If the USDOE reduces any of the SGIG award from the eligible amount of $36.1 million, the remaining cost recovery contribution by ratepayers should be reduced by an equal amount.

(q) With respect to the distribution percentages shown on Schedule A, the 0.17 percent assigned to Rate GT should be ratably distributed to the remaining rate schedules. The last steps to develop the monthly fixed charge rate are to divide each rate schedule's revenue responsibility by its most recent customer count, and to divide those results by twelve to arrive at a monthly rate.

In its reply comments, OCC agreed with Staff's recommendation that FirstEnergy should be required to net benefits against costs in the pilot program. OCC also recommended that the pilot program should be reviewed before it begins and should be audited when it is completed. Finally, OCC requested that interested parties be provided access to the metrics used to determine the success of the pilot program.

(16) Moreover, on March 23, 2010, FirstEnergy filed an application, pursuant to Section 4928.141, Revised Code, for a SSO for the period between June 1, 2011, and May 31, 2014. This application is for an ESP, in accordance with Section 4928.143, Revised Code, and the application includes a stipulation agreed to by various parties regarding the terms of the proposed ESP. *In re FirstEnergy*, Case No. 10-388-EL-SSO (*FirstEnergy Second ESP Case*). Among other terms, the signatory parties provide recommendations in Section E.1. of the stipulation to resolve several issues regarding cost recovery for FirstEnergy's smart grid pilot project. Accordingly, the Commission will defer ruling on those issues

until we address the stipulation filed in the *FirstEnergy Second ESP Case*.

(17) On June 15, 2010, FirstEnergy filed a letter in this docket in which FirstEnergy agreed to modify its application pursuant to the following Staff recommendations, enumerated in Finding (14) above: (a), (c), (d), (k), (m), (n), (o), and (q).

With respect to Rider AMI, FirstEnergy has accepted Staff's recommendation that Rider AMI be a fixed monthly charge rather than a usage sensitive charge. OCC, Citizen Power, and OPAE argued that costs related to the smart grid should be allocated on a kWh basis because larger customers benefit most from a reliable distribution grid. However, these parties have not demonstrated that the costs related to smart grid deployment will vary according to the energy usage of individual customers. We agree with Kroger that recovery of smart grid deployment costs through a per kWh charge would disproportionately allocate the costs to customers that consume large amounts of electricity. Therefore, the Commission finds that, according to principles of cost causation, Staff's recommendation that Rider AMI be a fixed monthly charge is reasonable and is consistent with our prior orders approving the recovery of smart grid deployment costs. See *In re Duke Energy Ohio*, Case No. 09-543-GE-UNC, Opinion and Order (May 13, 2010) at 5-6.

FirstEnergy is directed to work with Staff to develop in advance an evaluation plan for its controlled randomized test of approaches to peak time rebate pricing and customer participation and to participate fully in USDOE efforts to promote comparability among consumer behavior studies across Smart Grid Investment Grant projects. We note that FirstEnergy has an opportunity to contract and partner with the USDOE Office of Electricity to obtain technical assistance in developing a consumer behavior study plan including independent review of FirstEnergy's proposed approach and evaluation studies. We encourage the Companies to fully consider this opportunity.

With respect to lost distribution revenues, the Commission finds First Energy should be authorized to collect lost distribution revenues during its current ESP. Moreover, First

Energy will be authorized to collect lost distribution revenues after May 31, 2011, unless otherwise ordered by the Commission. In addition, the Commission notes that our approval of lost distribution revenues is limited to those lost revenues which can be demonstrated to be the result of FirstEnergy's proposed alternative pricing program.

Moreover, the Commission believes that any lost distribution revenues recovered by FirstEnergy should be solely the result of the alternative pricing program. Therefore, we will direct the Staff to ensure that the evaluation methodology compares the energy savings by customers who are not included in the alternative pricing program with the energy savings measured for customers who are not in the alternative pricing program to ensure that that lost distribution revenues do not include conservation efforts which would be implemented by customers irrespective of the smart grid deployment. Further, in determining both the amount of lost distribution revenues which should be recovered and compliance with the annual energy efficiency benchmarks, Staff should ensure that no energy savings are counted twice. For example, for customers in the Ohio Site Deployment, any deemed savings resulting from other FirstEnergy energy efficiency programs should not be counted in addition to the energy savings measured by the advanced meters included in the smart grid deployment.

Further, the Commission directs FirstEnergy to work with Staff to ensure the effectiveness of communications and education of consumers participating in the alternative pricing program.

The Commission further notes that the other Staff recommendations accepted by FirstEnergy appear to address the remaining concerns raised in the comments filed in this proceeding, except for those related to cost recovery. As stated above, the Commission will address those cost recovery issues when we consider the stipulation filed in the *FirstEnergy Second ESP Case.*

Therefore, the Commission finds that the application filed by FirstEnergy, as modified by FirstEnergy in its letter filed on June 15, 2010, is consistent with the stipulation approved by the Commission in the *FirstEnergy ESP Case,* does not appear to be unjust or unreasonable, and should be approved. Therefore, the Commission finds that it is unnecessary to hold a hearing in this matter.

It is, therefore,

ORDERED, That the application filed by FirstEnergy in this proceeding, as modified by its letter dated June 15, 2010, be approved. It is, further,

ORDERED, That the motions to intervene in this proceeding filed by OPAE, OEG, OCC, IEU-Ohio, Nucor, Citizens Power, and Kroger be granted. It is, further,

ORDERED, That motions for admission *pro hac vice* filed on behalf of David C. Rinebolt, Theodore Robinson, Garrett A. Stone, and Michael K. Lavanga be granted. It is, further,

ORDERED, That a copy of this Finding and Order be served upon all parties of record in this case and all parties of record in Case No. 08-935-EL-SSO, et al.

THE PUBLIC UTILITIES COMMISSION OF OHIO

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