BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Ohio) Power Company to Update its gridSMART) Rider.

Case No. 14-192-EL-RDR

FINDING AND ORDER

- (1)On March 18, 2009, the Commission issued its Opinion and Order in Columbus Southern Power Company's (CSP) and Ohio Power Company's (OP) (jointly, AEP-Ohio or Company) electric security plan (ESP 1) cases. In re AEP-Ohio ESP 1 Cases, Case Nos. 08-917-EL-SSO and 08-918-EL-SSO, Opinion and Order (Mar. 18, 2009) (ESP 1 Case). As modified and approved by the Commission, CSP was authorized to create the Phase 1 gridSMART rider. In re AEP-Ohio ESP 1 Case at 34-38; Entry on Rehearing (July 23, 2009) at 18-24. The Phase 1 gridSMART project consisted primarily of advanced meter infrastructure, home area network, and distribution automation, and required the Company to pursue federal funding for the project. The Company pursued and was awarded federal funding through the American Reinvestment Recovery Act from the United States (U.S.) Department of Energy (DOE), which required the expansion of the gridSMART plan presented to include realtime pricing, community energy storage (CES), smart appliances, cyber security operation center, and plug-in electric vehicle components. The term of AEP Ohio's ESP 1 ended December 31, 2011.
- (2) By Entry issued on March 7, 2012, the Commission confirmed its approval of the merger of CSP and OP effective December 31, 2011. In re AEP Ohio, Case No. 10-2376-EL-UNC, Entry (Mar. 7, 2012).
- (3) On March 30, 2012, AEP-Ohio filed an application for a second modified ESP (modified ESP 2) for the Commission's consideration. The Commission approved, with certain modifications, AEP-Ohio's modified ESP 2 application which included the continuation of the gridSMART Phase 1 rider, subject to annual true-up and reconciliation, and the implementation of a Phase 2 gridSMART rider, subject to certain clarifications. *In re AEP Ohio ESP 2 Case*, Opinion and

Order (Aug. 8, 2012) at 61-63; Entry on Rehearing (Jan. 30, 2013) at 53.

- (4) The gridSMART rider rate was last evaluated for prudency of expenditures, reconciled for over- and under-recoveries, and the rate mechanism adjusted in Case No. 13-345-EL-RDR, with the rate effective beginning April 17, 2014. *In re AEP Ohio*, Case No. 13-345-EL-RDR, Finding and Order (Feb. 19, 2014) at 6-7.
- (5) On February 3, 2014, AEP Ohio filed the instant application to update its gridSMART rider mechanisms. In this application, AEP-Ohio presents actual gridSMART project spending and revenue recovery during 2013, as well as projected costs, and revenue requirements for 2014. The Company proposes a new gridSMART rider rate of \$1.11 per bill for residential customers and a rate of \$4.63 per bill for non-residential customers. The proposed gridSMART rates would be an increase of \$.60 per bill for residential customers and an increase of \$2.53 per bill for non-residential customers over the rates approved by the Commission in the Company's most recent gridSMART case, Case No. 13-345-EL-RDR.
- (6) On March 10, 2014, the Ohio Consumers' Counsel (OCC) filed a motion to intervene. On January 6, 2015, Direct Energy Services, LLC and Direct Energy Business, LLC (jointly Direct) filed a joint motion to intervene. OCC and Direct each assert a real and substantial interest in this case and claim that the disposition of the case may impair or impede their respective ability to protect that interest. No memorandum contra OCC's or Direct's motion for intervention was filed. The Commission finds that OCC and Direct set forth reasonable grounds for intervention and, therefore, their respective motions to intervene should be granted.
- (7) On September 15, 2014, Staff filed comments on AEP Ohio's application to update the gridSMART rider mechanism. AEP Ohio filed reply comments on October 22, 2014.
- (8) By Entry issued on December 2, 2014, a procedural schedule was established whereby interested persons were directed to file motions to intervene and comments to the application by January 6, 2015, and reply comments by January 20, 2015. Consistent with the December 2, 2014 Entry, comments were

filed by OCC and reply comments were filed by Staff and AEP-Ohio.

Audit Process

(9) As a part of its investigation, Staff examined the schedules filed by AEP Ohio for accuracy and consistency with the Commission's Orders in the Company's previous gridSMART cases. Staff also reviewed the Company's financial statements for completeness, valuation, allocations, and accuracy by way of document review, field inspections, interviews, and data requests.

