



76 South Main Street  
Akron, Ohio 44308

April 30, 2010

1-800-646-0400

Mr. John Williams  
Public Utilities Commission of Ohio  
180 E. Broad Street, 7<sup>th</sup> Floor  
Columbus, Ohio 43216

Dear Mr. Williams,

As indicated in Figure 1.6.3-2 of FirstEnergy's Smart Grid Modernization Initiative application ("Smart Grid Initiative"), an average 30% SAIDI improvement is estimated in the targeted project areas. This estimate is based on analyzing a five year outage history of sustained outages of the 34 distribution circuits targeted for this project. Specifically, the five year outage history was analyzed both with and without the enhancements to be implemented as part of the Smart Grid Initiative to determine the potential improvement that might be gained.

The above estimate assumes the same outage types which occurred in the past are repeated in the future. If future outages differ, then the actual benefits are expected to differ from what has been estimated. Further the estimated 30% improvement in the targeted project areas was based on the average five years of data. Therefore, the actual benefits will also need to be evaluated based on five years of data.

As indicated in FirstEnergy's Smart Grid Initiative, the purpose of the Smart Grid Modernization Initiative is "to (i) test and validate the integration of crosscutting smart grid technologies with existing distribution system infrastructure; (ii) analyze full-system life-cycle costs and benefits to justify recovery of investments (which is essential to the evaluation of whether to expand deployment across the Ohio Edison, Toledo Edison and CEI service territories); (iii) examine how aging infrastructure will function when combined with smart grid technologies; and (iv) evaluate the associated benefits to customers and the environment." With this purpose in mind and until such time that the project is fully implemented, quantified and analyzed, it will not be known if the "actual" benefits are equal to the estimated benefits or whether the actual benefits represent

what can be achieved on other parts of the system if the project was expanded to include such other parts of the system. Costs for widespread installation will also vary.

Based on the project scope and assumptions set forth above and further explained in the Smart Grid Initiative, the Company believes that the Smart Grid Initiative (once completed) is likely to result in a 30% improvement in SAIFI based upon five years of results in the targeted project areas. Due to variability in conditions, improvements in any one year will not necessarily reflect the anticipated improvement.

The Company anticipates SAIFI results in the targeted project area that reflect an improvement of 30% or .96. The improvement in SAIFI will be measured five years after the project has been fully implemented and in service. The Company does not anticipate measurable CAIDI improvements as a result of the Smart Grid Initiative. In addition, due to the size of the project the Company expects little or no impact to overall reliability results for CEI. In no way will the results for SAIFI and CAIDI affect the recovery of costs under the Smart Grid Modernization Initiative.

If you have any question please call me at (330) 761-4200.

Regards,

A handwritten signature in cursive script, appearing to read "Steve E. Ouellette".

Steve E. Ouellette  
Director, Rates & Regulatory Affairs – Ohio  
FirstEnergy Service Company

Cc: Eric Dickson  
Rebecca Leiter  
Ebony Miller  
Dana Parshall  
Tim Richard

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Summary: Correspondence relating to Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company and the "Ohio Smart Grid Project" - Attachment A electronically filed by Mr. George A Yurchisin on behalf of FirstEnergy Corp. and Ridmann, William R.