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ARKANSAS PUBLIC SERVICE COMMISSION

IN THE MATTER OF AN INVESTIGATION)
OF POLICIES RELATED TO DISTRIBUTED)
ENERGY RESOURCES)

DOCKET NO. 16-028-U
ORDER NO. 10

ORDER

On November 9, 2017, by Order No. 5 in this Docket, the Arkansas Public Service Commission (Commission) expanded the scope of this proceeding to include investigation of and the broad collection of information on policies related to Distributed Energy Resources (DERs)¹ including DER aggregation and data access issues, as well as questions that touch on matters that may affect customers and third parties that may have an interest in accessing customer data and integrating DERs into the electric grid. The Commission posed for initial consideration a set of 19 questions and sub-issues, to be addressed in subsequent proceedings by Parties in this Docket following the issuance of a procedural order. This Order launches that process.

The Commission's decision to expand this Docket to investigate policies related to DERs flows from rapidly changing customer expectations and actions in the electric power sector; technological advancements in renewable energy production, demand response, and energy efficiency; and the growth in DERs and third-party providers of such resources. The Commission agrees that grid modernization and DER adoption will continue, and adoption rates will increase even in the absence of regulatory measures, as customers demand greater choices and implement new technologies behind the

¹ As noted in Order No. 5, the Commission considers DERs as including, but not limited to: energy efficiency resources (EE); demand response (DR); smart thermostats and controls; renewable resources and distributed generation (DG), including solar and wind technologies; storage technologies, including batteries and water heaters; and electric vehicles (EVs), all of which may be enabled, enhanced, and integrated into the grid by implementation of Advanced Metering Infrastructure (AMI).

meter such as renewables, storage, electric vehicles, and autonomous equipment controls such as smart thermostats, and continue to implement energy efficiency and demand response measures using advanced metering infrastructure (AMI) and smart meters. The Commission desires to ensure that Arkansas adapts to these changes with the benefit of timely regulatory measures. The Commission further wishes to ensure that Arkansas benefits from the establishment and accommodation of DER markets and actions of third-party providers and aggregators of DERs, while acknowledging and encouraging proper roles for our distribution utilities. The Commission also wishes to protect and grow DER jobs; secure opportunities and avoid costs for its citizens; protect vulnerable customer groups such as low-income customers; and capture environmental benefits for Arkansans.

In order to signal to the state's electric utilities, their customers, third-party providers of DERs that wish to serve the market in Arkansas, and other interested stakeholders, the Commission declares its intent to explore these issues in an open and deliberative way over an extended period. The Commission recognizes that this is a large task and one that will take considerable time and will involve planning, organization, and collaboration among Parties. As explained below, the Commission invites the Parties to this Docket to provide initial procedural recommendations for developing a roadmap for Commission action addressing DER topics and related power sector issues. In accordance with Order No. 5 and other provisions of state law relevant to DERs,² the Commission establishes below an initial procedural schedule and provides

² See, e.g., (1) **the Regulation of Electric Demand Response Act of 2013, Ark. Code Ann. §§ 23-18-1001 et seq.**, authorizing the Commission to “establish the terms and conditions for the marketing, selling, or marketing and selling of demand response by electric public utilities or aggregators of retail

an opportunity to submit comments on procedural issues prior to scheduling a public **Educational Workshop on DER and Grid Modernization Procedural Issues.**

The submission of pre-Workshop written comments and oral comments at the Workshop will provide an opportunity for Parties to this Docket to offer their thoughts on the organization and initial list of issues under consideration by the Commission.

Procedural History

In Order No. 5, the Commission permitted additional petitions for intervention for parties interested in participating in the expanded Docket. Following the close of the intervention period on January 12, 2018, the Commission issued Order No. 9 on January 22, 2018, granting intervenor status to Advanced Energy Management Alliance, the Environmental Defense Fund and Mission:data Coalition (a joint appearance), and the Home Performance Coalition.

customers to retail customers or by electric public utilities, aggregators of retail customers or retail customers into wholesale electricity markets;"

(2) **the Energy Conservation Endorsement Act of 1977, Ark. Code Ann., §§ 23-3-401 et seq.**, defining energy conservation programs as including not only conservation and energy efficiency measures but also demand reduction and load management, alternative metering equipment designed to implement new rate structures, and renewable energy technologies (solar, wind, geothermal, biomass conversion, and various forms of energy from wastes) and authorizing the Commission to "require... measures which cause [utilities] to incur costs of service and investments which conserve as well as distribute electrical energy... if [the Commission] determines they will be beneficial to the ratepayers of such public utilities and to the utilities themselves;"

(3) **the Arkansas Renewable Energy Development Act of 2001, as amended, Ark. Code Ann. §§ 23-18-601 et seq.**, encouraging renewable energy resources and technologies and the net energy metering of electricity;

(4) **the Arkansas Clean Energy Development Act of 2007, Ark. Code Ann. §§ 23-18-701 et seq.**, requiring utilities to consider clean energy and the use of renewable resources as part of any resource plan;

(5) **Ark. Code Ann. § 23-2-304(a)(10)(A)**, providing for the protection of confidential customer information in the absence of retail customer consent or if data is provided only in the aggregate; and

(6) **Ark. Code Ann. § 23-2-304(a)(11)**, authorizing the Commission to "propose, develop, solicit, approve, require, implement, and monitor financial assistance programs" for low-income customers.

