



Public Utilities Commission

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REF: Expedited Application Issue

Dear Commissioners,

To apply for interconnection of a solar PV system under 15 kW AC, a Simplified Interconnection Agreement application is used with no cost to the applicant, unless National Grid determines that the solar PV system will exceed 20 kW of solar PV connected downstream from the transformer serving the property.

When National Grid determines that a solar PV system exceeds their 20 kW limit, the applicant then must use an Expedited Interconnection application, which requires a \$300 study fee paid to National Grid and must be accompanied by an electrical engineer stamped one-line diagram. When we asked our electrical engineer how the required one-line diagram helps National Grid determine what the load is on the transformer, they said it doesn't; the PV system inverter AC power output is what determines what load will be on the transformer. This information is on all PV interconnection applications with National Grid. We wrote to national Grid to ask why this requirement exists and did not receive a reply.

Issue Experienced:

A 2.03 kW AC residential application was put on hold because the addition of the system to the local transformer pushed the total AC kW over 20 kW or the transformer already had over 20 kW AC of solar connected to it.

This required the application to go from a Simplified Application to an Expedited Application incurring the \$300 application fee to NGrid and an electrical engineer stamped 1-line, with a typical cost of \$750-\$1,000, for a total cost of up to \$1,300 to proceed. This cost would be incurred by the applicant, in this case, the homeowner. Spending this money triggers a study, rather than a guaranteed interconnection approval.

The homeowner is not willing to pay this fee, as it represents a large percentage increase of their overall solar installation cost. In addition, this fee is a gamble. It compensates NGrid for checking if the transformer can handle the additional solar load. If NGrid determines that it cannot, the homeowner will get an approval letter contingent on them paying for a transformer upgrade. We have experienced cost estimates from National Grid for this work ranging from \$2,000 to \$5,000.

The post- tax credit cost of the 2.03 kW AC residential array was to be about \$4,900. These additional costs increase the system cost by 26% if the transformer can take the load, and by 66%-128% if the existing transformer cannot take the load. In both scenarios, these increased costs erase the economic benefit of the solar array for the homeowner.

Proposed Partial Fix:

Eliminate the requirement for a stamped electrical drawing on Expedited Solar Applications.

Electrical drawings show wire size and interconnection methodology and do not have an impact on transformer sizing.

Any interconnection application to National Grid will communicate the AC kW rating with or without a stamped electrical drawing; it is communicated in the Simplified Application on Exhibit A and in the Expedited Application on Exhibit C. It is not necessary to have an electrical drawing to determine if a transformer can handle the additional solar interconnection. In addition, a \$300 fee to determine if the project can continue, rather than \$1,300 +/- fee, is more tenable.

In summary, we ask that you investigate this electrical engineer one-line diagram requirement for these small systems and eliminate it and the unnecessary additional cost burden on homeowners who wish to install solar PV on their home.

Sincerely,
Newport Solar
Doug Sabetti- President