

Summary of Public Comments
APSC Net Metering Rules

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Comments Received via APSC Administrative Docket 16-027-R

1. **Received from:** Office of the Attorney General

Date Received: October 15, 2019

Comment:

Rate Structure - The AG asserts that the rate structure issue is the most important contested issue in this Docket, noting that Order No. 22 has given the Parties an opportunity to re-evaluate previous positions in light of the new statutory landscape. The AG states that in the time between the recommendations of Sub-Group 2, which has since disbanded, and the present, the AG has been able to fine-tune its priorities specific to net-metering. The AG continues to advocate for a fair allocation of cost between net-metering and non-net-metering customers. The AG advocates for a “Do-No-Harm” approach that considers the benefits of changes from the status quo, but places a strong emphasis on potential negative impacts of making changes too quickly without due consideration of these potential negative impacts. Id. at 5-6. The AG states that Act 464 now provides clearer guidance on which rate structures are allowable, specifically for customers who receive service under a rate that does not include a demand component. The AG acknowledges that Act 464 gives the Commission broad discretion on the net-metering rate as described in Order No. 22: With regard to the rate structure issues, the Commission notes that the General Assembly left entirely to the Commission the decision to choose one of the various options set forth in the Act, or a hybrid thereof – for example, whether to:

- retain the current one-for-one net excess generation credit approach favored by Sub-Group 1 in Phase 2;
- adopt the 2-Channel net excess generation credit approach proposed by Sub-Group 2;
- develop an avoided cost approach for net excess generation credits, with an “additional sum” up to 40 percent of avoided cost; and/or
- recognize in net excess generation credits the monetary value provided to a utility by the use of net metering as specified by market mechanisms, if any, of the regional transmission organization of which the electric utility is a member and market mechanisms, if any, that measure utility distribution system benefits.

In light of Act 464's clarifications of allowable rate structure options, specifically the option of a hybrid approach, the AG continues to support as a reasonable compromise the overall premise of 2-Channel Billing and the original position of Sub-Group 2. The AG asserts that this is a pragmatic solution to addressing cost allocation and recovery issues, while allowing customers the continued choice to install net-metering facilities to lower their energy bills. However, while continuing to support 2-Channel Billing and its protection for non-net metering customers, the AG states that it is important to evaluate whether or not an immediate change to 2-Channel Billing would promote appropriate public policies, noting that abrupt changes in net-metering rate structures could have immediate, harmful effects that are not outweighed by their immediate benefits and thus violate the AG's "Do-No-Harm" principle. Accordingly, the AG recommends a gradual move towards full 2-Channel Billing while mitigating negative effects. The AG cautions against an abrupt move to 2-Channel Billing and cites the negative results of Nevada's sudden change to phase out the full retail credit. The AG favors a tiered or phased-in approach (such as the one in Nevada that resulted from legislative changes) that would move toward a credit based on avoided costs utilizing tiers that would be developed in this proceeding. The AG states that a tiered approach finds a balance between Sub-Group 1's and Sub-Group 2's original positions.

Thus, while the AG strongly advocates an end-point adopting full 2-Channel Billing, the AG recognizes the benefits of phasing in that rate structure. The AG discusses the 2-Channel Billing plus an "adder" approach adopted from the beginning by Mississippi and distinguishes Arkansas's circumstances from those in that state, noting that Arkansas should consider concerns such as job losses from a change in the rate structure. The AG cites Indiana as an example of how a phased-in approach could be beneficial for Arkansas, noting that Indiana moved away from a 1:1 credit mechanism, but took a more tempered approach by phasing this out over time. The AG observes that the main impact of the phase-out will impact net-metering customers in years much further out, thus demonstrating the benefits of a gradual change. The AG proposes a phased-in approach that would move toward a credit based on avoided costs, utilizing tiers to be developed in this proceeding. For example, the AG suggests that the first tier could begin with the credit equaling the retail rate with a phasing over time to a credit fully based on the avoided cost. Under this approach, the amount paid to the customers could be based on the separate reading of the amount being delivered back to the grid, but it would not initially be paid at an avoided cost rate. Instead it would be paid at the retail rate and over time it would be adjusted to an avoided cost rate by adjusting the weighting of each component. The AG argues that the tiered approach applies the concept of gradualism, similar to what frequently occurs in general rate cases: as cost-of-service studies show the proper allocation of revenue requirements across different rate classes, interclass subsidies are sometimes identified, and an effort to eliminate the subsidies may be undertaken. The AG notes that if subsidies are large and a change to eliminate all

subsidies would cause rate shock for a given class of customers, the subsidies are usually not fully eliminated in that rate case. Instead, the AG states, the subsidies can be reduced in future rate cases over time to mitigate rate shock to any one particular rate class. The AG asserts that this same principle of reasonably mitigating negative effects should apply to net metering. The AG notes that while grandfathering would help eliminate rate shock to existing participating net-metering customers, the rooftop solar industry could experience a negative economic impact as was seen in Nevada. The AG states that it is sensitive to this impact, as rooftop solar businesses across the state have made business investments, like company vehicles and equipment and the hiring and training of personnel. The AG expresses concern that these companies may be unduly harmed if an immediate change of rate structure is implemented. The AG asserts that the phased-in approach would allow businesses to adjust over time as net metering grows in the state, and it would also allow solar equipment and installation costs to decrease, offsetting some of the lost opportunities from a lower payback on the investment for net-metering customers. The AG also believes the adoption of 2-Channel Billing could also act as a market stimulant to other energy management technologies: home energy management systems and batteries will be more appealing as net-metering customers will have an incentive to shift their energy loads to times of the day when the net-metering facility is generating electricity, or to store self-generated electricity for use during other time of the day to avoid the need for utility-supplied electricity. The AG notes that costs of battery technology will also likely decrease over time, giving customers an option to use more of their self-generated energy on-site.

Grandfathering - The AG states that Act 464 sets out three levels of grandfathering:

- Level 1 – customers net metering prior to July 24, 2019, are automatically grandfathered at the full 1:1 retail rate. However the length of the grandfathering is not specified. The AG believes that Level 1 grandfathering should be limited to 20 years.
- Level 2 – net-metering customers that submit an interconnection request between the effective date of the Act and December 31, 2022. The AG contends that Level 2 requires the net-metering customer to individually seek review and approval from the Commission on a case-by-case basis to be grandfathered at the rate structure in place at the time of the signing of the standard interconnection agreement, for a period not exceeding 20 years.
- Level 3 – interconnection agreements submitted after December 31, 2022. The AG asserts that the statute does not contemplate grandfathering for those net-metering customers.

The AG states that Level 1 grandfathering acknowledges that net-metering customers prior to Act 464 made a significant financial investment decision based on the best information they had at the time. Although the proceeding in this Docket began in April 2016, the AG notes that there was no Commission decision made related to the rate structure. The AG states its belief that the treatment of net-metering customers prior to Act 464 is not being challenged by any party to the proceeding. According to the AG, Level 2 grandfathering provides the possibility of grandfathering with notice, opportunity for public comment, and approval by the Commission.

Consumer Protection Rules - The AG expresses concern that in an effort to maximize profit during this period of uncertainty without clear NMRs, third-party developers may mislead utility customers and insert contract terms into agreements that could be harmful to customers. The AG notes that one element used to mislead potential net-metering customers is the short- and long term benefits of the installation of net-metering facilities or, as Act 464 now allows, the short- and long-term benefits of a lease of net-metering facilities. The AG states that the Commission must consider the fact that unregulated entities are not currently restricted by Commission rules or standards in the marketing and development of facilities allowed under Act 464. For example, the AG states, there is a very real danger that onerous contract terms could be inserted into agreements, placing undue and unwarranted risk on ratepayers regarding changes to rates, escalating construction costs, and failure of contract terms to contemplate costs associated with replacement, repair, malfunction, or shutdown. The AG argues that contract terms must be clearly disclosed, displayed, and easy for lay persons to understand, adding that any assumptions used in payback calculations should also be clearly displayed. According to the AG, these should include, but not be limited to: full cost of equipment and installation; projected future maintenance costs; avoided rate; avoided rate escalation factor; projected on-site usage of self-generated electricity; and projected excess generation. To reduce these concerns the AG recommends that an ongoing working group be established by the Commission to develop a Code of Conduct and a process to certify providers and be responsible for setting terms and conditions for participating in net metering in Arkansas. The AG suggests this could be similar to the Parties Working Collaboratively for energy efficiency programs.

Leasing and Service Agreements - Regarding leasing providers (as well as other third-party developers), the AG expresses concern that a legislative solution may be needed to grant statutory authority to the Commission to regulate these providers. The AG submits that rules developed in Phase 3 should address Commission oversight of solar installers and net-metering facility owners that offer leasing options. The AG recommends that the leasing option be provided under the Code of Conduct, with terms that should be clear and conspicuous, and that leasing providers should be subject to the same program/expulsion rules developed by the customer protections workgroup.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

2. **Received from:** Entergy Arkansas, LLC

Date Received: October 15, 2019

Comment: EAL argues that there are numerous outstanding issues that the Commission must address to assure that net-metering in Arkansas operates in the market-driven manner intended by the General Assembly and the Commission. EAL has identified the following issues:

- Rate structure issues;
- Eligibility for net metering including customer size and configuration;
- Additional requirements for Commission approval of net-metering requests in excess of 1 MW of capacity;
- Requirements for lease or power purchase agreements (“PPAs,” referred to as “service agreements” in Act 464) to qualify for net-metering treatment;
- Eligibility of so-called “community solar gardens” including, if permitted, interconnection requirements and consumer protection measures;
- Appropriate changes to the existing interconnection process; and
- Appropriate consumer protections and disclosures the Commission should require as a condition of approval, consistent with the public interest.

EAL asserts that the Commission’s decisions on these pivotal issues will have a significant effect on energy costs for all Arkansans currently and well into the future. EAL notes that solar developers are actively marketing to larger commercial, governmental, and industrial customers across the state and exhorting them to make long-term investment decisions in purported net-metering facilities and touting projections of future customer cost savings based on assumptions of no change in current NMRs. According to EAL, the current rules encourage construction of facilities that are higher cost than grid- scale solar project available to the utility. EAL asserts that the net-metered facilities provide benefits to participating customers at the expense of other customers. Conversely, EAL asserts, the utility grid-scale solar investments provide economic and other benefits to all of the utility’s customers. EAL argues that the cost shift that it and other utilities assert exist through this and other dockets is not a fiction, as alleged by Scenic Hill Solar and other private solar advocates in this proceeding. EAL states that it has submitted substantial evidence to show that the cost shift is real, imminent, and adverse to the public interest. EAL points to the Direct Testimonies of Kurtis W.

Castleberry and Myra L. Tarkington, both filed in Docket 19-042-TF on August 15, 2019, as addressing the cost shift, noting that it incorporates those testimonies by reference pursuant to RPP Rule 3.05. EAL states that Mr. Castleberry described the essence of the cost shift and resulting unfairness that arises as a result of the customers electing to net meter under the 1:1 crediting mechanism further exacerbated by Act 464. According to Mr. Castleberry's testimony in that Docket, if a tax-exempt entity eligible under Act 464 chooses to purchase energy directly from an unregulated third-party solar developer through a long-term PPA and to participate in net metering as it currently is structured under a 1:1 full retail credit billing framework and under EAL's existing rate schedules, those customers will no longer pay the majority of the fixed costs incurred by EAL to provide them with electric service, with the result being that non-participating customers now will pay more through higher rates to cover those fixed costs no longer being paid for by the participating customers.

EAL states that its witness Myra Talkington quantified in Docket No. 19-042-TF the annualized cost shifting that will occur and concluded that one could assume the total costs that would be avoided and recovered from non-participating customers if 100 percent of the estimated annual energy sales were lost would be approximately \$75 million per year, which is a conservative estimate considering that there are substantial additional energy sales being made to tax-exempt customers under other rate schedules such as Large General Service (LGS). If all potentially eligible customers were to sign along-term PPA for solar, including those on various LGS rate schedules, Ms. Talkington estimated that the annual energy sales lost would be approximately \$126 million per year. EAL asserts that absent action from the Commission, these circumstances will result in significant revenue erosion and cost shifting to other customers, which will be reflected in the form of higher electric rates for non-participating EAL customers in the near future. EAL contends that it has presented ample evidence that the utility's fixed costs are not materially lowered because of net metering. Instead, EAL argues, customers who install net-metered facilities simply avoid paying their share of the costs incurred to provide and maintain the grid on which those customers continue to depend, and those costs are absorbed by the utility's other customers, whose rates necessarily will increase to account for the lost contribution from net-metered customers. EAL asserts that this point is incontrovertible and lies at the center of the many net-metering issues facing the Commission – namely, what rate structure should be put in place for net-metering that ensures just and reasonable rates for all utility customers in Arkansas.

EAL argues that in their attempts to refute such incontrovertible evidence of cost shifting, parties like Scenic Hill Solar point to studies performed in Phase 2 that relied upon numerous "erroneous assumptions and methodological flaws" that were well documented by EAL and other parties during that phase of the proceeding. EAL asserts that these parties can no longer hide behind the argument that the number of customers

participating in net metering is so small in Arkansas that there is no need to address these concerns at this time, noting that since March 2019, EAL has received over 200 Preliminary Site Review totaling over 40 MW. EAL posits that ultimately, these private solar advocates will likely assert that the solar energy produced by their facilities “benefits” all customers rather than shifts costs, just as they sought to do with the Crossborder Report analysis submitted in Phase 2. That study, or a similar study with the same premise – i.e., that avoided costs somehow actually exceed retail rates in Arkansas – EAL argues, cannot overcome the ample evidence provided by EAL showing that net-metered facilities are more costly to construct than grid-scale solar resources, and that cost-shifting is an unavoidable outcome if the positions of those parties are adopted by the Commission and the existing 1:1 full retail credit framework goes unaltered as a result of this process. According to EAL, the arguments about the benefits of net-metered solar in the Crossborder Report and similar reports from other proceedings around the country largely have been challenged by the emergence of low-cost, grid-scale solar facilities, which deliver the same environmental benefits at a fraction of the cost arising from crediting net-metered solar at the full retail rate for the energy that such systems produce. In addition, EAL argues, the Crossborder Report is of limited value in this proceeding, given a fundamental assumption in that report that the net-metered facility is located “on [the customer’s] premises” and “behind the meter [reducing the customer’s use of power from the utility.” This assumption is simply false with respect to the majority of the large projects for which customers in Arkansas currently are pursuing, EAL argues. In those circumstances, EAL asserts, as its witness Michael Schnitzer discusses in his testimony supporting these Initial Comments, there is no “own use” of solar; instead, the customer is simply injecting solar power into the grid at one location and consuming grid power at a different location or locations.

EAL asserts that where a significant amount of load for a net-metering customer is located at a different location from the injection point of the customer’s solar generation, and certainly in instances where the customer’s solar generation is at a location with no customer load, that arrangement likely constitutes retail wheeling in violation of FERC rules and applicable federal law governing transmission service. EAL states that this is true regardless of whether the injection point is at distribution voltage. Should the Commission permit these types of arrangements, EAL argues that the facts and circumstances surrounding each such scenario would need to be analyzed to determine whether, through the net-metering arrangement, the customer effectively is utilizing the transmission system to serve its load. EAL argues that the Commission should instead require that net-metering facilities actually be behind-the-meter, to help avoid any potential violation of FERC rules or federal law. EAL asserts that another issue the Commission must consider in developing rules and standards for net metering, particularly any rules addressing standardized contracts or a code of conduct for unregulated private solar developers, involves RECs associated with energy from net-

metered facilities. In particular, EAL states, the Commission should adopt rules – consistent with AREDA – requiring that, to qualify for net metering, the RECs associated with the energy from a net-metering facility must, at a minimum, be assigned to the customer whose energy usage the facility purportedly will offset (and not to the private solar developer). EAL argues that such a requirement may be established both generally and as a specific condition for obtaining Commission approval of a new net-metering facility for which such approval is required. Absent such a requirement, EAL asserts, there is reasonable cause to question whether the energy from the facility qualifies as solar energy at all and whether the facility qualifies for net metering under the Commission’s existing NMRs and Arkansas law. EAL states that a utility obtains RECs with respect to energy generated by or purchased from its owned, grid-scale solar generating facilities, whereas that is not the case with respect to net-metered energy. EAL notes that AREDA provides that the customer retains ownership of the RECs its net-metering facility produces and that the REC entitles its holder to claim that it has caused renewable, or green, energy to be produced. EAL states that the ability to make that claim – the REC – has value. Accordingly, EAL argues, in considering any claims of environmental benefits by the solar advocates, the Commission must recognize that the utility receiving energy from those net-metered facilities obtains none of the RECs associated with energy produced by those facilities – the RECs that represent the environmental attributes (i.e., the “solar-ness” of that energy). Unless the customer agrees to retire the RECs or assign them to the utility receiving the energy, EAL asserts, the utility cannot claim the environmental attributes of the net-metered energy, because the customer or the developer (depending on the arrangement between the two) can sell or transfer the REC to another customer outside of Arkansas, who will then claim credit for the renewable aspect of the renewable attribute of the energy produced. And, EAL states, to the extent the RECs are not retained by the net metered customer, the facility does not qualify for net-metering under AREDA.

EAL cites Scenic Hill Solar’s contract with the City of Hot Springs, which was made public by the city, as providing an example of the type of arrangement that does not qualify as solar net-metering under Arkansas law and for which the Commission should adopt rules to prohibit. EAL states that the contract also illustrates the potentially misleading claims of solar developers regarding the product they are selling and potential need for consumer protections. According to EAL, that contract provides not only that the City of Hot Springs receives none of the RECs created by the solar projects, but also that if Hot Springs ever receives other environmental attributes from the solar projects, it must assign them to Scenic Hill Solar. Without Scenic Hill Solar receiving any and all RECs from the City of Hot Springs under the agreement that was executed, EAL asserts that the purported net-metering arrangement violates AREDA, and indeed, it cannot reasonably be asserted that the city is actually receiving solar/renewable energy at all. Yet, according to EAL, after the contract was entered, Scenic Hill Solar claimed in a

media report –apparently falsely – that the contract would provide Hot Springs with environmental benefits. EAL argues that it is not only consistent with AREDA, but also in the public interest for the Commission to regulate net-metering activity in a manner that preclude arrangements such as this, whose renewable status is dubious, but also safeguards against Arkansas electric customers from being misled in this fashion. EAL states that the Commission’s NMRs are very clear, as is AREDA, that a retail electric customer can qualify for net-metering if and only if it is using (or in this case purchasing under a long-term PPA) renewable energy from certain qualifying technologies like solar and wind. If the customer is not actually using (or purchasing) renewable energy, EAL argues, that customer is simply ineligible for net-metering. Further, EAL states, under the Commission’s current rules, the solar developer that retained the solar RECs may decide to sell those RECs to a business or organization several states away that in turn claims those RECs for their own compliance or sustainability purposes. According to EAL, the Commission should consider such scenarios and establish rules, consistent with AREDA, to regulate the treatment of RECs that is required for a facility to qualify for net-metering.

Rate Structure Issues

Cost Shifting Under 1:1 Full Retail Credit - EAL argues that net-metering results in cost shifting when a 1:1 full retail credit is provided to the net-metering customer. For this reason, EAL recommends that the long term rate structure for net-metering facilities be addressed at the outset of Phase 3. EAL states that if the intended objectives of Act 464 are to be achieved, modifications to the net-metering rate structure and rules are needed to prevent or reduce the current subsidies for sub-scale solar, and associated cost shifting. EAL cites the testimony of the Commission Chairman in support of Senate Bill 145 (which became Act 464) as acknowledging that the bill advocated by the solar advocates has a compensation level that is lower than the utilities’ position at the Commission.⁵⁶ According to EAL, the Chairman stated that the current level of compensation of 10 cents per kWh “comes straight from retail and nobody is saying that’s what we should do.” Additionally, the Chairman stated that the “solar folks” urged the “status quo” while “the utilities are in the 5-cent range,” whereas “[t]his bill starts at 3.3 cents with a 40 percent cap.”

Economies of Scale - Citing the testimony of Mr. Schnitzer, EAL argues that, owing to economies of scale, larger “grid-scale” facilities have lower installed costs and higher capacity factors than smaller “distributed-scale” facilities, including behind-the-meter and other distributed scale facilities. Even though grid-scale solar is more advantageous, EAL asserts, the current 1:1 full retail credit framework promotes development of smaller distributed-scale solar. EAL contends that this means EAL is forced to pay inflated rates for solar energy injected into the grid from facilities eligible for net-metering – far more than it pays for solar obtained through integrated resource planning and competitive

procurements – and well in excess of the cost of energy in the MISO day-ahead and real-time markets.

Ownership of RECs - EAL recommends that the Commission adopt rules – consistent with AREDA – requiring that, to qualify for net-metering, the RECs associated with the energy from a net metering facility must be assigned to the customer whose energy usage the facility will offset (and not to the solar developer). Absent such a requirement, EAL argues that there is reasonable cause to question whether the energy from the facility qualifies as solar energy at all and whether the facility qualifies for net-metering under the Commission's existing NMRs and Arkansas law. EAL points out that the Commission, in approving EAL's solar energy tariff in Docket No. 18-037-TF, adopted a requirement that the RECs from EAL's grid-scale solar facilities be retired on behalf of the customer who is purchasing renewable energy under that tariff.

Fewer Grid-Scale Solar Facilities - EAL argues that continuing the non-market subsidy reflected in the current 1:1 full retail credit rate structure for net metering will likely foreclose development of more economic grid-scale solar facilities. EAL explains that there are physical and operational constraints that limit the amount of solar capacity that EAL's system can absorb irrespective of whether its distribution or grid-scale solar. For example, without energy storage, the amount of solar generation that can be absorbed into the grid during the midday hours is limited to demand net of generation from non-solar resources – any generation in excess of demand must be curtailed. EAL explains that some forms of generation (e.g., baseload nuclear) do not make economic sense to curtail, while other forms of generation (e.g., combined-cycle gas turbines) cannot be fully curtailed because they must remain online, operating at minimum levels, to be available to ramp up during the afternoon and early evening hours as the sun goes down and solar production fades.

Grandfathering - EAL argues that grandfathering projects under the current 1:1 rate structure will produce long-term harm for customers. EAL further argues that net-metering facilities grandfathered under the current framework would be approved as a long-term resources for which all customers are effectively required to pay with no review of the economic benefits of those resources to customers. EAL points out that this approach contrasts sharply with the lengthy, thorough reviews conducted by the Commission in the case of a utility proposing a new, long-term generating resource for customers. EAL's currently pending proceeding seeking approval to acquire the Searcy Solar facility is one example. EAL acknowledges that customers should have the right to interconnect a generator to meet their own needs and to export energy to the grid provided such exports do not shift costs to other customers. EAL disagrees with the intervenors that believe that Act 464 requires the Commission to grandfather. EAL points to language in the statute that states "subject to approval by a Commission" and

recommends the Commission clarify that point now to assure that absolutely no questions on this topic remain.

2-Channel Billing or Grid Charge

EAL recommends the Commission adopt a more market-driven rate structure that sends proper pricing signals to net-metering customers. EAL recommends two alternative rate structures: 2-Channel Billing and a Grid Charge.

A. Under 2-Channel Billing, the rate charged for energy recorded on Channel 1 for the service provided by the utility to the customer would be the Commission approved tariffed rate for the net-metering customer's respective rate class, i.e., the retail rate inclusive of applicable riders. The rate charged for the excess energy (kWh) exported to the grid from the net-metering facility would be measured through Channel 2 and be based on EAL's avoided cost. EAL states that the most appropriate credit rate is the MISO real-time hourly locational marginal price (LMP) within Arkansas. EAL states that an alternative would be to use the National Renewable Energy Laboratory's (NREL), PVWatts model to calculate a more appropriate avoided cost-based credit rate that can then be applied to any excess generation delivered to the grid. EAL is proposing that the credit rate for excess energy recorded on Channel 2 be approximately \$0.033 per kWh. EAL notes that the statute permits up to a 40% additional sum if certain conditions are met, but takes no position as to the appropriateness of an additional sum. EAL states that the 40% additional sum would be \$0.013 per kWh and would be the upper range of the credit rate that could be applied to Channel 2. EAL notes that 2-Channel Billing, combined with an appropriate avoided cost-based credit rate for excess energy, mitigates, but does not eliminate, the cost shifting from net-metered to non-net-metered customers.

B. EAL's second option, a Grid Charge, is a monthly fee that can take various forms, but fundamentally is designed to recover fixed costs that are not avoided by virtue of a customer that self-generates electricity. With a Grid Charge, a net metering customer would be billed as they are today with a 1:1 full retail credit for any excess energy delivered to the grid, and the Grid Charge would be an additional charge on the bill. The Grid Charge would be calculated based on the utility's most recently approved COS study adjusted, if necessary, to account for a Formula Rate Plan if one were in place, as with EAL. The Grid Charge would then be applied to the installed nameplate capacity (expressed in kWDC) of the customer's net-metered facility. At a minimum, EAL states that the \$/kWmonth Grid Charge should be developed based on the distribution unit cost (converted to \$ per kWh) from the most recent COS Study and the expected typical annual output measured in kWh per kWDC capacity of a typical installed solar facility in

Arkansas. EAL has calculated a Grid Charge for each of its rate classes as follows: \$2.52 for Residential, \$1.98 for SGS, and \$0.96 for LGS.

Policy Issues to be Decided - EAL asserts that the net-metering rate structure is the most critical issue facing the Commission, but there are a number of policy issues with long-term implications that also must be considered by the Commission in developing the necessary revisions to the current NMRs contemplated in Order No. 22. According to EAL, key issues requiring guidance from the Commission include basic matters such as the definition of a net metering customer and a net-metering facility, as well as what type of arrangement qualifies for net metering. As with the rate structure issue, EAL submits that these policy issues should be guided by the aim of protecting the public interest and ensuring that the policy objectives of the General Assembly and the Commission are achieved. EAL asserts that these policy issues also implicate the need for revisions to the current interconnection process, as well as consumer protections and rules limiting opportunities for gaming the NMRs to circumvent their requirements.

Defining Net-Metering Customers and Net-Metering Facilities - EAL states that up until Act 464, AREDA defined a net-metering customer as “the owner of a net metering facility.” Under the pre-Act 464 AREDA NMRs, a customer may only aggregate accounts, which are under “common ownership,” which EAL defines as accounts under a common tax identification number (a residential customer’s social security number or a non-residential customer’s federal Employer Identification Number (EIN)). However, EAL states that Act 464 expanded the definition of a customer eligible for net-metering to include customers that lease a net-metered facility and qualifying nontaxable entities purchasing energy under a long-term PPA, described as a “service contract” in Act 464. Despite expanding the definition of a net-metering customer, EAL states that Act 464 did nothing to expand the definition of “common ownership” required for meter aggregation. EAL further argues that it is critical that those parameters remain to ensure that net-metering operates as contemplated by the General Assembly and to prevent the opportunity for gaming the rules. As an example of potential gaming, EAL states that the developer Scenic Hill Solar is proposing a project for the City of Stuttgart that combines three separate legal entities with separate federal taxpayer identification numbers (i.e., the City of Stuttgart, Stuttgart Municipal Waterworks, and the Stuttgart Public Library) as one customer. EAL argues that the City of Stuttgart’s arrangement appears in violation of Ark. Code Ann. § 23-18-603(7)(C), which permits a service agreement for a single tax-exempt entity and does not appear to contemplate a service agreement comprised of multiple tax-exempt entities. In looking at Act 464, EAL argues that the General Assembly did not modify the aggregation language in AREDA, nor did it expand the definition of a net-metering customer beyond the additions noted earlier (i.e., a customer that has entered into a lease or “service contract”). Given that nothing in AREDA or Act 464 states how a customer should be defined for purposes of meter aggregation, EAL

argues that no basis exists for altering the factors that always have defined what constitutes a net-metering customer -- i.e., possessing a unique tax ID number.

Signatures to the Interconnection Agreement - Act 464 expanded the availability of net metering to now allow a customer to lease the solar facility from the solar developer/provider, or, for eligible customers, execute a long-term PPA to purchase electricity from a solar facility that will be constructed, owned, and operated by a third-party. Given this important change, EAL argues that it is critical to identify which parties will be required to sign the interconnection agreement due to the liability provisions, indemnities, terms of payment of costs, and other items affecting service in the interconnection agreement. EAL recommends that the Commission require both the owner of the facility (e.g., the solar developer) and the customer taking advantage of net-metering to execute the interconnection agreement to properly protect all parties, which means it is essential that the customer identify for the utility the type of arrangement being contemplated so that the appropriate obligations and commitments are obtained. EAL argues that this is of particular concern where the service agreement customer or lessee is a government entity that asserts it is unable to sign the indemnity provisions of the interconnection agreement, which may leave no party responsible for damages or injuries caused by the customer's net-metering system unless appropriate language is inserted to address those circumstances. The interconnection agreement must be updated to properly reflect the roles and responsibilities of all parties involved.

Defining a Net Metering Facility - EAL recommends that the Commission adopt rules that clarify the type of facilities to which net-metering will apply in a manner consistent with the arrangements contemplated in AREDA that were not modified by Act 464. EAL's position is that the General Assembly contemplated and that AREDA requires net metering facilities to be located behind a customer's meter where there is actual usage to record and where the flow of the net-metered generation can offset the customer's load at that location. However, EAL states that it is seeing arrangements that involve distributed-scale solar generation facilities located not on the same premises as the load they serve but instead remote (in some cases many miles away) from that load. EAL argues that these customers seek to engage in "retail wheeling" by using the utility's distribution system to wheel power from the generator to the customer's load. In summary, EAL argues that this type of arrangement runs afoul of AREDA and Act 464 and does not qualify for net-metering.

Sizing a Net-Metering Facility - EAL states that developers are asking EAL to consider a customer's usage based on future hypotheticals that EAL has no way to verify. EAL disagrees with this approach and recommends the Commission clarify its existing rules that uphold the General Assembly's intent on this issue by allowing customers (or solar developers) to install net-metering facilities that will be designed to produce no more

electricity than the customer actually consumes (i.e., customer's usage for the 12 months prior to interconnection).

Interconnection Rules and Policies - EAL states that it previously has discussed the flood of interconnection requests that it has received since Act 464 was adopted by the General Assembly, particularly for larger projects that require additional study and consideration, and this significant change warrants further revisions to the Commission's NMRs and the utility's respective tariffs to ensure that net-metering customers are responsible for the additional costs that are incurred to meet their requests. Namely, EAL recommends that Preliminary Site Reviews be required for all facilities. Further, EAL states, as discussed by its witness J. David Palmer, the expanded netmetering options under Act 464 have caused not only an increase in the number of requests received, but also an increase in the size of projects that must be evaluated for technical and reliability implications as well as the variety of scenarios being proposed by solar developers for net-metering facilities that they are trying to sell. EAL asserts that some solar developers are seeking to obtain net-metering treatment for customers for a variety of scenarios that are not contemplated under AREDA or Act 464, many of which are outlined in the discussions above. As discussed in Mr. Palmer's Direct Testimony, EAL states that this is not a scenario where EAL is attempting to foreclose interconnection of qualifying net-metering facilities, but rather a situation where EAL cannot approve certain interconnection requests that have been submitted to it without clear direction from the Commission on these issues. Given the changed circumstances and the workload associated with these requests, EAL states that rule and tariff changes are needed to assure that customers seeking to interconnect a net-metering facility are paying the administrative and other costs associated with studying their requests. According to EAL, such changes are also needed to ensure that customers are adequately protected in their investment, and that the utility has an opportunity to review the proposed facility before it is installed. One such change recommended by EAL should be to require a Preliminary Site Review for all net-metering facilities. Additionally, EAL argues that the Commission should carefully consider additional rules regarding interconnection that should be required in the event the Commission expands what facilities are permitted to net meter as discussed by Mr. Palmer in his testimony.

Interconnection Charges - EAL states that since Act 464 was adopted, EAL has received a flood of interconnection requests particularly for larger projects that require additional study and consideration. Therefore, EAL recommends that Preliminary Site Reviews be required for all new facilities, which would be paid for by the net-metering customer – a practice consistent with cost causation principles. Charging a fee would ensure that net-metering customers are responsible for the additional costs that are incurred to meet their requests. EAL suggests that a one-time fee should be associated with each Preliminary

Site Review, and a one-time fee should be associated with the interconnection request to change the meter.

Additional Billing Charges - At present, EAL states that its billing process for meter aggregation customers has been and continues to be a manual, labor-intensive process that must be conducted each month to assure that proper credit for the customer is made and in the proper order. Up until Act 464, EAL states that it has determined that the cost to modify its billing system to automate meter aggregation functions outweighed the cost of continuing to bill such customers manually. EAL states that it may be unrealistic or even infeasible to continue the current practice of manual billing. As such, EAL argues that any costs needed to upgrade EAL's billing system solely to accommodate meter aggregation should be borne by net-metering customers that use meter aggregation and not by all customers, who derive no benefit.

Penalties for Unapproved Interconnections - EAL recommends that the Commission adopt a policy that unauthorized interconnections do not qualify for net-metering and thus are foreclosed from receiving any benefits of net-metering for the life of the unapproved system, in addition to having responsibility for any damages resulting from the unauthorized interconnection.

Updated Rules for Leases and Service Agreements - According to EAL, Act 464 amended AREDA to allow leases and for qualifying nontaxable entities to enter into "service contracts" (effectively PPAs). EAL states that, for leases, certain restrictions must be met for the arrangement to be eligible for net-metering treatment. EAL states that in both cases, the Commission will now be required to review each lease and "service contract" and determine whether it actually meets the requirements established by Act 464. To help facilitate the review of leases, EAL proposes two options:

- The Commission could establish a review process for lease agreements to be submitted to General Staff and the utility to ensure compliance; or
- The Commission could establish a form agreement that either must be used or that, if used, would allow the net-metering customer to forgo APSC review.

With respect to reviewing "service contracts," EAL also recommends two options:

- The net-metering customer could submit legal analysis confirming eligibility for safe-harbor treatment, including a detailed explanation of the basis for that opinion (e.g., a detailed review of contract terms and specific pricing provisions contained in the purported service contract); or
- The Commission could develop a standard form contract.

Gaming

EAL provides the following are examples of gaming activity that may be occurring under the Commission's current NMRs:

- Breaking up a larger solar project into smaller projects to stay below thresholds for Commission review (e.g., multiple < 1 MW solar projects even though the customer has executed a single lease or service agreement where the aggregated capacity would trigger Commission review and approval; a similar situation would occur if the customer proposes multiple < 5 MW solar projects that in aggregate exceed the 5 MW threshold for review).
- Aggregation gaming (i.e., meter aggregation where the expected solar production will provide energy for only a fraction of the customer's total metered usage, but where the customer has listed all of their accounts that will have to be manually billed but only the first few are likely to receive any credit against their billed actual usage).
- Grouping together individual meters, including, but not limited to, residential meters that exceed in total allotted thresholds (e.g., 1 MW) and are not tied to any actual load (i.e., so-called "community solar" projects seeking to utilize meter aggregation).
- Submission of multiple preliminary site reviews for the same customer for the same location simultaneously, when in fact the customer only intends to install one system.
- Submission of Preliminary Site Reviews without an actual customer associated with them and that are only intended to "scout out" the potential for a site for a new solar facility.

Consumer Protection Rules - EAL recommends that the Commission develop consumer protection rules that will assure that Arkansas consumers are not entering into long-term contracts or leases for solar generating facilities based on misleading or false claims and representations by solar developers with respect to the product they are selling to customers. Such rules should include mandatory minimum disclosures outlined by the Commission such as:

- Information includable in rate comparisons and savings estimates presented to customers (e.g., inappropriately using national averages for electric rates rather than utility-specific electric rates; estimates of future escalation of utility rates that far exceed the actual rate increases from the utility in question; other assumptions);
- Minimum requirements for disclosure of technical information, such as

- o Expected lifetime operational performance; warranties; annual degradation; expected future costs including equipment replacement (e.g., inverters); preventative maintenance and associated costs;
- o Origin of solar panels (e.g., Germany, China, U.S.);
- Required/minimum disclosures for lease arrangements (e.g., ownership of RECs);
- The extent to which the Commission may require a contract to describe the allocation of risk to the customer, such as the risk of Commission non-approval of the applicable net-metering arrangement and the potential for future changes that influence the value the customer will receive from net-metering; and
- An explanation and timeline of the process so that customers are not misled into thinking that the minute their facility is built, it will begin providing value. The interconnection agreement must be submitted to the utility at least 30 days prior to anticipated interconnection in order to facilitate review by the utility and allow time for the utility to identify any issues. Developers appear to be telling some customers that they may miss out on current federal tax credits because the utility is taking too long, when instead the developer has failed to timely submit a complete interconnection application and then somehow expects instantaneous interconnection.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

3. **Received from:** Oklahoma Gas & Electric

Date Received: October 15, 2019

Comment:

Rate Structure - OG&E acknowledges that Staff's proposed NMRs allow for utilities to submit individual utility-specific net-metering solutions that will balance the interests of both its participating and non-participating customers. OG&E supports this approach, as it will allow the Commission to develop experience with multiple net-metering solutions that can assist future refinements that improve the balance of interests for both participating and non-participating customers. OG&E attaches its proposed redline refinements to the Staff's proposed rule changes. OG&E requests that the Commission approve a rate structure to replace the current 1:1 rate structure. OG&E recommends that any new rate structure approved by the Commission be based on each utility's cost of service. Of the three new rate structure options allowed for by Act 464 (2-Channel billing, grid access charge (or similar), and three-part rates that include a demand charge,

or a hybrid thereof), OG&E's preference is the adoption of a grid access charge rate structure for all applicable net-metering customers. OG&E believes such a rate structure is the most effective mechanism to mitigate the current unreasonable allocation of costs to non-net-metering customers. OG&E also responds to the potential rate structures listed in Order No. 22.

Current 1:1 rate - OG&E states that the current rate structure leads to unreasonable allocations of costs to non-participating customers because the net-metering customers are no longer paying for the customer- and demand-related services that are embedded in the credit they are receiving. Additionally, OG&E states, under a 1:1 net-metering rate structure, nonparticipant customers are required to pay far more than market rates (SPP and MISO Day- Ahead) for unscheduled excess energy delivered onto the utility grid by net-metering customers.

