

## **Issues Affecting Progression of Generation Interconnection Studies**

There are a number of factors that affect the progression of an Interconnection Study – *i.e.*, Interconnection Feasibility Study, Interconnection System Impact Study, or Interconnection Facilities Study – for a proposed generator interconnection. These include a concentration of Interconnection Requests in limited geographic areas, Interconnection Customer modifications of generator’s technical data, a large increase in Interconnection Request activity resulting from New England’s Forward Capacity Market (“FCM”) and State-sponsored efforts, and other complexities associated with such actions.

When there are multiple Interconnection Requests in the same part of the New England Transmission System, often in the vicinity of other existing resources, it can affect the completion of Interconnection Studies.

ISO New England Inc.’s (“ISO-NE”) interconnection procedures rely on the Federal Energy Regulatory Commission’s (“FERC”) standardized “first-come, first-served” approach to determine the order of performing Interconnection Studies and each Interconnection Customer’s cost responsibilities (e.g., for system upgrades). When projects are geographically distributed, multiple Interconnection Studies may be performed simultaneously because one project may have minimal, if any, impacts on another. However, when projects are concentrated in one particular area of the system, it may be necessary to complete one study, including the identification of the required system upgrades to accommodate that project, before the next study can be initiated.

Currently, there are multiple pending Interconnection Requests concentrated within several geographical areas of the system; particularly, in southwest Connecticut, northern New Hampshire and, most recently, northern Maine. Until the Interconnection Studies of the earlier queued projects are complete, the studies of the later queued projects cannot commence.

As demonstrated in recent technical conferences held by the FERC,<sup>1</sup> this is a nation-wide problem as there is a shortage of qualified planning engineers to adequately conduct and complete the necessary studies. As the number of Interconnection Requests has climbed (as discussed below), this shortage has limited the ability of ISO-NE, its consultants and the Transmission Owners to add enough resources to complete studies in a more timely manner. ISO-NE and its consultants have been adding planning resources to support this process but the

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<sup>1</sup> See, *Interconnection Queuing Practices*, 122 FERC ¶ 61,252 (2008). See also ISO New England’s Interconnection Queuing Practices Status Report, Docket Nos. AD08-2-000 (filed April 21, 2008).

magnitude of Interconnection Requests continues to be a challenge for the region.

Additionally, Interconnection Customers can contribute to the delay of Interconnection Studies.

One common issue is that an Interconnection Customer may not have selected a generator supplier prior to submitting its Interconnection Request. These Interconnection Customers have difficulty supplying the technical modeling data required for ISO-NE and the Transmission Owners to conduct the Interconnection Studies. Another common occurrence that affects the progression of Interconnection Studies is when Interconnection Customers make changes to the characteristic of their project during the study process. These changes must be evaluated to determine if they are material and therefore impact a project's interconnection Queue Position. For example, an Interconnection Customer may seek to reduce the size of the project, select a different supplier with a generator(s) of different technical characteristics, or change certain key milestone dates, such as their in-service date. These changes, while not prohibited by the FERC approved interconnection procedures, consume further ISO-NE resources and study efforts, and affect the processing of interconnection projects through the study process.

Interconnection Customers with wind projects have unique issues that affect the progress of Interconnection Studies. Under the interconnection procedures, wind projects have up to six months to provide detailed information on their projects. This six month window can delay the studies of other projects in the interconnection queue. Interconnection Customers are also increasingly utilizing foreign suppliers of wind turbines. Often, foreign suppliers consider detailed data on their wind turbines to be commercially sensitive information and are reluctant to provide Interconnection Customers with the detailed data needed to conduct Interconnection Studies. At times, studies are delayed while the Interconnection Customer works through appropriate confidentiality agreements or other acceptable data handling processes with their suppliers.

Lastly, the volume of requests for interconnection service affects the progress of Interconnection Studies.

Among the drivers for this increased Interconnection Request activity are the ISO-NE FCM, State-sponsored Requests For Proposals ("RFPs") for new generation, and State-specific mandates for renewable energy. These efforts have encouraged the development of new resources in New England, in turn significantly increasing the number of projects in the queue and correspondingly

the study work for ISO-NE staff, consultants and Transmission Owners. These efforts have also added certain complexities that can result in further delays of Interconnection Studies. For example, States have issued RFPs for new generation of various types (*e.g.*, CT) or encouraged generation development by considering methods for underwriting transmission system upgrades costs (*e.g.*, NH). Uncertainty of the outcome of these and other initiatives has caused Interconnection Customers and, at times, Interconnecting Transmission Owners to cause the Interconnection Study process to move more slowly in anticipation of the process results.

On October 31, 2008, ISO-NE submitted for FERC's approval revisions to the existing interconnection process in New England.<sup>2</sup> These proposed revisions provide for increased financial and milestone requirements for interconnection projects to receive and maintain an interconnection queue position, which will help reduce the number of projects in the queue to those that are viable, serious and committed to completing the interconnection process and installing new generation.

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<sup>2</sup> See Joint Filing of Proposed Revisions to the Generator Interconnection Process and Forward Capacity Market Participation Provisions Set Forth in the ISO New England Inc. Transmission, Markets and Services Tariff; Docket Nos. ER09-237-000, *et al.* (filed Oct. 31, 2008).