

SUMMARY OF RECOMMENDATIONS

The Solar ABCs commissioned this study to analyze and suggest updates to the FERC SGIP screens. The goal was to review the lessons learned in federal and state proceedings since the adoption of the FERC screens in order to determine the feasibility of further simplifying interconnection procedures, and, perhaps, moving the federal screens closer to the converging “best practice” state screens, thereby reducing barriers to installing PV equipment.

Thirty-seven subject matter experts responded to an online questionnaire and provided recommendations concerning the technical FERC SGIP screens and the 10 kW Inverter Process. As a result, we recommend that three screens be updated, and that a fourth screen and the 10 kW Inverter Process be studied or discussed further. We discerned no consensus with respect to the remaining screens.

We recommend the following changes:

Screen 2.2.1.7: The limit placed on the size of the aggregate generation on a single phase shared secondary should be updated to be in terms of a percentage of the transformer nameplate power rating.

Screen 2.2.1.9: The stability requirement should be rewritten for clarity.

Screen 2.2.1.3: Area networks should be covered in addition to spot networks. In addition, limits on maximum load should also be revised upward in keeping with recent rules enacted in Connecticut and by Consolidated Edison in New York and with the guidelines defined in IEEE 1547.6, which went to ballot in mid-June 2010.

Screen 2.2.1.2: Further investigation and research is needed to determine whether to increase (and if so, by how much) the current 15% limit on generating capacity related to circuit peak load (or possibly changing the limit to a percentage of the circuit minimum load). Separate treatment of inverter-based generation should be considered. DOE or NREL should aggressively study these issues.

10 kW inverter process: Further dialogue and investigation is needed to determine whether to increase the limit from 10 kW for the simplified inverter interconnection process (and if so, by how much).

The Solar ABCs recommends that FERC and NARUC collaborate to further determine the potential benefits of updating these FERC SGIP screens. The goals are to remove barriers to increased PV penetration and harmonize state and federal approaches to the screens based on what has been learned over the past decade. The current FERC–NARUC collaborative on demand response provides a suitable template for a joint effort on the FERC SGIP screen update.

Competitive Fairness

Prior to February 2008, utilities were not eligible to receive the 30% investment tax credit (ITC) for PV. When the law was amended to extend the ITC to investor owned utilities (IOUs), it resulted in a dramatic increase in utility solar installations. According to IREC’s Larry Sherwood, the installations could increase from 22 MW in 2008 to more than 300 MW projected in 2010 (personal communication, April 22, 2010). IOU access to the ITC has profoundly altered the utility role in the PV market. However, this is not a complete blessing. Allowing access to the ITC by IOUs subjects the marketplace to an increased potential for conflicts of interest—when the utility directly competes with nonutility competitors who need the utility’s interconnection, for example. The utility’s business interest for promoting its own PV installations presents a clear conflict with its role as aggregator and interpreter of study information, federal and state regulations, and industry guidelines for PV installations. Based on previous situations, it cannot be assumed that utilities will keep the public’s best interest in mind. Rather, without clear

direction from regulators, utilities might discriminate against competitors to maximize shareholder value.

Anecdotal problem reports are abundant. For example, the authors know of a situation in which a utility installed a 3.7 MW synchronous generator on its system without a transfer trip or three-phase circuit breaker, even though it consistently requires both pieces of equipment for interconnection of customer-owned facilities. The cost savings evident in the discriminatory requirements give the utility a significant advantage. This denies the public the benefit of a real market, and allows the beneficiary of a state-granted monopoly to use its monopoly power for its own gain.

Fair-trade practices require utility-owned PV and non-utility-owned PV providers to follow the same rules, often known as anti-discrimination. Therefore, the Solar ABCs recommends that FERC and NARUC be vigilant in ensuring that utilities follow the same procedures that are imposed on other generators. This might be achieved by jointly developing an enforceable non-discrimination policy or rule to ensure uniform application of the technical requirements of all DG systems, regardless of whether they are utility-owned.