2-Channel Billing - OG&E notes that 2-Channel Billing was a compromise among Sub-Group 2 parties and OG&E did not oppose it. If 2-Channel Billing is adopted, OG&E recommends that each utility be allowed to set its own rate structure components (grid access charge, demand charge, etc.) at a level that limits unintended subsidies and minimizes above market payments for excess energy. If the Commission were to determine that utility specific net-metering rules are not desirable, OG&E requests that the Commission approve a grid access charge mechanism for net-metering customers. OG&E states that a grid access charge should be designed to recover the costs that are not avoided by a net metering facility, at a minimum including the cost of utilizing the distribution grid. OG&E states that under the current 1:1 credit mechanism, a net-zero kWh customers will avoid all costs of utilizing the distribution grid, which means all other customers are footing the bill for these costs. Under an unavoidable grid access rate structure, any net excess energy within the billing cycle would be credited at the rate of the utility's avoided cost.

Avoided Cost Plus an Additional Sum - OG&E notes that under Act 464, the burden of proof for any "additional sum" up to 40 percent of avoided costs is on the party seeking the sum. OG&E states that the evaluation of an additional sum should be based on quantifiable benefits and should also consider the impact on non-net-metering customers. OG&E urges caution in including any Quantifiable Benefits that cannot be tied to an accounting or market mechanism, or any amount not currently included in a utility's cost of service.

Benefits Related to RTO Market Mechanisms - OG&E states that it is unaware of any explicit RTO (SPP) market mechanism that measures the utility distribution benefits provided to a utility by the use of net metering. OG&E further notes that the grid provides a substantial benefit to distributed energy

resource customers equal to battery backup storage within varying time intervals and urges the Commission to consider those benefits in the calculation of any Quantifiable Benefits. Id. at 6.

Customer Protections

Protections for Non-Net-Metering Customers

OG&E states that either a grid access charge or 2-Channel Billing would reduce the unreasonable allocation of costs to non-net-metering customers. OG&E also suggests adopting a three-part rate structure with an appropriate level of demand charge, and treating net-metering customers as a separate rate class. OG&E asserts that this will provide more accuracy and granularity into cost allocation to increase protections to non net metering customers.

Gaming - OG&E supports developing a regulatory mechanism to guard against the gaming of new 1,000 kW threshold net-metering projects. OG&E also requests the Commission take administrative notice of the FERC Notice of Proposed Rulemaking in Docket Nos. RM 19-15-000 and AD 16-16-000 in which, in part, FERC is proposing to increase its protections against gaming. OG&E proposes as an additional step to mitigate the potential for gaming, that the contact information for the owner of a facility needs to be listed on any interconnection agreement, and all solar lessors and aggregators should be required to register with the Commission, so as to establish mechanisms for enforcing common ownership rules. OG&E recommends establishing a process to allow utilities and/or other parties to file a complaint regarding any potential gaming, as third-party solar installers are not regulated. In addition, OG&E urges, penalties for gaming should include, but not be limited to, forfeiture of ability to participate in net metering.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

4. **Received from:** Southwestern Electric Power Company

Date Received: October 15, 2019

Comment: SWEPCO supports Staff's revisions to the NMRs with one exception: Rule 2.03 - New or Additional Charges. SWEPCO suggests that the language from Ark. Code Ann. § 23-18-604(a)(4) be incorporated in the Rule rather than just referring to the section. SWEPCO next discusses the contested issues.

Rate Structure: 2-Channel Billing - SWEPCO supports the adoption of the 2-Channel net excess generation credit because it appropriately recognizes the utility's costs that the net-metering customer avoids and provides for an additional credit of up to 40 percent of

the utility's avoided costs. SWEPCO discusses other benefits that make this method a fair and reasonable choice for all parties.

Quantification of Additional Sum - SWEPCO points out that the utility must be able to actually quantify the benefits based upon cost-based ratemaking already approved by the Commission and not by subjective "societal" benefits which may be claimed by the net-metering customer. The quantifiable benefits can also consist of benefits from RTO market mechanisms, but SWEPCO is unaware of any such market mechanisms in SPP.

Rate Structure: 1:1 Approach - SWEPCO does not support the existing 1:1 rate structure because it shifts costs to non-net-metering customers. SWEPCO argues that the current full retail rate credits the net-metering customer for investments in embedded costs that the customer is not avoiding by merely reducing their consumption. SWEPCO notes that in the first seven months of 2019, the Company issued 263 "net kWh zero bills" in Arkansas. These are bills that reflect a net-zero kWh usage for the month which means the only payment made by the customer is the fixed customer charge, which typically recovers the cost of meters and billing. The customer does not pay for fuel, energy efficiency programs, or any factor that is based on kWh usage. SWEPCO notes that the number of net-metering facilities in Arkansas has been increasing dramatically, noting that according to annual filings with the Commission, there were 1,500 net-metering facilities – both residential and commercial – among utilities with customers in Arkansas in 2018. This, SWEPCO states, was a 52 percent increase in the number of facilities from 2017. Furthermore, SWEPCO states, in 2017 there was a 53 percent increase in the number of facilities from 2016. SWEPCO itself issued over 200 "net kWh zero bills" in Arkansas in 2018 for net-metering customers, and for the first seven months of 2019, SWEPCO issued 263 "net kWh zero bills" in Arkansas. Like all Arkansas utilities, SWEPCO states that it is experiencing an increase in the number of residential and commercial net-metering customers, as well as full-blown marketing campaigns to schools, cities, and other municipal entities. SWEPCO states that as of its October 15, 2019 filing, it had received 62 net-metering applications and interconnected 68 new net-metering facilities in 2019 and is forecasted to receive another 90 applications and interconnect 84 new facilities before the end of the year. Given this unprecedented growth, SWEPCO asserts that the existing 1:1 rate structure is unsustainable.

Current Demand Tariffs (GS Tariff) - SWEPCO recommends that the Commission should make an exception to the NMRs regarding the continuation of the existing 1:1 net excess generation credit approach for net-metering customers who receive service under a rate that includes a demand component for any current demand tariff under which the Company is not fully recovering its cost to serve. As an example of such a case, SWEPCO points to customers under its General Service (GS) tariff that do not meet the 6 kW demand charge threshold. SWEPCO notes that a significant portion of the Company's costs for such customers under the GS tariff are thus achieved through the

energy charge. SWEPCO argues that while the proposed NMRs are a reflection of the statutory provisions of Act 464 for customers with a demand component, it believes that the statutory language does not properly take into consideration the new rate structure on current demand tariffs. Therefore, SWEPCO urges that the 2-Channel Billing approach should be extended to net-metering customers on the General Service tariff, as well as any current demand tariff under which the Company is not fully recovering its cost to serve, as an exception to the Commission's NMRs.

Gaming/Oversizing Facilities - SWEPCO notes that while Act 464 provides limits for the size of net-metering facilities for residential customers, it does not have a mechanism for "policing" customers who oversize their systems. SWEPCO states that Ark. Code Ann. § 23-18-603(8)(E) provides that a net-metering facility is "intended to primarily offset part or all of the net metering customer requirements for electricity."⁵⁷ SWEPCO notes that while Commission review is required for interconnection of a net-metering facility over 1,000 kWAC for a commercial or industrial net-metering customer, there is currently no disincentive for commercial or industrial net-metering customers to oversize a system. Rather, SWEPCO states, conditions have changed in a way that makes 1:1 netting and cost payment an inducement to oversizing. Therefore, SWEPCO supports the adoption of rules that specifically define a level of "over-sizing" and provides either penalties or terminates the Standard Interconnection Agreement and removes the customer from net-metering service until the size of the net-metering facility is reduced to comply with the Ark. Code Ann. § 23-18-603(8)(B)(i). To guard against gaming, SWEPCO also recommends developing rules or guidelines to define a level of "over-sizing" and provides either penalties or terminates the Standard Interconnection Agreement and removes the customer from net metering service to that of a cogeneration facility until such time as the size of the net metering facility is reduced to comply with Ark. Code Ann. § 23-18-603(8)(B)(i). SWEPCO also urges the Commission to develop rules or guidelines to guard against the possibility that a large net-metering facility that would otherwise exceed the new 1,000 kW threshold is not broken into multiple small net-metering facilities under common ownership to avoid Commission review.

Data Sharing -

SWEPCO points out that the Commission is currently addressing issues related to data privacy, data access, and data sharing in Docket No. 16-028-U. Therefore, SWEPCO believes it is premature to attempt to define and establish a market-based incentive for credit for data sharing until those data issues are addressed in Docket No. 16-028-U. SWEPCO also notes that it has not deployed AMI meters or separate production meters, both of which are necessary to gain increased visibility into the distribution grid. SWEPCO states that production meters are owned by the customer and are installed behind the customer meter in such a fashion that they are capable of directly measuring the output of a customer's net-metering facility. Production meters, in conjunction with

AMI meters, thus allow a utility to completely understand consumption, generation, import from the grid, and export to the grid in such a way that the true costs and load impacts to the grid by that customer can be quantified definitively. Because SWEPCO has an obligation to serve and the customer's production data is necessary to provide that service, SWEPCO does not believe it should have to pay for such information from the customer. SWEPCO states that, at this time, there is little incentive for the utility to provide distribution system information in exchange for a customer's data information or develop market-based incentives to increase net excess generation credits in exchange for information from net metering customers.

Grandfathering - SWEPCO believes Act 464 requires the Commission to approve net-metering facilities that seek to be grandfathered. SWEPCO also believes that Act 464 did not supersede Order No. 10, which provides that grandfathering will be determined based upon the date of the Commission's order, which has yet to be issued, adopting a new net metering rate structure. SWEPCO notes that Act 464 provides that net-metering customers who sign a Standard Interconnection Agreement (SIA) between July 24, 2019, and December 31, 2022, will be subject to the rate structure in effect at the time they sign the SIA. Therefore, SWEPCO argues, it would seem logical that the date of the Commission's order adopting a new net-metering rate structure will be date upon which ALL net metering customers at the time of the order would be grandfathered. For example, SWEPCO states, if that date is January 1, 2020, then all net-metering customers who are current customers, or have signed an SIA, will be grandfathered at the current 1:1 rate structure, and there would be no more grandfathering after that date. Additionally, SWEPCO contends that, as written, the Act 464 requirement for Commission approval applies only to the net-metering customers who submit an application between July 24, 2019 and December 31, 2022, or to any customer who has submitted a signed SIA prior to the date of the order adopting a new net-metering rate structure. Thus, SWEPCO states, the application of the grandfathering provision will also require the distinction of rates applicable to grandfathered customers versus new net-metering customers who will be subject to the rate structure as determined by the Commission. SWEPCO believes that the NMRs need to reflect and address these issues.

Third-Party Leasing - SWEPCO believes that the addition of third-party leasing of a net-metering facility may require the Commission to adopt additional rules or guidelines regarding eligibility and criteria for such leases, beyond the listed limitations in Ark. Code Ann. § 23-18- 603(7)(B)(i)-(ii).

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

5. **Received from:** The Empire District Electric Company

Date Received: October 15, 2019

Comment: Empire cites Proposed Rule 3.02(C), which states that “A Net-Metering Facility shall not be modified or changed to generate electrical energy in excess of the amount necessary to offset all of the Net-Metering Customer requirements for electricity.” Empire states that the NMRs should also clarify that the intent is to restrict the initial sizing of the net-metering facility to ensure that those facilities are not intended to generate electrical energy in excess of the amount necessary to offset all of the Net-Metering Customer requirements for electricity. Additionally, Empire states that the Commission should ensure that the NMRs address the potential disqualification of a facility as a net-metering facility if its production level becomes excessive as a result of the reduction of the electricity requirements of the Net-Metering Customer.

Rate Structure - Empire recommends that each utility be given a range of options for its proposed rates, terms, and conditions for net metering within its service territory. Empire argues that a single prescriptive rate structure solution applicable to all utilities requires that all utilities have sufficient technical capabilities to implement the prescribed solution which is not the case in Arkansas. Empire contends that a prescriptive one-size-fits-all solution would, by default, limit itself to the “lowest common denominator” or be limited to the technical capabilities of the least advanced utility. Empire suggests that as utilities implement new metering and billing technologies which support better solutions, those utilities should be encouraged to incorporate those advanced capabilities into their rates.

Aggregation of Meters - Empire notes that the Proposed NMRs address meter aggregation in Rule 2.04(C) and in Rule 2.05 and recommends that the Commission consolidate the meter aggregation rules into a single rule for brevity and clarity.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

6. **Received from:** Arkansas Electric Cooperative Corp.

Date Received: October 15, 2019

Comment: AECC explains that it is imperative that the Commission exercise flexibility given the vast diversity among the electric cooperatives in Arkansas. If, however, the Commission adopts a uniform rate structure, AECC recommends a rate based on wholesale rate for energy (kWh) – e.g., the avoided cost, noting that it is also the rate recently used by several states, including the neighboring state of Louisiana. AECC proposes changes to Staff’s Strawman, which are attached as AECC Initial Exhibit-1, in order to help clarify certain ambiguities or unintentional errors, and to better protect non-net-metering customers against the potential for unreasonable cost shifts.

Definitions – Additional Meter - AECC suggests a change to the Strawman definition for “additional meter.” Specifically, AECC states that the Strawman’s language does not reflect that Ark. Code Ann. § 23-18-604(c)(2)(A)(ii) prohibits, rather than promotes, meter aggregation. By focusing on singularly on common ownership, AECC asserts that Staff’s Strawman’s proposed language opens the door to limitless aggregation amongst different governmental or tax-exempt owners within a single service territory.

Applicable Period - AECC recommends that the term “applicable period” be defined to avoid confusion. AECC suggests the definition read as follows: “The period of time used by the Electric Utility to determine Net Metering or Net Excess Generation.” AECC argues that to avoid creating a cost shift that becomes a subsidy for net-metering customers, excess generation must be accounted for anytime a net-metering facility feeds energy back to the utility. Otherwise, AECC asserts, the net-metering customer receives more than the avoided cost – i.e., a non-market based rate, for generation it sells to the utility. Such a result, AECC contends, is contrary to the existence of wholesale power markets and negatively affects non-net-metering customers. AECC contends that the reality is that most utilities have the ability to measure energy flow both to and from customers. Because a net-metering facility provides energy only, AECC argues that its excess generation is effectively purchased as additional wholesale energy by the utility. By contrast, AECC argues, the energy a utility customer (including a net-metering customer) consumes comes with the infrastructure required to deliver it, on demand, and as much as is needed. AECC asserts that the distinction between the energy flowing to and from the utility means that excess generation from a net-metering facility has a distinctly lower value than the retail energy flowing to the consumer. AECC thus argues that continuing to compensate lower-value energy at an artificially inflated price does not serve the public interest.

Applicable Rate - AECC recommends adding a definition for “Applicable Rate” and suggests it read as follows: “The Net-Metering tariff rate filed by the Electric Utility that is multiplied by the kilowatt hours generated by the Net-Metering Facility and fed back to the Electric Utility.” AECC recommends that Commission adopt rates that are tailored to each public utility’s approved cost-of-service and system characteristics. In the absence of a utility- specific rate, the Commission should adopt the utility’s annual avoided cost rate for wholesale energy. Payments in excess of avoided cost should be based on a customer- and facility-specific determination and supported by substantial evidence. AECC argues that paying for excess generation at any rate above the utility’s avoided cost also requires all other customers to pay premium prices for energy that is (1) non-dispatchable, (ii) unable to be scheduled when needed, and (iii) not subject to the control of the utility.

Net Excess Generation Credits - AECC recommends that Staff's Strawman's proposed definition for Net Excess Generation Credits be deleted because it is unnecessary to carry out the law or to clarify the current Net Metering Rules.

Quantifiable Benefit - AECC believes there is a legal question as to whether the Commission is preempted to implement a rate for the purchase of energy above the utility's average annual avoided cost of wholesale energy under federal law – specifically, the Federal Power Act and the Public Utility Regulatory Policies Act. Subject to this argument, AECC suggests a procedural modification to the term Quantifiable Benefits to make it more consistent with Act. 464. AECC's proposed definition includes additional language, as follows:

(u) Quantifiable Benefits As defined in Ark. Code Ann. §23-18-603(9) and determined on a case by case basis upon the filing of a formal Application by the Net-Metering Customer. Any such Application must include evidence to demonstrate benefits to the utility from the Net-Metering Facility to merit compensation greater than market-based energy.

Rule 2.04 - Billing for Net Metering

Rates with and without Demand Components - AECC notes that Act 464 distinguishes between rate structures with and without demand components based on a distinction between the recovery of a utility's fixed(demand) costs versus variable (energy) costs. AECC asserts that the objective is to ensure that a utility's fixed costs are not left stranded by excess generation is accomplished only if the allocation of fixed costs is sufficiently compensatory. AECC states that there is a question (raised by at least one party, AAEA) as to whether the Commission has the discretion to establish a rate structure for demand-metered customers beyond the current full retail credit (such as a 2-Channel Billing approach). AECC argues against this theory by pointing out that Act 464 allows "net excess generation" to be measured in kilowatt hours or kilowatt hours multiplied by the applicable rate. AECC also points out that "applicable rate" is not defined, nor is it mentioned in Act 464 that demand-metered customers are guaranteed a full retail credit. Finally, AECC points out that facilities larger than 1 MW are reviewed under section (b)(9) instead of section (b)(6). Under section (b)(9), neither a rate nor a rate structure is prescribed, and therefore something entirely different than the full retail credit could be chosen by the Commission. AECC thus proposes that in recognition of the legal limitations of Act 464, the Strawman Rule 2.04(A)(2) should be modified as follows:

Except as provided in Ark. Code Ann. §23-18-604(b)(9), Net-Metering Customers who receive service under a rate that includes a demand component, the Electric Utility shall credit the net-metering customer with any accumulated

net excess generation in the next applicable billing period and base the bill of the net-metering customer on the net amount of electricity that the net-metering customer has received from or fed back to the electric utility during the billing period.

Demand Component Rates with Unique Characteristics - AECC urges the Commission to be flexible and consider alternate rate structures, including the phase-in of demand billing for certain Net-M customers with unique characteristics. For example, AECC submits, customers with seasonal accounts for irrigation, poultry houses, and other agricultural accounts should not receive full retail credit.

Rule 2.07 – Grandfathering Rate Structures - AECC believes the Commission has the discretion to approve the grandfathering on a case-by-case basis. AECC also suggests that the language in the Strawman at Rule 2.07(A) should be corrected from the plural to the singular language, as shown below:

The net-metering facilities of a net-metering customers who submits a standard interconnection agreement, as referred to in these Net Metering Rules, to the electric utility after July 24, 2019, but before December 31, 2022, is allowed to remain under the rate structure in effect when the agreement was signed, for a period not to exceed twenty (20) years. Such treatment must be approved by the Commission.

Gaming and Consumer Guidance - AECC recommends adding a gaming section to the NMRs and offers an example in AECC Initial Exhibit 1:

Any facilities used for Net-Metering being credited to a customer's account, regardless of the location of the facility and its aggregation, will be treated as a single facility and must comply with the imposed capacity and/or sizing limits under these Rules.

AECC also argues that gaming would diminish if not disappear once the Commission establishes a just and reasonable credit for excess generation, noting that gaming is only incentivized when a substantial benefit attaches to excess generation payments as a result of inaccurate price signals. In other words, AECC argues, gaming serves no purpose when over-generation competes on price with the markets in which power is currently purchased. AECC asserts that developing a Consumer Guide could also help address gaming. A good example is the Solar Consumer Protection Guide recently issued by the California Public Service Commission. In addition to a Consumer Guide, AECC recommends developing a Customer Bill of Rights and Code of Ethics, which would limit the consumer's exposure for the purchase of a system during the utility's review of the Preliminary Interconnection Site Review Request. AECC further recommends that third-party developers be required to, at a minimum, register with the Commission and

agree to comply with these requirements. AECC asserts that this will provide visibility into those businesses and allow the utility to deny interconnection when a developer does not comply with the Bill of Rights and Code of Ethics. Finally, AECC states that the Bill of Rights could be used to provide a consumer with the common language to understand what part of their utility bill they might avoid with net-metering projects and those billing elements which are, or might be, unavoidable.

Clarification in the Rules - Avoid Unreasonable Allocation of Costs - Because the term “unreasonable allocation of costs” is used throughout Act 464, AECC recommends the NMRs define the term or explain how allocation of costs will be evaluated.

Metering is Needed to Monitor Larger Projects - AECC points out that FERC recently issued a Notice of Proposed Rulemaking on PURPA which provides for the possibility of the “Rebuttable Presumption” being reduced from 20 MW to 1 MW. AECC suggests the possibility that future federal law may require these large facilities to participate in the market to make the market more efficient and bring benefits to all. With this in mind, AECC recommends that net-metering facilities greater than 1 MW be required to meter their total production. *Id.* at 14.

Exceeding the Statutory Limit Requires Heightened Scrutiny - AECC recommends re-evaluating the minimal standards that a facility must meet to exceed the statutory limit of 1 MW.

Distribution System Saturation - AECC proposes that net-metering saturation be addressed, in the NMRs, by stating the utility will prioritize net-metering projects based on the date the Preliminary Interconnection Site Review Request is completed and submitted for review to the utility. AECC proposes new language for Rule 3.01(G) to address this concern:

Rule 3.01(G)

The Electric Utility shall review, and process all completed Preliminary Interconnection Site Review Requests in the order they are received. If the Electric Utility’s existing facilities are not adequate to interconnect with the proposed Net-Metering Facility, the Electric Utility shall not be required to proceed with interconnection until:

- (i) the Net-Metering Customer shall pay for the cost of additional or reconfigured facilities, or
- (ii) a mutual agreement is made with the Electric Utility that equitably addresses the risk of interconnecting a Net-Metering Facility at a location where system capacity is likely to be exceeded.

After interconnection, the Electric Utility may interrupt a Net-Metering Facility or facilities that exceed system limits. However, these interruptions may be addressed by the mutual agreement referenced above.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

7. **Received from:** Carroll Electric Cooperative Corp.

Date Received: October 15, 2019

Comment: Rate Structure - Carroll supports the comments provided by AECC and notes that it has the highest concentration of net-metering customers (relative to total customers) of any utility in Arkansas. In Exhibits A through F, Carroll provides extensive evidence of the growth of net-metering in Arkansas and its own service territory, as well as examples of poor solar installations and a proposed Customer Bill of Rights and Code of Conduct. Carroll states that the total number of net-metering customers reported to the Commission has grown from 24 in 2007 to 1,507 in 2018. Carroll supports grandfathering of net-metering customers. Carroll's most recent internal report shows a total of 459 net-metering customers (primarily residential) are interconnected or pending interconnection to its distribution grid. Carroll recommends that the SIA be clarified so that both AC and DC ratings of net-metering proposals are listed with the limiting rating highlighted. Carroll recommends adopting a flexible, utility-specific Floor and Ceiling approach for setting a new rate structure. Carroll states that a reasonable Floor would be Avoided Cost, since net-metering facilities lack dependable capacity. An appropriate Ceiling would be the 1:11 full retail rate.

Consumer Protections - Carroll recommends developing a Customer Bill of Rights, a Code of Conduct for Utilities, and a Code of Conduct for Net-Metering Vendors. In Exhibit D, Carroll provides the following examples:

- 2019 Solar Consumer Protection Guide, California PUC
- Consumer Guide to Rooftop Solar PV, Arizona Residential Utility Consumer Office (RUCO)
- Consumer Complaints with Solar Installation Companies, Webpage of the NPUC's Consumer Complaint Resolution Division

Carroll also provides Exhibit E which is the sworn affidavit of Joey Magnini, Carroll's representative for all net-metering interconnection agreements. Mr. Magnini provides numerous examples with pictures of faulty installations. In addition, Carroll provides a proposed Net Metering Customer Bill of Rights and related Codes of Conduct for utilities and Net-Metering vendors.

- i. Five Joint Electric Cooperatives: Ashley-Chicot Electric Cooperative, Inc.; Clay County Electric Cooperative Corporation; Craighead Electric Cooperative Corporation; Farmers Electric Cooperative Corporation; and South Central Arkansas Electric Cooperative, Inc.

Rate Structure - These five distribution cooperatives filed a one-page comment supporting the comments and recommendations submitted by AECC in the filing of their Initial Comments. Additionally, each of the cooperatives listed above has a goal to implement cost-of-service based rates and rate structures for net metering customers that are tailored to the unique characteristics of their individual cooperatives and are consistent with Commission approved cost-of-service principles.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

8. **Received from:** Arkansas Electric Energy Consumers

Date Received: October 15, 2019

Comment: AECC explains that the NMWG met only one time following the issuance of Order No. 22 and found little or no consensus on any issues. AECC also notes that Staff's Strawman failed to provide a recommended resolution of the major contested net-metering issues or even a list of the contested issues. Therefore, AECC limits its comments to criticism of Staff's suggested red-line amendments to the NMRs, and a summary of AECC's general position on some of the contested issues. .

Staff's Proposed Amendments to the NMRs

Rule 1.01 and Rule 2.04 - AECC states that Staff's proposed amendment to Rule 1.04(n) in the definitions section is inappropriate and suggests an edit to the existing definition of "Excess Generation Credits":

Uncredited customer generated kilowatt hours remaining in a Net Metering Customer's account at the close of a Billing Period to be credited as set forth in Rule 2.04, or, pursuant to Rule 2.04, purchased by the utility in a future billing period.

Likewise, AECC states that Staff's amendments to Rule 2.04(A) through (C) are incorrect and recommends the Commission replace them with language that actually establishes the rates, terms, and conditions under which a net-metering customer can take service.

Rule 2.07 Grandfathering - AECC states that Staff's amendment merely adds the language from Act 464 verbatim to the NMRs. AECC recommends the Commission

reject Staff's amendment and replace it with language that actually resolves the controversy surrounding the meaning of Ark. Code Ann. § 2318-604(b)(10)(A).

Rate Structure - AEEC opposes the 1:1 rate structure and argues that the current rate structure is shifting costs to other customers. AEEC further argues that the shift is large enough to be problematic in rate classes where the rate design recovers a significant portion of fixed costs through a volumetric charge. AEEC supports 2-Channel Billing for net-metering customers in classes without a demand charge. AEEC also supports the concept of a Grid Usage Charge along the lines suggested by EAL in its September 23 Motion.

Interconnection - AEEC recommends that the Commission establish new guidelines for interconnection of net-metering facilities to include provisions for larger net-metering facilities, and leasing of the facilities for certain customers. In doing so, AEEC recommends the Commission resolve the following issues:

- How does the current standard contract need to be revised to accommodate a lessor, rather than an owner?
- Are the current time frames sufficient, given the larger sized projects?
- Should penalties be imposed for customers who interconnect without utility authorization?
- Are new rules needed to clarify aggregation issues?

Gaming - AEEC agrees that the Commission needs to promulgate rule changes to guard against gaming, but makes no other suggestions.

Lease and Service Agreements - AEEC recommends that the Commission clarify questions regarding whether a service contract for a net metering facility qualifies for safe-harbor protection as provided under § 26 USC 7701(e)(3)(A), as required by Ark. Code Ann. §23-18-603(7)(C). AEEC has provided the following issues it believes need clarification:

- Is the safe-harbor provision set forth in the Arkansas statute applicable to entities other than federal agencies?
- Section 26 USC 7701(e)(4) outlines several circumstances in which the safe-harbor protection under § 26 USC 7701(e)(3)(A) shall not apply. Should confirmation be required from the appropriate federal agency that none of those conditions exist with respect to the service contract at issue?

- Analysis of these issues will require review of contract terms and specific pricing provisions contained in the purported service contract. How will contract compliance be determined?

Grandfathering - AECC supports the interpretation of Ark. Code Ann. § 23-18-604(b)(10)(A) that the Commission must determine whether a particular net-metering customer will be grandfathered under the current rate structure. AECC argues that rules of statutory construction suggest that the phrase in this new grandfathering subsection of Act 464 applies to all of § 23-18-604(b)(10)(A), and not merely to the last antecedent clause (“for a period not to exceed twenty (20) years”). Additionally, AECC argues that none of the Commission actions contemplated by § 23-18-604(b) can occur without “notice and opportunity for public comment.” AECC asserts that such notice and comment would be a meaningless, hollow exercise if it could not influence the outcome of the Commission. Hence, the Commission may decide not to grandfather any of the customers after receiving “public comment.” Since in its view, a decision to grandfather would effectively enshrine a significant subsidy in rates for a period of time, AECC thus recommends that the Commission choose not to grandfather additional net-metering customers. Alternatively, AECC recommends that the Commission not grandfather customers for a lengthy period of time, insofar as such action will effectively enshrine a subsidy in rates for a lengthy period.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

9. **Received from:** Walmart

Date Received: October 15, 2019

Comment: Walmart supports changes to the Net-Metering tariff that are applicable to net-metering customers receiving service under a rate schedule that includes a demand component. Walmart proposes the following revisions:

- In order to ensure that net-metering billing aligns with changes in customer billing demand, for net-metering customers who receive service under a utility rate that includes a demand component, in addition to crediting the net-metering customer for any net excess generation as set forth in Staff’s Strawman at Sections 3.5 and 3.6, the electric utility should also reduce the net-metering customer’s billing demand to reflect any applicable reduction in demand resulting from the net-metering facility; provided, however, that billed demand cannot be reduced below zero.
- Walmart proposes the following revision to Staff’s Strawman at Section 3.2 to clarify that a net excess generation credit is not the only bill reduction available to net-metering customers with a rate that includes a demand charge:

On a monthly basis, the net-metering customer shall be billed the charges applicable under the currently effective standard rate schedule and any appropriate rider schedule. Under net-metering, the kilowatt hour (kWh) and kilowatt (kW) units of a net-metering customer's bill are netted.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

10. **Received from:** Distributed Solar Advocates, Arkansas Advanced Energy Association, National Audubon Society Inc., and Sierra Club

Date Received: October 15, 2019

Comment: Distributed Solar Advocates generally support Staff's Strawman but offer several amendments that further support implementation of Act 464. Distributed Solar Advocates attach the testimony of Thomas Beach of Crossborder Energy LLC, which provide updated results to the 2017 cost-benefit analysis that Crossborder Energy undertook for the service territory of EAL in Phase 2 of this Docket (Crossborder Study). Distributed Solar Advocates state that the updated analysis demonstrates that retaining the full retail rate for non-demand-metered customers will not result in unreasonable cost shifting to non-net-metering customers. Distributed Solar Advocates state that the evidence demonstrates that it is in the public interest and will not result in an unreasonable allocation of costs for the Commission to retain full retail net metering for non-demand-metered customers, while undertaking a considered and gradual transition to a rate structure that could better align incentives for the utility and net-metering customers to maximize the long-term system benefits offered by net-metering customers.

Grandfathering - Distributed Solar Advocates support Staff's incorporation of Ark. Code Ann. §23-18- 604(b)(10)(A) in its entirety as NMR Rule 2.07(A), with slight modifications to honor legislative intent and promote efficiency. Specifically, Distributed Solar Advocates recommend striking "subject to approval by the Commission."

According to Distributed Solar Advocates, this edit makes it clear the Commission is not required to engage in case- by-case grandfathering adjudication, but has issued its approval by establishing generally applicable rules for grandfathering. Distributed Solar Advocates thus argue Ark. Code Ann. § 23-18-604(b)(10)(A) is not a mandate to create needless docket activity, but that Commission approval is implicit once a rule is adopted. Distributed Solar Advocates also advocate that the NMRs solidify the grandfathering period at twenty years. Distributed Solar Advocates state that this interpretation is also consistent with the Commission's decision in Order No. 10. Distributed Solar Advocates' proposed amendments to the rule are shown below:

Rule 2.07 Grandfathering Rate Structures

- A. The net-metering facilities of net-metering customers who submit a standard interconnection agreement, as referred to in these Net Metering Rules, to the electric utility after July 24, 2019, but before December 31, 2022, are allowed to remain under the rate structure in effect when the agreement was signed, for a period of ~~not to exceed~~ twenty (20) years, ~~subject to approval by the Commission.~~
- B. A net-metering facility under subdivision(A) of this section remains subject to any other change or modification in rates, terms, or conditions.

Distributed Solar Advocates argue that although some parties have asserted that the statute gives the Commission the authority to approve grandfathering on an individual basis, this is a misreading of the intent of the statute, as such a practice is inefficient, unnecessary, and undermines the stability and predictability that the Commission previously identified. For similar reasons, Distributed Solar Advocates urge the Commission to exercise its authority to definitively state the twenty-year grandfathering period in the NMRs, rather than the range permitted by the statute, so as to provide customers with certainty regarding the time period over which they can ascertain the return on their investment, consistent with Order No. 10 and the stated intent of ARED.

Meter Aggregation - Distributed Solar Advocates support an amendment to the NMRs that establishes an easy, clear, and non-controversial means for customers to establish common ownership of multiple accounts for purposes of meter aggregation. Distributed Solar Advocates' proposal would require that the customer provide only their name and account numbers and a signature affirming that the accounts are under common ownership. Distributed Solar Advocates believe it is unnecessary to require customer tax IDs to confirm common ownership. Distributed Solar Advocates' proposed addition to the NMRs reads as follows:

Rule 2.05 - Meter Aggregation

D.A customer seeking to aggregate multiple accounts under common ownership shall submit a request to their Electric Utility identifying the accounts that are under common ownership. Electric utilities shall develop and provide a form for this purpose. The form may require submission of the following information relating to accounts that the customer seeks to aggregate: Customer name, customer account number. The form may require a signature affirming that the accounts for which aggregation is sought are under common ownership.

Rate Structure for Demand Billed Customers - Distributed Solar Advocates support the way in which Staff's Proposed NMR Rule 2.04(A)(2) reflects the difference in permissible rate structure for demand- and non- demand billed customers, noting that Act 464 establishes a bright-line distinction between customers that receive a bill that includes a demand component and those that do not. Distributed Solar Advocates believe

that Act 464 grants the Commission authority to modify net-metering rates for customers that do not receive a bill with a demand component, but does not give the Commission the authority to modify the rate structure for customers on demand component bills. Distributed Solar Advocates argue that the Commission is required to follow Act 464's prescriptive language for demand billed customers, which is in sharp contrast to the Act's grant of discretion to the Commission regarding how crediting shall occur for non-demand-billed customers.

Rate Structure for Non-Demand-Billed Customers - Distributed Solar Advocates acknowledge that Act 464 (Ark. Code Ann. § 23-18- 604(b)(2)(D)) gives the Commission ample discretion to design rates that promote the public interest and avoid unreasonable allocations of costs. Distributed Solar Advocates go on to describe the various rate structures spelled out in Act 464. Distributed Solar Advocates urge the Commission to consider the longer-term benefits that a robust distributed generation market can provide to the utility's system. Distributed Solar Advocates note that, critically, the statute gives the Commission authority to maintain the status quo, or take gradual and incremental steps toward a different rate structure, citing Subsection (D) in particular. Distributed Solar Advocates point out that Act 464 does not define "unreasonable allocation of costs," thereby leaving the Commission discretion to design rates that allow de minimis shifting of costs, as it traditionally has done in rate making to maintain simplicity, fairness, gradualism, and other principles of rate design. Distributed Solar Advocates state that the broader standard provided in the statute, which also directs the Commission to consider the "public interest" in designing rates, invokes the wide-ranging policy goals of AREDA expressed in Ark. Code Ann. § 23-18-602. Thus, Distributed Solar Advocates assert, the Commission's decision regarding the public interest should be informed not merely by immediate cost-of-service considerations, but also by the longer-term benefits that a robust distributed generation market can provide to the utility's system.

Distributed Solar Advocates state that Act 464 substantially departs from several Act 827 provisions that were previously discussed in this Docket, noting that Act 464 clearly establishes that the Commission may move away from 1:1 kWh netting, which was previously required by the definition of net metering and which precluded an approach such as 2-Channel Billing. Distributed Solar Advocates point out that Act 464 also provides a more specific definition for quantifiable benefits than was suggested in the prior statute, but notes that the Act requires the use of "quantifiable benefits" only in the case where the Commission elects to implement 2-Channel Billing or a grid charge, not where the Commission chooses to pursue any of the other rate structures within its authority. Most importantly, AAEA state, Act 464 specifically repealed the previous provision, added to AREDA by Act 827, that rates must recover the entire cost of providing service to a net metering customer. Distributed Solar Advocates argue that the

General Assembly's elimination of that requirement and substitution of a standard based on the public interest and no unreasonable allocation of costs among ratepayers is a clear sign of legislative intent to move away from a rigid cost-based rate structure.

Distributed Solar Advocates state that Mr. Beach's testimony and the updated Crossborder Study continue to show that (1) "solar DG is a cost-effective resource," and (2) "net metering does not cause a cost shift to non-participating ratepayers," and "[m]odifications to net metering are not needed to recover the utility's full cost of service over time from net metering customers." Mr. Beach's testimony also explains why a long-term evaluation of the costs and benefits of distributed generation is the preferred tool for informing rate design, rather than cost-of-service studies that look only at historic, embedded costs. Distributed Solar Advocates assert that Mr. Beach's testimony establishes that solar distributed generation provides significant, quantifiable social benefits, including local economic benefits and public health improvements from reduced air pollution, which are relevant to the public interest as set out in AREDA.

Distributed Solar Advocates assert that there is no imperative for the Commission to change the net-metering rate structure, or to do so in a precipitous manner as encouraged by other parties, adding that while the Commission may ultimately conclude that a rate structure other than the status quo would best promote the objectives of AREDA and improve efficiency through transparency and market-based incentives, it has discretion to shift utilities gradually to any new rate structure. Distributed Solar Advocates state that if the Commission determines that a change in the rate structure is needed, they recommend that the new rates be determined in a general rate case or other utility-specific proceeding. Distributed Solar Advocates believe this method is necessary because several of the rate structure options available in Act 464 require updated cost-of-service information and other utility-specific information such as the value of avoided costs and other benefits.

