## BEFORE THE PUBLIC UTILITIES COMMISSION OF OHD 11 NOV -7 PH 12: 50

In the Matter of the Application of Duke Energy )
Ohio, Inc. to Adjust and Set its Gas and )
Electric Recovery Rate for 2010 SmartGrid )
Costs under Rider AU and Rider DR-IM and )
Mid-Deployment Review of AMI/SmartGrid )
Program. )

Case No. 10/23/19-9E-RDR

## COMMENTS OF OHIO PARTNERS FOR AFFORDABLE ENERGY

Ohio Partners for Affordable Energy ("OPAE") herein submits its comments to the Public Utilities Commission of Ohio ("Commission") on the application of Duke Energy Ohio, Inc., ("Duke") to adjust its gas and electric recovery rates for 2010 smart grid costs under Rider AU and Rider DR-IM. This docket also considers the mid-deployment review of the AMI/smart grid program. Duke agreed to a mid-deployment audit and assessment of its smart grid program in Case No. 08-920-EL-SSO. In that docket, Duke presented a business case for the deployment of smart grid in its service territory. The stipulation in Case No. 08-920-EL-SSO provided for the implementation of smart grid, established a rider and application procedures for the recovery of smart grid deployment costs, and called for the mid-deployment summary and review of the "The summary and review shall address deployment lessons learned, an updated allocation of the annual distribution revenue requirement, and the desirability of continuing the program beyond December 31, 2011." [Emphasis added.] Stipulation, Case No. 08-920-EL-SSO at 15 (October 28, 2008). In Duke's last smart grid rider case, Case No. 09-543-GE-UNC, Duke agreed to provide such data and information as may be necessary to understand any revisions to Duke's business case including information on costs and operational

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benefits. The mid-deployment review was designated as the forum to discuss these matters.

From the audit conducted by MetaVu, Inc., it is obvious that, as of December 31, 2010, smart meter deployment is significantly delayed. Audit at 11. Per Duke's approved plan in 08-920, Duke has deployed only 35% of meters, as opposed to the 85% projected. (Audit, Tables 4a, 4b at 10, 11.) Duke is also projecting an increase in meter system costs of \$35.7 million and an overall increase in expected capital and O&M for the project of \$26 million (Audit, Table 14B, 14C, p. 35-36). In addition, 69% of the equipment slated to be installed in Duke's Cincinnati substations has yet to be deployed. The economic benefits of smart equipment intended to improve electric distribution efficiency is largely dependent on software, which is not anticipated to be completed in 2013. In short, the delay in deployments means that an assessment of the associated operational benefits must also be delayed. Audit at 11.

Based on the Cost/Benefit Model that Duke ran for Ohio, the 5 year total benefits between 2009-2014 are in fact \$7 million dollars less than what was originally filed in Case No. 08-920-EL-SSO. Application, Table 41A-C, at 81-83. This reduction in benefits is met with an increase in total capital investment for the corresponding 5 year period of \$57.8 million. Application, Table 40A, 40D, P. 79-80). The costs appear to be gaining on the benefits.

The auditor found that there was no readily available approach to measuring Momentary Average Interruption Frequency Index improvements from existing advanced metering technology. The auditor also found that Duke has not yet deployed the distribution management system ("DMS") that it intends to

use for distribution automation. The auditor recommended a formal change to the management plan as part of the DMS implementation. Audit at 12. The auditor also found several opportunities to make better use of meter data. Id. For the most part, however, delays in deployment also delay assessment and delivery to customers.

The auditor considered the possibilities for operational benefits from smart grid deployment, including reduced operations and maintenance costs including avoided labor and vehicle costs from remote meter reading and diagnostic capabilities. The majority of on-cycle manual meter reading will be eliminated with a concomitant reduction in labor costs. Fuel and purchased power costs could also be avoided with smart meter deployment. Audit at 13. However, the auditor did not project fuel cost reduction through improved power factor performance until 2013. Audit at 106.

The benefits projected from time differentiated pricing are also proving elusive. Duke has made strides in offering a suite of five time-differentiated pricing pilots to customers that have been targeted through pilot program efforts. The programs have not been successful on a statistically significant scale, and Duke and is reluctant to provide any estimation as to the benefits that customers receive from time-differentiated rates. Duke Witness Duff states, "the Company is still apprehensive about making any significant assumptions around the benefit that can be obtained by having the capability to offer its customers time-differentiated rates". (Testimony at 4.)

The Commission approved Duke's plan to deploy smart grid based on Duke's business case presented in Case No. 08-920-EL-SSO. Duke presented testimony quantifying projected costs and operational benefits in various categories. This is the record that supports the Commission's approval of the

program. See Testimony of Staff witness Greg Scheck, Case No. Case No. 09-543-GE-UNC (November 2, 2009) at 2. Mr. Scheck recommended that ongoing recovery of costs net of operational benefits should be based upon Duke's business case. He made this recommendation because some of the operational benefits are not easily known or measurable, and many have simply not been realized because of delayed deployment. The savings from the elimination of manual meter reading may be quantifiable, but the reduced extent and shorter duration of outages due to smart grid are not as easily tallied, and can be the result of factors other than the smart grid investment. Thus, the netting of costs and benefits on the basis of knowing, measuring, and attributing those benefits is uncertain. Still, the benefits must be netted against the costs so that Duke does not over-recover its smart grid investment. Customers should not be denied the benefits promised in the business case which are undelivered as a result of deployment delays. Mr. Scheck offers a reasonable approach to ensure customers receive the return on their investment during the past two years.

Given the slow pace of deployment and the failure of the auditor to confirm operational benefits for the 2010 period, no conclusions regarding the accuracy of the initial business case can be made as part of the mid-deployment review. As with last year's case, there is still insufficient data to determine the success of the smart grid program in delivering customer benefits.

This places the Commission in a difficult position. This case is the forum for determining whether deployment of the smart grid system should be continued beyond December 31, 2011, but there is a dearth of record evidence and, more importantly, information from the Meta Vu audit, to justify continuation of the deployment. Individual residential customers have paid their hard earned dollars for a system that is not providing them with any tangible benefits. The

Commission could suspend recovery of the costs associated with smart grid deployment through Rider DR-IM from residential customers and reinstate recovery only when tangible and intangible benefits are being provided to consumers and can be netted against deployment costs. If Duke is confident that its business case is correct, it could continue the deployment of smart grid with its own resources and recover from customers only when those benefits begin to accrue. In the alternative, the Commission can follow the recommendations of Mr. Scheck and impute the value of benefits projected by the business case determining the appropriate amount to be recovered from customers.

Respectfully submitted,

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## **CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing Comments was served electronically upon the following parties identified below in this case on this 4th day of November 2011.

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