On February 13, 2018, The Regulatory Assistance Project (RAP) submitted to the Commission an informational report requested by the Commission entitled *Enabling Third-Party Aggregation of Distributed Energy Resources* (RAP Report), appended hereto as Commission Attachment 1. The Report identifies issues, in addition to those raised by the Commission in previous Orders, which may need to be addressed by the Parties and the Commission in this Docket.

On March 8, 2018, the Arkansas Electric Cooperative Corporation (AECC) and AECC's Member Cooperatives³ (collectively, the Cooperatives), filed their *Motion for Exemption and Request for Withdrawal* (Motion) pursuant to Rule 3.10 of the Commission's *Rules of Practice and Procedure* (RPPs), citing their "unique business model and distinguishing characteristics," including "well-developed demand response programs" as justification for their withdrawal as Parties from his proceeding and exemption "from any subsequent rules or orders originating from the Commission's inquiry in this Docket or additional dockets originating from the same." Motion at ¶4.

On March 16, 2018, the General Staff (Staff) of the Commission filed its Response to AECC's Motion (Staff Response), posing an objection to an exemption for Cooperatives "at this time," stating that they have not provided any evidence in the record that provides good cause for granting the exemption or that demonstrates that granting it is in the public interest. On March 22, 2018, the Cooperatives filed their

³ Arkansas Valley Electric Cooperative Corporation; Ashley-Chicot Electric Cooperative Incorporated; C&L Electric Cooperative Corporation; Carrol Electric Cooperative Corporation; Clay County Electric Cooperative Corporation; Craighead Electric Cooperative Corporation; Farmers Electric Cooperative Corporation; First Electric Cooperative Corporation; Mississippi County Electric Cooperative, Inc.; North Arkansas Electric Cooperative, Incorporated; Ouachita Electric Cooperative Corporation; Ozarks Electric Cooperative Corporation; Petit Jean Electric Cooperative Corporation; Rich Mountain Electric Cooperative, Incorporated; South Central Arkansas Electric Cooperative, Incorporated; Southwest Arkansas Electric Cooperative Corporation; and Woodruff Electric Cooperative Corporation.

Reply to Staff's Response to their Motion, arguing that Staff interprets RPP Rule 2.05 to create an evidentiary standard that does not exist.

Commission Ruling and Order

Given the breadth and depth of the issues presented by the rapid changes in electric technologies and the economics thereof and the time and effort that will be required to address their implications for the electric utility industry and customers in Arkansas, the Commission has identified below – without necessarily indicating their order or priority – a list of issues and sub-issues for consideration and eventual substantive comment/testimony by Parties in this Docket or other dockets to be established by future order. Preliminarily, the Commission is exploring whether conducting portions of this proceeding, such as workshops or technical conferences, would benefit from the engagement of a qualified expert facilitator to undertake the following activities: assist in the design and management of this investigation; engage stakeholders; organize collaborative activity procedures; recommend subject-matter working groups; develop a workplan, meeting schedule, and timelines for completion of the working group process; plan and manage technical conferences and workshops; propose schedules for formal comments, testimony, reports, and recommendations from Parties; and prepare reports from the Parties to the Commission.

The Commission identifies the following categories of issues and sub-issues for substantive exploration in this Docket at a future time:

A) DER Aggregation Matters:

1. The issues and recommendations contained in the RAP Report;

2. Identification of appropriate roles for distribution utilities, third-party DER providers, and customers (*e.g.*, partners, platforms, contractors, etc.).
3. Development of rules or terms and conditions for utilities and third parties under the authority of the Regulation of Electric Demand Response Act of 2013, Ark. Code Ann. §§ 23-18-1001 *et seq.* for the marketing, selling or marketing and selling of demand response by electric public utilities or aggregators of retail customers or by electric public utilities, aggregators of retail customers, or retail customers into retail and/or wholesale electricity markets for purposes of capturing ancillary services benefits and other values;
4. Development of rules governing:
 - a. third party access to utility data;
 - b. communications upgrades;
 - c. cybersecurity;
 - d. confidentiality and privacy;
 - e. process for customer consent for access to data, data agreements, and programs such as Green Button;
 - f. interconnection standards; and
 - g. visibility into and identification of the hosting capacity of circuits for DER opportunity; and
5. Identification of DER services, DER compensation mechanisms, programs, and issues of subsidy and stranded costs.