Distributed Solar Advocates state that a gradual, data-drive approach to designing a rate structure is not only permitted by AREDA, but consistent with guidance in the National Association of Regulatory Utility Commissioners' (NARUC) DER Manual:

For the jurisdictions with low DER adoption and growth, there is time to plan and take the appropriate steps and avoid unnecessary policy reforms simply to follow suit with actions other jurisdictions have taken. Reforms that are rushed and not well thought out could set policies and implement rate design mechanisms that have unintended consequences such as potentially discouraging customers from investing in DER or making inefficient investments in DER. That is not to say a jurisdiction should ignore the issue. Understanding how its existing rate design interacts with its compensation may be worthwhile to consider at any time. The important point is that a jurisdiction be situated to analyze, plan, and be prepared

for its next steps before the market and customer adoption rates overtake its ability to respond.

Distributed Solar Advocates suggest that the Commission should consider exploring alternative rate designs through pilot programs or offer alternatives on an opt-in basis, which would allow the Commission to see how the new rates affect solar adoption and influence other key features such as system size, orientation, storage integration, and use of advanced inverters. Distributed Solar Advocates cite the New Hampshire Public Utilities Commission as a state taking this approach, noting that among the pilot programs to be implemented were time-of-use rates, real-time pricing, and monetary bill credits to expand DG ownership to low- and moderate-income customers.

A third option recommended by Distributed Solar Advocates is combining net-metering with time-of-use rates (TOU net-metering), which they suggest should be introduced gradually and conditionally, with net-metering customers first being offered the chance to elect TOU net-metering, and the success of the program being evaluated carefully prior to any decision to require TOU net-metering for new net-metering customers. Distributed Solar Advocates describe how TOU net-metering could work and the benefits to customers and utilities, noting that netting would still occur across the billing period (one month), but net-metering customers would receive different levels of credit for their exports, which would roughly track the value of the exports to the utility under the TOU rate. Distributed Solar Advocates also point out that California's three investor-owned utilities have TOU net-metering, having been implemented in 2014 under the California PUC's "NEM Successor Tariff."⁶⁰ Distributed Solar Advocates note that under state law, the state's investor-owned utilities were required to switch to TOU net metering when solar DG penetration reached five percent of aggregated customer demand, or by July 1, 2017, whichever came first. By the sake of comparison, Distributed Solar Advocates note that solar DG penetration in Arkansas is still less than 0.1 percent.

Distributed Solar Advocates argue that TOU net metering can provide benefits for a utility's system once solar becomes more prevalent, leading the net load peak hours to shift to later in the afternoon or early evening hours. These benefits arise, Distributed Solar Advocates state, because TOU net-metering incentivizes customers and third-party developers to install systems that maximize production, and therefore system benefits, during utility peak load hours. For example, Distributed Solar Advocates note, if the customer's utility peaks in late afternoon, rather than midday, then the customer may be incentivized to install a system with some components facing the west or southwest. According to Distributed Solar Advocates, TOU net metering also strengthens the incentive for customers to reduce their energy usage during peak hours, noting that the TOU rate has this effect directly on consumption, as consumers seek to shift their energy usage away from high-cost periods, but the higher price for exports during the peak

enhances the incentive, as net-metering customers realize the value they can capture for exports if they are not using the energy behind the meter.

According to Distributed Solar Advocates, because the time when net load peaks can shift later in the day as solar penetration on the system increases, TOU net metering automatically adjusts to reflect the gradually reduced value of solar to offsetting system peak. In this way, say Distributed Solar Advocates, TOU net metering would also incentivize the development of hybrid solar and storage facilities, so that customers can continue to offset as much of their high-cost usage as possible, even if and when system peaks shift into the early evening hours. To be clear, Distributed Solar Advocates state, Arkansas utilities are far from having the degree of solar penetration where there is an observable effect on net load, but TOU net metering would put in place a durable structure to reflect the changing value of solar as the installed solar capacity in the state increases. Distributed Solar Advocates note that several Arkansas utilities already have opt-in TOU rates for residential or small commercial customers, the joint parties recommend that those rates be comprehensively revisited in light of any new intended purpose, and to ensure that the on-peak windows selected, and the rates imposed for usage (and exports) during different periods, accurately reflect the cost to the utility of providing service during peak times. Distributed Solar Advocates recommend that any transition to TOU net metering should be gradual, and suggests that the Commission consider a pilot period in which net-metering customer can opt into TOU net-metering, as was the case in California. Distributed Solar Advocates also suggest that the Commission consider piloting rate structures that can provide a vehicle to incentivize customers to install and enable the capabilities of advanced inverters, to allow DG systems to provide ancillary services to the grid and integrate higher levels of DG without requiring distribution system upgrades. This incentive, Distributed Solar Advocates assert, could take the form of an adder to the net excess generation credit or any rate that specifically applies to exports, in order to reflect the value of those ancillary services or the value of the visibility to the utility.

Finally, Distributed Solar Advocates believe that transparency into the hosting capacity on the utility's distribution system is vital to streamlining and facilitating the interconnection process, optimizing the value of customer investments in DG, and enabling customers and DG developers to avoid proposing projects in congested areas of the distribution system, or at least be aware of the potential interconnection costs associated with doing so. Distributed Solar Advocates state that the Commission can help realize the highest level of benefits envisioned by AREDA by proactively pursuing policies, supported by well-designed pilots, to lay the foundations of utility transparency and willingness to help maximize the benefits of DG, as the Commission is currently evaluating in Docket No. 16-028-U.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

11. Received from: Scenic Hill Solar

Date Received: October 15, 2019

Comment: Scenic Hill Solar supports Staff's changes to the NMRs that incorporate the uncontroversial provisions of Act 464. Scenic Hill Solar supports the joint comments of Distributed Solar Advocates, Audubon, and Sierra Club regarding Act 464's provisions for meter aggregation and the applicable billing period. Scenic Hill Solar asserts that Act 464 does not give the Commission the authority to modify the rate structure for customers on demand component bills. Instead, Act 464 provides prescriptive language for net-metering demand billed customers. Scenic Hill Solar points out that during Phase 2, there was agreement within the NMWG that demand-metered customers are only netting the energy portion of their consumption, and are not causing any significant cost shifting. Scenic Hill Solar quotes from the NMWG Final Report, prior to the enactment of Act 464, wherein the utilities in Sub-Group 2 explicitly stated, "Sub-Group 2 recommends that demand-billed tariffs continue to be billed as they are today."

Grandfathering - Scenic Hill Solar recommends a modification to Rule 2.07 that strikes the phrase "subject to approval by the Commission" to make it clear that the Commission is not required to engage in case-by-case grandfathering adjudication, but has issued its approval by establishing generally applicable rules for grandfathering. Scenic Hill Solar also argues that statute itself provides an inherent limitation to the applicability of a general grandfathering period by specifying that it applies only during the time period beginning with enactment of Act 464 and ending at December 31, 2022, the date at which federal tax credits expire. Scenic Hill Solar argues that Act 464 granted automatic approval for projects greater than 300 kW, but less than 1 MW in size, and thus the Act cannot reasonably be interpreted to delay these projects for a case-by-case grandfathering review, when such review would essentially subject them to the same delays that the General Assembly sought to eliminate by automating their approval. Scenic Hill Solar further argues that it cannot escape notice that the General Assembly applied uniform grandfathering language to all projects – making no distinction for a grandfathering decision (as was the prior practice of the Commission) between automatically approved projects and those subject to project-by-project approval. Scenic Hill Solar asks the Commission to maintain 1:1 net metering for demand-metered customers in its NMRs, as required by Act 464, and take all actions allowable under Act 464 to foster the distributed solar energy market in Arkansas to allow the state to achieve significant penetration, as intended by Act 464.

Agency Response:

12. Received from: The Office of the Attorney General

Date Received: November 5, 2019

Comment: Gradualism - The AG reiterates her support for a transition to 2-Channel Billing that would move closer to an excess generation credit based on avoided costs as net-metering penetration increases. This transition would balance the AG's goal to move towards a more equitable allocation of costs while being sensitive to the market disruption net-metering developers could experience from an abrupt and dramatic change in rate structure. The AG's review of Initial Comments does not change the AG's position that a gradual change of the rate structure is necessary. The AG notes that Staff came to the same conclusion regarding gradualism and the concern regarding cost shifting. However, the AG does not believe it is reasonable to downplay the subsidization concerns of the utilities, especially when planning for the future of net-metering in Arkansas. The AG is working informally with EAL to gather information specific to EAL's system that will further inform the AG's view regarding the magnitude of the cost shifting and assist in crafting reasonable solutions within reasonable time frames. Therefore, the AG continues to support a long-term policy that mitigates subsidization, or eliminates it if possible, while seeking a reasonable gradual transition to a rate structure that accomplishes this policy goal. AG Reply at 2-4.

Flexibility - The AG supports flexibility for the utilities in how net-metering is implemented and, to some degree, in how net-metering rates are set, citing Empire and AECC as advocates for flexibility, given the diversity of the utilities' abilities to implement technologies capable of supporting advanced solutions and the material differences between electric cooperatives and investor-owned utilities. Notwithstanding this, the AG continues to support a standard rate structure as the default, such as the 2-Channel Billing rate structure. However, the AG agrees that there may be utility-specific circumstances where a 2-Channel Billing rate structure is not feasible or is overly burdensome for some or all of its rate classes. The AG would thus support a mechanism whereby any utility that desires to deviate from the standard 2-Channel Bill approach can make a filing with the Commission requesting an exemption or variation, and propose and alternative net-metering rate structure that it believes is more reasonable for its customers and its customers' specific circumstances and is likewise in the public interest. Id. at 4-5.

Quantifiable Benefits - The AG states that numerous Parties addressed the term "Quantifiable Benefits" as it relates to setting a reasonable net-metering rate structure, noting that Distributed Solar Advocates asserted in their combined Initial Comments that while Act 464 does provide a more specific definition of the term than was suggested in the prior statute, the use of Quantifiable Benefits is not required when the Commission chooses to pursue any of the other rate structures within its authority, and as such "is a clear sign of legislative intent to move away from a rigid cost-based rate structure." On the other hand, the AG states, Carroll argues in its Initial Comments that Act 464 provides the Commission discretion to consider Quantifiable Benefits and costs associated with net-metering customers, seeing the application of

Quantifiable Benefits as an area where the Commission can foster flexibility and the use of utility-specific information. According to the AG, OG&E also states that it is of the utmost importance to develop net-metering rates that are reasonable and based on truly Quantifiable Benefits, urging caution in including any such benefits that cannot be tied to an accounting or market mechanism or any amount not currently included in a utility's cost of service. The AG agrees with OG&E and believes that any additional monetary benefits included in net-metering rates must be quantifiable. The AG asserts that the term Quantifiable Benefits has been sufficiently defined in Act 464 and as reflected in the AG's draft NMRs. The AG urges the Commission to consider establishing a standard formula to calculate Quantifiable Benefits to eliminate ambiguity on what can and cannot be included in net-metering rates. The AG also support's Carroll's desire for flexibility and the need to use utility-specific information and data when setting net-metering rates, and believes a standard formula to calculate Quantifiable Benefits will achieve this goal.

Grandfathering. The AG reiterates her Initial Comments interpretation of three levels of grandfathering created by Act 464 and notes that there seems to be a significant divergence of views on grandfathering within the Phase 3 comments filed by others. At one end of the spectrum, the AG observes, the view is that there should be no grandfathering at all. On the other end, says the AG, the view is that the rate structure at the time of interconnection should be grandfathered in for the life of the net-metering facility. The AG states that it and some other commenters fall somewhere in between. The AG recounts the positions of the Parties on this topic, and then repeats her original position that Act 464 gives the Commission authority to grandfather net-metering customers who fall into Level 2 (net-metering customers submitting an interconnection agreement between the effective date of Act 464 and December 31, 2022) on a case-by-case basis, noting that the specific language of Act 464 supports a case-by-case determination. The AG points out that the statute clarifies that any possibility for grandfathering can only occur "following notice and opportunity for public comment."⁷⁰ That AG believes that all grandfathering, both Level 1 (net-metering customers established before the effective date of Act 464 – July 24, 2019, who are automatically grandfathered into the current rates at that time: 1:1 Billing) and Level 2, should be limited to twenty years, as described by Act 464, beginning from the date the interconnection agreement is signed. The AG argues that its current recommendation on grandfathering would fall squarely within the plain language of Act 464.

Code of Conduct - The AG states that there seems to be general agreement in the Initial Comments that a code of conduct for net-metering participation should be developed to protect customers, citing proposals from AECC and Carroll, which actually included a Proposed Customer Bill of Rights and Code of Conduct. The AG repeats her original suggestion that customer protection issues, including discussion of Carroll's proposal, should be addressed through a separate working group that allows for flexibility as issues arise. The AG recommends that such a working group should consist of Staff, the AG, net-metering providers, and the utilities. The AG cites the successful PWC on matters related to energy efficiency programs as

an example of a successful working group in Arkansas. However, the AG suggests that additional parameters be established for the net-metering customer protections working group, including a deadline for filing a Net-Metering Code of Conduct for Commission approval. In addition, the AG recommends that the working group should be required to meet at least semi-annually to address any new issues that need to be added to the Code of Conduct or revisions to be approved by the Commission. The AG suggests that more frequent meetings can also be set to deal with urgent issues. *Id.* at 11-12.

Regulation of Non-Utility Providers. The AG recounts her concerns in her Initial Comments that the Commission does not have statutory authority to regulate certain non-utility providers and notes that other Parties share this concern. The AG agrees with some of those Parties that net-metering providers should be required to register with the Commission prior to installing net-metering facilities in the State and be subject to program suspension or expulsion due to non-compliance with a Commission-approved Code of Conduct. However, the AG observes that to gain such authority for the Commission, legislation would be required. Without such legislation, the AG recommends that the Commission craft rules and regulations in such a way that utilities, which ultimately hold the responsibility for net-metering interconnection and which are strategically placed to protect the net-metering customer, bear the responsibility of customer protection. *Id.* at 12-13.

The AG asserts that it is reasonable for the Commission to enact rules such that if an unregulated third-party net-metering provider or participant does not adhere to the Code of Conduct, interconnection will not be completed or allowed to continue by the utility. The AG comments that this approach puts more burden on the utilities, which is not preferable, but absent legislation that gives the Commission general direct oversight of net-metering providers, there are limited options that will properly protect customers. The AG encourages the Commission to seek appropriate legislative changes that would place enforcement of the Code of Conduct where it belongs rather than punishing utilities for failing to adequately police unregulated third-party participants.

Consumer Rights and Consumer Education - The AG agrees with numerous other Parties that there is a need for both a Consumer Guide and a Customer Bill of Rights and recommends that one of the assignments given to the customer protections working group include their development. The AG suggests that the Commission explore requiring the submission of a customer acknowledged copy of the Consumer Guide and Customer Bill of Rights with any net-metering interconnection request forms. The AG believes that the submission requirement is an appropriate term and condition for net-metering under Act 464. *Id.* at 13-14.

Leasing - In keeping with her recommendations regarding customer protections, the AG states that necessary legislative changes may be required to compel net-metering leasing providers to register with the Commission prior to installing net-metering facilities in the state and be subject to program suspension or expulsion due to non-compliance with a Commission-approved Code

of Conduct. The AG expresses appreciation to EAL for suggesting that either a review process be established for lease agreements to be submitted to Staff and the utility, or the creation of a form agreement that net-metering providers would be required to use for leasing options. The AG states that this is also an issue best handled in the context of a customer protections working group.

Net-Metering Rules - The AG reiterates her argument that it would be more administratively efficient to begin with the language of Act 464, as that represents the current public policy of the State of Arkansas and that draft rules be narrowly tailored to the statute. This, she asserts, is preferable to shoe-horning Act 464's fundamental alterations to net metering into the existing NMRs. The AG continues to urge caution due to the dictates of Ark. Code Ann. § 25-15-220 requiring rules to be narrowly tailored to only that which is absolutely necessary to affect the statute.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

13. Received from: Entergy Arkansas, LLC

Date Received: November 5, 2019

Comment: First, EAL asserts, there is a very real problem and the Commission should be concerned that:

- Contrary to the erroneous and patently self-serving claims of the Distributed Solar Advocates, sub-scale net-metered solar is clearly uneconomic, and the Commission can and should reach that conclusion readily, without the need for further study.
- The 1:1 full retail credit rate structure creates a significant incentive for customers to pursue uneconomic sub-scale solar, at the expense of non-participating customers – this too, requires no further study or analysis.
- Cost shifts are occurring now. There is urgency for the Commission to act, given the magnitude of the subsidy under the current 1:1 full retail credit rate structure and the volume of projects that have sought Preliminary Site Review and/or been announced. Claims that cost shifts currently are, and will continue to be, de minimis are false.

Second, EAL states that claims that the Commission lacks authority to address the problem in certain key areas are incorrect in that:

- The Commission retains the authority to modify the rate structure applied to customers with demand charges, either by eliminating the 1:1 full retail credit or by imposing an additional charge.

- The Commission retains the authority to determine whether a proposed generation facility actually qualifies for net-metering.
- Requests to grandfather the rate structure applied to a net-metering facility remain subject to review and approval on a case-by-case basis by the Commission.

EAL argues that, in short, the Commission faces an urgent choice between two very different futures: one – the preferred course – where grid-scale solar is aggressively pursued at economic prices yielding the twin benefits of economic capacity and energy for all customers as well as economic development and environmental benefits for the region; or the other – contrary to the public interest – where misguided net-metering policies result in substantial investment in uneconomic sub-scale solar for the benefit of the very few at the expense of the many. EAL urges the Commission to choose the first path and act now to ensure that its promise is realized. To be clear, EAL states, it is not advocating in any way, shape, or form that customers should not have the opportunity to install their own self-generation; rather, the Commission’s net-metering policies and rules must ensure that other customers are not made to subsidize that choice by having to pay higher electric rates, which is the current path for the State of Arkansas in the absence of immediate action by the Commission.

EAL summarizes its request that the Commission take the following actions in an order addressing the issues raised in Order No. 22:

- Implement 2-Channel Billing for non-demand billed customers (e.g., residential and certain small commercial customers);
- Implement either 2-Channel Billing or a grid charge for customers who pay a demand charge;
- Confirm that, in order to qualify for net-metering, the renewable generating facility must be physically attached to the customer’s load (i.e. behind-the-meter), with appropriate sizing and aggregation requirements;
- Confirm that grandfathering, given its cost-shifting and distortive effects, will not be available for a customer unless approved for the customer through a specific order from the Commission

Rate Structure Issues - EAL states that the Commission can and should act now to implement a rate structure that sends the correct pricing signals to customers considering investing in a net-metering facility. EAL argues that the predictable consequence of leaving the 1:1 full retail credit rate structure in place is a vastly more significant problem that will only become more difficult to address with the passage of time. EAL further states that the Commission has the opportunity and the duty now to design an appropriate rate structure, given the proliferation of solar opportunities now enabled by Act 464, that satisfies the “apples to apples” comparison that was

presented to the Senate Committee as the overarching goal when the General Assembly was considering the Senate Bill that ultimately became Act

EAL says Arkansas is not a “low penetration state.” EAL disagrees with Staff’s assertion that net metering is “underdeveloped” in Arkansas or that Arkansas is a “low adoption state.” EAL asserts that this mischaracterization forms the basis for Staff’s advocacy of several positions that would promote further net metering in Arkansas, including an assertion that the current 1:1 full retail credit framework may be acceptable for the time being and that, as a consequence, some level of cost shifting that inevitably will follow may be reasonable. EAL points out that Staff asserts,⁷¹ without any quantification or substantiation, that because of low penetration of net metering today, “there is minimal to no measurable cost shifting occurring between customers within and between customer classes, particularly in light of unrecognized benefits” of net metering. EAL argues that Staff’s perspective fails to give sufficient consideration to the fact that Act 464 stands to enable a significant near-term increase in the level of net metering in Arkansas, which depends in significant part on the outcome of this rulemaking. EAL notes that Distributed Solar Advocates make arguments similar to those of Staff, but responds that the Commission should reject these arguments as self-serving and instead balance several competing objectives, as discussed in EAL’s Initial Comments. EAL states that the Commission should not, as Distributed Solar Advocates argue, adopt a “tunnel-vision” focus on the single objective of promoting additional net-metering opportunities, to the sole benefit of the Distributed Solar Advocates and customers who avail themselves of net metering (and to the significant detriment of all other customers and Arkansas generally). EAL references the lessons learned from Hawaii and Arizona, which it cites as jurisdictions that waited until net-metering penetrations were at more critical, saturated levels to enact needed policy reforms. EAL urges the Commission not to “kick the can down the road” under the erroneous basis of “low penetration,” which it says may be politically expedient. EAL states that the issue of unfair cost shifting will continue to grow, likely dramatically based on recent media reports involving tax-exempt entities pursuing larger net-metering projects.

EAL says the current 1:1 full retail credit rate structure creates an unreasonable cost shift. EAL critiques the testimony and analysis of Distributed Solar Advocates witness Beach and the accompanying updated Crossborder Study, stating that the assertions by Mr. Beach that (1) “solar DG is a cost-effective resource” and (2) that 1:1 full retail credit “net metering does not cause a cost shift to non-participating customers.” EAL asserts that both of these assertions depend on the existence of large offsetting benefits from distributed solar (with avoided costs now estimated by Mr. Beach at 15.7 cents/kWh), that rely on numerous “inaccurate and inflated assumptions” as well as methodology issues that were addressed extensively in Phase 2 of this proceeding. EAL states that some of the benefits that Crossborder attempted to quantify are wholly unrealistic and not credible – in particular Crossborder’s conclusions regarding the existence of avoided T&D costs.

EAL asserts that the simplest way to illustrate the unreasonableness of Crossborder's overall benefits estimates (i.e., avoided costs) is by comparison to the cost of grid-scale solar, which it states is in the range of 3.5 cents/kWh in Arkansas. EAL asserts that grid-scale solar can provide at least the same, if not greater, economic and environmental benefits as distributed solar, citing to the testimony of its witness Mr. Schnitzer.

EAL states that the value of distributed solar in Arkansas, which may avoid a small amount of transmission line losses in relation to grid-scale solar when sited behind-the-meter, simply cannot be 15.7 cents/kWh when the cost of grid-scale solar, which provides the same or higher benefits is 3.5 cents/kWh. EAL argues that sub-scale solar is not cost effective as a resource to serve customers since the current net-metering rate structure provides a subsidy that promotes the development of high-cost, sub-scale solar instead of low-cost, grid-scale solar and is not paid by the participating customer – it is ultimately paid by non-participants. EAL quotes the 2016 dissent of California Public Utility Commissioner Michael P. Florio on this point:

“First, I think there is sometimes a misconception that somehow the Investor-Owned Utilities are paying whatever Net Energy Metering customers receive for their solar generation. This not correct; the utilities are just a conduit. Other customers – the people who do not or cannot even have solar – pay the compensation that reflects the value of exported generation. Participating customers should be compensated at the retail rate for generation consumed on site. Exports should be compensated in a way that reflects their value, which should at minimum be differentiated by time and location....”

EAL says additional studies are unnecessary and a needless delay. EAL argues that Staff's Initial Comments' recommendations to perform more studies is unwarranted, since the existence of a cost shift is readily apparent and can be reliably and objectively quantified as the difference between lost revenues and the cost of grid-scale solar, as described by Mr. Schnitzer.⁷⁵ EAL asserts that additional studies are unnecessary to quantify exactly how worse off non-participants are, as the important facts were established in Phase 2 and have not changed since then. EAL responds to Staff's arguments (1) that a certain level of cost shifting is “part and parcel” of ratemaking based on grouped classes of customers and (2) it is not practical to set individual rates for customers. According to EAL, while some amount of cost shifting is unavoidable within grouped classes of non-homogeneous customers (e.g., residential customers in different geographic locations or with different consumption patterns), this does not imply that cost-shifting should be encouraged. EAL further asserts that there is no practicality concern where there is an identifiable group of net-metering customers that, given the existing 1:1 full retail credit rate structure, is causing a large and rapidly growing cost shift. EAL notes that it has proposed two alternative rate structures to mitigate the cost shift, both of which it asserts can be readily implemented.

EAL says the cost shift is already significant and growing rapidly. EAL responds to Staff's premise that the penetration of net-metering resources is currently low and its recommendation

that the Commission consider retaining the 1:1 full retail credit rate structure until net-metering penetration increases “to a threshold that might result in more substantial cost shifting.” EAL states that this premise is incorrect – the size of the cost shift is already significant and has been growing rapidly, especially following the passage of Act 464. EAL states that the explosive growth that is now occurring across the state – in actual installation, in new Preliminary Site Reviews, and in news reports of proposed large projects – all lead to the conclusion that what had been a potentially manageable issue is quickly spiraling into a major problem that, if left unaddressed, will lead to a large, long-term cost shift that will adversely impact the rates all customers pay and may affect the State of Arkansas’s economic competitiveness via impacts to its significantly lower than nation average electric rates.

EAL points to the testimony of Mr. Schnitzer as quantifying that the cost shift associated with the net-metering arrangement announced by the City of Hot Springs is approximately \$29 million over the thirty-year life of that arrangement and that the cost shift associated with a different PPA with Pulaski County is \$11 million over twenty years. EAL notes that media announcements demonstrate that other similarly large arrangements are being negotiated, but no such arrangements by any entity (including the City of Hot Springs and Pulaski County) have been presented to the Commission for review and potential approval. EAL asserts that the State of Arkansas has reached a threshold where the amount of cost shifting is rightly characterized as “unreasonable.” According to EAL, if the Commission does not implement a new rate structure, the only reasonable expectation is that the acceleration of private solar development activity will continue, and the problem will become larger and increasingly difficult to address. EAL states that, as explained by Mr. Schnitzer, “customers in each of EAL’s major rate schedules already have, or could soon have, actionable incentives to pursue net-metering under the 1:1 full retail credit rate structure. EAL asserts that this is especially true following Act 464, because of the ability to lease solar facilities and, for tax-exempt customers, to source solar using long-term PPAs.” Importantly, EAL asserts, each new net-metering arrangement increases the size of the cost shift, and the longer the 1:1 full retail rate structure is left in place, the more private solar developers will come to depend on it for their financial gain, and the more difficult it will be for the Commission to address later for the protection of non-participating customers.

Commission Authority to Reform Net Metering - EAL states that the Commission has authority to modify NMRs and should use that authority to avoid gaming and assure that rates for all customers remain just and reasonable. EAL asserts that Distributed Solar Advocates, as well as Staff in several instances, advocate strained interpretations of Act 464 language that would limit the Commission’s authority to make certain determinations and assert incorrectly that Act 464 dictates particular outcomes on several critical issues. For example, EAL states that Staff and Scenic Hill Solar assert that Act 464 requires that a 1:1 full retail credit be provided to demand-metered customers, recommending that no other rate structure modifications be incorporated into the NMRs for such customers. In addition, EAL states, Distributed Solar Advocates contend that the Commission should adopt rules that impose little to no review of net-metering by the

Commission, particularly with respect to issues such as grandfathering, determining whether facilities actually are eligible for net metering, and questions involving “common ownership.” EAL argues that these positions should be rejected, as they not only are inconsistent with the statutory provisions of Act 464 but also limit arbitrarily the Commission’s ability to regulate the development of net metering in Arkansas, as well as its ability to assure that rates are just and reasonable for all customers. *Id.* at 13-14. More particularly, EAL asserts that:

A. Under Act 464, the Commission retains the authority to modify the rate structure for net-metering for demand-metered customers, either by eliminating the 1:1 full retail credit or by imposing an additional charge. EAL states that Act 464 provides the Commission with a specific overarching directive, i.e., that the Commission “shall establish appropriate rates, terms, and conditions for net metering.”⁷⁸ EAL argues that this grant of authority to the Commission aligns with the specific powers and duties that the General Assembly has provided the Commission, i.e., the authority to “find and fix just, reasonable, and sufficient rates to be thereafter observed, enforced, and demanded by any public utility.” EAL notes that Staff and the Distributed Solar Advocates agree that Act 464 grants the Commission authority to modify net metering rates for customers taking service under a rate that does not include a demand component. However, EAL states, the Distributed Solar Advocates contend incorrectly that the language in Ark. Code Ann. §23-18-604(b)(6) forecloses any option for the Commission to modify the rate structure for customers taking service under a rate schedule that includes a demand charge, claiming that this provision “is in sharp contrast to the Act’s grant of discretion to the Commission regarding how crediting shall occur for non-demand-billed customers.”

EAL asserts that this is a flawed interpretation that ignores the Commission’s overall grant of authority referenced above, which provides the Commission with the clear authority to assure that the NMRs are appropriate and to assure that rates for all customers are just and reasonable. In this respect, EAL argues, the language in §23-18- 604(b)(6) is silent regarding the rate at which the customer is to be credited, only that they are to be credited. In addition, EAL asserts, the “sharp contrast” between subparts (b)(5) and (b)(6) noted above overlooks the fact that the purported language in (b)(5) that the Distributed Solar Advocates contend “grants the Commission authority to modify net metering rates for customers that do not receive a bill with a demand component” (i.e., “as measured in kilowatt hours or kilowatt hours multiplied by the applicable rate”) is included in the definition of “net excess generation,” which appears in both (b)(5) and (b)(6). In support of its assertion that the Commission is foreclosed from addressing the net-metering rate structure for customers with a demand charge, EAL notes that Scenic Hill Solar further states:

[T]he reason and justification for this difference is clear and was roundly debated in many parts of this proceeding: the argument that non-demand bill customers might not pay a cost-of-service level of charges to cover demand- related costs simply does not apply when demand-related costs are recovered through a demand component in the rate.⁸¹

Based upon this erroneous assertion, EAL contends, Scenic Hill Solar should agree that the inverse is also true, i.e., where there are demand-related costs to serve a demand-metered customer that are not recovered through the demand component of the rate, i.e., they are recovered through the volumetric portion of the rate, also known as the energy charge, then the argument that demand-billed customers are not paying the costs incurred to provide them electric service, in fact, does apply and should be irrefutable. Id. at 16-17.

EAL states it has already has provided evidence in this proceeding to demonstrate that a significant portion of the fixed costs incurred to provide service to demand-billed customers on the SGS rate schedule is recovered through the volumetric rate. EAL notes that its witness, Ms. Talkington, has explained in Docket No. 19-042-TF that there are significant fixed costs recovered through the SGS volumetric rate. EAL argues that the only evidence that Scenic Hill Solar can rely upon is the position taken by Sub-Group 2 in Phase II of this proceeding that omits important context, as well as an incorrect assertion that “EAL Arkansas ultimately supported Act 464.” In making this assertion, EAL states that Scenic Hill Solar attempts to relegate to a footnote EAL’s overarching concern that Act 464 be implemented in a manner that ensures that cost shifting would not occur. As reflected in the actual recording of the statements before the Senate Committee on February 14, 2019, EAL states, its concerns, as well as those of other investor-owned utilities and AECC, were that Senate Bill 145 be implemented in a manner that would not produce cost-shifting and that would not dictate a particular result, to avoid the potential for cost shifting.

EAL cites the following comments of Commission Chairman Thomas before the Senate Committee as reflecting the intent to avoid the cost shifting produced by the 1:1 credit:

“[W]hat we want is not the option to leave it at the retail rate. We want the option to choose what the utilities have advocated, two-channel billing. And, what the solar advocates have added, advocated, monthly net. Now, you think those things would average out to be pretty close, but the way they are fighting I know there’s some money there. So, what we want is options...we are not asking to keep the option of retail 1:1. We are asking within the context of the bookends between the two positions, to make the choice of the options between those and that’s what this bill does.”

EAL asserts that Act 464 was designed to provide the Commission with options for altering the rate structure associated with net metering, not to limit its authority to establish a reasonable rate structure for net metering in Arkansas. In the event that the Commission were to determine that demand-metered customers must continue to receive a 1:1 full retail credit for the energy produced by a net-metering facility, the Commission should approve the grid charge concept discussed by EAL witness Andrew Owens to assure that those demand-metered customers are not avoiding paying their reasonable share of the fixed costs for the electric system

that they continue to use and upon which they continue to rely, a significant portion of which currently is recovered through those customers' volumetric rates.

B. Grandfathering should be adopted only where specifically granted by the Commission. EAL asserts that grandfathering is another area where the Distributed Solar Advocates want to eliminate Commission review, noting that they recommend what they claim to be "a slight modification," namely to remove "subject to approval by a Commission," which is express language under Act 464. This, EAL states, would eliminate the General Assembly's express directive to the Commission to evaluate whether grandfathering is appropriate. EAL states that while none of these Parties nor Scenic Hill Solar makes an outright request for the Commission to adopt universal grandfathering, they admit that their proposed rule effectively authorizes grandfathering for all net-metering projects for a period of twenty years until the statutory period ends. In other words, EAL argues, they would bind the Commission with their suggested "slight" modification to provide 1:1 full retail credit net metering for all customers that submit a complete interconnection request prior to December 31, 2022, which EAL asserts cannot possibly be what was envisioned by the General Assembly when they included the term "subject to approval by a Commission." EAL argues that the plain language making grandfathering subject to Commission approval is there for a reason, noting that the objective of Act 464 is to promote cost-effective net metering, providing the Commission with the tools necessary to ensure that appropriate price signals are being sent to customers contemplating a net-metering investment. EAL asserts that grandfathering would limit the Commission's ability to modify the price signals that are being sent to those customers, and the Commission similarly would be limited in its ability to avoid or mitigate the unfair cost-shifting effects of net metering on non-participants.

According to EAL, the support that the Distributed Solar Advocates offer for their position on grandfathering is not compelling, noting that those Parties assert that grandfathering is appropriate for purposes of administrative efficiency and to provide certainty that will promote increased development of net metering. Yet, EAL asserts, their recommendations would serve to promote all net metering, i.e., that which is economically inefficient as well as efficient, which is inconsistent with the Commission's and the General Assembly's objectives. EAL notes that both Scenic Hill Solar and the Distributed Solar Advocates are frank about the problematic economics associated with net-metering facilities, with the latter admitting in its comments that "the economics of residential solar DG are currently marginal – that is, residential customers who install solar DG are barely able to recover their costs over the life of the system in most cases." Similarly, EAL states, Scenic Hill Solar claims that "litigation time and expense will overwhelm project economics for many projects." EAL argues that if the prospect of an administrative review of their project is enough to "overwhelm" the project's economics, or if project economics are marginal even where an above-market credit is provided that far exceeds the costs to the utility to acquire renewable capacity and energy, the Commission should question whether allowing such a project to go forward with an explicit and substantial subsidy from non-

participating customers is sound policy, or consistent with maintaining just and reasonable rates in Arkansas. EAL further argues that these Parties' interpretation limits the Commission's ability to regulate the development of net metering, noting that as EAL demonstrated in its Initial Comments and as the Commission has recognized previously, there is a physical limit to the amount of solar generating capacity that can be absorbed by Arkansas utilities. EAL asserts that if the Commission wants to obtain the maximum benefits of grid-scale solar development for Arkansans, it must retain the ability to manage the development of net-metering facilities to avoid foreclosing the development of much more economic, grid-scale solar development for the benefit of all customers.

EAL agrees with Staff's recommendation that the Commission consider its current practice of approving grandfathering on a case-by-case basis, as reflected in EAL's proposed modifications to the NMRs attached to its Initial Comments.

Gaming Issues - A. The Commission's NMRs should limit, to the greatest extent possible, gaming opportunities by clarifying qualifications for net-metering treatment. EAL argues that the comments submitted by the Distributed Solar Advocates reflect those Parties' singular focus on promoting net metering at any cost and in any conceivable manner, rather than in a manner that is economic, that ensures the legitimacy of proposed facilities and arrangements, and that is subject to clear rules. EAL asserts that those Parties' comments pay little to no attention to the Commission's request for rules addressing gaming opportunities, and a number of their respective positions actually would serve to promote gaming, with net-metering being available to facilities or arrangements well beyond those contemplated by the Commission or the General Assembly. Based upon the positions advocated by those Parties, EAL asserts that if adopted by the Commission, the following would occur:

- No meaningful review of "common ownership" would be required, with the customer merely needing to assert common ownership in some unverified writing;
- No contract review would occur to verify that a lease does not contain the statutory restrictions;
- No reviews would be required to confirm that a PPA (also known as a "service agreement") qualifies for safe harbor protection under federal law;
- No confirmation would occur that a tax-exempt entity even is qualified under the federal safe harbor language to enter into a PPA;
- The definition of "net-metering facility" relative to "net-metering customer" means that, for example, an application for Commission approval from the City of Hot Springs for 12.75 MW from five separate solar PV projects each with capacity between 1 to 5 MW may assert that review should occur under (b)(9)(A) (in other words, the overall capacity of 12.75 MW being

proposed by City of Hot Springs greater than 5 MW is irrelevant relative to which provisions of Act 464 would apply);

- No criteria beyond that specified in (b)(9)(A) would be applied to net metering facilities between 1 and 5 MW (in other words, according to Scenic Hill Solar' strained reading of the statute, cost-shifting or any other issue not enumerated in that section is not to be addressed by the Commission in any manner during the review process); and
- Limited reviews would be conducted on any project exceeding 5 MW up to 20 MW (for those facilities unable to circumvent these size limitations altogether through the potential maneuvering described above), with the scope of those reviews limited by the purported statutory issues.

EAL states that in the paradigm concocted by those Parties, the customer would be presumed to have an appropriately-sized facility based upon accounts that are aggregated, with the Commission not exercising any review and not determining whether the project complies with Act 464 and the Commission's NMRs. If those proposals were to be adopted, EAL argues, the Commission would have no way of assuring that net-metering is being implemented in a manner consistent with the General Assembly's directives or the Commission's NMRs and would simply take it on faith that the statutory framework is being respected. EAL states that the Commission should not adopt the approach these Parties advocate and instead should take this opportunity to utilize the tools provided by the General Assembly in Act 464 to assure that net-metering further develops in an appropriate manner.

B. Determining common ownership for purposes of meter aggregation - EAL states that, consistent with a position that advocates few to no checks on net-metering installations, Distributed Solar Advocates and Scenic Hill Solar urge the Commission to establish "an easy, clear, and non-controversial means for customers to establish common ownership of multiple accounts for purposes of meter aggregation."⁸⁹ EAL asserts that the "elegantly suited" approach they advocate merely would have customers "indicate common ownership through the submission of a signed form to their electric utility." Thus, EAL states, in order for a customer to aggregate additional meters to its account, Distributed Solar Advocates and Scenic Hill Solar would have the customer be required only to recite the fact of common ownership in writing. Thus, says EAL, these advocates contend that this approach "avoids unnecessary intrusions into customer tax IDs or other defining traits."

