Background

ISO New England (ISO) and its stakeholders anticipate growth of distributed generation (DG) resources in the near future. The growth of DG resources, while satisfying state goals, may present unique challenges for grid operators and planners (see ISO’s 6/19/13 PAC presentation). To help the ISO estimate the growth and impact of DG resources on the regional power system, it established the Distributed Generation Forecast Working Group (DGFWG). This scope of work outlines the responsibilities of the DGFWG.

The most common distributed generation resources include: solar photovoltaic (PV), small-scale wind, fuel cells, combined heat and power, and small hydro-electric power. Currently, PV represents the largest share of future DG resources throughout New England, and poses a number of unique challenges to system planning and system operations. Therefore, the ISO expects to focus a large part of its forecasting efforts on the impact of anticipated DG PV resources. The DGFWG will use the definition of “distributed generation” provided below.

Objective

In order to assist the ISO’s development of a DG forecast, it established a stakeholder working group. A DG forecast will provide ISO planners and stakeholders with estimates of DG to be used in long-range planning activities such as transmission planning and resource adequacy. The working group will provide input on DG forecast methodology, assumptions, data inputs, model validation, and feedback on the model results. Information shared through the DGFWG may also provide insight into some aspects of DG integration that may be useful for other planning and operational needs of the New England power system. The ISO will endeavor to develop an interim, qualitative forecast of DG resources based on the state’s policy goals. This interim DG forecast will be vetted through the DGFWG. The DGFWG will continue to assist the ISO with the compilation and verification of regional DG information for the purposes of developing a data-driven, quantitative DG forecast.

DGFWG Composition

This stakeholder group is open to all interested parties. Participation by state agency representatives with strong knowledge of both DG programs and sources of funding will be particularly valuable. The DGFWG will also benefit from the participation of those with relevant experience from the DG sector including distribution companies, renewable energy experts and DG program administrators. These representatives can provide DG resource data to the ISO and information on both interconnection requirements and technology performance characteristics. Information that the ISO uses to develop the DG Forecast will be shared with the DGFWG members consistent with the Information Policy.
The ISO is seeking working group members with expertise in the following areas: ratepayer funded DG programs, technology trends and associated changes in production costs, funding sources, installation and performance of DG resources, and trends in program implementation. Members will participate in an iterative process to develop an annual forecast, which may include face-to-face meetings and teleconferences. During the forecast development process, members may be asked to take on specific tasks, including but not limited to, external research and analysis, presentation development and delivery. Information on the electrical characteristics and proper modeling of DG will be discussed with the working group.

**DGFWG Organization**

The DGFWG is chaired by a representative of ISO New England, and will not be a formal NEPOOL committee or subcommittee. Periodically, the activities of the DGFWG will be shared with the Planning Advisory Committee and other committees as necessary. Meeting agendas and materials will be posted on the ISO website and advance notice will be provided to all interested parties.

The responsibility to produce the DG forecast rests with the ISO. The DGFWG will not be a voting body. The DGFWG will serve in an advisory role to the ISO, in accordance with the objectives stated above.

**DG Definition**

For purposes of the DGFWG, distributed generation resources are defined as those that are typically 5 MW or less in nameplate capacity and are interconnected to the distribution system (typically 69 kV or below) according to state-jurisdictional interconnection standards. These may include both those installations that are located behind a customer load (i.e., “behind-the-meter”) and those that are interconnected directly to the distribution system without a customer load being present. Note that this definition of DG is more expansive than the ISO’s Tariff. The Tariff definition is focused only on resources participating in the markets as Demand Resources, and the work of the DGFWG will focus on DG both in and outside of the markets. ([http://www.iso-ne.com/regulatory/tariff/sect_1/sect_i.pdf](http://www.iso-ne.com/regulatory/tariff/sect_1/sect_i.pdf)).

**DGFWG Communication**

DGFWG materials are available here: [www.iso-ne.com/dgfwg](http://www.iso-ne.com/dgfwg)

DGFWG questions and comments can be sent here: DGFWGMatters@iso-ne.com