Operations and Maintenance Expenses

- (10)Initially, Staff recommended a reduction of \$454,632 in operations and maintenance (O&M) expense for CES battery units. A CES unit is comprised of lithium ion batteries and power control systems which can be connected to secondary transformers to provide, among other things, backup power and voltage correction. Staff noted that AEP Ohio was directed to exclude the cost of the associated CES units from the rider until the units "are returned, tested, operational, and ready to be installed." In re AEP Ohio, Case No. 12-509-EL-RDR (2012 GridSMART Case), Finding and Order (Oct. 3, 2012) at 10. Staff reasoned that AEP Ohio has included in this application, a component to reclassify \$454,632 in capital costs as O&M expense which relates to the same 38 CES units previously excluded by the Commission in the Company's 2012 2012 GridSMART Case at 10. GridSMART Case. Staff acknowledged that, according to data requests, AEP Ohio admitted that six CES units had been returned from the vendor, and five CES units were operational and would continue to be tested but had not been installed at any customer site.
- (11) In its reply comments, filed on October 22, 2014, AEP Ohio disagreed with the Staff's recommendation. AEP Ohio submits that it was required to test the CES units, pursuant to the U.S. DOE gridSMART project, and that the Company conducted the test in a laboratory. The Company states that Staff verified six CES units were tested and that there were no discrepancies as a part of the field audit. The Company argues that it determined that the original 38 CES units were not performing as expected

and returned the CES units to the vendor, renegotiated the contract, and reduced and redefined the scope of this aspect of gridSMART project. After working with the CES vendor and U.S. DOE to redefine the scope of the pilot, AEP Ohio states that the Company reinstalled, tested, and reported on the CES unit technology. AEP Ohio proclaims that it acted prudently as to the CES units and the expense should be approved.

- (12) In the alternative, AEP Ohio contends that, if the Commission does not approve the recovery of the full O&M expense for the CES units, the amount of the disallowance should be adjusted to reflect the redefined CES pilot. AEP Ohio reasons that the amount of the disallowance presented by Staff is based on its calculation of the cost of 38 CES battery units, including overheads, based on the scope of the original pilot. The Company offers that Staff's calculation for only six batteries results in a decrease in the amount of the disallowance to \$155,409. Thus, AEP Ohio recommends a revised gridSMART rider rate of \$1.01 per residential customer and \$4.22 per non-residential customer.
- In its comments filed January 6, 2015, OCC endorsed the (13)recommendation of Staff that \$454,632 be excluded from the OCC emphasizes that, just as in the 2012 rider costs. GridSMART Case, the CES units are not providing service to customers and no benefit has been derived from the CES units. OCC offers that, in the 2012 GridSMART Case, the Commission established a four-part test for the cost associated with the CES units to be recoverable from customers through the rider. OCC contends the Commission declared that the CES units must be returned from the vendor, tested, operational, and ready to be installed for the cost to be recoverable in the rider. 2012 GridSMART Case, Finding and Order (Oct. 3, 2012) at 10. In fact, according to OCC, the CES units may never provide any service to customers and, therefore, customers should not have to pay for the CES units. OCC recognizes that six of the 38 units were returned from the vendor and were part of a test associated with the U.S. DOE gridSMART project wherein AEP Ohio tests new and evolving equipment and reports its findings to the U.S. DOE. However, OCC reasons that the CES test units were never installed in a residential area and, from the Commission's perspective, testing of the CES units is not the purpose of the gridSMART project. OCC notes that Staff

previously argued that the CES program is not a test of battery technology; rather it is a test of the degree to which properly operating units could contribute to localized demand for power and the related impacts on the distribution system. 2012 GridSMART Case, Staff Comments (Aug. 10, 2012) at 9. OCC emphasizes, as AEP Ohio admits, the CES units did not perform in accordance with the specifications and were returned to the manufacturer. 2012 GridSMART Case, Finding and Order (Oct. 3, 2012) at 10. Further, OCC argues that, in accordance with R.C. 4909.15, in order for the utility to collect from customers for the cost of equipment requires that the equipment be "used and useful." The CES battery units fail the used and useful requirement, according to OCC, particularly as to AEP Ohio's residential customers. OCC claims Staff's initial calculation of the adjustment includes six CES battery units. Furthermore, OCC notes that the Company renegotiated the contract with the vendor of the CES units and did not have to return any stimulus money to U.S. DOE in association with this aspect of the gridSMART project. Accordingly, OCC concludes that AEP Ohio has been compensated for the CES battery units and requests that the rider be reduced by \$454,632, as Staff recommends.

- (14) In its reply comments, Staff states that, after verifying the validity and accuracy of AEP Ohio's recommendation to reduce the adjustment from \$454,632 to \$155,209 for the CES battery units, Staff agrees that the adjustment should be \$155,209.
- (15) AEP Ohio filed reply comments on January 20, 2015, disagreeing with the comments of OCC. The Company reiterates and expands upon its replies to Staff's comments filed October 22, 2014. The Company states that it renegotiated the scope of the project with the U.S. DOE and the CES battery manufacturer after AEP Ohio determined that the CES battery units were not performing as expected. The project was reduced to six battery units, which were tested in a laboratory to allow the Company to observe how the batteries operated under various load scenarios. AEP Ohio reasons that the gridSMART project was approved by the Commission as a pilot to test new and evolving technology. The Company avers that it has met its performance obligation and should recover the costs associated with the CES units.