EAL responds that this recommendation is an absurd approach to resolving a real problem, noting that the fallacy of the advocates' position is demonstrated by the fact that they provide no acknowledgement of or response to the potential for gaming under this approach, much less any provisions to prevent gaming. EAL states that utilities, and the protection of the interests of their non-participating customers, require the establishment of a method to be able to confirm common ownership to avoid customer's claiming "common ownership" where none exists.

Otherwise, EAL states, customers may be able to aggregate limitless accounts which share no common ownership, defeating the purpose of this statutory requirement, noting that this issue is critical for the aggregation provisions of Act 464 not to be abused. Id. at 25-26.

EAL observes that customers and developers are incentivized, through the far- above-market value provided by 1:1 full retail credit net-metering, to construct the largest facility possible in order to maximize the subsidized bill savings that they will receive from the utility's non-participating customers, associated with a net-metering facility. As EAL reiterates its position that the question of what constitutes "common ownership" is not a simple one. EAL states that the methods used by utilities, including EAL, to confirm common ownership (e.g., tax ID numbers) are a reasonable approach to confirming that accounts proposed to be aggregated are, in fact, under common ownership consistent with the aggregation rules established in AREDA. EAL's use of taxpayer IDs is not an unreasonable "intrusion" and, indeed, such IDs are already commonly used by EAL and other APSC-jurisdictional utilities as the primary method to confirm customer identities for creation of accounts and for a host of other reasons, such as protecting against customer avoidance of unpaid charges for electric service simply by creating a new account for electric service under a different name. According to EAL, using taxpayer IDs for the purpose of ensuring common ownership is a natural extension of this type of existing usage of that information. Absent a systematic way to verify common ownership of accounts for aggregation under net-metering, EAL argues that utilities and the Commission are left with no way to verify that the statutory provisions are being followed and the process is not being gamed. EAL states that this is particularly concerning given the new provisions of Act 464 that permit service agreements for tax exempt or governmental entities. Without a means to confirm that the accounts are under common ownership and are all tax exempt, EAL contends that utilities will have no way to verify that the participating entities participating in these service agreements are qualified to do so. EAL recommends that the Commission adopt EAL's proposed modification to Rule 1.01(b) to clarify that common ownership shall be verified by tax identification number.

C. Determining whether a remote generator qualifies for net metering. EAL notes that in its Initial Comments, Staff expressed "concerns with the ability for consumers to enter into agreements for larger facilities that will by their nature appear to be small power producers" because "the facilities will not physically serve a customer's load." EAL strongly agrees with and shares Staff's concerns. Setting aside aggregation for the moment, EAL argues that net-metering contemplates facilities that are behind the customer's meter, just as the Crossborder Report assumed in its analysis. Indeed, EAL notes, the current NMRs and Staff's proposed Strawman both contemplate that arrangement, defining "Generation Meter" as "the meter associated with the Net-Metering Customer's account to which the Net-Metering Facility is physically attached." EAL states that Act 464 itself clearly contemplates such physical attachment through its retention of the statutory requirement in AREDA that the "electric utility shall allow net- metering facilities to be interconnected using a standard meter capable of registering the flow of electricity in two (2) directions" – there being no such bi-directional flow

absent load and generation located at the same premises. EAL repeats its position in its Initial Phase 3 Comments that permitting physical separation of the generator and the load against which it is net-metered would open the door for retail wheeling in potential violation of applicable FERC rules and federal law. For these reasons, EAL argues that the Commission should retain the definition of Generation Meter currently included in the Commission's NMRs and clarify in its next order that a net-metering facility must be physically attached to the customer's load in order to qualify for net metering. EAL states that it has seen a proliferation of Preliminary Site Reviews that propose solar facilities that are remote generators tied to no customer load, including over 30 MW in aggregate since February 2019.⁹⁵ As such, consistent with Staff's recommendation, EAL states that it is critical that the Commission provide guidance in this docket that these facilities do not qualify for net-metering. EAL states that sizing of the net-metering facility is another matter where gaming can occur absent clear direction from the Commission. EAL notes that Act 464 provides that the net metering facility is "intended primarily to offset part or all of the net-metering customer requirements for electricity," adding that the Commission Chairman's statements regarding Act 464 echo this intent:

"The key legislative limitation on net metering is the quantity. What you are supposed to do is build for your load. You're not supposed to build more than you need and finance that by selling to others. To me, the balance struck in this legislation, is correct because it maintains that."

EAL agrees with SWEPCO's statement in its Initial Comments that "there is no disincentive at this time to oversizing a system. Rather, conditions have changed in a way that makes one-for-one netting and cost payment an inducement for oversizing." EAL agrees with SWEPCO and the Chairman that the Commission should clarify the manner for determining the appropriate size for a customer's facilities to avoid the result noted by the Chairman, i.e., where the net-metering customer winds up exporting a substantial amount of energy to the grid. EAL notes that it discussed in Phase 2 of this proceeding as part of Sub-group 2, that the majority of the excess energy from a net-metering customer is provided to the grid between 9 a.m. and 3 p.m. EAL states that these hourly patterns of usage and generation can result in over half of the solar generation produced by such a facility being exported to the grid rather than used by the customer in the hour it is produced. EAL asserts that absent clarifications to the methodology for calculating the maximum size of a facility, the very circumstance sought to be avoided will materialize (i.e., a customer or developer building more than the customer needs to offset the customer's own usage and financing that oversizing through bill credits provided for that excess energy).

D. Reviews are needed to confirm that leases and PPA (service agreements) comply with the statutory provisions. EAL states that several parties recognize that the Commission needs to institute a process to determine whether net-metering facilities obtained through one of the two new options provided by Act 464 (i.e., leases or long-term PPAs/service agreements) meet the requirements set forth in that act. EAL's Initial Comments outlined the prescriptive terms set

forth by the General Assembly for each added option. EAL states that in its comments on the Interconnection process, Staff noted that the process should be expanded to encompass leases, but it provided no insight into the manner in which confirmation of compliance with the lease provisions will occur. Similarly, EAL states that Staff has not offered any proposals for the Commission to determine whether PPAs/service agreements qualify for the safe harbor provision as required by in Act 464. Although not specifically addressed in their comments, EAL asserts that Distributed Solar Advocates and Scenic Hill Solar's positions on the need for Commission reviews, if adopted, would ensure that little, if any, review would be required to determine these important issues. EAL urges the Commission to implement a process to ensure that only agreements and facilities that meet the statutory requirements are eligible for the benefits of net-metering.

E. Structuring projects with multiple facilities in order to avoid Commission review. EAL states that the Distributed Solar Advocates and Scenic Hill Solar both advocate that the Commission's eventual NMRs adopt a very limited review process, relying upon a skewed interpretation of Act 464:

[Act 464] specifies that the Commission must take into account reasonable cost allocation as part of the decision to approve or not approve 5 to 20 MW net metered projects.

EAL argues that duplicate consideration of the issue for grandfathering is unnecessary and not indicated by the language of the statute, which defines the criteria for approval of such projects. With this unreasonable interpretation of Act 464, EAL asserts that Scenic Hill Solar advocates the establishment of Commission rules that would adopt a review process whereby cost shifting is a consideration only for net-metering facilities over 5 MW up to 20 MW. According to EAL, this interpretation, if it were enacted, effectively expands the 1 MW threshold for Commission review to 5 MW, as the Commission would only be authorized to take into account negative cost-shifting impacts on non-participating customers for projects exceeding the 5 MW threshold. Yet, EAL asserts, the plain language of Act 464 states that any project subject to Commission review must be "in the public interest" – an inquiry by the Commission that necessarily must include consideration of cost shifting to non-participating customers. In addition, EAL argues, this interpretation, and others similarly limiting the Commission's authority over net metering, promotes gaming, providing an additional incentive, as SWEPCO noted in its Initial Comments, to pursue the practice of breaking projects into smaller pieces to circumvent and evade Commission review.

EAL states that AECC has submitted a reasonable approach to addressing this concern and eliminating potential gaming opportunities.¹⁰³ AECC's proposed rule 5.03(E)(1) provides:

Any facilities used for Net-Metering being credited to a customer's account, regardless of the location of the facility and its aggregation, will be treated as a single facility and must comply with the imposed capacity and/or sizing limits under these Rules.

EAL states that AECC's recommendation provides a clear and concise statement of the requirements that should be applied to net-metering projects, and EAL recommends that the Commission adopt this recommendation in its final rule.

Agency Response:

14. Received from: Oklahoma Gas and Electric Company

Date Received: November 5, 2019

Comment: OG&E states that contrary to the opinions of the Distributed Solar Advocates, Act 464 should not be interpreted as an attempt to maintain the status quo for net-metering rate structures in Arkansas, noting that while the Act may allow for the continued use of the 1:1 crediting structure, it does so with the provision that any rate structure should be in the public interest. To date, OG&E argues, no Party to this Docket has presented viable evidence to counter the overwhelming support that the 1:1 crediting structure unfairly burdens the non-participants of the current net-metering program with costs that are unreasonably allocated to them by the participants. OG&E asserts that the position held by some Parties that because of low penetration levels or potential impacts to existing customers with net-metering facilities, only a small step be taken now toward a more appropriate net-metering rate structure be taken at this time is in direct conflict with the Act's intention to promote a net-metering rate structure that is more in line with the public interest. OG&E states that this position would be to say that a known problem should be allowed to fester until becomes a more serious one. OG&E argues that it is not the intent of Act 464, nor should it be the intent of this process, to artificially support an industry on the backs of non-participating customers. OG&E states that an advantage Arkansas currently has is that it can establish rules that are sustainable and do not create subsidy issues that will have to be addressed in the future.

OG&E observes that those Parties supporting 2-Channel Billing, grid access charge, or utility-specific solutions are the same Parties (the utilities) supporting the Act's intent to promote a net-metering rate structure that is more in line with the public interest. While OG&E maintains its support that net-metering solutions should be utility-specific due to unique operating and consumer circumstances, absent a utility-specific solution, it recommends a grid access charge as the most reasonable path forward for all customers. OG&E states that support for this proposal was laid out in its Initial Comments as well as those EAL and AEEC, and it was acknowledged as a potential path forward by Staff, the AG, and AECC. OG&E states that, in conjunction with the changes outlined in the Act for net-metering, it would be supportive of separating net-metering customers into their own class in a cost-of-service study to analyze and design an appropriate rate structure specific to these customers, whether it be TOU rates or otherwise. OG&E notes that taking service under a TOU rate structure would allow net-metering customers to realize the time-specific value of the energy that they produce. If this process is undertaken, OG&E states, it should be intended "to ensure that the on-peak windows selected, and the rates

imposed for usage (and exports) during different periods, accurately reflect the cost to the utility of providing service during peak times,” citing Initial Comments by the Distributed Solar Advocates.¹⁰⁴ To aid in reducing the current unreasonable allocation of costs to non-net-metering customers, OG&E suggests, a transition to net-metering-specific TOU rates could be addressed by all utilities in their next proceeding in which a new cost-of-service study can be presented and net-metering customers can be analyzed in a standalone class of customers.

With respect to customers served under a demand rate, OG&E acknowledges that the law certainly allows for maintaining the current 1:1 rate structures, but states that there is a need to ensure that the demand rates being charged to these customers are set at an appropriate level to fully recover the demand portion of the cost to serve. Otherwise, OG&E states, it will result in an unreasonable allocation of costs to non-net-metering customers under the 1:1 net-metering structure. OG&E supports a process going forward that allows for the examination of the current price level of demand charges to ensure each utility is recovering the appropriate level of demand-related costs to mitigate unreasonable allocations of cost to non-net-metering customers.

Finally on the subject of rate structure, OG&E opposes inclusion in any part of the NMRs or utility tariffs in Arkansas Walmart’s proposal that “[u]nder net metering, the kilowatthour (kWh) and kilowatt (kW) units of a net metering customer’s bill are netted.” OG&E cites to the express language of AREDA and Act 464 providing for the netting of kWh or kWh multiplied by the applicable rate of a net-metering customer’s bill, and thus does not allow for netting of kW.

Aggregation - OG&E references Distributed Solar Advocates’ support of an amendment to the NMRs that establishes an “easy, clear, and non-controversial means for customers to establish common ownership of multiple accounts for purposes of meter aggregation,” but replies that it is unclear how the provision of a tax ID or other defining trait could possibly be intrusive or unnecessary, citing the benefits of using such an ID. OG&E requests that the Commission implement a means for establishing common ownership that includes, but is not limited to, the provision of a customer’s tax ID. OG&E also supports EAL’s Initial Comment that defining common ownership is a significant issue that still remains to be addressed. OG&E agrees with AECC’s Initial Comment that the Staff Strawman does not reflect the following found in Ark. Code Ann. § 23-18-604(c)(1), “an electric utility shall separately meter, bill, and credit each net-metering facility even if one (1) or more net-metering facilities are under common ownership.” While OG&E agrees that there are exceptions for how net-metering credits are applied to common ownership facilities, it recommends the implementation of rules that reflect the law’s prohibition on meter aggregation.

Grandfathering - OG&E notes that grandfathering under the current net-metering rate structure, not price level, ends on December 31, 2022. OG&E asserts that the purpose of grandfathering is to acknowledge that customers who construct facilities under prior rules/statutes may have made different decisions than under new rules/statutes, which means it only applies to the net-metering customer and not the facility. OG&E states that it should not be tied indefinitely to a customer or

a facility as changes in ownership should take into consideration the rules/statutes in place at the time of that change.

OG&E contends that the approach taken by Distributed Solar Advocates and Scenic Hill Solar to strike “subject to approval of the Commission” is in direct contradiction to the Act and is inherently flawed, arguing that the choice and length of time for any grandfathering decision should be based on a public interest finding in accordance with the Act. OG&E argues that there is currently no evidence to support the maximum allowable length of time as being in the public interest and, to make these findings, the Commission needs to have the ability to appropriately review the net-metering structure and price levels for each situation to determine if grandfathering is in the public interest. These determinations should remain subject to the approval of the Commission, according to OG&E, and made on a case-by-case basis. OG&E adds that this position is clearly supported by Staff when it states, “Prior to Act 464 the Commission has allowed grandfathering on a case-by-case basis. The Act requires no change to this practice.”

OG&E supports the second and third level of the 3-Level explanation of grandfathering provided by the AG, as it is reasonable and captures the language and spirit of Act 464.108 In addition, OG&E encourages the Commission to reject Distributed Solar Advocate’s revision to Rule 2.07, to extend the grandfathering exemption to December 31, 2022, stating that had the General Assembly intended to extend the exemption until that date, it would have omitted the language permitting Commission approval on a case-by- case basis, as identified by Staff in its comments. OG&E also reiterates comments made by AECC, that “[t]he Commission’s discretion to disallow grandfathering must be protected when it is evident that the proposed activity at the current rate structure does not protect other utility customers from unreasonable cost shifts. To hold otherwise would render the discretionary approval grant to the Commission meaningless.”

Data - OG&E disagrees with Distributed Solar Advocates regarding the topic of data and visibility into the distribution system, asserting that they are inappropriate for inclusion in this Docket and not based on any factual evidence. OG&E notes that the Commission is explicitly considering these issues in Docket No. 16-028-U and agrees with SWEPCO that attempting to define and establish a market-based incentive before these data issues are addressed in that docket seems premature. OG&E asserts that hosting capacity access is not a net-metering issue, but is a business request of third-party solar providers that would be paid for exclusively by all Arkansas customers, both net- and non-net-metering.

Interconnection - OG&E states that the IREC Model Interconnection Procedures for 2019 proposed by Staff for consideration by the Commission need to be more thoroughly vetted prior to any potential adoption, and that the appropriate docket in which to review it is Docket No. 16-028-U, where this specific issue is already being addressed.

Consumer Protections - OG&E cites and supports the AG's proposals to protect consumers from predatory practices by third-party solar developers that are unregulated entities, noting that while the Commission may not be able to regulate the prices set by third-party providers, it certainly has the authority to impose certain requirements in accordance with the rules and statutes. For example, OG&E states that the Commission has the authority to determine if net-metering lease arrangements qualify to participate in net metering. If a customer enters into an arrangement that the Commission determines is not permitted under net metering, OG&E states that it is still able to participate under the small power producer rates (e.g., OG&E's COG-1 rate). OG&E supports the AG's suggestion of the formation of a working group to address "setting terms and conditions for participation in net-metering, including suspension or expulsion from the program, basic requirements and prohibitions for marketing materials, and customer contract requirements. OG&E supports the inclusion of utilities in such a working group if it is formed. OG&E also fully supports EAL's recommendation that the Commission address consumer protection rules that will assure that Arkansas consumers are not entering into long-term contracts or leases for solar generating facilities based on misleading or false claims and representations by solar developers with respect to the product they are selling to consumers.

Leasing - OG&E recommends that the Commission adopt rules regarding third-party leasing of net-metering facilities and make explicit the types of facilities and agreements that will qualify for net-metering eligible leasing. OG&E supports statements by EAL, which states that these rules should (1) establish a review process for lease agreements to be submitted to Staff and the utility to ensure compliance; or (2) establish a form agreement that either must be used or that, if used, would allow the net-metering customer to forgo APSC review. Additionally, OG&E supports EAL's recommendation that the Commission clarify the standards that each net-metering customer will be required to meet to confirm their leased facilities or the energy purchased under a "service contract" are actually eligible for net metering. OG&E also supports EAL's recommendation when it states in part, "...the addition of third party leasing of a net-metering facility may require the Commission to adopt additional rules or guidelines regarding eligibility and criteria for such leases, beyond the listed limitations." OG&E supports the statements made by both EAL and SWEPCO and recommends that the Commission establish clear guidelines and rules for the definition, eligibility, limitation, form, and review of all third party net-metering lease proposals in an effort to protect all customers. OG&E recommends that the Commission establish clear guidelines and rules for the definition, eligibility, limitation, form, and review of all third-party net-metering lease proposals in an effort to protect all customers.

Gaming - OG&E agrees with EAL's recommendations to the Commission around gaming, including a requirement that any net-metered facility must be behind the customer's meter and must displace some amount of electricity that the customer consumes. In particular, OG&E urges the Commission to establish rules that recognize Ark. Code Ann. § 23-18-604 requirement that net-metered facilities register the flow of a net-metering facility in two directions. In

accordance with this law, OG&E states that rules should be established that prohibit facilities from qualifying specifically for net-metering (OG&E notes that they can potentially qualify as a Small Power Producer) if said facility is not located behind a customer meter in which load is offset. OG&E expands on this, by asking that the rules further clarify the restrictions for what qualifies as a proper account which a net-metering facility can appropriately be placed behind. OG&E cites as one example that should be avoided, the placing of a net-metering facility behind a security light to establish an account in which load would be offset.

Other Issues - OG&E agrees with EAL's position that because Act 464 promotes the production and use of renewable energy, a customer that obtains energy from a facility but does not retain the renewable attributes through RECs, that customer is not receiving renewable power and is therefore not qualified for net metering. OG&E states that Ark Code Ann. § 23-18-603 (7) is clear in this regard.

Agency Response:

15. **Received from:** Southwestern Electric Power Company

Date Received:

Comment: Rate Structure - While it is SWEPCO's position that the 2-Channel approach for net-metering customers who receive service under a rate that does not include a demand component is the most effective mechanism to mitigate the current unreasonable allocation of costs to non-participating customers, SWEPCO would also support the recommendations of AECC, Empire, and OG&E that the Commission consider rules that would allow for utility-specific rate structures. This, SWEPCO asserts, would allow each utility the flexibility to select the best available option for proper rates based on long-standing cost-of-service principles, individual needs, and implementation of new metering and billing technologies. Additionally, SWEPCO endorses changes to the net-metering rate structure for demand-billed customers where current rate schedules do not recover the majority of fixed, functionalized costs through existing demand charges. SWEPCO does not support the continuation of the existing 1:1 credit rate structure for all the reasons included in its previous comments, but rather continues to support the adoption of the 2-Channel Billing approach. With regard to net-metering customer compensation in addition to the utility's avoided cost, SWEPCO reiterates that quantifiable benefits are defined as "[r]easonably demonstrated costs that: (i) are related to the provision of electric service and based on the utility's most recent COS Study filed with the Commission; and (ii) will be avoided by the utility by use of net metering." Therefore, as cautioned by OG&E, SWEPCO argues that the utility must be able to actually quantify the benefits based upon cost-based ratemaking already approved by the Commission or be tied to an accounting or market mechanism and not by subjective "societal" benefits or future, estimated long-term "values" that may be claimed by the net-metering customer.

Gradual-Phased Approach - SWEPCO notes that Staff, the AG, and the Distributed Solar Advocates believe that changes to the current net-metering rate structure in Arkansas should be gradual or tiered to ensure that private distributed generation development is not discouraged, which is of particular concern in a low adoption state. SWEPCO responds that Arkansas added the 18th most solar projects among the 50 states last year, adding 118 MW of solar generation. SWEPCO adds that Arkansas, which had a meager 22 MW of solar power at the end of 2017, saw its total rise 552%, ranking it 33rd among solar states in 2018, up 13 spots from a year before. As stated in its Initial Comments, SWEPCO argues that, given the unprecedented increase in the number of applications received for residential and commercial net-metering customers, the existing rate structure is not sustainable. SWEPCO remains concerned about the continued use of the 1:1 credit rate structure and the unreasonable allocation of or increase in costs to non-participating customers. Further, SWEPCO states that Arkansas ranks among the top five states with the lowest average electricity price in the United States, with the state's average price for residential electricity (10.18 cents/kWh) falling 3.09 cents/kWh below the national average. SWEPCO asserts that Arkansas's low electricity rates are likely the leading cause of the state's historically low solar adoption rates, which make adoption of distributed generation resources much less cost effective than in states with higher average electricity prices. SWEPCO states that it is proud to be able to provide reliable electric service to its customers in Arkansas at such reasonable rates. However, SWEPCO asserts that it is not the responsibility of the state's utilities, or the state's non-participating customers, to advocate ratemaking that justifies investments on behalf of solar customers. Additionally, a tiered or phased-in approach that would move towards a credit based on the utility's avoided costs, as suggested by the AG, would be complicated for customers and the utilities, and is unnecessary as the grandfathering approach discussed below would eliminate the potential rate shock to existing net-metering customers.

SWEPCO states that apprehension regarding an immediate change in the rate structure is unfounded, as the recommendations regarding the EGCR received in this Docket over the last three years are data-driven and evidence based. SWEPCO's COS Study and SPP Market data serve as the basis for the Company's recommendation of the 2- Channel Billing approach. SWEPCO states that the COS Study and SPP Market data encompass the full quantifiable costs and benefits of the utility's generation capacity, system reliability, and its distribution and transmission systems, as well as the full costs and quantifiable benefits of serving a net-metering customer. SWEPCO asserts that this approach is consistent with Act 464 and the framework upon which rates are set in Arkansas. Furthermore, SWEPCO says its determination of the EGCR includes actual, quantifiable costs and benefits in contrast to the Distributed Solar Advocates' recommendation to maintain the status quo using an analysis based on assumed and speculative information regarding the hypothetical future value of solar generation. SWEPCO states that quantifiable costs and benefits provide the foundation for proper economic price signaling that will aid in customer decision-making and also provide a basis for a net-metering program that will benefit participating customers, nonparticipating customers, the utilities, and

the State of Arkansas. Moreover, SWEPCO agrees with AECC that potential gaming is addressed if cost-based economic price signaling is the standard.

Quantifiable Benefits/Crossborder Report - SWEPCO argues that Arkansas ratemaking policy does not consider hypothetical future societal or other non-quantitative benefits in setting rates. SWEPCO urges the Commission to avoid engaging in any discussion or dispute resolution about the inputs and values for the Crossborder Report study because it is inherently flawed by its questionable assumptions. Furthermore, SWEPCO asserts that the Distributed Solar Advocates' continued reliance on the Crossborder Report's long-term analysis of costs and benefits to support retaining the current net-metering policy of crediting excess generation at the full retail rate is not consistent with the requirements of Act 464 or the statutory framework that supports ratemaking in Arkansas. SWEPCO urges the Commission to reject it.

SWEPCO notes that the Distributed Solar Advocates also state that Act 464 only requires the use of "quantifiable benefits" for the rate options that implement the 2-Channel Billing approach or a grid access charge and not for any other rate structure within its authority. According to SWEPCO, they interpret this and the elimination of the requirement in Act 464 that rates must recover the entire cost of providing service to a net-metering customer as a clear sign of legislative intent to move away from a rigid cost-based rate structure. While SWEPCO appreciates the recognition that only benefits that are quantifiable and correlated to the utility's COS studies are appropriately included in a 2-Channel or grid access charge rate structure as a benefit, SWEPCO strongly disagrees that these rate structures are the only instances where benefits have to be "quantified" to be included to adjust the rate at which net-metering customers are compensated. SWEPCO states that the utilities have clear indication throughout the instructions of the Commission's RPPs, that there are specific requirements to identify, allocate, and functionalize the utility's costs through jurisdictional and class COS studies. The required COS studies are used to determine rates that are just and reasonable for all classes of customers, SWEPCO states. Undetermined benefits, without a firm tether to the utility's COS studies, are in SWEPCO's view, fictional at best and not measurable in determining just and reasonable rates. Moreover, SWEPCO does not agree that by mentioning the two suggested rate structures for non-demand billed customers, the statute intended to treat quantifiable benefits differently for other rate structures (including the rate structure for demand-billed customers). SWEPCO states that clearly this is also recognized in the fact that the definition of "quantifiable benefits" requires a basis in reasonably demonstrated costs that are "based upon the utility's most recent cost-of-service study filed with the Commission."

Cost Shifting/Class-of-Service Basis - SWEPCO is in agreement with AECC's Initial Comments that the current rate structures encourage cost shifting between participating and non-participating customers in classes that recover a substantial portion of fixed costs through variable charges, and can also occur in rate classes that are demand-billed, but still have a portion of fixed costs not recovered through the demand rate component. SWEPCO also agrees with AECC's comments that there are situations where net-metering customers have unique

characteristics that should be considered on a class-of-service basis. SWEPCO would extend this recommendation to certain rate classes where there is a mix of demand-billed and non-demand billed customers and where a rate class, through its approved rate schedule, is not fully recovering its fixed COS through fixed charges but through variable rates. SWEPCO states that these rate schedules have large portions of functionalized fixed costs included for recovery through variable kWh rates and notes that these rate classes are vulnerable to extending current subsidies or putting non-participating customers at risk of being asked to subsidize customers who choose to participate in net metering by shifting the allocation of fixed costs to non-participating customers via the next class COS study.

Demand Reduction - SWEPCO states that Walmart proposes in its comments that current net-metering tariffs be revised to reduce the net-metering customer's billing demand to reflect any applicable reduction in demand resulting from the net-metering facility. Walmart also proposes a rule change to include that kWh and kW units of a net-metering customer's bill are netted. SWEPCO disagrees with this suggestion, noting that billing demand (kW) is measured based on actual customer capacity requirements from the utility and serves as the basis for a demand-billed customer's billing demand charge. SWEPCO states that demand charges are typically determined based on functionalized fixed generation, transmission, and distribution service costs in order to recover the costs to serve customer class load requirements that are recovered through approved demand rates. SWEPCO argues that to net a customer's measured demand would serve to artificially reduce the customer's actual capacity requirements requested from the utility, resulting in reduced recovery of fixed costs set in place to serve the load required and actually used by the customer, as measured at the meter. Furthermore, SWEPCO states, the net-metering customer has already reduced its demand based on the output of the net-metering facility. SWEPCO notes that demand-billed customers with net-metering facilities will already benefit through reduced reliance on the utility resources, but will continue to be served by the utility's generation, transmission and distribution systems as indicated by demand (kW) measured at its meter. Also, SWEPCO argues, because solar generation is not typically available at the time of the system peak, any netting of demand will actually exacerbate any issues associated with subsidization of the net-metering customers. According to SWEPCO, these customers will still be using SWEPCO's system at the time of the system peak and contributing to peak load demand, yet could be paying even less for it than they currently pay. Finally, at this time, SWEPCO states, utilities do not have visibility into a customer's production behind the meter. Therefore, any billing adjustment associated with reduced demand would not be feasible.

SWEPCO states that Distributed Solar Advocates suggest that the Commission examine the transitioning to TOU rate structures for net-metering customers. SWEPCO would reiterate the caution, as expressed by Empire, that some utilities do not necessarily have sufficient technology to implement a prescribed solution (such as TOU or other interval-type solution). SWEPCO states that it does not currently have TOU rates already designed for all classes of net-metering customers based on its most recent class COS study, nor does it have advanced meters which

record interval data. While SWEPCO is not opposed to a TOU suggestion, it argues that the Commission should consider adopting this approach only on a case-by-case basis. Furthermore, while there is potential in determining delivered and received kWh within intervals of TOU to develop a rate structure that is based more on cost causation for net-metering customers, SWEPCO states that it has started to see 5-minute interval nodal locational marginal prices in the SPP reach negative amounts. SWEPCO states that the Commission will need to be mindful about any policies developed related to TOU pricing due to changing markets from increased renewable penetration.

Grandfathering - SWEPCO points out that Distributed Solar Advocates argue that the rules should not contain language requiring Commission approval for the grandfathering of net-metering customers, believing that Commission approval is implicit once a rule is adopted, and therefore, approving grandfathering on an individual basis is inefficient and unnecessary. Conversely, SWEPCO supports EAL and AEEC's view that Act 464 explicitly provides that grandfathering is "subject to approval by a commission." Thus, SWEPCO asserts that the Commission must determine whether a particular net-metering customer or group of customers will be grandfathered under the current rate structure. Further, SWEPCO notes, AEEC urges the Commission not to grandfather additional net-metering customers, or alternatively, to grandfather customers for a period less than 20 years, believing that a decision to grandfather would effectively enshrine a significant subsidy in rates for a period of time. Notably, SWEPCO states, Act 464 provides that net-metering customers are to be grandfathered "for a period not to exceed twenty (20) years." Thus, SWEPCO states, the statute clearly vests the Commission with discretion to grandfather customers for a shorter period of time, asserting that the statutory language supersedes the Commission's decision in Order No. 10 to adopt a grandfathering term of 20 years. Accordingly, SWEPCO suggests that the Commission choose not to grandfather customers for a lengthy period of time, as doing so would continue to preserve the unreasonable allocation of or increase in costs to non-participating customers.

Additionally, SWEPCO notes, Order No. 10 states that the grandfathering period will be determined based upon the date of the Commission's Order adopting a new net-metering rate structure, which has yet to be issued. However, SWEPCO states, Act 464 provides that net-metering customers who sign an interconnection agreement between July 24, 2019, and December 31, 2022, will be subject to the rate structure in effect at the time they sign the interconnection agreement. SWEPCO asserts that determining a grandfathering period from the time of signing of an interconnection agreement would result in a different date for each customer, which would be difficult to manage from a customer service standpoint. Accordingly, SWEPCO recommends that the date of the Commission's Order adopting a new net-metering rate structure will be the date upon which all net-metering customers at the time of the Order would be grandfathered. For example, if that date is January 1, 2020, then all current net metering customers, or customers who have signed an interconnection agreement, will be grandfathered at the current 1:1 credit rate structure. SWEPCO notes that there would be no

additional grandfathering after that date. SWEPCO asserts that Act 464 does not seem to supersede Order No. 10. In fact, according to SWEPCO, the only changes from Order No. 10 versus Act 464's language are the requirement for Commission approval for those customers seeking to be grandfathered and the grandfathering term. SWEPCO states that grandfathering perpetuates the substantial cost-shifting to non-participating customers of the 1:1 credit rate structure currently in effect and is, therefore, not in the public interest. SWEPCO states that harm is presently occurring from the lack of clarity on this issue. Thus, SWEPCO believes that the NMRs need to reflect and address these concerns.

Larger Facilities/Oversizing/Gaming - SWEPCO states that gaming potential is material and significant and should be addressed by the Commission in the NMRs, urging respect for the sizing limits imposed by Act 464. SWEPCO points out the Order No. 10 states that rather than strictly prohibiting overproduction, AREDA looks to the customer's intent in sizing the net-metering facility, which may be reasonably discerned by comparing the customer's usage with the size of the intended net-metering facility at the time the facility is installed and the interconnection agreement is signed. Therefore, SWEPCO supports EAL's recommendation that sizing of net-metering facilities should be limited to what is necessary to meet no more than the customer's usage for the 12 months prior to interconnection. To provide better protection, SWEPCO agrees with EAL, OG&E, AEEC, and AECC's suggestion that a new gaming section should be included in the NMRs and recommends the rule language proposed by AECC in AECC-Initial Exhibit 1. SWEPCO cites one particularly important provision, which states:

Any facilities used for Net-Metering being credited to a customer's account, regardless of the location and its aggregation will be treated as a single facility and must comply with the imposed capacity and/or sizing limits under these Rules.

As an additional step to mitigate the potential for gaming, SWEPCO recommends that all solar lessors and aggregators should be required to register with the Commission and a process established to allow utilities and/or other parties to file a complaint regarding potential gaming, as third-party solar developers are not regulated. SWEPCO states that penalties for gaming should include, but not be limited to, forfeiture of a customer's ability to participate in net metering.

SWEPCO also supports development of customer protections such as a Customer Bill of Rights and Code of Ethics and notes that it is important for utilities to play a role in the consumer protections considered by Staff and discussed by the AG. SWEPCO notes that customers are being approached with long-term contracts or leases by solar developers and could greatly benefit from having a guide to help them through the process. SWEPCO states that utilities currently do not have input into the portion of the marketing materials provided to their customers based on the utilities' rates, terms, and conditions. Including utilities as part of a future consumer protection process will make for a better-informed customer, SWEPCO states, especially in light of grandfathering rules that are introduced to protect a consumer's investment,

which is based on an estimate of a utility's rates and is devoid of any verification from the utilities. SWEPCO believes that it would benefit all parties if the utilities could provide guidance, through some formalized process, in the rates used to determine pay-back periods for potential net-metering customers. SWEPCO notes that Staff has observed that the NMRs do not address whether larger facilities that are not directly connected to a customer's load should be more appropriately be consider a Distributed Energy Resource. SWEPCO is in "strong agreement" with EAL that facilities located solely on remote "generation-only" sites utilize the utility's distribution and transmission systems to wheel power from the generator to the customer's load (one or more other meters). SWEPCO states that these installations run afoul of AREDA, are inconsistent with cost causation principles, increase costs to non- participating customers, and potentially implicate FERC rules and/or federal law. Accordingly, SWEPCO believes that such facilities should not qualify for net metering.

Leasing - SWEPCO states that Act 464 fundamentally altered net metering in Arkansas by enabling customer access net metering through leasing of facilities rather than only through direct ownership, so long as the lessor does not sell electricity to the lessee. According to SWEPCO, the leasing arrangement allowed by the statute would permit a customer to make monthly payment to a solar developer without purchasing the actual panels. SWEPCO shares the AG's concern that this could easily result in misleading contract terms for customers accessing this leasing option. SWEPCO states that the NMRs should specifically address Commission oversight of solar developers, including net- metering facility owners who offer leasing options to customers. SWEPCO states that the new leasing option creates a circumstance where the Commission will be required to review each lease and determine whether it meets the requirements established by Act 464. SWEPCO agrees with the AG and EAL that a review mechanism is needed, noting that leasing terms should be clear and conspicuous, and leasing providers should be subject to the same program suspension/termination rules it discussed above. SWEPCO supports EAL's proposed review option establishing a form agreement that, if used, would allow the net-metering customer to forgo Commission review.

Interconnection - SWEPCO observes that the current interconnection process does not contemplate a leasing ownership structure, and thus agrees with Staff and EAL that the interconnection rules will need to be amended. SWEPCO recognizes that the interconnection process must be updated to properly reflect the roles and responsibilities of all parties involved, and thus it supports EAL's recommendation that the Commission require both the owner of the facility (e.g., the solar developer) and the customer taking advantage of net metering to execute the interconnection agreement to properly protect all parties. SWEPCO cites EAL's explanation that without this additional protection, if a problem were to arise, the utility may find itself in a position of being responsible for any costs or damages, while the customer and lessor assert lack of responsibility due to either not having signed the agreement or not having control over the net-metering facility. SWEPCO states that, like EAL, it has charged customers for certain feasibility studies, but has not charged customers for any Preliminary Site Reviews or for interconnection

requests. However, SWEPCO states the recent influx of new interconnection requests has placed an administrative and cost burden on the Company to review and process these requests. SWEPCO asserts that charging a fee associated with Preliminary Site Review and interconnection requests is consistent with cost causation principles and will help assure that only legitimate requests for interconnecting a net-metering facility are submitted. Accordingly, SWEPCO believes that a one-time, cost-based fee should be associated with each Preliminary Site Review and interconnection request.

Agency Response:

16. **Received from:** Arkansas Electric Cooperative Corp.

Date Received: November 5, 2019

Comment: AECC asserts that the 1:1 full retail rate is overly compensatory, unduly preferential, and is against the public interest, noting that wholesale energy markets allow utilities to purchase generation for approximately 3 cents per kWh, on average. By contrast, AECC states, the current NMRs and conforming tariffs require utilities to pay net-metering customers between three and four times more than the market rate for generation.

