

### BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO



In the Matter of the Application of : Case Nos. 11-346-EL-SSO Columbus southern Power Company and : 11-348-EL-SSO

Ohio Power company for Authority to :

Establish a Standard Service Offer :

Pursuant to § 4928.143, Ohio Rev. Code, in the Form of an Electric Security Plan.

In the Matter of the Application of

Columbus Southern Power Company and

Ohio Power company for Approval of

Certain Accounting Authority.

Case Nos. 11-349-EL-AAM

11-350-EL-AAM

# PREFILED TESTIMONY OF GREGORY C. SCHECK

ON BEHALF OF THE STAFF OF THE PUBLIC UTILITIES COMMISSION OF OHIO ENERGY & ENVIRONMENT DEPARTMENT EFFICIENCY & RENEWABLES DIVISION

STAFF EX. \_\_\_

August 4, 2011

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- 1 1. Q. Please state your name, employer and business address.
- A. My name is Gregory C. Scheck. I am employed by the Public Utilities

  Commission of Ohio, 180 East Broad Street, Columbus, Ohio 43266-0573.
- 5 2. Q. What is your current position at the Commission?

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- A. I am a Utilities Specialist in the Energy Efficiency and Renewables

  Division of the Energy and Environment Department. I am responsible for

  analyzing issues and providing recommendations pertaining to electric util
  ity energy efficiency programs, including peak demand reductions, demand

  response, and smartgrid related issues.
- 12 3. Q. What are your qualifications as they relate to your testimony in this
  13 proceeding?
- 15 A. I have worked at the Commission since 1985 in various capacities. Most of
  16 that time I have spent reviewing and evaluating demand forecasts, energy
  17 efficiency programs, and smartgrid issues.
- 19 4. Q. What is the purpose of your testimony in this proceeding?
- 20 A. The purpose of my testimony will be to address a few areas of the
  21 Columbus Southern Power Company (CSP) and Ohio Power Company
  22 (OPCo) (collectively, the Companies) ESP filing. Those areas include

CSP's gridSMART demonstration project expansion to Phase 2 and beyond, the subsidy payments to the initial 200 customers who purchase a plug-in electric vehicle for a charging station, the continuation of the non-bypassable gridSMART rider merged into one rate, the modification and continuation of the energy efficiency and peak demand reduction rider, the Companies' continuation of the Interruptible Power-Discretionary schedule to a rider, and the adoption of an Emergency Curtailable Service Rider.

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#### GRIDSMART EXPANSION TO PHASE 2 AND BEYOND

- Q. What is your knowledge or understanding of the status of CSP's
   gridSMART Phase 1 of the project?
  - A. The Applicant originally filed its gridSmart plan in their prior ESP filing to be deployed over a seven to ten year period. The initial part of this deployment was characterized as Phase 1 of the project which constitutes approximately 110,000 advanced meters and a distribution automation system rollout to customers in the northeast quadrant of central Ohio over the initial ESP period. In addition to this, the Companies agreed to provide consumer education and up to 10,000 home area networks (HAN) as a part of this project. Subsequent to that prior ESP filing, CSP applied for ARRA stimulus dollars as a part of a demonstration project to help defray the costs of this initial pilot phase. In order to receive approval for this funding from

the USDOE, CSP agreed to expand the initial Commission approved pilot which increased the costs from \$109 million to \$150.3 million. 2 .

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- 6. 4 Q. What are the expanded parts of the Phase 1 gridSMART project now renamed the gridSMART demonstration project that took it from \$109 mil-5 lion to \$150.3 million? 6
- A. Originally, AEP Ohio's gridSMART Phase 1 project consisted primarily of 7 the 110,000 advanced meters and a 2-way communication system to those 8 meters, 70 distribution automation circuits, 17 integrated volt-var control 9 circuits, cyber security and interoperability, consumer education and up to 10 10,000 home area networks (HANs) on some form of time differentiated 11 rates. The USDOE funded project was expanded to include a real-time 12 double auction pricing pilot for up to 1,000 customers, a demand dispatch 13 engine, 10 all electric cars, 15 charging stations and 80 MW of community 14 15 storage. In addition, CSP agreed to increase data collection and reporting to the USDOE. 16

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- 7. Q. What does this increased data collection and reporting include?
- A. The additional data collection and reporting includes monthly status 19 reports, quarterly status reports, quarterly build metrics reports and tech-20 nology performance reports. Additional non-routine reporting includes 21 CSP's participation in USDOE peer reviews, providing ""Lessons 22

Learned/Best Practices", and providing data to the national data clearinghouse as requested by the USDOE. At the end of the project, CSP will
need to file "close out" financial reports as well.