- B) **Rate Structure and Rate Design Matters:** Development of model tariffs and rules for Time-of-Use Rates, Pre-Pay Programs, performance-based regulation, tariff-based DER programs, decoupling, possible unbundling of electricity services, and the near- and long-term implications of DER and grid modernization for Net Energy Metering (NEM) and NEM rates.
- C) **Low-Income Customer Participation Matters:** Development of rules or policy guidelines for DER compensation and program design and financial assistance programs ensuring equitable treatment of and participation by low-income customers under the authority of Ark. Code Ann. § 23-2-304(a)(11);
- D) **Advanced Technology Matters:**
1. Development of necessary rules or standards enabling interoperability and technologies to share capabilities of an integrated communications network using analytics and big data. Such rules or standards should enable customers and customer-authorized third parties to access customer usage information collected by AMI and to access other data generated by the meter, including rules to avoid double counting of energy efficiency program savings, facilitate integration of DER onto the distribution network, and include energy efficiency as a DER that may participate in energy markets wherever it can offer cost-effective value to the grid. The Commission has initially identified the following technologies that may be relevant to achieving customer benefits and better integration of DER: AMI, Meter Data Management Systems, Advanced Distribution Management Systems, Distributed Energy

Resources Management Systems, smart inverters, Fault Location Isolation and Service Restoration;

2. Identifying and gaining an understanding of the impacts of implementing these advanced technologies on utility billing systems; and
3. The identification of steps, including the development of rules or policy guidelines, that can be taken to give utilities, transmission and distribution system planners and operators, customers, and third-party DER providers, including renewable generators and storage providers, greater visibility into the distribution system so as to:
 - a) enable and enhance the forecasting of DER deployments and their impacts on transmission and distribution networks;
 - b) update existing interconnection tariffs and facilitate standardization of interconnection and communications protocols under the revised IEEE⁴ Std 1547-2018 (Revision of IEEE Std 1547-2003) *Standard for Interconnecting and Interoperability of Distributed Resources with Associated Electric Power Systems Interfaces* and thereby enable greater utilization of smart inverters and minimize interconnection charges for DER;

⁴ Institute of Electrical and Electronics Engineers.

- c) identify and optimize the development of non-wires alternatives to utility generation, transmission, and distribution investments;
- d) capture ancillary services benefits of DER; and
- e) reduce distribution and transmission congestion and enhance reliability.

E) Distribution System Planning and Integrated Resource Planning

Matters: Gaining a better understanding by the Commission and Parties of utilities' existing distribution system planning processes:

- a) the current and planned ability of utilities to attain visibility into the distribution system, perform DER hosting capacity analysis and load forecasting, and to provide heat maps for customers and third party DER providers, including how data generated from AMI can be used to better inform utility planning and operations;
- b) integration of information from interconnection requests from third-party DER providers; and
- c) necessary infrastructure investments to integrate DERs so as to enable these resources to participate in retail and/or wholesale markets.

After the initial procedural comments are filed, the Commission will schedule a public **Educational Workshop on DER and Grid Modernization Procedural Issues** to receive oral comments and recommendations regarding the procedures

2018. The Commission does not set a page limit for comments but urges the Parties to be concise and to file joint comments if possible. Following the initial Educational Workshop on Procedural Issues, the Commission may adopt a schedule for subsequent technical conferences and workshops for the purpose of developing additional information and providing educational opportunities on the DER issues, with such events being open to attendance by the Parties, other stakeholders, the Commission, and the public. Further activities such as technical conferences and workshops among the Parties may be scheduled to attempt to achieve consensus between the Parties on the substantive issues in the Docket either before or after comments on the substantive issues are filed.

Given the investigatory nature of this proceeding, the impact that rapid technological change and the dramatic development of and declines in costs of DERs will have on all electric utilities regardless of their business model, and the value and experience with these issues that the Cooperatives may bring to the collaborative consideration of the DER issues that will undoubtedly affect them and their Members, the Commission at this stage of the proceeding defers action on their request for exemption and withdrawal from this Docket. Following the conclusion of the initial Educational Workshop the Commission will revisit the request of the Cooperatives for exemption from further participation in all or part of this Docket.

Therefore, the Commission orders and directs as follows:

1. Pre-Workshop procedural comments shall be filed no later than noon on September 28, 2018.

2. An initial **Educational Workshop on DER and Grid Modernization Procedural Issues**, as well as public educational workshops on DER issues and further proceedings in this Docket, will be set by future order.


3. The Commission defers action at this time on the Cooperatives' *Motion for Exemption and Request for Withdrawal*.

BY ORDER OF THE COMMISSION.

This 27th day of July, 2018.

I hereby certify that this order, issued by the Arkansas Public Service Commission, has been served on all parties of record on this date by the following method:

☐ U.S. mail with postage prepaid using the mailing address of each party as indicated in the official docket file, or
☒ Electronic mail using the email address of each party as indicated in the official docket file.

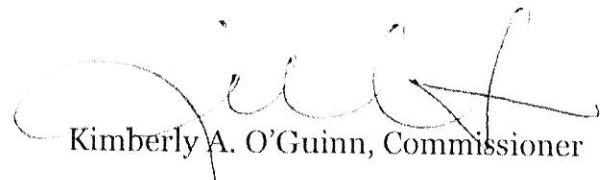

Cynthia Maguire
Mary Loos, Secretary of the Commission



Ted J. Thomas, Chairman



Elana C. Wills, Commissioner



Kimberly A. O'Guinn, Commissioner