Rate Structure - AECC notes that it has been argued by Staff that Act 464 does not require a change in the current net-metering rate structures currently established by the Commission. If true, AECC responds, the corollary is that Act 464 does not require retention of the current net-metering rate structures, either. AECC cites testimony of the Commission Chairman at a Senate committee hearing in support of its position that it has been acknowledged – even as the basis upon which Act 464 was passed – that the current, full-retail rate regime is unsustainable. AECC thus argues that now is the time for Arkansas to move away from over-compensating end-use generators who are neither operating in the wholesale energy markets nor complying with the same dictates that wholesale generators must satisfy. AECC states that such compensation is also contrary to well-established principles of ratemaking and public utility service.

a. Demand Component Customers. AECC asserts that Act 464 does not require continuation of the current 1:1 rate structure. More particularly, AECC notes that Act 464 does not use the terms “demand billed” or “demand metered,” but instead uses the phrase “demand component,” which it states has a different meaning. AECC responds to Staff’s assertion that Act 464 “continued the current 1:1 rate structure,”¹¹⁹ stating that to the contrary, Ark. Code Ann. § 23-18-604(b)(6) does not mention, much less require, that the Commission maintain the current rate or rate structure for such customers (or any customers). Instead, AECC states, that Section states that:

(6) Except as provided in subdivision (b)(9) of this section, for net-metering customers who receive service under a rate that includes a demand component, shall require an electric utility to credit the net-metering customer with any accumulated net excess

generation in the next applicable billing period and base the bill of the net-metering customer on the net amount of electricity that the net-metering customer has received from or fed back to the electric utility during the billing period;

AECC states that 604(b)(6) only requires crediting “net excess generation in the next applicable billing period,” and adds that “net excess generation” is a defined term under the laws and can be “measured in kilowatt hours or kilowatt hours multiplied by the applicable rate....[.]” According to AECC, there are thus two separate options for measurement, which means the General Assembly left the decision to the Commission, through its review of the individual utilities’ respective tariff filings, to decide the proper mechanism for crediting. AECC thus argues that the 1:1 full retail credit for all customers, including those with a demand component in their rate structure (including seasonal accounts, such as irrigation, poultry houses, and other agricultural accounts that are offline part of the year), must be evaluated under the amended law using statutory construction principles. AECC asserts that, quite simply, the General Assembly does not, and neither did Act 464, set rates for net metering: that is the Commission’s purview and Act 464 requires the Commission to do that for all net-metering classes.

b. Prior Recommendations in Phase 2: AECC is not bound by settlement positions made under an entirely different law. AECC states that as support for retention of a subsidy to certain net-metering customers, Staff suggests that maintaining the current 1:1, full-retail credit rate structure for demand-metered customers was recommended previously by certain Parties to this Docket.¹²¹ AECC responds that this suggestion ignores the salient fact that a compromise struck, under a very different fact scenario and before a massive overhaul of the law, cannot possibly be used to bind any Party during Phase 3 of this Docket. AECC states that it no longer agrees, or identifies, with the compromise reached by Sub-Group 2 in Phase 2 of this Docket and does not support rates or rate structures that over-compensate customer-owned, net excess generation.

c. Burden of Proof: Net-Metering Customers bear the burden of proof for adders in excess of the filed rate. AECC states that it appears, but is not entirely clear, that there might be an expectation by Staff that utilities will bear the burden of proof to demonstrate that a net-metering facility creates an unreasonable allocation of costs, rather than the net-metering customer demonstrating the opposite. If this is the case, AECC asserts, a shift of this magnitude creates precedent about which AECC reserves all of its rights to address in a later filings. For now, AECC offers that, when a utility files a tariff, the approval of that tariff is a decision by the Commission that the utility has met its burden and the filed rate is just and reasonable. Said another way, AECC argues, if a net-metering customer wants to be paid more than the filed rate allows, the net-metering customer must prove that any additional compensation they are requesting “will not result in an unreasonable allocation of or increase in costs to other utility customers....” AECC contends that if, and only when, that showing is made should the burden of proof shift to the utility for rebuttal purposes. According to AECC, to hold otherwise creates a rebuttable presumption that all cost allocations stemming from a net-metering facility are

reasonable unless the utility shows otherwise, which would result in a burden of proof contrary to Act 464.

d. Timing: Cost shifting of any magnitude resulting from overpayment for net excess generation should be addressed on a tariff and/or facility-specific basis. AECC applauds and shares Staff's recognition of the importance of a utility-specific approach in net-metering ratemaking and the position that cost shifting is a concern. With the uptick in scale of net-metering facilities from 300 kW to as large as 20 MW, AECC asserts that the potential cost shifting impacts have increased exponentially and waiting for an increase in severity to address the matter only courts trouble. Despite the claim by Staff that there "is minimal to no measurable cost-shifting occurring between customers within and between customer classes..." AECC states that at least one electric utility (EAL) has already quantified, through filed evidence, a loss in revenue of \$75 million to \$126 million from a net-metering single facility. Further, AECC cites to EAL's assertion in this Docket that "...approximately 70 - 75 percent of [its] fixed costs in base rates are recovered through the volumetric charge – not through the demand charge component — thus, allowing a customer to avoid not only variable costs but also the majority of the fixed costs that are incurred ... to serve them – costs that, importantly, are not reduced by the installation of a net-metering facility."¹²⁶ AECC points out that EAL's evidence was "neither refuted, either with comments or data, proving there is, in fact, minimal to-no-measurable cost shifting." AECC argues that procrastination on action now, because it is perceived to be a minor issue, exacerbates the problem in the future. AECC adds that different rate structures and rules for net metering for different customers create confusion, inefficiency, and complication that could have unintended consequences on current and future net-metering customers and the utilities to whom they are selling their generation. Plus, AECC asserts, ignoring how difficult, and likely non-qualitative, a wait-and-see approach would be, if implemented, the General Assembly did not establish a penetration level for the Commission to evaluate when cost shifting should be addressed. To the contrary, AECC states, Ark. Code Ann. §§ 23-18-604(b)(2)(B), 604(b)(2)(D), and 604(b)(9) require a net-metering benefits analysis be determined on a tariff and/or facility-specific basis, regardless. AECC notes that AREDA was created in 2001, with several goals stated in the preamble, including to increase the consumption of renewable resources. Presumably, AECC states, that goal still drove Act 464, and in the almost twenty years since AREDA was passed, AECC has been able to acquire, on market-supportable, market-based and price- advantageous terms, enough capacity and energy to the point that nearly 1 of every 5 kilowatt hours AECC generates – on an energy basis – comes from hydro, solar, wind, or biomass resources. In short, AECC contends, it has achieved, without inaccurate price signals or subsidies, what AREDA was intended to capture. According to AECC, this demonstrates that net-metering is not the only vehicle to achieve AREDA's goals, and continuing to force payments for generation at above-market prices is no longer necessary to encourage a diverse generation mix.

e. Cost-of-service studies are not needed to value compensation for excess generation. AECC quotes Staff for the proposition that “foundationally a certain level of cost-shifting is part and parcel of ratemaking based on grouped classes of customers[]” and, therefore, it is necessary to review a utility’s most recent cost-of-service study to assess whether there is a subsidy. AECC counters that this suggestion misses the mark when it comes to remediating net-metering cost shifting, asserting that net-metering policy is about how much is paid by non-net-metering customers for the generation net-metering customers want to sell to the utility. AECC states that the comparator for that inquiry is unrelated to billing determinants in a cost-of-service study and, instead, should be measured against the price paid for generation in the relevant wholesale energy markets. Generation is generation, AECC argues, and the wholesale avoided cost comprehends the fact that generation is homogeneous, on an energy basis, i.e. net-metering power is no different than any other power, renewable or otherwise, that can be purchased in the market. Making rates for generation the same, regardless of the origin of the generation, AECC asserts, balances the General Assembly’s aim to promote renewable energy through net metering without unduly burdening non-net-metering customers. AECC points out that this very balance was recently recognized by the Louisiana Public Service Commission when it reduced the net-metering rate paid for customer-owned generation to the wholesale avoided cost, determining that any other result would abdicate its obligations to the public interest. In fact, AECC states, that Commission held that forcing a payment of greater than avoided cost would be an inherent subsidy by non-solar customers. AECC states that Act 464 created, for the first time since AREDA was passed nearly 20 years ago, a unique opportunity to adopt a market-based approach in the customer-generator space. According to AECC, the wholesale energy markets, managed by independently-operated, FERC-designated RTOs, set the energy price based on sophisticated computer models and a footprint-wide, multi-state view, which also capture the accompanying regulatory and federal oversight that ensure generation availability and reliability. AECC argues that to continue to pay a higher price for non-market energy perpetuates a false economy, negatively affects the markets’ value under federal regulation and deprives market participants of efficiencies the markets are designed to capture.

f. Grandfathering is not required by law. AECC states that grandfathering is a point of contention in the net-metering space because an uneconomic, inflated price is being paid for customer-owned generation. If the Commission lowers the price utilities are ordered to pay for customer-owned generation to a market-based rate, then, AECC says, the deleterious financial effects of grandfathering are lessened to a point that the concern is no longer acute. AECC argues that grandfathering should not be approved by the Commission for any net-metering facility, absent the case-by-case, Act-464-required individual facility/customer showing, that a guaranteed, long-term, higher energy payment will serve the public interest. Absent a change in the price paid for customer-owned generation, AECC asserts that grandfathering the price paid to net-metering customers locks in place an over-compensatory rate to the detriment of all other ratepayers, which runs afoul of Commission-approved standard interconnection agreements and net-metering tariffs. AECC argues that guaranteeing a customer-generator a fixed,

unsustainable rate to be captured at their election, at the expense of other ratepayers, violates the public interest.

h. **Distributed Energy Resources and Interconnection Matters:** Action should be taken in this Docket. AECC shares Staff concerns with the ability for consumers to enter into agreements with solar developers for larger facilities that will, by their nature, appear to be small power producers. AECC also agrees with Staff that “DER should [not] be treated the same as a net metering facility.” In addition, given their interrelationship to net-metering, AECC argues that these substantial matters should be decided in this rulemaking, not a different docket, noting that Docket No. 16-028-U is an educational proceeding with no defined timelines or finite objectives. In addition, AECC argues, that Docket is not a rulemaking, and the rigors required by due process for state action are not present in that forum. Assuming small power producers are going to receive net-metering treatment, even though they are facilities with no load, AECC asserts that any accompanying rules or regulations for such facilities should be decided in this Docket as part of the ongoing Phase 3. In addition, AECC argues that any changes to the interconnection processes and timing should be decided here, based on evidence of needed changes, including the timing of interconnection and any accompanying rights and obligations for interconnecting facilities.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

17. **Received from:** Joint Cooperatives: Arkansas Valley Electric Cooperative Corporation, C & L Electric Cooperative Corporation, Carroll Electric Cooperative Corporation, Mississippi County Electric Cooperative, Inc., North Arkansas Electric Cooperative, Inc., Petit Jean Electric Cooperative Corporation, Rich Mountain Electric Cooperative, Inc., Southwest Arkansas Electric Cooperative Corporation, Woodruff Electric Cooperative Corporation

Date Received: November 5, 2019

Comment: Nine electric distribution cooperatives filed Rebuttal [Reply] Comments pertaining to Staff’s Strawman NMRs and point out issues with the current 1:1 full retail rate structure for demand-billed tariffs as discussed in Staff’s Initial Comments. The Joint Cooperatives respond to Staff’s Initial Comments stating that “[f]or customers with a demand component, the Act continued the current 1:1 rate structure, which the parties recommended for demand-metered customers.” The Joint Cooperatives state that in those Initial Comments, Staff is relying on comments made in the Joint Report filed in Phase 2 of this Docket on September 15, 2017, by Sub-Group 2, where Sub-Group 2 recommended 2-Channel Billing to non-demand billed tariffs. While Sub-Group 2 recommended that demand-billed tariffs continue to be billed as they are today, the Joint Cooperatives note that there were a lot of assumptions and a vastly different statutory framework under which the Parties were collaborating to reach a settlement in

Phase 2. According to the Joint Cooperatives, the challenge with that compromise, particularly given the increased facility size (from 300 kW to as large as 20 MW) allowed under Act 464, makes the deficiencies in existing 3-part rate structures more difficult to navigate. For the distribution cooperatives, the Joint Cooperatives assert, it is simple to determine whether the existing 3-part structure is overly compensatory to net-metering customers: Each cooperative has a Cost of Energy Adjustment, which passes through inflation in fuel cost and TO/RTO charges billed to the cooperatives by their power supplier, AECC. Except for the TO/RTO demand-related charges, the Joint Cooperatives state, the pass through of these costs plus AECC's energy charge represent volumetric energy-related costs. The Joint Cooperatives state that to determine the fixed costs recovered in the volumetric base energy charge, an individual could find the difference between the energy charge for demand-billed tariffs and the cost of energy embedded in the cooperatives' base energy rates. For example, Rich Mountain's Large Power Service rate has an energy charge of 3.862 cents per kWh. The cost of energy embedded in the energy charge is 2.8264 cents per kWh. The difference of components is 1.0356 cents, which would represent fixed costs embedded in the volumetric energy charge instead of the customer or demand charge. According to the Joint Cooperatives:

- Fixed costs embedded in the volumetric energy charge range from \$0.00081 to \$0.14237 per kWh sold. While there are demand-billed tariffs that align closely to cost of service, there are many that do not. C & L Electric Cooperative Corporation, Woodruff Electric Cooperative Corporation, and Mississippi County Electric Cooperative, Inc. have irrigation class tariffs that would be crediting to a net-metering customer as much as an additional \$0.14237 of fixed cost per kWh sold under the existing 1:1 rate structure, which would create significant subsidies between net-metering and non-net metering customers.
- Another example is Southwest Arkansas Electric Cooperative Corporation's rural three-phase rate. This rate's demand is currently being phased in as it previously did not have a demand component. The current energy charge is \$0.08232 per kWh sold, which is \$0.04447 per kWh sold above the cost of energy embedded in the energy charge.
- Each of the nine cooperatives listed reserves the right to address over-compensation for net-metered generation due to fixed cost recovery shifts between net-metering and non-net-metering customers.
- The cooperatives should be able to develop net-metering rate tariffs consistent with the present tariff revenue requirements as approved by the Commission by shifting costs to the customer and demand charges while lowering the existing energy charges.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

18. **Received from:** Arkansas Electric Energy Consumers

Date Received: November 5, 2019

Comment: Rate Structure - AEEC disagrees with Staff's contention that changes to the current net-metering rules should not be rushed absent a showing of unreasonable cost shift or increase in costs and its questioning whether the current 1:1 credit for net-metering customers results in cost shifting from net-metering customers to other electric energy customers. AEEC points to the Comments of Sub-Group 2 (which included Staff as a member) in Phase 2 of this Docket, stating that the Comments establish the opposite – that the 1:1 netting in rate classes that recover most of their fixed costs through volumetric rate components allows participating net-metering customers to avoid paying their fair share of fixed costs, thereby shifting those costs to other customers and creating a subsidy. AEEC asserts that Staff's "wait-and-see" approach is wrong and states that good public policy demands addressing the cost-shifting issue now – before the subsidy gets much larger and harder to address.

With respect to the contention of the Distributed Solar Advocates that no subsidy or cost shifting exists, AEEC asserts that the Comments and testimony of Sub-Group 2 in Phase 2 of this Docket discredited Mr. Beach's Crossborder Report and that these same contentions are also refuted by the Initial Comments filed in Phase 3 by EAL, SWEPCO, OG&E, and AECC. AEEC states that significantly, neither Staff nor the Distributed Solar Advocates and Scenic Hill Solar refute the fact that the expansion of the opportunity for net metering made possible by Act 464 (primarily achieved through the raising of the caps and the loosening of the definition of "owner") will exacerbate the cost shift to non- participating customers, unless the Commission modifies the current rate structure.

AEEC continues to support 2-Channel Billing (with an appropriate credit for excess energy) for net-metering customers in classes without a demand charge, or the concept of a Grid Usage Charge, and suggests that the Commission enact changes to create a reasonable net-metering rate structure as soon as possible, consistent with due process. However, AEEC opposes a phased-in approach, as suggested by the AG, and instead supports the approach to setting net-metering rates advocated by EAL, SWEPCO, and OG&E.

Grandfathering - AEEC reiterates its Initial Comments position that the Commission must determine, on a case-by-case basis, whether a particular net-metering customer (or potentially a group or groups of customers) will be grandfathered so as to utilize the current rate structure. AEEC notes that its position is supported by Staff, the AG, AECC, EAL, and SWEPCO. In view of its Initial Comments and those of all non-solar parties in this Docket, AEEC urges the Commission to exercise the discretion afforded by Ark. Code Ann. § 23-18-604(b)(10)(A) and choose not to grandfather additional net-metering customers, asserting that a decision to grandfather would effectively enshrine a significant subsidy in rates for a period of time. Alternatively, AEEC suggests that the Commission exercise its discretion to grandfather customers for a short period of time (such as six to twelve months).

Comments on Staff's Proposed Amendments to the NMRs - AEEC reiterates its suggested changes to Staff's proposed amendments to the NMRs made in its Initial Comments and, in addition, specifically support two AECC recommendations as alternatives to AEEC's: (a) Eliminating the definition of "Net Excess Generation Credits" and (b) Adding a clause to Rule 2.04(A)(2).¹³² AEEC also supports AECC's recommended edit to Rule 2.07, to clarify that the Commission must determine on a case-by-case basis, whether a particular net-metering customer (or potentially a group or groups of customers) will be grandfathered so as to utilize the current rate structure. AEEC specifically opposes the changes to Rule 2.07 recommended by Scenic Hill and the Distributed Solar Advocates to eliminate the clause "subject to approval of the Commission" from Rule 2.07, as it contends such an edit would clearly contradict Act 464.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

19. **Received from:** William Ball

Date Received: November 5, 2019

Comment: Mr. Ball submits his observations and beliefs from a broad perspective, stating that the current net-metering rate structure and level of penetration do not significantly risk cost shifting to non-net-metering customers. He cites the testimony of Mr. Beach as demonstrating that the benefits of net metering equal or exceed the retail value of a kWh purchased from a utility in Arkansas: some benefits are realized by the utilities, some by utility customers, and some are universal benefits. He asserts that the utilities have largely refused to acknowledge a number of environmental, societal, and life cycle values that cannot be denied, and notes that California utilities have been forced to cut power to millions of customers to avoid potential fires that are now the new normal brought on by climate change. He cites this as an example of costs/benefits that are not recognized in a typical cost-of-service assessment.

In response to EAL's Initial Comments contention that the benefits asserted by the Crossborder Report and other proceedings around the country have largely been challenged by the emergence of low-cost, grid-scale solar facilities, which deliver the same environmental benefits at a fraction of the cost, Mr. Ball states that it makes no sense to compare an investment made by a utility with funds that are ultimately derived from ratepayers, to an investment made by private capital. He notes that EAL in the same Comments minimizes the benefit of large projects being pursued by customers because they are injecting solar power into the grid at one location and consuming grid power at a different location or locations. Mr. Ball notes that every large commercial solar facility that has been installed in Arkansas, or is currently being pursued, is now serving or will serve customers that pay a demand charge. The result, he says, is that the customer is helping reduce demand for the utility at the solar facility while still paying demand charges at the location(s) they consume grid power. Additionally, he asserts, meter aggregation is not retail wheeling, since the customer's facility is offsetting part or all of their energy

requirements, whether their facility is located behind their meter or at a location with no customer load.

With regard to RECs, Mr. Ball states that the NMRs are clear – RECs belong to the customer, not the developer nor the utility. He notes that Arkansas does not have a renewable portfolio standard and RECs have little economic value; that they can only be sold by the owner, whether with the help of a developer or not; and that if they are sold, neither the owner nor any other person except the purchaser can claim the environmental attributes of RECs. He asks, rhetorically, whether if the customer decided to give the RECs to the utility, would the utility claim the customer is not actually using (or purchasing) renewable energy and that the customer is thus simply ineligible for net metering? He states that he knows of no RECs that have been sold by Arkansas customers and that their minimal economic value is not being realized. He thus has no problem with the transfer of REC ownership to the utilities at the discretion of the net-metering customer.

Mr. Ball states that if the Commission decides to alter the rate structure for net metering, he believes there are more equitable methods than using 2-Channel Billing, noting that net metering constitutes a kWh-for-kWh exchange, and that the utility does not purchase kWh from a net-metering customer. He considers the 2-Channel Billing method outlined in Act 464 to be too prescriptive and states that the limits listed in the Act are likely the reason the utilities supported the legislation. He states that limiting the value of net excess generation to avoided cost plus an adder not to exceed 40 percent of avoided cost would turn what is currently a marginal return on investment into an investment that most would not make. Mr. Ball states that if changes to net metering are necessary, he believes a grid access charge applied to all volumetric rate customers to be a preferable option. He submits that such an approach would consider impacts to all volumetric rate customers and be less likely to target only net-metering customers. He states that the grid access charge, if any, should be based on the size of a customer's electric service and if they are a net-metering customer, it should not be based on the size of their net-metering facility.

Mr. Ball believes that EAL's request that all meters aggregated for the purpose of net metering should be under a common tax ID is a red herring. He notes that the rule states that all meters aggregated must be in the same account name and within the utility's service territory. He considers a requirement that all accounts be under one tax ID to be an attempt to suppress net metering. Mr. Ball states that in the case of third-party ownership where the net-metering customer is leasing the system, the developer provides numerous guarantees and insurance coverage that is in excess of the mutual indemnification requirement currently in place. He states that this is especially true in the case of government or other entities where the requirements for mutual indemnification are already waived.

Mr. Ball asserts that it is disingenuous for utilities to accuse renewable energy developers of gaming a system in which the utilities hold all of the cards. He cites an example of a solar company that submitted a Preliminary Site Review to a utility on behalf of a customer and within

twenty-four hours a utility-affiliate solar entity contacted the customer and informed them that “the interconnection would cost a lot less if they did the project instead of the private solar company.” Mr. Ball supports the idea of including consumer protection language in the NMRs and suggests that there is also a need for language protecting renewable energy developers from utilities. Mr. Ball states that even if the utilities projections of lost revenues in the many millions of dollars are accurate, they represent revenue lost to competition that will affect their shareholder’s bottom line and not lost revenues that they would otherwise invest in maintaining the transmission and distribution infrastructure and that the utilities therefore need to replace those losses by shifting costs to non-net-metering customers in order to support the grid.

Mr. Ball observes that grandfathering is the only certainty in an uncertain renewable energy market. He states that Act 464 has increased the number of larger scale and third-party applications, but the increase in rooftop solar installations has not been as significant. He asserts that if new net-metering rules following utility recommendations are implemented, coupled with declining federal tax credits, investment in rooftop solar will be non-existent. He submits that even if 1:1 net-metering credit continued for many years, it is not certain that significant cost shifting would occur. He believes that the existing plan to extend grandfathering of net-metering facilities under the 1:1 rule until December 31, 2022, is prudent and consistent with the scheduled decline in the federal tax credit.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

20. Received from: Distributed Solar Advocates (AAEA, Audubon, Sierra Club)

Date Received: November 5, 2019

Comment: In introductory Reply Comments, the Distributed Solar Advocates note that the most contentious topic for the Commission to resolve is how residential customers who install solar for their own on-site use should be credited for any renewable energy that they incidentally send to the utility’s grid. These advocates assert that net-metering customers’ reduced on-site usage and exports reduce the overall distribution system load, thereby enabling the utility to avoid many costs that would otherwise be incurred over the lifetime of the net-metering system. They state that from the perspective of all customers, the long-term reduced system costs enabled by these customer-financed systems outweigh reduced revenue recovery in the short-term – asserting that there is a net benefit to all ratepayers. In addition, the advocates state, the unique nature of the benefits provided by net-metered systems further countenances the Commission’s support of these valuable resources. The solar advocates note that net-metered solar systems and other renewable distributed generation provide long-term, low-maintenance climate and other environmental benefits, job creation and system resilience and diversity benefits, among others – all based on significant private investment and federal tax credit

leverage by customer generators. They point out that these customer generators maintain the systems, insure them, and enhance the value of the real estate where those systems are sited.

The Distributed Solar Advocates submit that valuing net-metering systems based on their ability to avoid costs already incurred is a completely illogical concept and will not create the proper incentives for private investment that benefits all customers by avoiding costly new utility investment. As such, they say, it is not consistent with the public interest to compensate net-metering customers at levels that do not reflect the value of their investment, and will not support further investment. The solar advocates reiterate their position that the Commission should determine that under the very low levels of distributed solar generation currently installed in Arkansas, the existing full retail net-metering framework is in the public interest and does not result in unreasonable allocations of costs to other customers. However, they state, to support development of this resource in a way that maximizes benefits to other customers, the Commission should establish a process to consider and evaluate alternative rate designs in a gradual manner.

Rate Design - Net Metering for Demand-billed Customers - Distributed Solar Advocates state that Act 464 definitively requires 1:1 kWh netting for customers taking service on a rate that includes a demand charge, citing Ark. Code Ann. § 23-18-604(b)(6), and declaring that there is simply no rate design issue for the Commission to resolve in this proceeding as it relates to demand-billed customers. The advocates state that the General Assembly's foundation for this decision stems from the fact that even Arkansas's electric utilities had very recently taken the position that there is simply no reasonable claim of a cost shift caused by net metering when customers are on a rate that charges for demand-related costs directly. Despite clear statutory language, the Advocates state, several parties (EAL, AECC, and SWEPCO) specifically advocate for the Commission to alter net metering for demand-billed customers, or argue with the General Assembly's judgment in maintaining the status quo for such customers.

Distributed Solar Advocates state that among those Parties taking issues with net-metering for demand-billed customers, AECC attempts to interpret the statutory language to offer the Commission some discretion regarding rate structure for demand-billed customers, but to no avail. The advocates contend that AECC asserts that Act 464 provides discretion through the definition of net excess generation, which is defined as an "amount of electricity as measured in kilowatt hours or kilowatt hours multiplied by the applicable rate." However, Distributed Solar Advocates argue, the use of the term "net excess generation" in Ark. Code Ann. § 23-18-604(b)(6) does not introduce the ambiguity or flexibility that AECC suggests, because that section otherwise mandates the Commission to require utilities to "base the bill of the net-metering customer on the net amount of electricity that the net-metering customer has received from or fed back to the electric utility during the billing period." Thus, the advocates claim, this section is unambiguous as to whether "net excess generation" should be credited to demand-billed customers based on kilowatt hours or "kilowatt hours multiplied by the applicable rate." Distributed Solar Advocates assert that only the former is permitted. Distributed Solar Advocates

state that in their Initial Comments, some Parties cite evidence regarding the scale of an alleged cost shift based on examples from demand-billed customers as part of their case to urge the Commission to move away from net-metering generally, or not allow grandfathering. While the advocates disagree that net-metering of demand-billed customers results in any cost shifting, they argue that any cost shifting that may result from kilowatt-hour netting of demand-billed customers is irrelevant to the separate question of what constitutes a reasonable rate structure for non-demand-billed customers, or how grandfathering should apply to such customers. They further state that if there were such cost shifts due to lost revenues from demand-billed net-metering customers, those costs would generally be borne by others within the same rate class, not shifted to other classes. Notably, the Advocates state, AECC, which represents demand-billed customers, acknowledges that cost shifting concerns among that group are not problematic. Distributed Solar Advocates state that the Parties who attempt to alarm the Commission about the consequences of grandfathering residential net-metering customers by referring to large potential systems installed on behalf of demand-billed customers are “unhelpfully conflating these issues.” For example, the advocates contend, EAL witness Schnitzer calculates cost shift associated with large-scale projects for demand-billed customers. Such a calculation is irrelevant to the issue at hand, the advocates assert, and misleadingly suggests that the scale of distributed generation development in the residential market is anywhere near as significant as what has been proposed in the commercial and public sector entity markets.

Net Metering for Non-Demand-Billed Customers - Distributed Solar Advocates state that residential customers take service on tariffs without demand charges and Act 464 leaves the Commission with significant discretion in how to design net-metering rates for such customers. According to the advocates, Act 464 requires the Commission to select a rate design that is “in the public interest and do[es] not result in an unreasonable allocation of costs to other utility customers.” The advocates state that in determining what constitutes the public interest, the Commission should consider the purposes of AREDA, to promote distributed renewable energy resources, for the attendant health, resilience economic development, and consumer choice benefits. Distributed Solar Advocates state that in determining what allocations or increases of costs are “reasonable,” the Commission should consider changes to rates over a planning time horizon, not based simply on a snapshot of embedded costs. They assert that just and reasonable rates not only recover prudently incurred costs; they also send price signals supporting economic efficiency and policy implementation. According to the advocates, “reasonable” allocation of costs include practices that tolerate de minimis cost shifts that are favored by public policy or could only be eliminated through measures that would result in rate shock or other disruption. What is a “reasonable” allocation of costs, the advocates assert, must also consider the public interest and AREDA’s purposes – the two parts of the standard work in tandem. Although AECC urges the Commission to define “unreasonable allocation” in this proceeding, and the advocates agree that the Commission will need to interpret this term in order to adopt NMRs on rate design, they urge the Commission not to adopt a rigid definition that would preclude its ability to modify the rate design as the market and technologies mature.

Reasonable Allocation of Costs and Cost Shifting - Distributed Solar Advocates state that Parties who argue that residential net metering shifts costs to other customers take a restrictive view of the question before the Commission and that their arguments boil down to a comparison of the retail rate (credited to consumers for exports under the current 1:1 approach) and either the cost of utility-scale solar or other measures of avoided cost for energy. The advocates assert that these frames ignore the cost and challenges of delivering wholesale generation to load, as well as system savings associated with slower peak load growth, and overlook other benefits of distributed generation including resiliency and consumer choice. As a foundational matter, Distributed Solar Advocates state, the Commission should recognize that net-metered customers do not create any costs by reducing their dependence on utility-provided electric service. They assert that the cost-shift issue is about allocations of costs and the efficient and policy-justified design of rates.

Distributed Solar Advocates agree with Staff's Initial Comments that the time frame for the Commission's analysis matters, stating that if one looks solely at whether certain embedded costs can be avoided instantaneously as a result of distributed generation, then distributed generation appears to offer more limited benefits. However, the advocates contend, this myopic view treats all costs other than energy as fixed and unavoidable and leads to a result where a private investment that reduces system costs over the long run would be discouraged if it results in any costs to other ratepayers in the short run. They quote from Mr. Beach's Corrected Testimony finding that "Solar DG is a cost-effective resource for EAL, as the benefits equal or exceed the costs in the TRC, Program Administrator, and Societal tests. As a result, in the long run, deployment of solar DG will reduce the utility's cost of service." Distributed Solar Advocates state that the Crossborder Energy analysis uses a "long-term, life-cycle analysis that covers the full economic life of a solar DG system, which is at least 25 years." Mr. Beach explains that this is standard practice for these analyses and a long-term, life-cycle analysis is also standard practice when a utility wants to build and then charge its customers for a new plant that will last for decades. He adds that the benefits of DERs are avoided costs and not the embedded, historical costs used in COS studies. He states that avoided costs are by definition counterfactual – they are costs that the utility never incurs because it procures a service from another source. He quotes the economic axiom he believes to be useful here: -- Over the long run, all costs are variable – but notes that likewise, over the very short-run, all costs are fixed. Just and reasonable rates, he states, strike the right balance in addressing both short- and long-run cost impacts. Distributed Solar Advocates argue that every utility cost is fixed only on a short time-horizon and can be avoided if utilities engage in more comprehensive and integrated planning, including at the distribution system level, that includes forecasts of distributed generation development and output.

Distributed Solar Advocates state that fortunately, AREDA gives the Commission flexibility to interpret the public interest and reasonable allocations of costs using a longer-term view of the utility's system. Doing so, they contend, is consistent with the Commission's approach to energy

efficiency, which requires utility expenditures on measures that will cost effectively allow customers to reduce their usage, on the basis that these measures will ultimately avoid more costs than they impose in the short run. The advocates argue that the conceptual similarity to energy efficiency is why Crossborder Energy and countless other net-metering cost-benefit studies utilize the same framework for analysis of how system costs and other ratepayers will be affected.

Distributed Solar Advocates state that the updated Crossborder Energy analysis filed with their Initial Comments shows that over a 20-year period, net-metered distributed generation avoids more costs than it shifts to other customers. They note that while they anticipate responding to additional critiques that may be made in the Reply Comments, the testimony of EAL witness Schnitzer contains a limited rebuttal of the methodology in the Crossborder Energy study. They also note that the study comprehensively addressed previously filed criticisms of its study in an attachment to the Surreply Comments of Sub-Group 1 to Joint Report and Recommendations of the NMWG in Phase 2 of this Docket. Distributed Solar Advocates then undertake an extensive review and response to Mr. Schnitzer and EAL's arguments.

First, Distributed Solar Advocates state, Mr. Schnitzer agrees with Crossborder Energy that avoided line losses are a benefit of distributed generation. They state that the study's analysis employs line losses developed by EAL, which increase the energy value of distributed generation by seven percent and its capacity value by eight percent. Second, the advocates state, Mr. Schnitzer begins to rebut the concept of avoided transmission costs, but ultimately takes issue only with valuing avoided transmission in cases of meter aggregation, where the generation is remote from some portion of the load offset on behalf of the net-metering customer. The advocates state that even this limited critique falls apart as a matter of common sense about grid operations since a net-metered resource is still behind a meter on the distribution system and close to other loads, so any exports will flow directly to the closest load on that distribution feeder, whereupon the utility will charge full retail despite not having provided any transmission service associated with that particular kilowatt-hour. They argue that the assertion that the energy exported from a net-metering system would use the transmission to reach other meters associated with that customer account rests upon an inaccurate description of how electrons flow and is irrelevant to the analysis of avoided costs. Distributed Solar Advocates next respond to Mr. Schnitzer's contention that Crossborder Energy's valuation of avoided distribution costs relies on unnamed "studies for other utilities that have shown that 80 to 90% of distribution feeders are not fully loaded, and thus there are no capital costs to be avoided." The advocates state that while it is challenging to address Mr. Schnitzer's concern given the lack of citation to these studies, it also appears that he misses a core concept with avoided distribution costs. They state that it is unsurprising and reflects conservative distribution system management as well as typical patterns of system use, for most feeders not to be fully loaded. If a distribution feeder is already fully loaded, they note, it is likely too late to avoid any costs associated with an upgrade of the feeder's components. According to the advocates, distributed generation prevents a feeder from

becoming fully loaded, which is how it avoids expensive incremental distribution system costs (that in turn may have low asset utilization rates) over the 20-30 year life of these generation systems. For this reason, Crossborder Energy estimates avoided transmission and distribution costs based on the relationship over a 10 to 20 year period between load growth and transmission and distribution system investments.

Next, Distributed Solar Advocates address the subject of Mr. Schnitzer's testimony and EAL's comments regarding the relative costs of utility-scale and distributed generation. They state that simple economies of plant scale are widely understood, so it is unclear why EAL spent ratepayer dollars on an expert to establish that distributed generation is more costly to install than utility-scale solar. Moreover, they assert, this comparison misses the point and is irrelevant to implementation of Act 464. They note that EAL argues that AREDA is intended to promote economic renewable energy resources broadly, but argue that in doing so misreads the statute. Distributed Solar Advocates observe that AREDA is specifically about customer-sited and customer-financing renewables, not renewable energy generation more broadly. They note that Ark. Code Ann. § 23-18-602(a), stating the purposes of AREDA, refers specifically to net metering as a mechanism to reduce barriers to entry for customer-financed renewables, and the statute focuses exclusively on policies for development, administration, and compensation of customer-financed solar. They state that were AREDA intended to incentivize efficient utility-scale renewable energy development, it should be considered by the Commission as part of its review process for every resource planning decision by the utilities. The advocates argue that the added jobs and local economic benefits of distributed generation are the reason for higher prices of and higher benefits from distributed generation. Distributed Solar Advocates assert that AREDA does not permit the Commission to make a policy choice that because utility-scale renewable energy may be less expensive to install than distributed renewable energy resources, distributed generation should no longer be facilitated through utility net-metering tariffs. Doing so, they argue, would undermine the purpose of AREDA to facilitate the exercise of consumer choice and local economic development.

Moreover, Distributed Solar Advocates assert, the cost of a value provided by utility-scale renewables are not directly comparable to that of distributed generation. They state that Mr. Schnitzer asserts that all benefits of distributed generation can be obtained from utility-scale installations, which they contend is a blinkered perspective that ignores not only the avoided line loss benefit of distributed generation that Schnitzer otherwise acknowledges, but also the avoided transmission and distribution costs associated with generating electricity close to load. Unlike utility-scale systems, the advocates state, distributed generation avoids the need to acquire land and possibly expand the transmission system, both of which can be costly and face community opposition. Additionally, the advocates state, citing the Crossborder Energy study, distributed generation also lays the groundwork for a more resilient grid as it is the foundational technology for hybrid distributed generation-storage resources that can ultimately allow vulnerable customers or those offering critical services to ensure continued service during

transmission and distribution outages. Distributed Solar Advocates argue that utility-scale solar, or any remotely located generation, will never provide that benefit.

Finally, Distributed Solar Advocates note that EAL makes the strange argument that the utility and its customers must choose between utility-scale and distributed renewable energy, and that net metering is somehow deterring the utility from investing in utility-scale solar they acknowledge is extremely affordable. The advocates declare that there is no such trade-off and cite EAL's postulation that there is a limit on how much solar can be integrated on the system, but cites no study establishing what such a limit might be. The advocates note that in California, nearly 20 percent of energy production, on average, is from solar resources, and the state plans to add substantial amounts of new solar as part of its goal to achieve 100 percent clean energy by 2045. Distributed Solar Advocates state that as complementary resources such as storage and demand response become more widely available, any current engineering cap on the amount of solar the grid can accommodate, will increase. They cite a recent NREL study that shows that with increased grid flexibility, 25 percent or higher penetrations of solar can be achieved at low cost. The advocates contend that the question of what any cap might be is practically irrelevant in the state of Arkansas, which currently produces less than 3 percent of its energy from all non-hydroelectric renewable energy sources combined. They state that EAL eventually acknowledges the supposed ceiling on solar is a long-run problem. The advocates state that should EAL or other utilities accelerate their procurement of utility-scale solar to the point where it faces challenges managing this resource become a practical reality, they would welcome a reconsideration of the public interest in further incentives for distributed solar generation. They contend that the fact many customers are choosing to install distributed generation because utilities are not moving quickly enough to satisfy consumer preferences for less polluting generation resources, because customers value non-monopoly solutions, and intrinsically understand the benefits of distributed energy resources. Here, they state, a utility is seeking to squelch consumer choice simply because the utility could – but is not – giving those customers what they want, even though it would be quite affordable to do so. Distributed Solar Advocates assert that is precisely the consumer choice gap that AREDA aims to address.

Proposed alternative rate designs will not achieve objectives of the statute. Distributed Solar Advocates state that Parties advocating for immediate changes to the net-metering rate design for residential customers generally call for two types of changes: imposition of a 2-Channel billing rate design with Channel 2 compensation at the utility's avoided cost of energy, or imposition of a grid charge. They respond that neither of these proposed rate designs meets the standard of consistency with the public interest and avoiding unreasonable allocations of costs.