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- 8. Q. Where is the current deployment status of the gridSMART demonstration project?
- At this time, most of the meters with a few exceptions have been deployed A. 7 in the Phase 1 rollout. All of the distribution automation equipment and 8 Home Area Networks will be deployed and operational by the end of 2011. 9 Along with this infrastructure, CSP continues to develop and propose a 10 number of dynamic rates and direct load control options to those customers 11 in Phase 1. The Staff agrees that there will be a great deal of knowledge 12 and experience gained from this initial deployment. Much of CSP's origi-13 nal business case regarding benefits was predicated on changes in customer 14 behavior which will rely upon customer acceptance to new technologies 15 and customer response to various dynamic pricing options. Much has yet 16 to be determined from the Phase 1/demonstration project deployment. 17

- 9. Q. According to CSP's agreement with the USDOE, when will the data collection and analysis be done for the Phase 1/demonstration project?
- A. According to CSP's USDOE agreement, CSP will collect data from the pilot for the calendar years 2012 and 2013. The data collection should be

completed by December 31, 2013 and the analysis of the data should be completed by March 31, 2014. The Staff and the Commission will not know until that time, whether Phase 1 has been a success or not based on the metrics agreed to with the USDOE and any other further Staff evaluation and analysis.

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- 10. Q. Do you think that CSP should be able to proceed at their own expense and risk of cost recovery to start Phase 2 and further deployments before the evaluation of Phase 1 is completed?
- A. No, as there may be other issues such as security and interoperability that need to be determined to be in compliance before other phases of the project can proceed. The Staff thinks that it would not be prudent to allow CSP to go forward with other phases of the project, if it was determined that the initial deployment did not meet the necessary requirements for the security and privacy of consumer data along with the interoperability of systems and equipment. This would provide customers with the assurance of having their information protected and the ability to have their choices of new technological equipment not become to overly restrictive in order to able to maximize the potential benefits of more intelligent grid.<sup>1</sup>

<sup>[</sup>See Staff witness David W. Cleaver's direct testimony regarding the Distribution Automation and Substation Automation aspects of CSP's proposed gridSMART expansion beyond Phase 1.]

- 1 11. Q. When do you think CSP should start deployment of Phase 2 and other phases of the project?
- A. The Staff believes that CSP should not start deployment of Phase 2 and beyond for the project until the Phase 1/demonstration project has been fully evaluated and determined to be a success. If Phase 1 is determined not to be a success, then the Staff would likely recommend that the remaining parts of the project should not go forward.

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#### **GRIDSMART RIDER**

- 10 12. Q. Do you think that the CSP gridSMART rider should be continued and
  11 merged into one rate for the combined AEP Ohio operating companies?
- 12 A. The Staff believes that the CSP gridSMART rider should be continued, but
  13 it should be based on the Staff recommendations in Case No. 11-1353-EL14 RDR. If the Columbus Southern Power and Ohio Power operating com15 panies are merged, then Staff recommends that the remaining costs of
  16 Phase 1 and any other potential later phases of the gridSMART project be
  17 recovered from all AEP Ohio customers through one rider.

#### PLUG IN ELECTRIC VEHICLES

2 13. Q. Do you think that CSP should be able to recover the subsidy costs to those customers who will require a charging station to recharge their all electric vehicle?

