**Questions regarding Issue 1: *Should the Commission modify Fast Track Screen Q to minimize the number of distributed energy resource projects subjected to transmission cluster studies, and, if so, how?***

1. What is the purpose of Screen Q?

**IOUs**: A screen to determine what additional studies are required to interconnect the project.

**CalSEIA**: Screen Q is part of the Electrical Independence Test[[1]](#footnote-1) that quantifies impact of proportional current flow from a DER onto the transmission network. If a proposed project is downstream from a device on the transmission system that was recently studied by a previous cluster study, it is evaluated for potential backflow.

1. How does a project fail Screen Q?

**IOUs**: A project will fail screen Q if the project reasonably contributes to requiring Network Upgrades.

**CalSEIA**: A proposed Rule 21 project crosses over to the CAISO Appendix Y[[2]](#footnote-2) tariff and enters into a Transmission Cluster Study if the Screen Q power flow model indicates that more than 5% of the system nameplate could flow through a device that was studied in Cluster 8 or 9. This is not done on an 8760 basis, comparing the expected output and transmission constraint hourly throughout the year. Rather, solar is treated as uniform generation at the nameplate capacity.

1. What happens to a project if it fails Screen Q?

**IOUs**: If the generator interconnection fails Screen Q under the Detailed Study Process or the Distribution Group Study, it has the option to re-apply to be studied in the Wholesale Distribution Tariff (WDT) Transmission Cluster per Section F.3.d. of the Rule 21 Tariff. At end of the Cluster Study, the project can decide to either stay in the WDT tariff or sign a Rule 21 IA

**CalSEIA**: A project that fails Screen Q becomes part of the current cluster study and cannot move forward until the cluster study is completed. This increases the interconnection timeline to up to 3 years.

1. What types of projects tend to fail Screen Q?

**IOUs**: Projects requesting to be connected at locations where the utility is aware of transmission issues/constraints, or projects requesting to be connected in areas where there is a high amount of existing/queued generation.

**CalSEIA**: The Cluster 10 study covers nearly the entire service territory. Any project with potential to back-feed a small amount of power beyond the substation can fail the screen. This results in relatively small DER projects (501 kW - 1000 kW) entering into the transmission cluster study queue.

1. How many projects have failed Rule 21 Screen Q to date?

SDG&E: zero (0)

SCE: one (1)

PG&E: Eleven (11) projects failed during the 2013-2017 timeframe

1. How many projects that have failed Screen Q have entered into a Transmission Cluster Study?

SDG&E: n/a

SCE: one

PG&E: 3 projects moved to the WDT Cluster Study Process

1. How many of those were found not to significantly contribute to the upgrade needed?

SDG&E: n/a

SCE: None

PG&E: All 9 projects that failed EIT

**CalSEIA**: This was not a significant issue in previous cluster studies. The current cluster study is still underway, so there has been no determination of which projects will be allowed to proceed. The impact isn’t the main issue, the main issue is the time it takes to conduct the cluster study. Impact or none, the timelines make the current process untenable.

1. Why was the 500 kW exemption threshold in Rule 21 chosen? Why does it only apply to NEM projects?

**IOUs**: 500 kW was determined by the Rule 21 working group as being sufficiently large to potentially contribute to requiring transmission system upgrades. Believe the exemption applies only to NEM projects in part due to cost allocation issues.

**CalSEIA**: There currently exists an exemption from the Transmission Cluster Study for projects less than or equal to 500 kW[[3]](#footnote-3). That threshold was chosen during the last major update to Rule 21. At the time, it was acknowledged that smaller systems do not have significant impact on the transmission system and it is appropriate to have an exemption threshold. 500 kW was seen as high enough to cover the majority of customer-sited projects.

1. Could the threshold be raised without posing a safety or reliability risk to the grid?

**IOUs**: Believe the basis for establishing the 500 kW was appropriate, and are open to discussions on reviewing that basis.

**CalSEIA**: We cannot identify any specific safety or reliability issues that will result from doubling the threshold. An increase to 1000 kW would relieve a lot of the turmoil this issue has caused. This would also allow for greater coordination between this section of the tariff and other sections of the Rule 21 Tariff that allow for upgrade costs associated with projects less than 1000 kW to be shared facilities.

1. How do we expect this issue to evolve over the coming years? Will it improve or worsen?

**IOUs**: Need clarity on the issue that is being referenced.  By definition, a screen in a study process is established to identify projects that either do or do not meet certain pre-defined criteria.  The frequency or number of projects not passing a screen cannot, without further context, be a reason to change the screening criteria.

**CalSEIA**: This issue will become more common, even if the threshold is raised to 1000 kW. The problem is two-fold.

* First: The number of projects causing sub-transmission back-feeding (Failing Screen N) will certainly increase.
* Second: The scope of the CAISO Cluster 10 and beyond will continue to increase as well, so more projects will certainly start to fail Screen Q.

Recommendation from solar parties: The Commission and CAISO should begin exploring a better long-term solution while the exemption threshold is increased.

1. “Electric Rule No. 21 Generating Facility Interconnections” Section G Interconnection Technical Framework – Overview Flowchart [↑](#footnote-ref-1)
2. “CAISO Appendix Y GIP For Interconnection Requests Generator Interconnection Procedures (GIP)” Section 4.2 [↑](#footnote-ref-2)
3. “Electric Rule No. 21 Generating Facility Interconnections” Section G.3 (a): Note 1 [↑](#footnote-ref-3)