2-Channel Billing proposals - Distributed Solar Advocates state that Parties who propose 2-Channel Billing call for compensation of excess energy exported to the distribution system at the utility's avoided cost of energy only. They respond that compensation at this extremely low avoided cost rate inadequately credits consumer-generators for the value that distributed generation offers the grid. Put another way, they assert, 2-Channel Billing overcorrects for a

perceived shifting of costs to other customers that does not exist, especially if one considers the full spectrum of costs that distributed generation avoids. In doing so, they argue, it also fails the public interest prong on the Act 464 standard because export rates at avoided energy costs will not be sufficient to cover costs for systems that would be installed by most, if not all, residential customers. This rate design would devastate the residential distributed generation market in Arkansas, they state, and not only be contrary to the General Assembly's objectives to promote customer choice, avoid imports of out-of-state fuels, and the many other state interests in distributed generation, but it would also increase system costs in the long run as costs that distributed generation would have avoided are instead incurred.

Distributed Solar Advocates note that, as the AG's Initial Comments aptly describe, an immediate shift to avoided cost-only generation would likely lead to the loss of jobs at solar installation companies in Arkansas. The advocates urge the Commission to consider the experience in Michigan as it decides what course of action to take, noting that in 2018, the Michigan Public Service Commission switched from full retail net metering to a compensation scheme based on LMPs. They note that this created significant uncertainty and a fall-off in solar adoption in the state, and Michigan lawmakers are beginning the process of adopting a new law to switch back to a rate structure that will better support the residential solar market. Distributed Solar Advocates observe that none of the proposed export rates includes avoided line losses, despite EAL witness Schnitzer's admission of this benefit. To the extent that the Commission concludes that it is unable to consider the full spectrum of avoided costs due to the definition of "quantifiable benefits" in Ark. Code Ann. § 23-18- 603(9), then the Commission should decline to redesign net metering for residential customers in line with the process set out in Ark. Code Ann. § 23-18-604(b)(2)(B).

Distributed Solar Advocates state that while the most important problem with the proposed 2-Channel billing net excess generation rate is the exclusion of avoided costs other than energy costs, another matter for the Commission to consider is that LMPs do not accurately reflect utilities' avoided cost of energy due to many utilities' practice of uneconomically dispatching coal units. The advocates note that a recent paper published by the Sierra Club shows that LMPs may be suppressed by nearly one-third due to excessive uneconomic generation, primarily by utility-owned units.¹⁵⁴ Distributed Solar Advocates contend that although utilities that engage in self-scheduling practices may be able to buy power at these suppressed rates, their customers are effectively charged more for the utility's own generation when the utility's units operate at a loss, but they recover their production costs in excess of LMP from customers through their approved revenue requirement. The advocates state that it would require further investigation by the Commission to determine the utilities' actual avoided cost of energy, when factoring in any uneconomic dispatch practices by utility-owned generation in Arkansas. For the purposes of their comments, the Distributed Solar Advocates simply note that this would be a topic for further consideration if the Commission were to go the route of compensating residential net-metering customers based substantially on LMP. For the foregoing reasons, the advocates argue that the

Commission should not pursue 2-Channel Billing. Distributed Solar Advocates address an argument advanced by certain parties that interprets Ark. Code Ann. § 23-18-604(b)(2)(B)(iv) to require that the net-metering customer demonstrate quantifiable benefits as part of establishing the rate for net excess generation. This section of the statute states: “the additional sum added to the avoided cost of the electric utility may be applied after the demonstration of quantifiable benefits by the net-metering customer and shall not exceed forty percent (40%) of the avoided cost of the electric utility.” Distributed Solar Advocates assert that the phrase “by the net-metering customer” refers to the benefits provided by that customer, not a showing that must be made by the net-metering customer. They state that to interpret this provision otherwise would require the Commission to conclude that the General Assembly intended individual residential customers who wish to net meter to present a case before the Commission for such benefits, after hiring an attorney and expert witness, and for the Commission to consider separate evidence and issue separate orders in each such case. Fortunately, say the advocates, the statute can be read to avoid such an inefficient process by placing the burden of establishing rates on the utility. They argue that the Commission can avoid this thorny issue entirely by declining to adopt 2-Channel Billing.

Distributed Solar Advocates also urge the Commission to reject OG&E’s argument that integration or “storage service” costs should be netted out of quantifiable benefits, suggesting that this approach appears to be a holdover from the prior version of Ark. Code Ann. § 23-18-604(b)(2)(B), but is not permitted by the current definition of quantifiable benefits. Moreover, the advocates assert, integration costs are negligible when solar penetration is low, and the notion of the utility providing a storage “service,” while good storytelling, is a complete fiction.

Grid charge - Distributed Solar Advocates note that several Parties advocate that the Commission impose a grid charge on residential net-metering customers, acknowledging that such a charge is among the options specifically permitted by AREDA. Ark. Code Ann. § 23-18-604(b)(2)(C) permits the Commission to:

Authorize an electric utility to assess a net-metering customer that is being charge a rate that does not include a demand component a per-kilowatt- hour fee or charge to recover the quantifiable direct demand-related distribution cost of the electric utility for providing electricity to the net- metering customer that is not:

- (i) Avoided as a result of the generation of electricity by the net- metering facility;
and
- (ii) Offset by quantifiable benefits[.]

Notably, the advocates state, the only cost that may be recovered through such a fee are the utility’s demand-related distribution costs, and only if those costs are not actually avoided by generation from the net-metering facility, and also not offset by quantifiable benefits. Distributed Solar Advocates argue that understanding whether demand-related distribution costs are avoided

by the net-metering customer requires an understanding, among other things, of the net load profile of that customer, which could well reflect lower demand during the times that determine the residential class's share of those distribution system costs. The advocates contend that a fee imposed on net-metering customers for demand-related distribution costs, when they likely have lower peak demands than others in their class, does not reflect cost-based ratemaking and is not consistent with cost-based ratemaking nor considerations of the public interest.

Distributed Solar Advocates assert that an example provided by EAL in the testimony of Mr. Owens illustrates the unfairness of applying a grid charge to many net-metering customers. That example shows a customer who, after netting their excess generation, still pays for 700 kWh a month.¹⁵⁶ The advocates ask: Is such a customer really not making a reasonable contribution to paying the demand-related distribution costs associated with serving them for that month? They note that while some net-metering customers may occasionally have bills consisting of only the customer charge, many others continue to have significant bills, yet would still be imposed an additional fixed charge that is likely more than \$10 a month. The advocates argue that such an additional charge cannot be supported without a better understanding of how residential net-metering customers contribute, on average, to the demand-related distribution costs, or reductions in those costs, fairly allocated to the residential class.

Distributed Solar Advocates assert that the proposed grid charges would also significantly undermine the market for residential solar by increasing the payback period for net-metering systems. They state that the revised Crossborder study shows that the economics for residential solar on EAL's system are already quite marginal under the Participant Test, which shows a result of just barely above 1.0.¹⁵⁷ This indicates that any additional charges could tip the balance where such systems are no longer installed and, the advocates assert, would likely lead to significantly reduced business for residential solar installers in the state. While acknowledging that this consequence is not dispositive of the Commission's decision in this rulemaking proceeding, the advocates state that it is a component of the public interest that the General Assembly has directed the Commission to consider when rendering a decision. *Id.* at 19.

Transition to a new rate structure. Distributed Solar Advocates assert that the Initial Comments from the Parties confirm that there is no urgency to change the rate design for residential net-metering customers, pointing out that Staff Exhibit A, examining data from the utilities' March 2019 filings shows extremely low adoption rates: Only 1,493 customers participate in net metering out of 1.4 million customers – about 0.1 percent of all customers on average. At these levels of adoption, any cost shift is *de minimis*, they assert, even if viewed in the inaccurate framing advanced by certain utilities, which ignores all avoided costs other than avoided energy. *Id.* at 20.

While the Distributed Solar Advocates disagree with the AG's preference to move toward avoided cost-based compensation, they strongly agree with the AG's recommendation that any transition must be gradual. They note that the AG makes a compelling case regarding the impacts

on solar businesses of an abrupt transition and notes that a transition period will give those businesses time to scale up, for technology costs to come down, and for other market factors to evolve in a way that enables these businesses to thrive even with lower compensation rates. The advocates agree with the AG that such a transition is similar to gradual movements made in the context of ratemaking to eliminate cross-subsidization while avoiding rate shock. They note that tolerance of de minimis cost shifting and gradual elimination of any identified cross-subsidization is a well-established practice at the Commission, and thus no abrupt transition away from full retail net metering is needed to avoid “unreasonable allocations or increases in costs to other consumers.”

Distributed Solar Advocates note that multiple electric cooperatives along with Empire contend that the Commission should provide some flexibility for utilities at different stages of solar penetration and with different metering technologies. They agree that some flexibility of this type could be valuable and is consistent with the principles they have set out concerning the public interest in avoiding over-corrective measures to address de minimis cost shifting. They state that if the Commission were to determine that some move away from full retail net-metering is needed, it could specify different thresholds of solar penetration at which each utility would progress toward a new rate structure. This, they state, would be similar to the approach taken in California, where utilities transitioned to TOU net metering when the solar penetration on their specific systems reached five percent of aggregated customer non-coincident peak load. They note that Carroll acknowledges that full retail net metering is acceptable for utilities with very low solar penetration.

Grandfathering - Distributed Solar Advocates argue that the Commission should allow any residential customer who submits a signed interconnection agreement before the end of 2022 to continue to take service under the current net-metering rate design for a set period of time over which the Commission has discretion, up to twenty years. They assert that allowing customers to continue receiving compensation under the rate structure in place at the time a net-metering contract is signed is critical to the ability of customers to assess the likely payback period on their investment and avoid abrupt changes that leave customers unable to recover their investment. They contend that investments in long-lived assets are very challenging to support without some certainty regarding the revenues to be earned. They note that Carroll acknowledges that utilities are allowed such certainty regarding recovery of costs for their own investments.¹⁵⁹

Distributed Solar Advocates state that the justifications for grandfathering identified by the Commission in Order No. 10 remain valid, and the small increases in the amount of net-metered generation since then does not change those equities. The advocates observe that several Parties attempt to point to significant increases in interconnection requests from demand-billed customers to support an argument that, although the Commission allowed grandfathering two years ago, circumstances have changed enough that it must not do so again. However, the advocates note, these Parties almost universally point to growth in net-metering installations by demand-billed customers rather than in residential net-metering systems. They state that the

record shows that Arkansas was in 2017, and remains today, an extremely low-solar-penetration state, despite AREDA's success in stimulating economic development associated with net metering. The advocates contend that the number of residential customers who utilize net metering or might submit signed interconnection agreements in the next several years will not cause more than a de minimis amount of cost shifting, even if one accepts a "cramped, backward-looking definition of cost shifting." In response to AEEC's contention that the statute would allow the Commission not to grandfather at all – resting its argument upon the "subject to approval by a commission" language, Distributed Solar Advocates state that interpreting Ark. Code Ann. § 23-18- 604(B)(10)(A) to give the Commission complete discretion regarding grandfathering would give no meaning to the word "shall," which begins that section. The advocates call for the Commission to avoid reading the statute in a way that gives no meaning to a particular part, particularly where the part that would be disregarded is a mandatory term. The Advocates state that the presence of the term "shall" in the statute demonstrates such an intention contrary to entirely permissive construction that AEEC advances.

Distributed Solar Advocates assert that the statute can be read to avoid such an anomalous interpretation, by interpreting the phrase "subject to approval by a commission" to refer only to the term of years the customer can remain under the rate structure in effect when the net-metering contract is signed. In contrast to the overarching mandate signified by "shall" at the beginning of the section, the advocates state that the statutory language regarding the length of time for grandfathering clearly delegates some discretion to the Commission, further establishing that the "subject to approval" language applies to the duration decision, not the initial decision to grandfather. Distributed Solar Advocates urge the Commission to make an across-the-board determination regarding grandfathering for residential and small commercial customers, as it did in Order No. 10. They agree with Scenic Hill Solar's observation that case-by-case adjudication would be incredibly inefficient, and such a scheme would, practically speaking, deter most projects from ever getting off the ground. This would be especially true, they assert, if the Commission were to adopt EAL's position that the scrutiny involved in each grandfathering determination should amount to a full-blown cost and benefit analysis akin to what the Commission would require from a utility seeking to enter into a PPA.

According to Distributed Solar Advocates, several Parties read Order No. 10 and Ark. Code Ann. § 23-18-604(b)(10)(A) together in unnecessarily complicated and ultimately incorrect ways. They cite SWEPCO's contention that under Order No. 10, after the date of a Commission order in Phase 3 of this proceeding, no further grandfathering is permitted.¹⁶¹ The advocates state that this would be directly contrary to the statute, which states that the Commission shall allow customers to be grandfathered if they submit interconnection agreements before 2023 (though with discretion as to the duration of the grandfathering period). It is true, however, the advocates state, that customers submitting interconnection agreements after a Commission order but before 2023, would be grandfathered under any new rate structure that the Commission's order may place into effect within that time frame. They note that the AG contends that the statute "does not

contemplate grandfathering” for those customers who submit interconnection agreements after December 2022. The advocates state that it is unclear from this statement whether the AG considers the statute to be silent as to grandfathering these customers or prohibits grandfathering. The advocates believe that because § 23-18-604(b)(10)(A) is silent as to the Commission’s obligation to grandfather customers who interconnect after 2022, the Commission may exercise its inherent authority to do so, as demonstrated in Order No. 10. Distributed Solar Advocates state that this continued authority could be important should the Commission choose to engage in the type of extended and flexible transition period that the advocates have recommended. For example, they state, if the Commission were to gradually modify the net-metering rate structure once the distributed generation on a utility’s system reaches a certain level, that threshold could be reached for some utilities in 2025, and the Commission may wish to ensure that customers who interconnect in 2024 are able to do so with a full understanding of the likely return on their investment.

Interconnection - Distributed Solar Advocates agree with Staff that, given the changes made by Act 464, the interconnection rules need to be amended. In addition, they fully support Staff’s recommendation that the IREC Model Procedures be used as a guide for updating interconnection in Arkansas, noting that these procedures standardize and streamline interconnection of DERs, synthesize best practices, save all stakeholders time and resources, maintain grid safety and reliability, and improve efficiency and affordability. The advocates note that, for example, under the IREC Model Procedures, preliminary site review (PSRs) are only required for larger projects. This, they note, is in stark contrast to the proposal by EAL in this Docket, which advocates for PSRs for all facilities regardless of how small the project. The advocates state that requiring PSRs for small facilities creates an unnecessary barrier in the residential solar market.

In addition to using the IREC Model Procedures as a guide for updating interconnection in Arkansas, Distributed Solar Advocates support a general inquiry into specific utility practices that unnecessarily delay interconnection and, accordingly, support Staff’s recommendation of the creation of a code of conduct critical for both the solar provider and the utility. The advocates also support Staff’s recommendation of the development of a Consumer Guide to assist consumers in evaluating net-metering options. They are willing to participate collaboratively with all Parties in the development of this guide.

Meter Aggregation - Distributed Solar Advocates state that Act 464 made no significant changes to meter aggregation, which was introduced to AREDa through Act 827, and allows customers to apply credits from a net-metering system to additional meters beyond the one directly connected to the net-metering system.¹⁶⁴ They note that the sole change was a new section, Ark. Code Ann. § 23-18-604(c)(2)(A)(ii), which states that “[s]ubdivision (c)(2)(A)(i) of this section does not apply if more than two (2) customers that are governmental entities or other entities that are exempt from state and federal income tax defined under § 23-18-603(7)(C) co-locate at a site hosting the net-metering facility.” The advocates note and disagree with AECC’s

contention that subdivision (c)(2)(A)(ii) prohibits, rather than promotes, meter aggregation for governmental and other tax exempt entities. The advocates support Staff's proposed revisions to the net-metering rule. They note that the subdivision refers to governmental and tax-exempt entities that co-locate and that such entities are not necessarily under common ownership, in which case they would not be eligible for meter aggregation under subdivision (c)(2)(A)(i). The advocates argue that it would make no sense for the General Assembly to add a new section saying that a provision allowing aggregation among meters under common ownership does not apply to entities that are not under common ownership. Instead, they contend, subdivision (c)(2)(A)(ii) should be read to say that the restriction on net metering to meters under common ownership does not apply to governmental and other tax-exempt organizations, so long as they co-locate at a site co-hosting the net-metering facility. Such an expansion makes good sense from a policy perspective, in that it expands access to net metering to such organizations and governmental entities, allowing them to take advantage of some economies of scale in installing a larger system, while maintaining a tight link between the generation and the customer load it is offsetting due to the co-location requirement.

Distributed Solar Advocates note that EAL proposes that the Commission define "common ownership" to mean customers with the same tax identification number. While the advocates agree that the Commission should provide some definition for common ownership to ensure that disagreement over it does not become a roadblock in project development, as it has. The advocates do not agree with EAL's more narrow proposal; instead, they propose that the Commission deem sufficient a statement by a customer seeking to engage in meter aggregation that the accounts it seeks to aggregate are under common ownership. However, the advocates state that in order for customers to understand what would constitute common ownership, the Commission should clarify that it includes partial ownership arrangements, combined budgeting and operational control, and other indicators of interest or control over the account in question. Distributed Solar Advocates note that EAL asserts that a tax identification number is the "existing basis used to define a customer," but provides no examples of how the tax identification number has been used in this way. The advocates contend that this failure is odd considering that such examples should presumably be readily within EAL's control were this an established practice. They assert that EAL does not explain why an identifier used in the context of defining a customer is necessarily determinative in defining "common ownership," as there is no definitional overlap between the qualifications and requirements to secure a tax identification number and the characteristics of common property ownership, interest, or control. In fact, the advocates assert, EAL's use of a tax identification number as denoting common ownership is without support in corporate and governmental common ownership structures. For example, they note, two corporate subsidiaries of a common parent corporation are under common ownership, yet they still have separate tax identification numbers from each other and from the parent company. In a governmental example, they note, a municipality may have its own tax identification number, yet it may have an electric company and a water company each with separate tax identification numbers. Distributed Solar Advocates argue that it is nonsensical to

assert that the water company and the electric company are not under common ownership by the municipality. The advocates state that many farmers and other sole-proprietors in Arkansas would unnecessarily be barred from meter aggregation by adoption of EAL's overly restrictive proposal. For example, they note, a residential customer and her farm LLC should be regarded as being commonly owned, but would likely have separate tax identification numbers and customer accounts.

Distributed Solar Advocates note that EAL challenges meter aggregation on a number of grounds beyond simply refining the expansion provided for in Act 464: e.g., EAL asserts that meter aggregation is a violation of FERC rules and constitutes retail wheeling.¹⁶⁶ However, the advocates state that these arguments are not fully developed, are outside the scope of this proceeding to update the NMRs in response to Act 464, and appear to be legal challenges to the statute. As such, the advocates do not address them but reserve their right to do so at a later time should the Commission determine that these issues are within the scope of this Docket.

Distributed Solar Advocates note that EAL also contends that meter aggregation does not offer the avoided transmission and distribution system benefits as net-metering facilities co-located with load. The advocates respond that this ignores that net-metering facilities are located on a distribution feeder near some loads, even if not some portion of the system owner's load. Thus, they state, the utility is still able to serve those other customers without incurring transmission and distribution costs, and without line losses.

The solar advocates note that EAL asserts that net-metering customers who utilize meter aggregation should bear the costs of upgrading EAL's billing system to one that can handle aggregation without the need for manual billing. The advocates state that EAL presents no evidence of how much manual billing costs or how those costs might increase in the near future, and how such costs compare to the billing system upgrade EAL says would be required. The advocates state that such an upgraded billing system would likely create administrative cost savings to EAL, which would benefit all customers. Under such circumstances, the advocates assert, it would be manifestly unfair for net-metering customers to bear all of those costs. They contend that one effect of net metering may be to expose inadequacies in utility billing systems – inadequacies that could constitute a barrier to efficient and economic adoption of a wide range of DERS. Ultimately, they state, this proceeding is the wrong one for the issue EAL raises. If EAL believes this new billing system is a prudent investment, the advocates state, it should buy the system and then seek to include the cost in its rate base. They state that the need for the system and appropriate cost allocation should then be worked out in proceedings designed for those purposes. Finally, Distributed Solar Advocates note that EAL asserts that meter aggregation customers with too many accounts listed as eligible for having credits applied to them are engaged in "gaming" that the Commission must address in this proceeding. The advocates state that gaming implies attempts to circumvent rules, whereas the behavior EAL describes sounds simply like excessive optimism on the part of the net-metering customer. They state that it is

unclear how listing additional accounts that will rarely if ever receive bill credits harms anyone or undermines the Commission's rules.

Gaming - Distributed Solar Advocates state that in Order No. 22, the Commission prompted parties to address measures to address potential gaming of the 1 MW threshold in Ark. Code Ann. §23-18-603(8)(b)(ii). They note that several parties propose definitions of circumstances that would constitute gaming. For example, SWEPCO contends that it constitutes gaming to have multiple facilities under 1 MW under common ownership at the same location. The advocates agree that co-location of facilities could be an indicator of intention to game the 1 MW threshold, but only if those facilities have an aggregate capacity of more than 1 MW. Furthermore, the advocates state, "common ownership" of the co-located systems would need to correspond to how common ownership is defined for purposes of meter aggregation. In other words, they state, if a collection of entities are not deemed commonly owned such that they can aggregate across meters, then they should not be deemed commonly owned for the purpose of gaming rules around co-located facilities. The advocates note that AECC proposes a new section of the NMRs – Section 5.0

– to address various concerns it has around gaming. However, the advocates respond, most provisions of AECC's proposed NMR 5.0 do not concern the 1 MW threshold, but instead other types of misleading statements, unpermitted actions, or crimes of omission by net metering customers. For example, AECC proposes terminating net-metering privileges and subjecting a customer to the penalties associated with "tampering" under the General Service rules, for such infractions as changing the service contact of a net-metering facility without notifying the utility. Absent more information about how pervasive the conduct listed in proposed rule 5.03(A)-(F) is, and the utilities' inability to address it through existing process, Distributed Solar Advocates do not believe such harsh remedies are appropriate. Id. at 30-31.

The advocates note that AECC proposed rule 5.03(E)(1) does relate to the 1 MW threshold and states that "Any facilities used for Net-Metering being credited to a customer's account, regardless of the location of the facility and its aggregation, will be treated as a single facility and must comply with the imposed capacity and/or sizing limits under these Rules." Thus, they state, AECC's proposed rule is broader than SWEPCO's in that it would aggregate the capacity of all facilities credited to a customer's account, regardless of location. In the advocate's view, such a rule might prohibit legitimate arrangements where a customer has behind-the-meter systems at multiple locations that it owns (such as multiple shops or offices associated with a single business) and links those Net-Metering Facilities to meters at other properties owned by the customer. They acknowledge that this would be an unusually complex meter aggregation arrangement, to be sure, but raise the possibility to illustrate a circumstance where having Net-Metering Facilities linked to a single customer account, but not co-located, and exceeding the 1 MW threshold, does not appear to be motivated by an attempt to game the threshold, but simply the result of a customer taking advantage of multiple rooftops and seeking to maximize the value of those credits.

Distributed Solar Advocates assert that EAL likewise seeks to shoehorn into the “gaming” inquiry a wide range of behaviors it views as troublesome relating to Preliminary Site Reviews. They urge the Commission to hesitate to prohibit what appear to be reasonable commercial behaviors without better understanding the motivations behind them. From EAL’s description of how Preliminary Site Reviews help solar developers understand the feasibility of interconnecting at different locations, the advocates state that these issues are likely to be addressed through measures to improve transparency regarding utility hosting capacity, as being explored in Docket 16-028-U.

Leasing - Distributed Solar Advocates note that several parties suggest changes needed to the Net Metering Rule to implement the Act 464 provisions expanding net-metering eligibility to leased facilities or those managed under service contracts. For example, they state, EAL asks the Commission to establish a process for reviewing lease agreements to ensure that they qualify for net metering, or alternatively to allow for use of a form agreement. The advocates note that AEEC raises a similar concern with respect to service agreements, noting the need to assess whether the exclusions from the safe harbor provision at 26 U.S.C. §7701(e)(4) are applicable before determining whether a facility is eligible for net-metering. Distributed Solar Advocates agree that there should be a streamlined process for determining eligibility for net-metering of facilities utilizing these kinds of arrangements, but that process need not involve the Commission; instead, they argue, the Commission could consider designating a staff member to review such agreements and attempt to resolve any disputes with the utility regarding eligibility. The advocates assert that any such process should have the objectives of allowing consumers seeking to utilize lease or service contract arrangements to confirm early in the process that their system will be eligible for net metering, while not requiring those customers to jump through countless hoops or initiate a Commission proceeding in order to get approval for net metering. To that end, the advocates could support EAL’s suggestion that a form contract or lease agreement be developed which could be used to eliminate any kind of uncertainty or case-by-case review, though they state that the use of such a form agreement should not be compelled.

On the issue of the eligibility of a consumer for the safe harbor provision at 26 U.S. § 7701(e)(4), the advocates note that AEEC suggests that the Commission might require confirmation by the appropriate federal agency (presumably the IRS), of the applicant’s eligibility. The advocates believe such a requirement would be unnecessarily burdensome, especially considering that in most cases, the face of the service contract should generally resolve whether the safe harbor applies. Distributed Solar Advocates assert that since many of the utility commenters in this Docket have taken a hostile stance towards these express expansions of net metering rights under Act 464, there is a real concern that a utility might utilize a “legal” review of a lease or service agreement as a means to delay or derail proposed net metering facilities.

Consumer Protection and Related Issues - Distributed Solar Advocates support the recommendation of the AG that the Commission establish a working group to develop measures intended to protect consumers, which could include a code of conduct for utilities and solar

installers, general consumer protection information, and possibly a process to certify providers. The advocates state that it is critical that the code of conduct apply to both utilities and solar installers, so that the process can truly be as smooth as possible for consumers. To that end, they propose that any such working group that the Commission may establish should include, or at least seek input from, representatives of different consumer classes. They suggest that the working group could consider already available resources such as the California Public Utilities Commission Solar Consumer Protection Guide recommended by AECC to determine applicability and comprehensiveness from an Arkansas perspective. The advocates note that a number of parties have suggested that the Commission should have a process to receive complaints against or otherwise discipline solar installers. Distributed Solar Advocates contend that the Commission's jurisdiction to do so is not clear, given that these installers are not public utilities. As such, the advocates suggest that this working group should examine what tools the AG and the Commission have under their existing authority to enforce the code of conduct or otherwise hold companies interacting with ratepayers accountable for any misleading statements. They state that those discussions can inform recommendations that might be made to the Commission or General Assembly, as appropriate, regarding consumer protection in this area.

Miscellaneous Provisions - Distributed Solar Advocates note that EAL contends that in order for a facility to qualify for net metering, the net-metering customer must hold the RECs, because if the customer does not hold these credits then the facility cannot be counted as "renewable generation" eligible for net metering. EAL asserts that "AREDA requires that customers retain the RECs associated with the energy provided by the net-metered facility in order for the generator to qualify as 'renewable' and the customer be eligible to take net-metering service."¹⁶⁸ But the advocates assert that this is not what Ark. Code Ann. §23-18- 604(b)(8)(B) says, noting that the section states: "[a] renewable energy credit created as the result of electricity supplied by a net-metering customer is the property of the net metering customer that generated the renewable energy credit" (emphasis added). According to the advocates, AREDA does not say the REC is inalienable property, as EAL asserts. The advocates suggest that EAL's concern appears to be that the net-metering customer may transfer its property (the REC) to a solar developer as part of a negotiation of the contract. According to the advocates, the implication of EAL's argument is that the net-metering customer can never sell the RECs their system generates to anyone without losing eligibility for net-metering. That would, they note, of course, include any sale of the REC to the utility, which would seem problematic given EAL's suggestion that it might one day seek to claim the RECs of net-metering facilities on its system for compliance with a renewable portfolio standard or similar policy. Distributed Solar Advocates argue that EAL's proposal to restrict net-metering customers' right to sell their property, including an upfront sale to a developer in order to obtain more favorable installation terms, has no precedent among state net-metering policies as far as they are aware. While RECs are essential to ensuring that multiple entities do not make renewable energy claims regarding the same kWh, the advocates assert there is no indication in AREDA that the General Assembly was concerned that distributed renewable energy systems be strictly "additional" in order to be

eligible for net-metering. Instead, the advocates assert, the General Assembly seemed particularly focused on the economic development benefits of distributed generation development, which is enhanced by the transferability of RECs and the revenues that can thereby be generated.

Distributed Solar Advocates state that EAL and SWEPCO express concerns that net-metering facilities are being oversized, and propose changes to the NMRs to address that problem.¹⁶⁹ However, the advocates respond, neither utility offers any evidence that facility oversizing is a problem, or that attempts by consumers to oversize are not adequately controlled by the existing net-metering rules. The advocates note that in Order No. 10, the Commission addressed concerns about oversizing and concluded that the existing Net-Metering Rules and interconnection procedures were adequate. The advocates state that no Party puts forth evidence that circumstances have changed sufficiently that interconnection procedures are inadequate to resolve these conflicts and that require amendment to the NMRs regarding facility sizing. Distributed Solar Advocates note that AECC proposes to define the “applicable period” in a way that would eliminate netting over the billing period. They respond that such a definition would make net metering as it currently exists impermissible under the Commission’s rules even during any transition period that the Commission might deem appropriate. They state that this would also take away the flexibility that AECC otherwise says should be available to accommodate diversity among cooperatives. The advocates argue that the Commission should define “applicable period” in a way that preserves its flexibility regarding what it ultimately views as the preferred rate structure, and to provide for a measured transition. As the Commission considers whether to stick with monthly netting or move to a different mechanism, Distributed Solar Advocates note that there is great market value in ensuring that the billing period and the netting period are consistent. They assert that bills and netting arrangements provide price signals to customers and a common temporal platform for evaluating net-metering facility investments, usage patterns, and payback performance. They argue that to have two separate time periods—one for billing and one for net-metering facility netting — will create excess confusion for customers who are merely seeking to manage and reduce their utility bills through Net-Metering Facility investments.

Finally, Distributed Solar Advocates state that EAL raises an issue as to whether certain facilities qualify for net metering if they are not “behind the customer’s meter” and do not “displace some amount of electricity that the customer consumes,” and requests that the NMRs be clarified to impose such restrictions on facilities that can qualify for net-metering. At the same time that EAL is advocating for this “clarification” to the rules, the advocates state, and absent evidence that any customer seeking to net meter is actually proposing a facility with no associated load, the utility is providing confusing information to customers about the likely outcome of this proceeding. They note that two of AAEA’s member companies who are solar developers recently received the following form email from EAL regarding solar projects they are developing on the EAL system:

There is a rulemaking currently before the commission (APSC) concerning updates to the net metering rules including whether remote facilities qualify for net-metering. A remote site is an interconnection that does not serve load at the physical location of the solar facility. Therefore, until this rulemaking is complete at the APSC, Entergy cannot move forward with the "insert customer name" net meter installation project since it is a remote site.

Distributed Solar Advocates argue that Act 464 and this rulemaking have nothing to do with whether a remote net metering facility qualifies for net metering, asserting that such facilities qualified for net metering under any reading of AREDA before Act 464, and Act 464 made no amendments to AREDA that changes that fact. They state that such "remote" sites will always have some load associated with them for such things as inverters, night lighting and security, and will be equipped with a meter capable of measuring electricity in two directions. The advocates acknowledge that load associated with the facility will be less than the electricity produced by the facility; however, the excess will be used to offset other meters of the owner of the facility under meter aggregation. The advocates state that the AAEA member companies intend to file a complaint at the Commission to address this issue.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

21. Received from: Scenic Hill Solar

Date Received: November 5, 2019

Comment: Scenic Hill Solar's comments address in particular the comments of EAL regarding demand-metered customers, net metering penetration, common ownership, grandfathering, renewable energy credits, and energy storage, and provide correspondence with EAL for the Commission to establish that EAL has routinely delayed the most basic of interconnection reviews on spurious grounds. In addition, Scenic Hill Solar provides a correction to what it calls EAL's completely speculative and premature analysis that finds that a substantial cost shift will occur as a result of Scenic Hill Solar's interconnection of a net-metered system for the City of Hot Springs. As well, Scenic Hill Solar addresses some of EAL's "unsupported" redlines to its net-metering tariff and the Commission's NMRs.

Further, given EAL's claims of net metering causing a cost shift to non-net-metering customers, Scenic Hill Solar provides as attached exhibits the reports cited in its initial comments, which were reports synthesizing individual studies at the state or utility level, and providing an extensive sampling of those studies. According to Scenic Hill Solar, these studies generally show net metering has either a de minimis impact or a net benefit on non-net-metering residential customers, implying that demand-metered customers, which have lower energy rates than residential customers, provided an even greater net benefit according to those studies. According to Scenic Hill Solar, the intent of including these studies is to show that EAL's claims of cost

shifting are based on a simple avoided energy cost analysis that ignores other values commonly identified in studies. With Arkansas' low penetration of solar, Scenic Hill Solar asserts that whatever the impact of net metering is, it is certain to be very small as a percentage of retail sales. Scenic Hill Solar states that the Commission has plenty of time to determine the scope of an appropriate study and conduct the study, and expects that such a study will show that net-metering provides a net benefit, as other studies in low solar penetration states have shown.

Demand-metered Customers - Scenic Hill Solar states that, along with EAL's initial comments, its witnesses Schnitzer and Owens filed testimony addressing the purported impact of demand-metered customers and steps that the Commission could take to mitigate these impacts. EAL's comments also incorporate by reference testimony filed by witnesses Castleberry and Talkington in Docket 19-042-TF regarding cost shifting. For purposes of the present rulemaking, Scenic Hill Solar contends that this blizzard of testimony should not be considered at all with respect to demand-metered customers.

According to Scenic Hill Solar, Act 464 clearly preserves traditional kilowatthour- for-kilowatthour (1:1) net metering for demand-metered customers, so it is out of scope in this rulemaking to address alleged cost shifting caused by these customers. Nonetheless, Scenic Hill Solar questions the conclusions of these EAL witnesses, noting that Mr. Schnitzer provides calculations of the overall impact of net metering, including the "made up" specific example of a net-metering facility that he asserts Scenic Hill Solar may use to provide energy to the City of Hot Springs. Scenic Hill Solar states that Mr. Schnitzer's calculations for Hot Springs are refuted later in its comments, but also questions his overall results in light of the numerous studies attached to its comments that show much greater benefits than just the avoided energy costs that Mr. Schnitzer uses. Most notably, Scenic Hill Solar states, he shows that for LGS customers, the cost shift is just 1.1 cents per kWh using EAL's avoided energy cost as the only benefit.¹⁷⁴ With even the most conservative of approaches acknowledging just over a penny of other benefits, Scenic Hill Solar argues that the cost shift for these customers becomes a net benefit for non-net-metering customers. To be clear, Scenic Hill Solar acknowledges that many of its customers have LGS meters. Most importantly, Scenic Hill Solar states, all that EAL knows about the Hot Springs project is that an agreement exists for a 12.75 MW facility and that neither Mr. Schnitzer nor anyone else at EAL knows anything more about the project, so it is impractical for them to opine on the impact of the project at this time.

Scenic Hill Solar asserts that it is a free country, so Mr. Schnitzer can speculate all he likes, but the Commission should ignore completely his speculation, as the APSC will have an opportunity to review the future Hot Springs projects when they have been fully developed. This will occur more quickly, Scenic Hill Solar states, if EAL stops its delaying tactics in processing preliminary interconnection site reviews. According to Scenic Hill Solar, Mr. Owens provides extensive testimony on how 2- channel billing can be established to pay for exported energy at avoided cost rates, including an example showing the process and supposed savings of using 2-Channel Billing for a demand-metered customer. Again, Scenic Hill Solar asserts, there is simply no point

in providing this example, given that Act 464 preserved 1:1 net-metering for demand-metered customers. According to Scenic Hill Solar, within EAL's comments, the citations to testimony in Docket No. 19-042-TF include a summary of those results, with wildly unrealistic impacts based on all customers that have filed for preliminary review actually installing systems. What matters at the present juncture, Scenic Hill Solar asserts, is that solar penetration in Arkansas is so low that impacts are immaterial at this point, and any reported impacts should be based on an unbiased study that considers more than avoided energy costs. Particularly for demand-metered customers, Scenic Hill Solar states, a reasonable analysis accounting for more than just avoided cost would show a net benefit of the largest customers availing themselves of net metering.

Net-Metering Penetration - Scenic Hill Solar asserts that EAL's reported cost-shifting impact raises the issue of when the Commission should perform a study to look at the impacts of net metering from its unbiased perspective. Scenic Hill Solar suggests that the Commission has time to begin to formulate the approach it wants to use for study based on examples from dozens of other states, and hire an expert to perform a study of the impacts for EAL and to develop a model for evaluation of the impacts for other utilities. Further, Scenic Hill Solar suggests that changes to net metering should be based on such a study; at the current low penetration, and that the impact on non-net metering customers is de minimis. Scenic Hill Solar poses the question: When is the right time for a study? Scenic Hill Solar responds that looking at all generation in kilowatt-hours, as a percentage of the utility's total customer sales, would be a useful way to establish the timing of a review of net metering, noting that both Minnesota and New Jersey have used this percentage of retail sales approach. According to Scenic Hill Solar, Minnesota uses four percent of utility retail sales, at which point a utility can request to deploy a value-of-solar tariff. New Jersey uses 5.8% of total state retail electricity sales, says Scenic Hill Solar, at which point a supplier can ask that state's commission (the Board of Public Utilities) to let them stop offering net metering. Scenic Hill Solar suggests that to establish net-metering generation, it would be a cumbersome and unnecessary exercise to gather the data for all net-metering systems in Arkansas. Instead, the Commission could use average kWh/kW figures from existing Arkansas systems, together with data from NREL's PVWatts to calculate generation based on installed capacity. According to Scenic Hill Solar, the benefit of using a generation-as-a-percentage-of-sales approach would be that the percentage sets an absolute outer bound on cost shifting. In the example it presents, if the utility sees a reduction of 3.4 percent of its sales due to net metering, the impact on non-net-metering customer bills cannot be any more than that percentage. Even using only avoided energy costs, Scenic Hill states, the impact on non-net-metering customer bills would be in the range of only 2%, and with reasonable accounting for other benefits, argues that the impact would be to reduce non-net-metering customer bills.