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- A. No, the Staff believes that CSP should not recover the proposed charging station subsidies of \$2,500 per customer for the first 200 customers who have purchased an electric vehicle and request it. Only, those charging stations that were provided for in the Phase 1 pilot which were 15, should receive some sort of subsidy.
- 11 14. Q. What should the subsidy amount be for the 15 charging stations?
- 12 A. The Staff recommends that the subsidy amount should only be up to 50%
  13 of the costs for those stations that are eligible for ARRA stimulus funds.
  14 Beyond that point if CSP wants to subsidize charging station costs, they
  15 should do so with shareholder dollars.
- 15. Q. Why does Staff believe that CSP should recover the remaining proposed charging station subsidy dollars from its shareholders?
- 19 A. The Staff believes that all electric vehicles are essentially a new business
  20 opportunity for the AEP generation affiliate to substantially increase sales
  21 during off-peak periods. An average electric car has been estimated to con22 sume in electricity over a year what the average residential house consumes

in that same time period. Customers who have purchased an all-electric car should be able to qualify and take advantage of a time-of-use rate from the AEP Ohio operating companies, since the electricity costs are lower during off-peak times.

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- 6 16. Q. If a customer purchases a certified charging station for his/her electric vehi-7 cle should AEP Ohio provide for a TOU meter?
- A. Yes, AEP Ohio should provide the customer a TOU meter if the customer
  has purchased an electric car. However, if the meter can also include the
  customer's household consumption, as well as the charging station for the
  electric car, a second meter would not be required. However, if a second
  meter is required, the customer should pay for the incremental costs for the
  TOU meter unless CSP would like to install the second meter free of charge
  without any cost recovery.

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17. Q. What is the Staff's opinion about Plug-In Electric Vehicle load not counting towards the baseline for determining the annual energy efficiency benchmarks?

A. Staff believes that it is reasonable not to count Plug-In Electric Vehicle load towards the baseline of determining the annual energy efficiency benchmarks, but CSP must make an application that such changes were outside of its control. It is understood that technological change occurs naturally

and that Plug in Electric Vehicles could fit into that category; however, the AEP Ohio Companies will have to make their case to adjust their sales baselines.

### INTERRUPTIBLE POWER - DISCRETIONARY RIDER (IRP-D) AND EMERGENCY CURTAILABLE SERVICE RIDER (ECS)

18. Q. Do you have any issues related to the AEP Ohio Companies offerings under Rider IRP-D and Rider ECS?

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Staff has only one issue and that relates to Rider ECS. The Staff applauds Α. the efforts of CSP to make their interruptible service offerings better aligned with PJM's demand response tariffs; however, Staff has an issue with Rider ECS. The Staff is in disagreement that curtailment credits can be a negotiated amount of not less than 80 percent of the AEP East Load Zone hourly Real-Time Locational Marginal Price (LMP) established by PJM for each event hour. The AEP Ohio electric distribution companies are regulated distribution companies which can offer some form of a Standard Service Offer. As such, the SSO cannot be discriminatory to all those that qualify for that particular service. Therefore, the Staff recommends that the Curtailment Credit be of the same percentage for all those customers who qualify for this service. Therefore, staff recommends that the AEP Ohio operating companies amend their Rider ECS to reflect this change. The other option would be that the AEP-Ohio Companies offer this type of service through a competitive affiliate.

#### ENERGY EFFICIENCY AND PEAK DEMAND REDUCTION RIDER

- 2 19. Q. Are there any changes being proposed to the EE/PDR rider?
- A. There are no dollar amounts recommended to be changed in this case, but
- only that the two AEP Ohio distribution company rates be allowed to be
- 5 merged into one rate. Staff has no opinion at this time as to whether or not
- the EE/PDR riders for the AEP Ohio operating companies should be
- 7 merged into one rate, but that it should be decided in the distribution rate
- 8 case.

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- 10 20. Q. Does this conclude your testimony?
- 11 A. Yes, it does.

#### PROOF OF SERVICE

I hereby certify that a true copy of the foregoing **Prefiled Testimony of Gregory**C. Scheck, submitted on behalf of the Staff of the Public Utilities Commission of Ohio, was served by regular U.S. mail, postage prepaid, or hand-delivered, upon the following Parties of Record, this 4<sup>th</sup> day of August, 2011.

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