



www.ariseia.org  
3111 N. Central Ave. – A101  
Phoenix, AZ 85012

August 19, 2020

Docket Control  
Arizona Corporation Commissioners  
1200 W. Washington Street  
Phoenix, AZ 85007-2996

RE: Docket No. E-01933A-20-0116, In the matter of the application of Tucson Electric Power Company for Approval of its Distributed Generation Interconnection Manual.

Chairman Burns and Commissioners:

The Arizona Solar Energy Industries Association (“AriSEIA”) recently has heard from numerous member companies that Tucson Electric Power (“TEP”) is violating the Commission’s newly adopted interconnection rules. This violation of the rules is causing installers and customers to waste time and money on solar projects that are being rejected for reasons not permitted in the rules. Our organization believes the harm caused by this violation merits Commission intervention.

Specifically, several of our members have reported that TEP is not following Screen A under A.A.C. R14-2-2615. That provision provides that when interconnecting a Generating Facility to a distribution circuit, “the aggregated generation on the circuit, including the proposed Generating Facility, shall not exceed 15% of the total circuit annual peak load as most recently measured at the substation or on the line section (if available), or the circuit hosting capacity limit; *whichever is greater*.”<sup>1</sup> It is worth mentioning up front, that our members report that TEP is the only Arizona utility violating the rules as described below.

Our members report TEP does not consider the circuit hosting capacity as Screen A requires. Instead TEP applies an entirely different review criteria of its own choosing. TEP explains that it does look at the first part of Screen A—15% of the annual peak load—in applying Screen A. However, if TEP determines the project fails this part of Screen A, TEP simply ignores the hosting capacity test and determines if the system exceeds 100% of the minimum daytime load of the circuit. Note, Screen A says nothing about using the “minimum daytime load” and TEP simply has no authority to do this.

In fact, we have attached to this letter a memo one of our members received from TEP in June where TEP admits it “only has a minimal amount of distribution circuit data” and explains that this is why it cannot properly apply Screen A. TEP goes on to admit that instead of using hosting capacity as required, it is instead using, “100% of feeder minimum daytime load *as a proxy* for measuring feeder circuit hosting capacity.” (emphasis added) Obviously, nothing in Screen A permits the utility to develop its own “proxy” for the Commission’s requirement and this memo amounts to an admission by TEP that it is improperly applying Screen A to the detriment of its customers.

---

<sup>1</sup> A.A.C. R14-2-2615(A). Emphasis added.

This method was not reviewed by the Commission and is not included in the interconnection rules as part of Screen A. Instead, it was created by TEP and for TEP, and most problematically, does not reflect the accurate limit of the circuit's hosting capacity. Minimum daytime load is simply not an adequate proxy for determining a distribution circuit's hosting capacity, and according to TEP, it is being used because the company has insufficient data resources for completing the necessary circuit modeling.

Consequently, TEP's method is impeding the solar industry's ability to operate in the company's service territory. The impediment that TEP's screening method produces is particularly challenging because of the stage in the sales process that it occurs. Typically, installers and salespeople will work with customers to design a system that both meets the customer's energy needs and fits the design parameters of their home. Once the design is completed, the installer obtains permitting and prepares for installation, by which time \$1,000 - \$2,000 has likely been invested in the project. Unfortunately, TEP is informing customers that they are failing TEP's improper version of Screen A only *after* money and time has been invested. As you can imagine, customers who learn their project has been rejected after expending that much effort are understandably frustrated, and for installers the costs incurred for developing the project can never be recovered.

In order to comply with the rules, Arizona's utilities need to perform hosting capacity studies and they should make the results publicly available so installers and customers know where solar can be located and where it cannot be located without additional grid investment. Confusingly, TEP published a map of feeder daytime load data, but not hosting capacity, and this map purported to show that 50% of more of Tucson residents would be prohibited from adopting rooftop solar. TEP should be working to provide a map depicting the necessary hosting capacity information.

AriSEIA recommends the Commission require TEP to conduct a hosting capacity study to comply with Screen A, and also make the results available to installers and the public. The information is critical for installers and customers to make informed decisions and needed for TEP to comply with the interconnection rules. In addition, it is our understanding that Arizona Public Service Company is completing a hosting capacity study of its own for the same purposes described above, and that that utility has elected to suspend implementation of Screen A until the study results become available. We ask that the Commission require TEP to do the same until its own study is completed. The bottom line is, if a utility is incapable of properly applying Screen A, it should not punish its customers for its inability to comply.

Thank you for your help with this important matter.

Sincerely,

/s/ Nicole LaSlavic  
Director  
AriSEIA

Attachment

At present, TEP only has a minimal amount of distribution circuit data. This data primarily consists of individual distribution feeder circuit megawatt (MW) and megavar (MVAR) loads measured at 15-minute intervals by recording devices located inside TEP substations. This limitation prevents us from modeling actual circuit loads at the line segment or customer levels. We can, however, identify peak loads and minimum daytime loads for the individual distribution feeders and we use this data for screening purposes.

Although TEP is still in the process of drafting its Interconnection Manual, when reviewing a DG application against Screen A in accordance with the Rule, we first check to see if the existing aggregate DG connected to the specific distribution feeder circuit exceeds 15% of peak load for the previous 12 months. If it does, we then evaluate that same feeder aggregate DG against that feeder's minimum daytime load. Given our limited data resources, TEP is using 100% of feeder minimum daytime load as a proxy for measuring feeder circuit hosting capacity. Please note that per the Rule, checking feeder minimum daytime load is not required until the Supplemental Review process. However, as feeder minimum daytime load (and not feeder peak load) is the true indicator of safety and reliability risk, such as back-feeding the circuit or islanding potential, we have chosen to use that as our metric for feeder hosting capacity. Thus far, a majority of applications that did not meet the 15% of feeder peak load threshold did subsequently pass the 100% of feeder minimum daytime load threshold and were approved.

We are currently working to publish maps on the TEP website showing areas of our service territory that have reached DG saturation levels as measured by feeder minimum daytime load data to assist DG installers and customers. We hope to have this available soon.