(16) As to OCC's used and useful argument, AEP Ohio quotes from In re AEP Ohio, Case No. 11-1353-EL-RDR (2011 GridSMART Case). The Company notes that, in the 2011 GridSMART Case, the Commission explained that the gridSMART project was approved as a rider, as proposed by Staff, "as opposed to the proposed distribution rate increases over the term of the ESP, to better facilitate the audit of expenditures" and "in order to encourage the expedient installation and operation of gridSMART technologies, prudent gridSMART investments are recoverable as costs are incurred." On that basis, AEP Ohio proclaims the Commission rejected the "used and useful" argument. 2011 GridSMART Case, Opinion and Order (Aug. 24, 2011) at 3, citing In re AEP Ohio ESP 1 Cases, Opinion and Order (Mar. 18, 2009) at 37-38.

Finally, AEP Ohio references documents filed in the 2012 *GridSMART Case*, and responses to data request submitted in this case, that support the Company's calculation of the adjustment for the CES units.

(17) The Commission concludes that the gridSMART rider should be reduced by \$155,209, as ultimately recommended by Staff, for the CES units. In the 2012 GridSMART Case, AEP Ohio informed the Commission that the CES units had been returned to the vendor and subsequently AEP Ohio had begun to conduct laboratory test with four pre-production CES units. According to AEP Ohio, the tests were expected to show the previously identified design and operational issues had been resolved to the Company's satisfaction. Furthermore, AEP Ohio projected that field testing would be conducted over a 3-8 week period for each unit to assure the units operate under all operating conditions and environments. 2012 GridSMART Case, Finding and Order (Oct. 3, 2012) at 9. In the 2012 GridSMART Case, the Commission denied recovery, at that time, of certain CES unit costs as a result of the failure of the CES units to perform as expected, until the CES units were returned to AEP Ohio, tested, operational, and ready to be installed. 2012 GridSMART Case, Finding and Order (Oct. 3, 2012) at 10. AEP Ohio subsequently renegotiated this component of the gridSMART project with the vendor and U.S. DOE, and six CES units were returned to AEP Ohio for laboratory testing. AEP Ohio acknowledges that the CES units were tested in the laboratory. According to a response to a Staff data request, five of the CES units are operational but not installed at customer premises. Further, according to Staff, AEP Ohio does not currently have any plans to install the CES units. The Commission finds that the CES units failed to comply with all the criteria for recovery of the associated costs, as stated in the 2012 GridSMART Case. The CES units failed to meet the final criteria, to be operational and ready to be installed for the benefit of AEP Ohio customers. For this reason, the Commission finds the gridSMART rider should be reduced by \$155,209 for CES unit costs.

Labor Expense

(18) Staff recommends a reduction of \$2,019,826 for nonincremental labor that was included in a reclassified adjustment from capital to expense. OCC endorses Staff's recommendation. AEP Ohio agrees with Staff's recommendation. Accordingly, the Commission finds the gridSMART rider should be reduced consistent with Staff's recommendation to reduce labor expense.

<u>Revenue Requirement</u>

(19) Staff recommends a reduction in capital of \$951,101, resulting in a reduction in the revenue requirement of \$233,183. OCC endorses Staff's recommendation. The Company agrees with Staff's recommendation. Therefore, the Commission concludes capital should be reduced by \$951,101 and the revenue requirement adjusted accordingly.

Effective Date

(20) The gridSMART rider rates adopted in this proceeding are to be effective with the next billing cycle and continue through May 31, 2015, the conclusion of this ESP term. Furthermore, in light of the Commission's decision in the Company's most recent ESP application, to extend the gridSMART program through May 31, 2018, the gridSMART rider rate adopted in this case shall continue with the commencement of the new ESP term on June 1, 2015, until otherwise ordered by the Commission. In re AEP Ohio ESP 3 Case, Case No. 13-2385-EL-SSO, et al., Opinion and Order (Feb. 25, 2015) at 51-52. It is, therefore,

ORDERED, That OCC's and Direct's motions to intervene be granted. It is, further,

ORDERED, That AEP Ohio's application to revise its gridSMART rider rate be approved, as modified herein, consistent with this Finding and Order. It is, further,

ORDERED, That AEP Ohio shall file a compliance schedule and proposed tariffs consistent with this Finding and Order, subject to review and approval by the Commission. The proposed tariffs shall be filed with the Commission within seven calendar days after the issuance of this Finding and Order. It is, further,

ORDERED, That a copy of this Finding and Order be served upon all persons of record in this case.

THE PUBLIC UTILITIES COMMISSION OF OHIO

Thomas W. Johnson, Chairman

Steven D. Lesser

M. Beth Trombold

Asim Z. Haque

GNS/dah

Entered in the Journal MAR 1 8 2015

G. M. Neal

Barcy F. McNeal Secretary