

Distributed Generation Interconnection Requirements (DGIRs)

A.A.C. R14-2-2615.A

Level 1 Super Fast Track (<20 kW) Screen FAQs

Q: What is Screen A?

A: Screen A is a component of the DGIRs under section A.A.C. R14-2-2615.A, which states “For Interconnection of a proposed Generating Facility to a distribution circuit, the aggregated generation on the circuit, including 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...” All exporting Super-Fast Track DG systems must be evaluated using screens A, E and F.

Q: How does TEP conduct Screen A?

A: TEP conducts Screen A by reviewing the total aggregated existing solar capacity of the TEP distribution circuit to which the applicant’s installation location is connected, then dividing that cumulative capacity by the most recent highest annual peak load for that same distribution circuit. If this exceeds 15 percent, TEP will perform an initial Supplemental Review to determine if the project can still proceed regardless of failing Screen A.

Q: Can TEP provide a real-life example of how the Screen A process is applied?

A: Let’s say a residential customer presently served from TEP distribution circuit called “feeder X” wants to install a solar PV system. On July 7, 2019 at 4 p.m., TEP recorded a peak load of 10,000 kilowatts (kW) on feeder X. TEP facility maps show feeder X provides service to 2,000 customers, and that 200 of those customers have already installed solar PV systems. The sum of the kW ratings for all 200 PV systems equals 1,000 kW. Here’s the Screen A calculation: Screen A Ratio = $1,000 \text{ kW} / 10,000 \text{ kW} = 0.1 = 10\%$. Since 10% is less than 15%, this project request would pass Screen A.

Q: What is a Supplemental Review?

A: If a project fails Screen A, TEP will perform an initial Supplemental Review based on the most recent data from the aggregated circuit to which the applicant’s PV system is connected. TEP will perform this review using the most recent Minimum Daytime Load data of the applicable subject distribution circuit to determine if there are any safety or reliability risks to TEP electrical operations. Additional details can be found in the DGIRs under A.A.C. R14-2-2620.E.

Q: What if my project fails Screen A, but passes the initial Supplemental Review?

A: If your project fails Screen A, but passes the initial Supplemental Review, your project will continue through the application review process.

Q: What if my project fails Screen A and fails the initial Supplemental Review?

A: If your project fails Screen A and the initial Supplemental Review, the installer and customer will receive correspondence describing possible options. The project will be placed in the *Application Requires Corrections* Status. One option is for the customer to request an official Supplemental Review (R14-2-2620) performed by TEP's engineering team. The Supplemental Review requires a signed agreement and a \$500 deposit prior to commencement. Another option is the installation of battery storage, which could qualify the project as a non-exporting or inadvertent exporting system. This means that the generation will serve customer load and charge batteries with no excess generation exported onto TEP's grid.

Q: Can I make modifications to my project to meet Screen A requirements that do not include battery storage?

A: Not at this time. TEP performs Screen A based on all of the existing solar generation capacity already on the TEP distribution circuit the potential project is tied to. If that number already exceeds 15 percent of circuit annual peak, there is no amount of system size reduction that will allow the proposed project to pass this screen.

Q: Does the customer have the option to upgrade TEP equipment to meet Screen A?

A: No, Screen A evaluates applications using a ratio of connected solar generation capacity to TEP distribution circuit peak load. Unlike a Screen E failure, where the installation of a dedicated transformer is an option, the upgrade of TEP equipment is not an option to meet Screen A requirements.

Q: Will TEP provide data or mapping information to show areas in its service territory where applications would not pass Screen A and the Supplemental Review?

A: TEP cannot provide that information at this time, but is working to provide this information in the future.

Q: Do I have to submit an application to determine if my project will pass Screen A or the Supplemental Review?

A: To determine if your project will pass our Screen Review, you may request a Pre-Application Report. See section **R14-2-2616** in the DGIRs for additional information.

Q: Has the shared transformer allowance expanded with the new DGIRs?

A: Yes. The DGIRs expand system sizes for Level 1 Super Fast Track projects to 20 kWac on a shared transformer from 10 kWac. While the allowable size has expanded, a review of the aggregated amount of solar including the proposed interconnection is now mandatory.

Q: What might cause a project application to fail Screen E?

A: An application will fail Screen E if the aggregated amount of existing distributed generation capacity and the proposed solar project's capacity exceed 75 percent of the nameplate rating for their shared TEP distribution transformer. See R14-2-2615.E

Q: Is there a way to move forward with a project that fails Screen E?

A: Absolutely. Customers that experience Screen E failures have two options. They can downsize their system to an acceptable size as outlined in TEP customer correspondence or they can upgrade to a dedicated transformer. Either way, our Renewables Team will be happy to assist in this effort.

Q: How much does it cost to upgrade to a dedicated transformer?

A: The cost of the upgrade cannot be determined until after meeting onsite with a field technician from our Design department. Installation of a dedicated transformer is a lengthy process and can consist of significant costs. If you choose to pursue installation of a dedicated transformer, our Renewables and Design teams are available to assist you throughout the process.

Q: Is my project subject to Screen F?

A: Single-phase inverters that operate at 240Vac are not subject to Screen F. Screen F is intended only to address the potential impact of load imbalance that might be created by 120Vac inverters connecting to a standard 240/120V single-phase transformer. To continue providing adequate service voltage, imbalances must not exceed 20 percent. See R14-2-2614.F for more information.

Q: How were the screening processes for Super Fast Track projects (under 20kW) developed?

A: The DGIRs were developed through a multi-year process, which had many stakeholders, and were adopted by the Arizona Corporation Commission (ACC). The ACC has regulatory oversight of the majority of Arizona's utilities, including TEP. TEP is bound to implementing these rules, until there is a change or directive from the ACC.