Scenic Hill Solar asks what the appropriate threshold is for a study using this approach. Given that AREDA has a clear intent to promote distributed renewable energy, and its language regarding avoiding "an unreasonable allocation of or increase in costs to other utility customers," Scenic Hill Solar suggests that the Commission would want to conclude a study before net-

metering penetration exceeds five percent, at which point even with only an avoided energy cost approach, the impact of net metering on non-net-metering bills would be no more than perhaps 3%, and a reasonable study would likely show a minimal impact.

Common Ownership - Scenic Hill Solar states that EAL simply ignores AREDA's language of "common ownership" and instead imposes a requirement of customers having the same tax identification number ("tax ID") in its place. Having gone through this discussion with EAL for a specific project, as discussed in both Initial Comments and the supplemental testimony of EAL witness Palmer, Scenic Hill Solar states that it is clear that the tax ID approach is unworkable.

More importantly to Scenic Hill Solar, the statutory requirement regarding common ownership cannot reasonably be interpreted to mean anything but ownership by the same person or entity. Scenic Hill Solar states that an entity such as a municipality can have more than one tax ID for different city functions, but if the city owns both the water pumping station and city hall, those two city functions with separate tax IDs are nonetheless commonly owned. Mr. Palmer discusses the request of Scenic Hill Solar's client, the City of Stuttgart, and states the crux of the problem as, "because it is reasonable to assume that a non-taxable entity has a single tax ID, EAL considers it clear in the statute that multiple tax ids would constitute multiple net-metering customers."¹⁷⁵ Scenic Hill Solar responds that it is not reasonable to assume that a non-taxable entity has a single tax ID. For the City of Stuttgart, Scenic Hill Solar states that it has clearly demonstrated that the City has more than one tax ID, and has gotten the Mayor on the phone with EAL to affirm that the City has more than one tax ID. Scenic Hill Solar asserts that the effort has dragged on for months, as discussed later in its comments, for absolutely no reason, adding that EAL's response has been to refuse to complete a preliminary technical review based on its position that the City of Stuttgart is not the common owner of its city departments.

Scenic Hill Solar notes that EAL's comments address the Stuttgart example as well, over the course of three pages. Scenic Hill Solar states that it seems audacious that EAL can be aghast that it claims that, "three separate legal entities with separate federal taxpayer identification numbers (i.e., the City of Stuttgart, Stuttgart Municipal Waterworks, and the Stuttgart Public Library) now are "associated with" one customer, i.e., the City of Stuttgart." Scenic Hill Solar states that it does claim that these entities are under the common ownership of the City and asks that the Commission direct EAL to accept that city departments, despite having separate tax IDs, are under the common ownership of the city in question. According to Scenic Hill Solar, EAL goes on to posit that under its line of reasoning, a person who owns multiple businesses might claim common ownership. Scenic Hill Solar asserts that EAL's presumption seems to be that opening this floodgate will allow untold combinations, possibly even without actual ownership in common. In Scenic Hill Solar's opinion, an affidavit of common ownership would be sufficient, but it would also be feasible to show evidence of common ownership through corporate formation documents showing common ownership. However, Scenic Hill Solar urges the Commission to not apply such a rule to municipalities, arguing that proving that the library

and the water department of a city are under common ownership is a frivolous exercise; common ownership in that case is self-evident.

Grandfathering - Both Scenic Hill Solar's Initial Comments and the Initial and Reply Comments of Sierra Club/Audubon/AAEA [herein the Distributed Solar Advocates] discuss grandfathering at length, and the need for certainty. In contrast, according to Scenic Hill Solar, EAL asserts that grandfathering will perpetuate the cost shifting that they allege. As noted earlier in these comments, Scenic Hill Solar argues that by only looking at avoided energy costs, EAL is dramatically overstating the potential for cost shifting and asserts that grandfathering is critical for demand-metered customers. Scenic Hill Solar asserts that while 1:1 net metering is preserved by Act 464 for demand-metered customers, laws can change. Scenic Hill Solar asserts that just as a residential customer who installed a net-metering facility before Act 464 reasonably expects the 1:1 net metering that motivated her to install her facility will not be snatched away, a demand-metered customer installing a net-metering facility today should be able to rely on the continuation of 1:1 net metering. Scenic Hill Solar states that EAL has redlined the NMRs to add a grandfathering provision as Rule 2.11, providing only that, "Any customer who is already interconnected at the time of the enactment of these Rules may apply for grandfathering by submitting an Application with the Commission." Scenic Hill Solar states that asking every net-metering customer in the state to submit an application to the Commission for an individualized determination of grandfathering creates needless uncertainty and thwarts the goals of AREDA. Scenic Hill Solar asserts that consistency requires that the Commission establish a single period for grandfathering. Given that Act 464 allows for a period of up to 20 years, the Legislature clearly considered that amount of time to be in the range of reasonableness, and Scenic Hill Solar encourages that length to give the prospective net-metering customers the improved certainty that will spur more renewable installations as intended by the Arkansas General Assembly.

Renewable Energy Credits - Scenic Hill Solar states that EAL makes the interesting though unsupported argument that net metering customers must retain the RECs associated with their net-metering facility's generation, or else the facility is no longer actually a renewable energy generator. Mr. Schnitzer cites the Energy Services Agreement that the City of Hot Springs has signed with Scenic Hill Solar as an example of a developer retaining RECs.¹⁷⁸ The problem with this argument, according to Scenic Hill Solar, is that AREDA does not require that the net-metering customer retain the RECs associated with her facility, but only that, "[a] renewable energy credit created as the result of electricity supplied by a net-metering customer is the property of the net-metering customer that generated the renewable energy credit." Like any property, Scenic Hill Solar observes, RECs can be sold. Scenic Hill Solar states that it does not assume that it owns the RECs, which is the reason that a provision about RECs is in the agreement with the City of Hot Springs cited by Mr. Schnitzer. In practice, Scenic Hill Solar states, it is difficult for an individual net-metering customer to become familiar with the processes for tracking and selling RECs, so the RECs have less value to the net-metering Customer directly than may be achieved by a developer on the net-metering customer's behalf.

By taking ownership of the RECs, Scenic Hill Solar contends that it can offer the City of Hot Springs and other customers lower energy rates. Scenic Hill Solar asserts that the argument that selling energy generated by a solar array to a utility customer, while not selling the associated RECs to the customer somehow makes the solar array no longer a net-metering facility is unpersuasive. A net-metering facility is defined in relevant part as a facility that, “[u]ses solar, wind, hydroelectric, geothermal, or biomass resources to generate electricity . . .” Scenic Hill Solar states that it is unaware of any state that requires the net-metering customer to retain RECs -- the common practice is to allow the sale of RECs because it is another revenue stream that helps defray the cost for the customer. Given EAL’s alleged intent to delay interconnection approval for the City of Hot Springs based on their assertion that the REC ownership issue creates uncertainty, Scenic Hill Solar requests that the Commission rule on this issue as soon as possible.

Energy Storage - According to Scenic Hill Solar, Mr. Schnitzer notes in two instances that energy storage could expand the potential for solar energy penetration, but is currently expensive. However, with massive investments in battery technology underway, particularly for electric vehicles, Scenic Hill Solar states that the general speculation is that battery costs will continue to rapidly decline.¹⁸¹ Scenic Hill Solar suggests that at some point in the coming months, the Commission will need to clarify what types of storage facilities may be considered a part of a net-metering facility, given the changes in Act 464.

Evidence of EAL Delays - Scenic Hill Solar notes that in Mr. Palmer’s supplemental testimony for EAL, he states that, “some parties have alleged that EAL is obstructing the preliminary site review process and interconnection process for potential net-metering installations,” and, “[t]o date, EAL has only notified three potential net-metering customers of such issues related to Act 464.”¹⁸² The City of Stuttgart, a Scenic Hill Solar customer, is the first of the three customers that Mr. Palmer discusses. Scenic Hill Solar states that it has experienced issues with other applications, and attaches to its Reply Comments some of its lengthy correspondence with EAL to seek preliminary reviews, each of which is discussed at the end of this section. For these reviews, Scenic Hill Solar has paid \$1,000 each, for a total of \$12,000 to date. According to Scenic Hill Solar, the limited and non-binding technical review of whether an interconnection of a MW facility at a particular site will possibly require upgrades appears to require only a few hours of engineering time. Scenic Hill Solar notes that at the October 29, 2019 workshop in Docket No. 16- 028-U, EAL clearly explained what is variously referenced in its comments in the present Docket: if it perceives that an applicant would not qualify for net metering, then it will not process the preliminary technical review. Scenic Hill Solar asserts that with the stated intent of not misleading customers that they might qualify for net metering, EAL refuses to even provide the most basic technical review of distribution circuit capacity. Scenic Hill Solar contends that the Commission has the sole authority to determine whether a proposed project qualifies for net-metering. Obviously, Scenic Hill Solar states, it would not waste time guiding a customer down a path towards development of a facility if it thought the facility would not

qualify. While EAL might have a different opinion, Scenic Hill Solar asserts that it is not their prerogative to decide these issues on their own, especially in the preliminary site review process.

Scenic Hill Solar attaches as Exhibit 1.a correspondence with EAL starting in July 2019 regarding the Stuttgart project. The first page summarizes the 23 major interactions on the pages that follow. Scenic Hill Solar states that the August 15th email from EAL in this Stuttgart correspondence details EAL's refusal to process multiple applications for a project in Camden (each of which Scenic Hill Solar paid EAL to process). As shown by the correspondence, Scenic Hill Solar states, it repeatedly represented that there were only two tax ID numbers associated with the City of Stuttgart, while EAL contended that there were three. After multiple emails over several months, Scenic Hill Solar states that it was finally able to get EAL to identify which meters had tax ID numbers other than the two now known to be associated with the City. The City of Stuttgart has supplied EAL with W-9 forms to correct errant tax ID numbers in EAL's records, per the final correspondence in the record. According to Scenic Hill Solar, this string makes it very clear that tax ID numbers are not a workable method for EAL to establish common ownership. According to Scenic Hill Solar, the common ownership of City of Stuttgart departments could have been accepted as obvious three months ago, and the project could be installed and operational at this point, but for EAL's delay. Scenic Hill Solar also attaches as Exhibit 1.b a timeline and 32 pages of correspondence with EAL regarding applications for multiple net-metering facilities to serve the City of Camden and Ouachita County, starting with initial applications in June. Again, Scenic Hill Solar cites delays based on multiple applications, each of which EAL was paid \$1,000 to process, attributable to EAL's opinion that they are not required to undertake more than one study for any given customer at a time. Scenic Hill Solar provides Exhibit 1.c -- a four page email string with EAL regarding multiple applications for preliminary review of facilities to serve Forrest City. According to EAL, these emails also illustrate that EAL is asserting that it will not process more than one application at a time for facilities proposing to offset load at one or more of the same meters. Scenic Hill Solar's purpose in filing the email strings related to Stuttgart, Camden, and Forrest City is to demonstrate the pressing need for Commission direction that a utility cannot rely on tax ID numbers to determine common ownership (at least, not for municipalities), and that a utility should process preliminary technical reviews promptly, without delay based on its interpretation of Act 464 and the net-metering rules.

EAL Testimony Regarding the Impact of the City Hot Springs Utilizing Net- Energy Metering - Scenic Hill Solar states that in the Mr. Schnitzer's testimony, he shows that the energy rates for LGS and LPS customers are mostly comprised of his determination of 3.5 cents of avoided cost, with the remaining 1.1 and 1.0 cents, respectively, of those rate schedules' energy rates attributed to a "cost shift."¹⁸³ Scenic Hill Solar asserts that Mr. Schnitzer thereby assumes the conclusion he wishes to achieve. While Scenic Hill Solar vigorously disputes whether there is a cost shift at all, even with Mr. Schnitzer's assumptions, it points out that the cost shift would be a fraction of what he has calculated. Scenic Hill Solar states that it does not wish to expend anyone's

resources to review all of EAL's witnesses' calculations. As noted earlier, Scenic Hill Solar notes that the only information that EAL has concerning the Hot Springs project is that an agreement exists with Scenic Hill Solar for a 12.75 MW project; EAL is merely speculating about impacts without knowing any details about the project. According to Scenic Hill Solar, at the appropriate time the Commission will have an opportunity to review the specifics of a "real" project from Scenic Hill Solar for Hot Springs, rather than the "fictional" project examined by Mr. Schnitzer.

Miscellaneous EAL Redlines - Scenic Hill Solar states that in EAL's redline of the NMRs, attached to its Initial Comments, EAL includes several provisions that are not supported by AREDA as modified by Act 464. Scenic Hill Solar's attention to these specific redlines is not meant to show support for any other elements of EAL's redlines. In NMR Rule 2.01, EAL adds in redline that a utility, "is not required to interconnect a customer installing a renewable facility that is not connected to its load." Scenic Hill Solar states that it justifies this position in its comments with the logic that AREDA calls for the use of a bidirectional meter, and such a meter would be unnecessary if energy only flowed in one direction, such as at remote generation site without load. According to Scenic Hill Solar, this argument suffers from several fatal flaws:

- First, AREDA only says that an electric utility "shall allow" interconnection of a NET-METERING Facility with a bi-directional meter; it does not require the use of a bi-directional meter; accordingly, EAL is free to use a uni-directional meter at a net-metering facility sited remotely;
- Second, nothing in AREDA requires load at the generation site, including the definition of a net-metering facility;
- Third, the concept of allowing generation to offset load at another site was conceived of, and has been discussed throughout workshops in this docket as a way for customers with load at a site with limited potential for solar generation to put an array on vacant [sic] land elsewhere and offset their load; and
- Fourth, a customer can install lighting at a remote generation site and thereby have load at the site.

Scenic Hill Solar next notes that in NMR Rule 2.09(C), EAL adds redline to prohibit multiple applications to offset the simple, non-binding reviews. As Scenic Hill Solar discussed previously, the customer pays \$1,000 for these fairly simple, non-binding reviews. Scenic Hill Solar responds that in the interest of enabling distributed renewable generation, it makes sense for a developer to be able to ask about the potential to install a given net-metering facility on multiple locations and pick the most promising. Importantly, Scenic Hill Solar asserts, requiring sequential rather than parallel preliminary reviews would needlessly delay projects. In NMR Rule 2.10, EAL's redlines would prohibit applications that cumulatively exceed the 1 MW threshold unless there is Commission approval. Presumably, Scenic Hill Solar

asserts, EAL intended this provision to apply to applications to serve the same load, such as three facilities to serve a single commercial customer. However, together with its proposal to have the developer sign an interconnection agreement along with the utility customer, Scenic Hill Solar argues that EAL's redline here would effectively prohibit any developer from having more than a single MW of applications submitted to a utility at any given time. As well, Scenic Hill Solar states, this relates to its discussion in the prior paragraph of the propriety of allowing multiple applications.

Scenic Hill Solar notes that in Section 3.01, EAL's redline would have the developer sign the interconnection agreement along with the host, noting that to its knowledge, this is not done elsewhere. Scenic Hill Solar states that the developer is identified in the agreement and given authority to represent the utility customer, so that the utility can address any issue or emergency with the installer who has a deep understanding of the facility design and the interconnection. However, Scenic Hill Solar states, the utility has an existing relationship with the utility customer, and energy being exported from the site belongs to the utility customer, and therefore that is the appropriate contracting party.

Finally, Scenic Hill Solar notes, in EAL's redline of its tariff, it adds in Section 52.1.1 that the threshold size for a commercial NET-METERING facility is the "lesser [sic] of 1) one thousand kilowatts (kW) for non-residential use unless otherwise allowed by the Commission and 2) one hundred percent (100%) of the Net-Metering Customer's highest monthly usage in the previous twelve (12) months of use." Scenic Hill Solar states that there is no such restriction in AREDA, other than a provision that for residential net-metering facilities the customer is restricted to the greater of 25 kW or the highest monthly usage in the past twelve months.¹⁸⁶ Scenic Hill Solar asserts that for commercial customers with a fairly steady load, EAL's redline would severely limit the customer's ability to offset consumption: As an example, a customer with a completely steady load of 1 MW would require 8,760 MWh per year, but could only build a 1 MW system that might produce 1,500 MWh per year.

Cost-Benefit Reports and Studies - Given EAL's repeated claims of cost shifting, Scenic Hill Solar puts into the record for the Commission's consideration the reports and many of the underlying studies referenced in its Initial Comments. Scenic Hill attached the ICF 2018 report commissioned by the Department of Energy that reviewed 15 state studies. According to Scenic Hill Solar, of these studies, six were cost-benefit analyses for net-metering, while others were looking at DER values, and appropriate rates for value-of-solar tariffs, using much of the same methodology used to assess net-metering programs. From Scenic Hill Solar's perspective a particularly notable feature of all of these studies is their focus on residential solar. In all of the states represented in these studies, demand-metered customers pay energy rates that are lower than bundled residential rates, so the comparison to benefits would show a net benefit across all studies (except possibly the SAIC study).

For the reasons stated in its Reply Comments, Scenic Hill Solar asks the Commission to maintain 1:1 net metering for demand metered customers in its NMRs, as required by Act 464, and to establish clear provisions in the Rules for demand-metered customers, net-metering penetration, common ownership, grandfathering, REC ownership, and storage provisions. Further, Scenic Hill Solar asks that the Commission establish that utilities be directed to conduct preliminary review of interconnection requests purely on the basis of technical feasibility. And finally, Scenic Hill Solar asks that the Commission find that based on the cost-benefit studies conducted over the past six years across the country that generally show net benefits of net-metering in states with low net-metering penetration, the Commission establish a process for Arkansas utilities to assess their costs and benefits, and establish that given the low net-metering penetration in Arkansas, such studies are not necessary in Arkansas at this time.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

22. Received from: Entergy Arkansas, LLC

Date Received: November 19, 2019

Comment: EAL states that it reached out to various parties informally in an effort to narrow the scope of contested issues that the Commission must resolve. EAL has identified the following areas of potential agreement among the parties:

- the immediate establishment of a 2-channel billing rate structure applied to customers on a rate schedule without a demand component (“non-demand-metered customers”) consistent with the requests of several parties;
- the establishment of a grid charge for customers on rate schedules with a demand component (“demand-metered customers”) to help mitigate the cost-shift that will result due to those customers avoiding fixed infrastructure costs included in the volumetric portion of certain rates;
- grandfathering provisions to be applied for qualifying net-metering customers;
- an approach to demonstrate common ownership for the purpose of meter aggregation;
- sizing restrictions for net-metering facilities;
- establishing a definition of a generation meter; and
- a process for developing transparent interconnection procedures and consumer protections through the Net-Metering Working Group.

Rate Structure for Non-Demand Component Rates - EAL recommends the Commission immediately implement 2-Channel Billing for new net-metering customers on rate schedules without a demand component. Upon implementation each utility would make a compliance filing and provide a calculation of the applicable 2-Channel Billing credit rates. Thereafter, each utility would make an annual filing updating the rate with the utility's current avoided capacity and energy costs. For those net-metering customers that are fully interconnected before the Commission issues this Phase 3 Order, EAL recommends grandfathering for no longer than 10 years under the 1:1 retail rate. As an alternative, EAL states that the Commission could incorporate a more gradual, step-down approach, by applying the 40 percent avoided cost adder, with periodic step downs in that adder.

Rate Structure for Demand Component Rates - EAL urges the Commission to adopt a Grid Charge for net-metering customers of all sizes that receive service under a rate schedule that includes a demand component. The Grid Charge would be a fixed charge approved by the Commission and based on each utility's cost-of-service. Any net-metering customer that is fully interconnected before the issuance of the Commission's Phase 3 Order would be grandfathered for 10 years.

Grandfathering - EAL notes that it previously recommended in Phase 1 of this docket that it could support a reasonable grandfathering period and at that time did not oppose 20 years. EAL explains that the concept of grandfathering is not some automatic right but rather is intended to help ensure that a customer installing a solar facility has a reasonable opportunity to recover a portion of its investment. With that in mind, the grandfathering provision must consider the declining cost of solar facilities that has occurred since Phase 1 of this proceeding. Id. at 12-14.

Common Ownership for Aggregation - For any customer under a non-demand component rate schedule, EAL urges the Commission to continue the current practice of requiring a customer to demonstrate that the same tax ID remains in place for any aggregated account(s). With respect to demand-metered customers, EAL urges the Commission to adopt Staff's recommendation requiring an affidavit, supported by appropriate documentation, to demonstrate common ownership, and that is subject to reasonable and justifiable challenges. To avoid gaming, EAL states that any net-metering facilities under common-ownership must be considered a single project for purposes of Commission review and approval.

Sizing of Net Metering Facilities - EAL argues that it is not reasonable to allow a net-metering facility to offset 100 percent of a customer's requirements in all hours of the year. The Commission should clarify now that such sizing practices cannot continue. For example, depending upon the specific characteristics of a customer's load profile, a net-metering facility sized to produce 100 percent of the customer's annual energy consumption could result in net exports in excess of 60 – 70 percent of total solar production. To prevent oversizing facilities under a demand component rate schedule, EAL urges the Commission to adopt a maximum size a customer is authorized to construct to remain eligible for net-metering. EAL recommends that

the maximum size be set equal to the capacity needed to generate no more than 25% net exports based on the customer's annual solar production compared to annual usage. For customers on a non-demand component rate schedule, EAL continues to support the current rule of using a customer's prior 12 months energy usage as the maximum size for a net-metering facility.

Defining Generation Meter - EAL continues to argue that "generation meter" as used in the currently-effective Net-Metering Rules, means the generation meter must be connected to the customer's load. EAL argues that there is no basis for revising the currently effective rule, because Act 464 made no provision authorizing remotely-located generation for purposes of net-metering. EAL states that maintaining the current rule avoids potential claims that the net-metering customer is participating in retail wheeling of energy.

Matters to be Addressed by the Net-Metering Working Group - EAL agrees with Staff's recommendation that the Commission direct the NMWG to develop interconnection rules using the IREC uniform interconnection rules as a template. EAL agrees that the NMWG could also be directed to develop a Consumer Guide, mandatory standards for developers, as well as standard templates for Leases and Power Purchase Agreements/Service Agreements. EAL cautions that the IREC uniform rules create a number of requirements for the utilities to implement for purposes of interconnecting customers, the costs of which may be substantial as well as requiring significant time to develop and implement. Prior to implementation of such model interconnection rules, the costs and benefits of those interconnection policies should be evaluated by the Commission in a more thorough review of the implications of such a decision, including allocation of the costs to comply with those interconnection provisions.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

23. Received from: Oklahoma Gas and Electric Company

Date Received: November 19, 2019

Comment: Cost-Shifting - OG&E provides excerpts of articles from several trade publications that support the existence of cost-shifting under the full retail net-metering rate.

Solar Penetration Policy - OG&E is supportive of the development of solar in Arkansas but encourages the Commission to use a reasoned approach that takes into account (1) customer impacts for both non- and net-metering participants, (2) an economical and market-based support for solar in Arkansas, and (3) sustainable long-term solar investment policies. OG&E argues that the current 1:1 rate should not be tied to a certain level of solar penetration.

Rate Structure - OG&E disagrees with Staff's proposal that utilities only be allowed to change their net-metering rate structure through a general rate case. OG&E argues that Staff's proposal goes against the intent of Act 464 and is biased against those utilities that have chosen FRPs.

Meter Aggregation - OG&E supports Staff's recommendation to require a standard form and signed affidavit to confirm common ownership of meters that are aggregated. However, OG&E does not agree that utilities should be prohibited from requesting a tax ID number as part of a request for service. Common tax ID numbers support an assertion that points of service are under common ownership. If points of service do not have common tax ID numbers, then additional documentation would be required to establish that said points of service are under common ownership and therefore qualify for net metering aggregation.

Grandfathering - OG&E continues to argue that Act 464 gives the Commission authority to approve grandfathering on a case-by-case basis.

Consumer Protections - OG&E supports the AG's recommendation that net-metering providers be required to register with the Commission prior to installing net-metering facilities in the State and be subject to program suspension or expulsion due to non-compliance with a Commission-approved Code of Conduct. However, OG&E does not agree that utilities should be solely responsible for policing third-party providers. Utilities are not in a position to be the monitors and enforcers of any Code of Conduct that may be adopted. Enforcement of any such Code is more appropriately placed with the Commission or the AG. OG&E also argues that the IREC Model needs to be more thoroughly vetted prior to any potential adoption as a consumer protection guide. OG&E recommends that this issue be taken up in Docket No. 16-028-U where the issue is already being addressed.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

24. Received from: Southwestern Electric Power Company

Date Received: November 19, 2019

Comment: Rate Structure - SWEPCO continues to argue that the existing 1:1 retail rate structure is not in the public interest. SWEPCO believes the Commission should address the rate structure in this proceeding and not wait until the utility files its next general rate case to alter the rate structure. SWEPCO states that it must serve all its customers at just and reasonable rates. SWEPCO believes that purchasing power from net-metering facilities at retail rates without billing for fixed costs that are recovered through volumetric rates, creates a subsidy from non-participating customers to net-metered customers – not just and reasonable rates.

Grid Charge - SWEPCO believes that all net-metering customers that have a demand on the distribution system, whether during the system peak or not, should pay for distribution system costs. SWEPCO argues that some parties have a misunderstanding of how distribution plant costs are allocated. SWEPCO explains that distribution system is not sized to handle the system peak but instead is sized to handle the diversified peak loads of customers in each class for localized areas of the distribution system. Distribution systems must be capable of meeting the

sum of each class' maximum demand, irrespective of system peak. This means that net-metering customers that use the system at any time also contribute to the class' maximum diversified demand, no matter when each customer's peak demand occurs, and therefore, contribute to the class' allocation of distribution system costs.

Non-Demand-Component Net-Metering Customers - SWEPCO continues to support the 2-Channel approach and requests that the Commission enact changes to create a reasonable and sustainable net-metering rate structure as soon as possible. SWEPCO also supports the recommendation from other parties that the Commission consider rules that would allow for utility-specific rate structures. SWEPCO argues that Staff is incorrect in stating that changing to 2-Channel Billing would require updating COS information and other utility-specific information.

Demand-Component Net-Metering Customers - SWEPCO again explains how its General Service tariff is inadequately structured to recover its fixed costs through the demand charge. Therefore, SWEPCO continues to support the 2-Channel Billing approach to net-metering customers on the General Service tariff as well as any current demand tariff under which SWEPCO is not fully recovering its cost to serve. Alternatively, SWEPCO supports a fee or charge be applied to those net-metering customers. SWEPCO states that the additional fee can be charged pursuant to the net-metering tariff and would not require additional tariff or rate changes. In other words, SWEPCO would not need to file a general rate case to effectuate the change.

Quantifiable Benefits - SWEPCO states that parties are not in agreement as to whether Act 464 requires a net-metering customer to actually provide evidence of quantifiable benefits. Therefore, SWEPCO requests that the Commission clarify this provision. SWEPCO also supports the AG's recommendation that the Commission consider establishing a standard formula to calculate quantifiable benefits to eliminate ambiguity on what can and cannot be included in net-metering rates.

Reporting Requirements - Staff recommends the adoption of additional annual requirements for net-metering facilities in Docket No. 06-105-U for the purpose of assessing renewable energy penetration on a utility-by-utility basis. SWEPCO explains that this could prove problematic for utilities to provide some of the information requested, such as the total production of a net-metering facility in kWh. Total production would have to be estimated as SWEPCO currently does not have an accurate measurement of the production the customer uses behind the meter. Additionally, providing the peak demand by customer on a monthly basis could also be difficult. Staff further requests solar PV installation information by rate class, but does not specify what type of information.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

25. Received from: Arkansas Electric Cooperative Corp.

Date Received: November 19, 2019

Comment: Rate Structure - AECC argues that a net-metering customer's generation is worth what every other increment of generation is worth in the wholesale energy markets, i.e., the avoided cost. Absent proof that it is more valuable than other generation available to the utility, the price paid for a net-metering customer's generation should not exceed the wholesale avoided cost. For this reason, AECC argues that it is unnecessary to require a general rate case or new cost of service study before approving a new rate structure for individual utilities. AECC believes the Commission has the authority to set new rates and rate structures for each class of net-metering customers no matter whether the customer is a demand component rate or non-demand component rate.

Solar Penetration - AECC argues that AREDA does not contemplate a minimum solar penetration level. AECC argues that by leaving the current net-metering rate structure in place until a certain penetration level is met is equivalent to imposing a renewable portfolio standard. AECC points out that even with the existence of federal tax credits that subsidize solar, added to an overly-compensatory retail rate in Arkansas for nearly two decades, Arkansas net metering penetration levels remain low because the cost of electricity in Arkansas is also low. AECC argues that perpetuating incentives to increase penetration at some unstated level or time in the future, without regard to the current economic consequences of that price shift, is against the public interest.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

26. Received from: Carroll Electric Cooperative Corp.

Date Received: November 19, 2019

Comment: Defining Terms in the NMRs - Carroll urges the Commission to define precisely the terms "net energy facility" and "net energy customer" from the language of the Act in the NMRs, with the inclusion by the Commission of specific examples that indicate what does and does not match the definition in the Act. Doing so will resolve much of the confusion and concern regarding both aggregation and gaming. As an example, Carroll points to the language in Ark. Code Ann. §23-18-604 ©(2)(A)(ii), which if taken literally, this means "more than two" qualifying government/tax exempt entities do not have the discretion to apply net-metering credits to a bill for another meter. Carroll Surreply at 1-3.

Rate Structure and Solar Penetration - Carroll continues to support a Floor (avoided cost) and Ceiling (1:1 retail rate) rate structure. The Commission should consider each utility's cost/benefit analysis of implementing 2-channel billing, utility-specific avoided cost as well as

retail cost, and special rate considerations. Carroll urges the Commission not to delay policy action until solar capacity becomes a problem, as has already happened in California, Nevada, Arizona, and Hawaii.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

27. Received from: Arkansas Electric Energy Consumers

Date Received: November 19, 2019

Comment: Cost Shifting - AEEC continues to believe that the current 1:1 net-metering rate structure shifts costs to non-participating customers. AEEC argues that the cost shifting or subsidies will begin to emerge each time a utility files a new formula rate plan demonstrating a revenue shortfall that then has to be redistributed across all rate classes. AEEC warns that additional cost shifting could likely occur if certain customers in the large industrial rate classes begin to migrate to smaller commercial rate classes where they can obtain service using a favorable net metering rate.

Rate Structure - AEEC urges the Commission to adopt new rate structures immediately to address the subsidy before it expands. For non-demand component rate classes, AEEC does not recommend a specific new rate structure, but states that the new rate structure should address the subsidy by reducing the amount of the credit for net excess generation to a more reasonable level. For rate classes with a demand component, AEEC agrees with OG&E that the rate tariffs for those rate classes should be redesigned to recover more of the fixed costs through the demand component. AEEC worries though that adopting this policy would require waiting until a utility files a general rate case which may not happen for several years.

Grandfathering - AEEC urges the Commission to choose not to grandfather additional net-metering customers, or at least set the duration for grandfathering at a short period of time. This policy choice will prevent the continuation of subsidies and serves the public interest.

RECs and Customer Protections - AEEC agrees that customers should have the freedom to transfer renewable energy credits to another party in exchange for compensation or other things of value. AEEC also supports the recommendations made by the Staff and the AG that customer education measures and other customer protections should be developed.

Reporting Requirements - AEEC agrees with Staff's recommendation to establish certain reporting requirements regarding net metering penetration levels no matter which rate structure the Commission adopts.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

28. Received from: Arkansas Advanced Energy Association

Date Received: November 19, 2019

Comment: AAEA believes that the following contested issues need not be resolved in this proceeding in order to implement Act 464:

- Consumer protection
- Fees for interconnection or preliminary site review
- Rules regarding retention of renewable energy credits
- Rules regarding “oversized” net-metering facilities
- Changes to net-metering for demand-billed customers other than updating the rules to reflect revised statutory language.

Demand Billed Customers - AAEA believes Act 464 requires the Commission to retain the 1:1 retail net-metering rate for demand-billed customers. AAEA acknowledges that some utilities have provided evidence showing the amount of “fixed costs” that are embedded in volumetric rates even under demand-billed tariffs. AAEA argues such evidence is simply not relevant to the decisions the Commission must make in this case, given the clear statutory mandate regarding demand-billed net metering customers. AAEA also responds to EAL’s recommendation to continue the 1:1 full retail credit for demand-billed customers but also adopt a grid charge to recover the fixed costs. AAEA argues that it is also inconsistent with AREDA to impose a grid charge to recover fixed costs. AAEA points out that Ark. Code Ann. § 23-18-604(b)(4) states that the Commission may authorize an electric utility to assess a net-metering customer a greater fee or charge of any type, if the electric utility's direct costs of interconnection and administration of net metering outweigh the distribution system, environmental, and public policy benefits of allocating the costs among the electric utility's entire customer base. AAEA argues that EAL has not provided evidence to establish that a grid charge is justified.

Net Metering for Residential Customers - AAEA responds to EAL’s belief that the benefits calculated by Crossborder Energy are unreasonable because they exceed the cost of utility-scale solar generation. In other words, EAL asks why it should be forced to pay the higher benefit cost for net-metered energy when it can buy utility-scale solar at a lower cost. AAEA argues that EAL’s comparison is not apt, because utility-scale solar does not avoid line losses or transmission and distribution investments, nor does it support resilience or consumer choice or economic development to the same degree as distributed generation. AAEA urges the Commission to consider a long-term view of avoided costs, rather than a static, embedded view of those costs. Adopting such an approach will reduce costs over the long run for all customers, and best promote the purposes of AREDA. AAEA argues that even if the Commission rejects the

relevance of long-term costs and benefits, Act 464 allowance for reasonable allocations of and increases in costs clearly permits de minimis cost shifting.

Grandfathering - AAEA notes that the Commission has not required case-by-case adjudications of grandfathering previously, and should not interpret Act 464 to require such an approach going forward.

Consumer Protection - AAEA states that consumer protection measures are not among the issues that the Commission needs to resolve in adopting the next round of Net-Metering Rules. AAEA continues to support the AG's recommendation to form a working group to develop any needed consumer protection measures and determine the appropriate means of implementing and enforcing those standards. AAEA agrees that legislative action will likely be needed for a robust consumer protection framework, but a Commission-initiated working group would be valuable in identifying and characterizing consumer protection issues.

Gaming - AAEA agrees with Staff's recommendation to require the net-metering customer to use a standard form and sign an affidavit confirming common ownership of aggregated meters.

Defining Net Metering Facilities and Customers - AAEA disagrees with some parties that argue that remotely located net-metering facilities should not be eligible for net-metering because the facilities are not behind a meter that is attached to the load. AAEA also disagrees with EAL's recommendation to limit the size of a facility to prevent what EAL calls "oversizing."

Leasing Facilities and Service Contracts - AAEA recommends the Commission develop a standard form and designate a staff member to review such agreements and attempt to resolve any disputes with the utility regarding eligibility. The process should have the objectives of allowing consumers seeking to utilize lease or service contract arrangements to confirm early in the process that their system will be eligible for net metering, while not requiring those customers to jump through countless hoops or initiate a Commission proceeding in order to get approval for net metering.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

29. Received from: Scenic Hill Solar

Date Received: November 19, 2019

Comment: Cost Shifting - Scenic Hill Solar disagrees with EAL's claims that demand-metered net-metering customers are shifting costs to other customers. Scenic Hill Solar agrees with AAEA that the value of distributed solar appears to be above residential rates.

Solar Penetration - Scenic Hill Solar disagrees with EAL's assertion that Arkansas is not a low solar penetration state. Scenic Hill Solar states that utilities will likely continue to cite triple digit

growth rates in net metered generation. Scenic Hill Solar argues that the utilities should also show analysis of when net metering might provide more than one percent of utility retail sales.

1:1 Rate for Demand Metered Customers - Scenic Hill Solar argues that the Legislature, through Act 464, has directed the Commission to establish just and reasonable rates, and that it must have 1:1 Net-Metering for demand-metered customers. Scenic Hill Solar takes that to be a legislative presumption that 1:1 net-metering does not entail a cost shift, and is fully compatible with just and reasonable rates and appropriate net metering.

Demand Metered Customer Rate Structures - Scenic Hill Solar explains that the rate tariff design is done in a heavily contested general rate case, therefore, the amount collected in the demand component may not recover all the fixed costs because there were opposing positions in the rate case. Scenic Hill Solar suggest that because this allocation of costs is exhaustively decided in rate cases, the Commission should accept that allocation as settled. The Commission should assume that energy rates for demand-metered customers, for the purpose of net metering, reasonably recover the energy and related production costs to serve those customers, and do not recover fixed costs to serve those customers.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

30. Received from: William Ball

Date Received: November 19, 2019

Comment: Mr. Ball filed a statement that he did not wish to provide Surreply Comments.

Agency Response: The Commission adopted the proposed rules with some additional changes and amendments.

Comments Received from the Public:

1. Received from: Cheryl Snyder, MD

Date Received: July 22, 2019

Comment: Dr. Snyder asked that the Commission please continue the one for one credits for residential customers feeding into local power grids, as continued fairness to residential customers obtaining solar grids on their homes.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

2. Received from: Cindy English

Date Received: November 15, 2019

Comment: Ms. English wrote that she felt strongly that the net metering policy should not be changed to benefit the electric companies, and that use of alternative power should be encouraged. She said that cutting compensation paid to solar customers would be wrong.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

3. Received from: Emily Roberts

Date Received: November 22, 2019

Comment: Ms. Roberts wrote that Arkansas should protect the incentives offered to citizens who opt to use this clean, abundant, power source. She suggested asked the utility companies to discover ways to adapt and embrace renewable energy.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

4. Received from: Kathleen Beattie

Date Received: November 26, 2019

Comment: Ms. Beattie wrote that she was in favor of continuing the 1:1 reimbursement for private citizens, rather than have a two tiered reimbursement which would discourage solar energy expansion.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

5. Received from: Sandy Coffey

Date Received: December 2, 2019

Comment: Ms. Coffee wrote urging the Commission not to reduce the net metering amount utilities will pay to customers for using solar excess power.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

6. Received from: Shawn Hartley

Date Received: December 3, 2019

Comment: Mr. Hartley wrote that he is a homeowner who plans to install solar on his home. He asked the Commission to act in the best interest of Arkansans, and maintain the current rate of crediting solar producers for the full amount produced.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

7. Received from: Bradley Martin

Date Received: December 3, 2019

Comment: Mr. Martin wrote that he believes there is a greater good in incentivizing customers toward cleaner solar powers. He said he has considered installing solar, but without net metering, he would not install solar.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

8. Received from: Tom Machen

Date Received: December 3, 2019

Comment: Mr. Machen wrote asking to keep net metering laws as they are, so new residents and industry know that our state embraces new technology and promotes ways to save money.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

9. Received from: Zsolt F Sandor

Date Received: December 3, 2019

Comment: Mr. Sandor wrote to please support the solar panel incentive that is essential for the residential community.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for

customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

10. Received from: Michael C Armstrong

Date Received: December 4, 2019

Comment: Mr. Armstrong asked the Commission to please reject the proposal from utility companies which he says will negatively impact residential consumers by lowers net metering rates. He said that lowering costs for consumers should be the main focus.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

11. Received from: Shawn Hartley

Date Received: December 4, 2019

Comment: Mr. Hartley said that we need to deregulate the current rate structure to allow Arkansas to become a leader in efficient power production instead of relying on other states.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

12. Received from: Brian Gerdwagen

Date Received: December 4, 2019

Comment: Mr. Gerdwagen wrote that net metering is a benefit for consumers who want to produce green power at home. He cautioned that eliminating net metering does nothing to improve the public good, and would only increase the likelihood that solar panels will not be installed thereby relying on power companies and increasing their profits.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for

customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

13. Received from: Jennifer Gilley

Date Received: December 4, 2019

Comment: Ms. Gilley wrote that the public should be able to purchase solar at a discounted rate until the industry is more established. She said that Arkansas needs to be on the forefront of green jobs and green opportunities like solar energy.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

14. Received from: Brett Renfro

Date Received: December 4, 2019

Comment: Mr. Renfro wrote that as a poultry producer in southwest Arkansas, he has been researching solar power to help with one of the largest input costs he has. He is interested in solar power to help with his bottom line, and it would also serve as a backup system in times of power outages. He urges the Commission to not make any decisions which would hinder solar as an alternative energy source.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

15. Received from: Donna Drury

Date Received: December 4, 2019

Comment: Ms. Drury asked the Commission to please keep the one to one ratio for power generated by individuals or other entities.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

16. Received from: Nora Simmons

Date Received: December 4, 2019

Comment: Ms. Simmons wrote that solar power should not be unfairly metered for consumers based on the fact that the company will not make as much money on the service. She urged the Commission to keep the fair one to one net metering.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

17. Received from: Mark E Mulkerin

Date Received: December 4, 2019

Comment: Mr. Mulkerin said he would like fairness in how individuals and communities bear the costs of shared power generation. He wrote that utilities could add a separate line item to bills that identifies the cost of grid maintenance which should be assessed to solar panel owners. But he also pointed out the positive effects of carbon free energy being added to the grid and that solar customers provide excess energy to the grid. He again emphasized fairness so that households can fairly and realistically evaluate if rooftop panels are appropriate for them.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

18. Received from: Judy White

Date Received: December 4, 2019

Comment: Ms. White wrote that she's extremely disappointed to hear that a policy change could make solar less affordable to her and her husband, both of whom are retirees. She asked the Commission please do not change the net metering policy to put more expense on homeowners.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

19. Received from: David Robinson

Date Received: December 4, 2019

Comment: Mr. Robinson wrote to ask that the Commission continue supporting solar with full retail net metering as it exists. He hoped the Commission would consider continuing the existing policies and any policies which would promote the use of rooftop solar.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

20. Received from: Richard Smith

Date Received: December 4, 2019

Comment: Mr. Smith wrote that solar is going to help save him money on his farm, and it will help his utility save money through demand savings. He said that any change to the net metering rules will hurt both him and his utility.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

21. Received from: Jerry Manning

Date Received: December 4, 2019

Comment: Mr. Manning wrote that he and his wife invested in solar panels three years ago. He expects the panels will pay for themselves through reduced costs in 6-7 years, but only if the Commission leaves net metering in place as it is.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

22. Received from: Kevin Christian

Date Received: December 4, 2019

Comment: Mr. Christian wrote to encourage the Commission to keep full retail net metering intact. He asked that the Commission please work to keep and implement policies which will encourage diversification of our energy resources, and that would not place undue burdens and penalties on people who want to install solar.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

23. Received from: Karen White

Date Received: December 4, 2019

Comment: Ms. White wrote that she supports keeping the net metering program intact. She is a solar owner, and she feels that eliminating or reducing the benefit of net metering to consumers is a clear indication that utility profits are prioritized over consumers and the environment.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

24. Received from: Brittany Wiard

Date Received: December 4, 2019

Comment: Ms. Wiard wrote that she supports keeping full retail net metering intact, as reducing compensation for rooftop solar would be bad for Arkansas.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

25. Received from: Eleni Sallinger

Date Received: December 4, 2019

Comment: Ms. Sallinger wrote that she supports keeping full retail net metering intact. She said a 1:1 Compensation for solar energy provided to the grid by private citizens benefits all Arkansans.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

26. Received from: Marilyn Rumph

Date Received: December 4, 2019

Comment: Ms. Rumph supports keeping full retail net metering, as it seems wrong to punish consumers for clean energy upgrades to their personal property.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

27. Received from: Steven Smith

Date Received: December 5, 2019

Comment: Mr. Smith wrote that he is a retired engineer, with a degree from MIT, who spent his career building nuclear submarines, water treatment plants, buildings, and worked at Arkansas' nuclear plant. He stated that Arkansas should not take any action which would eliminate the one to one energy exchange between renewable energy capable customers and the utility. He said that leaving the current requirements will improve future cost effectiveness of purchasing renewable energy systems. He believes that all customers of a utility benefit from current net metering rules and as more renewable energy capable customers are added to the system, the utilities operation costs will decrease by reduction in the peaking power needs of the utility.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

28. Received from: Jennifer Cox

Date Received: December 5, 2019

Comment: Ms. Cox wrote that she supports keeping full retail net metering, and that reducing compensation for rooftop solar would be bad for Arkansas.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

29. Received from: Margaret Young

Date Received: December 5, 2019

Comment: Ms. Young wrote that as a future renewable energy user, she supports full retail net metering. She said that the current rate is one of the most promising reasons solar panel development and use can thrive in Arkansas.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

30. Received from: Paula Linder

Date Received: December 5, 2019

Comment: Ms. Linder wrote that people should not be penalized for doing the right thing.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

31. Received from: Jensyn Hallett

Date Received: December 5, 2019

Comment: Jensyn wrote that renewable sources, such as solar, are the way of the future, and Arkansas cannot afford to take steps which interfere with this growing industry in our state. This is not the time to disrupt compensation for those who have made an effort to use clean energy.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

32. Received from: Robin Rumph

Date Received: December 5, 2019

Comment: Ms. Rumph stated that net metering makes sense, and that Arkansas residents should not be punished by getting rid of it, but should be celebrated for being early adapters and energy producers.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

33. Received from: Barry Haas

Date Received: December 5, 2019

Comment: Mr. Haas and his wife have been net metering for four years using their solar panels, which are located at Bearskin Solar Center in Scott, Arkansas. On average, their solar panels produce more energy than the Haas' use at home. Mr. Haas mentions that as a current customer, he and his wife should be grandfathered in since they made their investment under existing regulations regarding the reimbursement rate. He also mentioned the issue of fairness, and asked that the Commission be careful in its considerations of any changes to the existing reimbursement rate.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

34. Received from: William J Forbess

Date Received: December 5, 2019

Comment: Mr. Forbess stated that he wanted to keep net metering intact for jobs for solar installation, manufacturing, and education. He also mentioned consumer savings, reduced reliance on the grid during peak, environmental protection from reduced carbon, and innovation for growth.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The

Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

35. Received from: Tom Jacobs

Date Received: December 5, 2019

Comment: Mr. Jacobs wrote that he is a farmer in Arkansas County, and he has a solar array. He asks that the Commission not impair people's hopes of a better future, and leave net metering as it is.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

36. Received from: Tami Hornbeck

Date Received: December 5, 2019

Comment: Ms. Hornbeck wrote that her family installed a solar array in 2018. She voiced multiple concerns with Entergy's "energy charge" and billing process, as well as their customer service regarding her net metering. She said all she is asking for is fair treatment and to not be penalized for trying to produce her own energy and contribute to the wellbeing of her family, business, and community.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

37. Received from: Dina and Jeff Nash

Date Received: December 5, 2019

Comment: Dina and Jeff are net metering customers with a solar system on their roof. Dina writes that she and her husband like producing clean energy for their neighbors, and asks that the Commission please leave their net metering rates the way they are, and to keep the 1:1 reimbursement provision for at least 20 years.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

38. Received from: David Luneau

Date Received: February 3, 2020

Comment: Mr. Luneau writes that he installed a 5.9kW photovoltaic grid-tied solar system in 2018, and that reducing one to one net metering would be a step in the wrong direction by discouraging solar investments. He states that the Commission will maintain a forward thinking vision and keep the current rules in tact.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

39. Received from: Adam Schaffer

Date Received: February 18, 2020

Comment: Mr. Schaffer wrote that he supports keeping full retail net metering intact, and reducing compensation would be bad for Arkansas.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

40. Received from: Paul Howard Burns

Date Received: February 18, 2020

Comment: Mr. Burns writes that he supports keeping full retail net metering intact, and reducing compensation would be bad. He says net metering reduces carbon emissions and saves ratepayers money, as well as strengthening our grid and creating local jobs.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

41. Received from: Katie Hollingshead

Date Received: February 18, 2020

Comment: Ms. Hollingshead wrote that she supports keeping full retail net metering. She says net metering reduces carbon emissions and saves ratepayers money, as well as strengthening our grid and creating local jobs.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

42. Received from: Anthony Callahan-Barile

Date Received: February 19, 2020

Comment: Anthony wrote that he felt the Commission needs to keep the current reimbursement system for residential owners who have solar panels. It allows for more interest in developing renewable energy at a local level, and levels the playing field for small consumers.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

43. Received from: Joseph Donahue

Date Received: February 19, 2020

Comment: Mr. Donahue wrote asking the Commission to preserve the 1:1 retail credit for any unused power sent back to the local utility. Distributed generation is a customer-financed investment that benefits the utility and all ratepayers through long term avoided costs. He stated that he is eager to see the Commission not impose any new barriers on additional solar development.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

44. Received from: Heather R. Nelson

Date Received: February 20, 2020

Comment: Ms. Nelson wrote that she support solar and all renewable energy, and wants to see Arkansas adopt fair yet aggressive renewable energy policies and laws. She additionally states that the best economic tool Arkansas has is solar, and she hopes the Commission will embrace that.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for

customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

45. Received from: Larry S Price

Date Received: March 3, 2020

Comment: Mr. Price wrote that net metering encourages solar investment, which expands our renewable contribution to the electric grid. He goes on to say that Arkansas does little to encourage low carbon solutions in other areas, and so the Commission needs to continue net metering.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

46. Received from: Chris Ladner, Matt Bell, and Michael Parker – Entegrity Energy Partners

Date Received: March 10, 2020

Comment: This comment states that they are the largest energy services company in the state, and thanks to the previous efforts of the Commission, they have been able to leverage energy efficiency rebates and net metering to help public clients save millions on their energy spending. They ask that any changes affecting net metering should be based on cost of service. Lost revenues should not be considered when determining updates to these regulations. The comment also states that only consider solar energy that uses the grid, not solar energy which is produced and consumed on a customer's site, as it is not fair to base a grid charge off of energy which does not leave its generation site. The comment also asks the Commission to use common sense grandfathering, to allow for a grace period to adopt new policies, enable current projects to be completed, and allow for private sector solar investments to be recouped. Lastly, the comment asks the Commission to maintain offsite net metering and meter aggregation.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The

Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

47. Received from: James McMath

Date Received: March 10, 2020

Comment: Mr. McMath writes that net metering at a 1 to 1 exchange is not only fair but necessary to move Arkansas forward with sustainable development of renewable energy and reduced carbon emissions. Returning power to the local grid during peak energy consumption is a benefit to the utility industry, not a loss. He writes that in all fairness, the utility should pay 2 to 1 to residential net metering customers.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

48. Received from: Randy Zook on behalf of Arkansas State Chamber of Commerce and Associated Industries of Arkansas

Date Received: July 24, 2020

Comment: Mr. Zook writes in support of low electric rates in Arkansas, and cautions that the Commission's recent order addressing rates for customers with private solar facilities perpetuates a rate structure which will drive up rates in Arkansas and have a deleterious effect on economic development. Mr. Zook advocates that a grid charge may potentially help protect non net metering customers from subsidizing customers with private solar systems. Mr. Zook voices concern for private solar generators built in locations separate from where the customer uses the electricity, as the customer still uses the poles, wires, and power plants of the utility. The wholesale market price for electricity is approximately one third that of the retail price, so a 1:1 retail credit requires the utility to pay three times more for electricity generated by a private solar facility than the utility would pay from other generators in the market. Finally, Mr. Zook urged the Commission to seriously reconsider, reevaluate, and change its decision in this proceeding.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The

Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

Comments Received During February 19, 2020, Hearing:

1. Received from: David Luneau

Comment: I believe that the need for clean and renewable energy is the most important issue we have when making a decision about net metering. I installed a 5.9 kW photovoltaic grid-tied system in September 2018 at my home in North Little Rock. The majority, about 93 percent, of my electricity are met using renewable nonpolluting resources. Power companies argue that small power generators such as my system are not paying their fair share. But I would argue that my system and others like it are serving the greater good by producing renewable energy and thereby reducing consumption of fossil fuels and the generation of nuclear waste. Consequently, we have cleaner air and water, we reduce greenhouse gases which is good for all of us. The price we pay the electric utilities for energy does not include the cost of our planetary and environmental long-term health. A reduction in the benefits of net metering, I think, would have the chilling effect on new installations of renewable energy in Arkansas. Let's keep this simple and incentivize the public, corporations, and utilities as well to move forward toward a sustainable energy future by leaving Arkansas' one-to-one net metering rules intact. Thank you.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures.

2. Received From: Josh Davenport with Seal Solar

Comment: I will be brief, focusing on grandfathering and offsite generation. Many of our clients have moved forward with solar because of Act 464. They have secured financing, applied for grants, submitted preliminary interconnection paperwork, and purchased materials in order to safe harbor. The time frame of these projects is out of our clients' control. They are waiting for feasibility studies, facility studies, utility infrastructure cost, or in some cases, the utility has run out of net meters, all of which are out of the clients' control. We ask that the Commission allow those clients that have decided to go solar between the enactment of Act 464 and the upcoming ruling to be grandfathered under the current rate and fee structure of net metering, and not to be affected by the unforeseen changes that the upcoming rule could bring. Offsite generation: We ask that the Commission be mindful when considering a grid charge or other fees for offsite generation. Many ratepayers do not have the space for solar. Take this multistory building. Parking canopies are expensive, leaving the roof as the best solar candidate. After shade setbacks and fire code walkways, I doubt there's enough room on this roof to cover 30% of the building's consumption. A grid charge of any sort could

limit the Commission or others alike from covering 100% of their needs with solar. The lack of virtual net metering and competitive community solar confines these clients enough. Please do not apply another barrier.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures.

3. **Received From:** Pete Moery

Comment: Last year our farming operation decided to build a \$1.5 million solar array to help offset our energy cost. Prior to going solar, both our contractor and I asked Mr. Jimmy Cook of Woodruff Electric some general questions. We asked if a farmer goes solar, would we lose any irrigation credits or have to do anything differently from what they've always done with our pumps. Mr. Cook responded, No, I don't know why they would have anything to do different from what they've always done because of solar. Mr. Cook advised that he would no longer answer any -- or have any communications with our current contractor. This made it difficult. Mr. Cook and Woodruff Co-op certainly discouraged us from choosing solar power unless we wish to hire a private contractor owned by the Co-op. Nevertheless, Mr. Cook indicated that going solar would not change how we'd previously done business with, and been billed by Woodruff Electric. After a final review of solar Act 464 we were confident to begin. After 68 days of paying for the \$4,000 feasibility study, we learned that it would cost an additional \$97,000 to upgrade the site. We would be purchasing a \$14,000 transformer and an \$8,000 meter. The total seemed high, but we paid it anyway to get the project started. The system was designed to create 1.5 million kW of power annually at the one-to-one ratio that would save us around 120,000 per year. Sadly, even though we were advised that going solar would not change how we had operated with Woodruff Electric in the past, it seemed the rules were changed once our array being operational. First, Mr. Cook advised that we would no longer be able to turn our pumps off and on in the offseason. He advised if we had not gone solar, we could still turn our pumps on and off, like we have done over the past 30 years. The Public Service Commission rate tariff does not seem to indicate such a penalty for going solar. Leaving our pumps on 12 months a year will cost our operation an extra \$35,000 annually, even though no electricity will be drawn during the off season. After Mr. Cook shared this, we chose not to sign an aggregation form required by Woodruff. Mr. Cook was adamant that we should sign the form. We declined. Second, Woodruff Electric proceeded to turn on all of our pumps on February the 3rd, 2020 without our approval. Finally, we received a shutoff notice for the meter on our solar site on February 5th, 2020 that was due February the 11th, 2020. The notice represents a new monthly bill for the meter we purchased, the amount will be \$750 per month plus taxes and fees. Rates with this minimum would include rates 5, 7, 8 or 14, each of which defined by the demands of over 20,000 kW or usage over 15,000 kW per month. A solar plant cannot possibly draw such demand power or come close. Solar

plants create power, they don't demand power. Before this project we carefully reviewed every rate tariff to confirm net metering was applicable. We also had conversation with Mr. Cook to confirm our understanding that going solar could not -- would not change anything, because it seemed we will be penalized about \$45,000 per year for going solar. We request that we not be penalized for going solar and still be allowed to turn our pumps on and off according to the season. We request that solar generation meter billing adhere to the rate schedule number one according to the defined demand usage and applicability for net metering.

Agency Response: The Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures.

4. **Received From:** Tim Covington

Comment: My family owns 3,300 acres in Poinsett County. Once I learned of the Act 464 and the one-to-one credit for power created, I chose to build a solar array. Finally my array was a bit over 800 pounds and was turned on last September. In January 2020, I received the first indication of credits on my energy bill. The bill seemed to be a little bit off compared to what the produce by—so far produced 100,000 kW according to Entergy's meter that was out on our inverters and our monitoring system. Unfortunately, Entergy indicates that I've only been credited for 16,000 kW of power. We've called Entergy and requested further review. We offered to take picture of meters and send to Entergy with no luck. We asked to speak to any and every supervisor to resolve this. We were told all of the supervisors are out for a few weeks. We requested to be contacted before the Entergy rep comes to check the meter, but were told by Entergy they are not required to contact you before they come out. I'm eager to work with Entergy and obviously want to get the billing issue resolved because it would be to my advantage, but it's very difficult when I cannot speak to any supervisors or meet any service reps on site. I'd ask the Commission to consider these roadblocks in reviewing any potential changes to net metering usage and rules.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted edits to Rule 3.03 Requirements for Preliminary Interconnection Site Review Request, including a required response time from the electric utility of no more than 90 days.

5. **Received From:** Lauren Waldrip, Director for the Arkansas Rice Federation

Comment: At the time of my birth, the world's population was just around 5 billion people and now, not even 30 years later today, the world's population has increased by over 50 percent. So what does this all mean? Farmers will have to provide more food with fewer resources and agencies such as USDA, EPA, will continue to encourage farmers to be good stewards of the earth. And I like to think that our state will do the same. The solar act of 464 is in place to help farmers do just that. And so, with power created by farmers' solar operation, he can -- he or she can offset their usage. And more importantly, the creation of that power actually lessens how much power must be created

by our traditional fossil fuel power plants. My family farm is also under contract in addition to some of my rice growers. Our farm is under contract to build a large solar array this year to help us be better financially and environmentally poised to provide more food for this growing population. Nevertheless, the utility says that if we go solar, we're asking non-solar customers to subsidize our environmental and financial benefits. And the utility companies are going to raise the rates on non-solar customers because others want solar. Thankfully, Mark Cayce of the Electrical Co-operative has proven that -- that peak power to be purchased by a utility is more expensive than crediting a one-to-one ratio to solar array owners. He has found that more solar actually lowers utility expenses for all of their customers. So in sum, if more farmers and industries go solar, the utility actually -- are actually required to purchase less peak power. I'm not a physicist, but a solar farm produces the most power when the grid needs the most peak power, in the heat days of summer. This is when the utilities are tasked with providing the highest level of power to its customers. They're turning on air-conditioners. They're turning on rice well pumps. Manufacturing is often quite busy in the summer. I just don't understand how private entities creating solar power when it is most needed by the grid could cause anyone to pay more in utilities. And so I'll quote Mr. Cayce, and he says that he, "can announce that after their most recent rate study on October 17th of last year, we're going to be seeing a 4 1/2 percent rate decrease at the Electric Co-operative." So every day I work to encourage farmers to adopt new technology that ultimately help increase their sustainability of our natural resources. And here we have: One, a law to allow for net metering; two, federal incentives and tax credits to encourage adoption; and three, farmers who are willing to do just that and invest in the future of their operations, the future of our industry, responsible stewardship of our resources, and yet it can't come to fruition. So I think at the end of the day, discretion of what the law does and does not do is not up to the utility. I would request the Commission to continue -- to consider how important the one-to-one ratio is to farmers as they seek to increase conservation efforts on their operation.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering, as well as Rule 2.05 Meter Aggregation.

6. **Received From:** Randy Zook, President of Arkansas State Chamber of Commerce and Associated Industries of Arkansas

Comment: The business community and economic developers of Arkansas depend on reliable and affordable electricity. Potential investors and site selectors include competitive utility cost on their list of times to evaluate. Electricity rates in Arkansas are among the lowest nationally and this is a key reason why we are as successful as we are in recruiting business to Arkansas, as well as retaining and expanding existing businesses in Arkansas. Low electricity rates are a critical assets for economic development in Arkansas and it's important that we keep them that way. The Arkansas business community supports cost-effective solar and other renewable energy as a means to

protect the environment, diversify our energy resources and reduce energy costs. Arkansas benefits from a mix of resources to meet its electric energy needs and cost-effective solar and other renewable resources should be part of that mix. Customers that want to acquire private solar and other renewable generating resources and participate in net metering to meet all or part of their electric energy requirements should be able to do so. However, those customers should be required to pay for their fair share of the electric utility facilities and other operating costs necessary to serve them.

I'm here today to express concern that the current rate structure for net metering customers in Arkansas does not result in cost-effective solar and other renewable resources for the electric utility customers in Arkansas. Under the current one-to-one full retail rate credit, customers with private solar generation, those customers fail to pay for their fair share of the cost of the electric utility facilities and other operating costs necessary to serve them. This results in these costs being shifted to the remaining electric utility customers and causes the rates for electric utility service to be higher for those customers that do not have their own solar generation.

To sum up, we would urge the Commission to adjust the net metering requirement so that -- or net metering formula so that nobody gets stuck with the shifted costs.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

7. **Received From:** Jim Rice

Comment: I'm here today because I have a dream that some day in Arkansas we can generate a significant portion of our electricity from clean, renewable, economical solar energy, but I am concerned that Act 464, with its two-channel building will make it very difficult to achieve this goal for individuals and small businesses. I'll demonstrate my concerns with some examples for a residence that uses an average of 1,000 kWh per month, will be for a 25-year period, which is the lifespan of a solar system, and will be for an 8.4 kW solar energy system that will generate 1,000 kWh per month. If the residence installs a solar energy system in 2020 under the current rule, they will except to pay approximately \$18,800 over 25 years, which is based on 20,000 to pay for the solar system, less 5,200 federal tax credit, plus around 4,000 in interest. If the residence installs a solar energy system after 2021 with two-channel, they will expect to pay \$37,400 over 25 years, more than double. 33 percent of electricity is consumed while the solar system is generating, so the 37,400 cost over 25 years is based on 20,000 to pay for the solar system, no federal tax credit which ends in 2021, plus approximately 5,400 in interest, plus approximately \$12,000 paid to the utility because of the two-channel billing. The 12,000 paid to the utility is based on 200,000 kWh purchased from the utility at roughly \$0.12 per kWh, which is what I pay now, less 200,000 credited from the utility at about \$0.06 per hour, which I understand the avoided rate might be close to that. With the fair net metering policy we have today, I can generate solar energy for just over \$0.06 per kWh. The utilities can do that too. With two-channel billing, my cost would be over \$0.12 per kWh. Two-channel billing is bad public policy. Please do the right thing and

work with the governor, the state legislature, state agencies to continue fair net metering and eliminate two-channel billing so the individuals and small businesses of Arkansas can have the opportunity to participate like the utility companies in the expansion of clean, renewable, economical solar energy in the natural state.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

8. **Received From:** A. J. Hood

Comment: I'm a farmer/farm manager in southeast Arkansas. Approximately two years ago we implemented solar on our farm to run our grain operation and it's made a substantial difference for our operation. Today in farming, everything is about sustainability. Sustainability is what the consumer wants and that's what we can show with our grain facility and our solar operation with that. The demand for solar in our area has been steadily growing. I get calls every day, so much so that I've invested in a solar company myself to help work with growers because I see the savings on a daily basis and the good that it does for the growers and the community in Arkansas. Solar works so well for Arkansas and works so well for farmers because it's a long-term investment. Farming is a long-term investment. All of our – all of us are multi-generational farmers. Our kids, our grandkids, everybody is going to inherit this. This is going to be passed on for years to go. So for me and my operation, I say that, you know, we need to keep everything the way it is because if we change and get away from net metering and if we get away from aggregation, it will completely eliminate solar in Arkansas. And guys, agriculture is number one in Arkansas and we need to make sure we protect that.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate.

9. **Received From:** Jeremy Terrell

Comment: I'm with Stone Creek Solar and I go out and I talk to lots of farmer and I talk to lots of businesses. I talk to lots of churches. And I talk to lots of schools. And I talk to lots of different entities that – that want to go solar, so that they can provide more for themselves, more for their constituents, whether it's towns, whether it's schools, whatever it may be. They keep getting asked to more and more with less and less. Solar has become one of those avenues in order for these entities to do more with less. And you know, what's funny to me and it's continuing to be an aggravation to use that are in the solar business, when we understand, and a man by the name of Mark Cayce of the Electrical Co-Op has repeatedly proven that the objections from other utility groups are wrong. He's got the data. He's proven it. He's actually put in a rate decrease. To our knowledge, that's one of the first ones possibly ever. I'm not sure the exact statistics, but it's all because he's embraced solar. He's repeatedly said "I have embraced solar for a while now and look what we're doing for our members." That's what they're supposed to be doing. Looking after their members. They're supposed to be supporting their members. They're supposed to be doing whatever they can for their members. And he has

proven that this does not increase rates, you know, statewide, or throughout his co-op. And we can -- we constantly hear this, that that's what it's going to do. They have no proof of it. There is no proof that it's going to. It's just an assumption. Mark Cayce has proof that it is the exact opposite and yet we keep pushing against him and keep ignoring the benefits of solar to these churches, to the schools, to farmers, to the life source of Arkansas. And we -- the pushback and the negativity and -- We've had farmers that literally have spent millions of dollars to put solar in, are getting billed more than what they would have ever gotten billed before. And it's because, you know, solar is good enough for them but it's not good enough for private citizens. And we believe that just shouldn't be right. And the net metering one-for-one should absolutely 100 percent stay the way that it is. And we also should move towards pushing these electrical co-ops to do what they've been asked to do, 30 days getting back to us, not pushing it off 60, 90, 120 days to allow our farmers that are investing so much and these schools and these towns to benefit from what they believe will help them do more with less.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures.

10. **Received From:** Beth Keck

Comment: I am the Volkswagen chair for sustainability at the Schwarzman College at Tsinghua University in Beijing, China. I am a visiting professor there. I'm also the practitioner in residence for China studies at Johns Hopkins School of Advanced International Studies, and I'm a former employee at Walmart where I worked on the sustainability team. I just want to encourage you, like others here, to continue putting in place the regulatory framework that is going to encourage solar to continue expanding in our state. The reason is that if you think about the big picture of what we are trying to accomplish here, is that if we have a clean grid, then we can have a cleaner economy and reduce the carbon impact our economy and on our -- and on our weather conditions and restabilize our -- restabilize our weather, for example, for all of our farmers that are here. There are a lot of debates about net metering and the implementation of solar across the United States. And I would encourage you, as our public commission here, to really undertake rigorous evaluations and your partners have in other states. The Brookings Institution has done a very nice job of pulling together many of the studies that have been done by other utility commissions. And just to quote Maine, for example, their study concludes that solar power provides a substantial public benefit because it reduce electricity prices due to the displacement of more expensive power sources, it reduces air and climate pollution, reduces cost for the electrical grid system, reduces the need to build more power plants to meet peak demand, stabilizes prices, and promotes, very important for our country and our state, energy security. These avoided costs represent a

net benefit for non-solar ratepayers. I also just want to address our friend from the Chamber of Commerce. And there's this really major trend with major businesses today to go net carbon neutral or carbon negative. And most recently, Starbucks, I notice you have a shop just around the corner. They have made their major announcement in that regard and are putting in place and moving through tracking that is, you know, based on science-based metrics as well. And so the industry base in our country is seeing the need for us to address this and we would really -- and our state will be a leader if we continue to encourage solar for our state. It will better position us as we need to be positioned for economic development. I believe that's -- so my semifinal comment is, please leave one-on-one net metering intact and please continue reducing the barriers for solar in a very thoughtful, constructive manner.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering.

11. Received From: Ken Leonard

Comment: I'm your basic electric consumer and obviously it's quite shown that electricity produced through PVs or solar electric panels as it's facilitated through full retail net metering have a great environmental benefit which is certainly not adequately provided for in economic analysis. However, we just look at economics studies by several public service commissions throughout the United States, they show that the electricity produced through residential rooftop PVs is worth more than the full retail net metering rate. So utilities actually benefit by having people, residents, install PVs on their roof. Because of the many reasons are -- some of which are, because of the avoided distribution losses, PVs obviously produce power during peak power consumption, and it also reduces the capital needs for utilities, to mention a few of the benefits of net metering. So I ask that full net metering be supported because of its positive economic benefits and environmental benefits. Electricity produced through PV promotes net benefit to all electrical consumers.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures.

12. Received From: Mike Hester

Comment: I'm the superintendent for Batesville Schools. Three years ago, I was hired as superintendent to Batesville, and we came in and we had a strategic plan. Our motto is Students First, so our first goal was student achievement. Second goal was to attract and retain teachers, which is a big issue for us. And then we wanted to create partnerships and look at efficiencies. One of the best things that we can do to put a student first is to put the best teacher with them because our teachers will spend more time with them than most parents or homes are able to give. And so, who I put with that student is probably the most important decision on time and resources that I could make. So what we did is we looked at our efficiencies of how we were behind on teacher salary scales and what --

we were losing teachers to competition. There's a shortage anyway in the nation and in the state. And in our area, we had gone done. So what we did is we went through an efficiency study. We had inherited a lot of little districts that had closed down. That was dragging us under. So when we looked at trying to get efficient by getting rid of those properties or whatever, we came to energy. And so, we became the state's largest energy efficiency project in the education, and we became the first and largest solar project. And so, what we did with that is we took the money and we put it back to our teachers to attract and retain teachers and stabilize our workforce, because that's what going to make a difference in our student achievement. It's what's going to make a difference in our relationship with all of our at-risk things that go on.

And so this last year -- we've been at this now two years. This last year we were able to give a \$1.2 million raise to our staff and with our efficiencies that energy was included. And what I'm asking you is, there's some momentum going in education and with nonprofit entities that we need you to keep -- keep it the same. Don't let regulations choke this out. The momentum that we're gaining, we were able to give that \$1.2 million raise and it only costs us \$100,000 in what we were able to squeeze and find. And it is rare. Where -- when do we ever get chance besides taxes to squeeze from our budgets and get anything? The efficiency that's going on right now -- and we've got other districts around us. I want to create those partnerships now with our hospital, our colleges, our county, our city. And if we go and we lose that momentum that we've got going now -- we've created all kinds of ways that we can get to efficiencies. When I have -- when I work with a hospital and they have all kinds of energy needs and I have the land and we can partner, I can have a third party come in and set that solar field up. That's 60 acres I don't have to mow and maintain that's costing me and the taxpayers money.

One of the best things about when we first put our solar panels up, not only did we do a field, but we did a canopy where we drop off and load people. When we put those things up, we had our senior citizens for weeks would come by in carloads, vans, just looking at them. And they all complimented how they appreciated what we are doing with our tax dollars, to make it go further through energy savings, and that we were able to be wise with their money and keeping the regulations like they are allows the nonprofits to do that.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

13. **Received From:** Matt Bell

Comment: I'm a partner with Integrity Energy Partners. We are an energy performance contracting company and a solar developer and contractor. With the passage of solar act

of 2019, it provided a clear market signal to businesses like ours to invest significantly in staffing, training, equipment, and inventory, which has resulted in providing local opportunities for multiple trades. The solar access act in our opinion has been a tremendous success and is doing what it is intended to do, allowing for nonprofit customers to enter into private partnership and lease solar systems and monetize the associated benefits that the federal investment tax credit in creating a vibrant, economic engine for Arkansas. As you've heard today from the Batesville School District, they have benefited tremendously from the implementation of energy conservation measures and renewable energy generation. Schools of our state are often underfunded and lack the resources to forward to pay for deferred maintenance needs and staff salaries. Through the implementation of energy conservation measures and renewable energy, we were able to save Batesville School District \$363,000 annually. The decision by Dr. Hester and the Batesville School Board was one that's primarily made on the financial impact of the project. If we were unable to save the district money, it would have been a poor decision for the board to direct financial resources away from staff salaries, building maintenance, just to provide clean energy generation. This is the case for all public entities in Arkansas. Batesville School District's energy conservation project and renewable energy project was implemented and completed behind the meter. The 740 kW solar system was sized below the school district's base demand, therefore never exports power to the grid. The solar project reduced the cost of energy consumption just like an energy conservation measure, such as LED lighting, HVAC systems, and window upgrades. This type of investment should be encouraged and rewarded for our public entities. The resulting project had zero impact on other ratepayers and only resulted in lost revenue to Entergy. Under the proposed utility grid charge scheme, the 740 kW system would have resulted in added grid charge of 17,500 annually. This added cost can only be evaluated as a cost subsidy on the backs of the solar adopters. The utilities have complained throughout this proceeding about cost shifting. And the very proposal they brought forth is not about compensation of true cost; it's about recouping lost revenues. Under the utility's proposed grid charge that not only runs counter to the argument of cost shifting, it results in solar adopters providing a subsidy to all the other customers who don't invest in energy efficiency and renewable energy. This is perverse incentive for innovation, clean energy generation, and energy conservation. Why should a solar customer be penalized for an investment in innovation, and all other ratepayers be subsidized the lack thereof? I want to close and thank the Commission for the opportunity to express my concerns in changing the solar access act as it was enacted. I'd like to ask that if the Commission chooses to enact a grid charge, that solar developers like our company are given adequate time to retrain our staff for new job opportunities, unwind significant investments and inventory and equipment, and continue to provide our customers with grandfathering to ensure their investments are secure, and finally, set clear interconnection policies that

prevent delay tactics by the utilities and unreasonable cost or procedures of interconnection.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

14. Received From: Tad Bohanon

Comment: I'm CEO of Central Arkansas Water. Hopefully you're drinking some of our water up there. We provide water for about 470,000 people in Central Arkansas, and we're engaged in the solar project. As we looked for it, net metering is critical to it. And so we are in support of keeping the rules with the one to one net metering. Maintaining low cost is critical. Everybody needs water. Water is vital to life. People can't live without it, so we need to keep our costs as low as possible. Being able to reduce our electric cost is a way that we can do that to be able to provide water to the most people at an affordable rate. But I'm also in the utility business. I understand maintaining infrastructure. So I get some of the arguments that are out there that are moving around. The thing I'd like to add at this point is that one of the arguments we hear, for instance, is look at California. California has some of the highest electric rates in the country. Yes, they do. But their average electric bill is one of the lowest. Why? Everybody's gone solar. They've reduced their cost of production of electricity by being able to spread that cost. By encouraging the development of solar within the state, it's actually at -- lowered the average cost for every Californian within the state on their average electric bill. The other thing I've heard a lot about is, now I got to pull out my notes here. Just a second, but I'm watching the timer real quick. Except for paragraph -- Subparagraph B9, and that -- that is where the issue comes up about, how are we going to allocate those costs and how are we going to do those things? Well, when you look at B9, it drives it down into different things. First, it looks at the people and it says, okay, if you've got less than 300 kW or now 1 mW, it's not existent. Then it says -- then it goes to 5 kW and there it puts in a three-part test: Residential use or not. We've heard from that; are there benefits to the utility, the public, or the economy? We've heard lots of comments of how it's beneficial to the public. It's beneficial to the environment. It's beneficial in the economy; and then, is the facility in the public interest? I would argue that CAW's interest in keeping water rates as low as possible is in the public interest. And then it has a second category of 20,000 kW, and it has the same thing, but then it says "and adds unreasonable allocation of costs to other customers." Now, I hear that that's a concern because we're cost shifting. I find it interesting in rates, when it's -- when we're in favor of it, we call it cost averaging. Makes it simpler, spreads out costs. When we're against it, we call it cost shifting. But it only adds -- the statute only adds the requirement of looking at cost

recalculation to other customers if you have more than a 20 MW facility. If you're at less than a 5 MW facility, that option is not there. One-to-one ought to stay in place without consideration of cost averaging.

Agency Response: The Commission adopted Rule 2.04 Billing for Net Metering. The Commission also adopted Rule 2.05 Meter Aggregation, which lays out requirements for customers seeking to aggregate. Additionally, the Commission adopted a detailed grandfathering rate structure in Rule 2.07 Grandfathering Net Metering Rate Structures. The Commission adopted Rule 2.06 to address Applications to Exceed Generating Capacity Limit.

