

Initiation of the Second Maine Resource Integration Study

Planning Advisory Committee

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SYSTEM PLANNING



Agenda

- Summarize the outcome of the first Maine Cluster System Impact Study formation process
- Identify the Cluster-Eligible Interconnection Requests for the Second Maine Resource Integration Study
- Describe the scope and the initial conceptual Cluster Enabling Transmission Upgrades to be considered in the Second Maine Resource Integration Study

OUTCOME OF THE FIRST MAINE CLUSTER SYSTEM IMPACT STUDY FORMATION PROCESS

Summary



The First Cluster Entry Window

- The final Cluster Enabling Transmission Upgrade Regional Planning Study (CRPS) Report for the northern and western Maine areas of the system (also known as the Maine Resource Integration Study – MRIS) was posted on the ISO-NE website under the Planning Advisory Committee section on March 12, 2018
- The posting of the final CRPS Report opened the cluster entry window for participation in the Cluster Interconnection System Impact Study ("CSIS") for Interconnection Customers with Interconnection Requests identified as cluster-eligible in the CRPS Report
- The Cluster Entry Deadline was 30 days from the posting of the final CRPS Report: April 11, 2018

First Cluster Formation

 The following Interconnection Requests met the cluster entry requirements (described in Section 4.2.3.2.2 of Schedule 22 and Schedule 25 of the ISO Open access Transmission Tariff) by the Cluster Entry Deadline and will be participating in the first CSIS

QP571	QP576
QP573	QP577
QP574	QP578



First Cluster Formation, continued

• The following Interconnection Request also met the cluster entry requirements by the Cluster Entry Deadline

QP639

- However, the conditions of oversubscription described in Section 4.2.3.3.2 of Schedule 22 and Schedule 25 were triggered by the cluster filling process
 - QP 639 was identified in the final CRPS report as eligible to participate in the CSIS and met the CSIS entry requirements and therefore would have been eligible for inclusion in the CSIS but was excluded as a result of the quantity of megawatts identified as potentially enabled by the CETU in the final CRPS report having been exhausted in queue order pursuant to Section 4.2.3.3.1 of Schedule 22 & 25
- Therefore, this Interconnection Request maintained its Queue Position and the Cluster Participation Deposit was refunded
- Since QP 639 is the only project included in the conditions of oversubscription for the cluster that had just been formed, in accordance with Section 4.2.3.3.2 of Schedule 25, QP 639 will be studied and processed serially (i.e. not in a cluster), in queue order

CLUSTER-ELIGIBLE INTERCONNECTION REQUESTS

Second Maine Resource Integration Study



Cluster Triggering Conditions

- The ISO has identified that the conditions in Section 4.2.1 of Schedule 22, Section 1.5.3.1 of Schedule 23, and Section 4.2.1 of Schedule 25 of Section II of the Tariff have again been triggered
 - At the discretion of the System Operator, Interconnection Requests will be studied in clusters for the purpose of the Interconnection System Impact Study and the Interconnection Facilities Study when the combination of the following circumstances is present in the interconnection queue: (a) there are two (2) or more Interconnection Requests without completed Interconnection System Impact Studies in the same electrical part of the New England Control Area based on the requested Point of Interconnection, and (b) the System Operator determined that none of the Interconnection Requests identified in (a) of this Section will be able to interconnect, either individually or on a cluster basis, without the use of common significant new transmission line infrastructure rated at or above 115 kV AC or HVDC
- The queue currently contains several Interconnection Requests (listed on subsequent slides) for generation projects that are remote from the existing system and will require common new transmission infrastructure to interconnect

Eligible Interconnection Requests

- The following Interconnection Requests are currently being considered in a new CRPS that will be known as the <u>Second</u> Maine Resource Integration Study and have been identified as potentially eligible to participate in a subsequent Cluster System Impact Study (CSIS)
- This does not reflect the final list of Interconnection Requests that will be ultimately identified as eligible to participate in a subsequent CSIS
- The final eligibility to participate in such a subsequent CSIS will be determined by the status of each Interconnection Request at the time of the finalization of the <u>Second</u> Maine Resource Integration Study

Eligible Interconnection Requests, continued

QP672	QP739
QP729	QP740
QP730	QP741
QP731	QP742
QP732	QP743
QP733	QP744
QP734	QP745
QP735	QP746
QP736	QP747
QP737	QP748
QP738	QP749



PRELIMINARY TRANSMISSION UPGRADE CONCEPTS

Scope of the Second Maine Resource Integration Study



Proposed Scope of the Second Maine Resource Integration Study

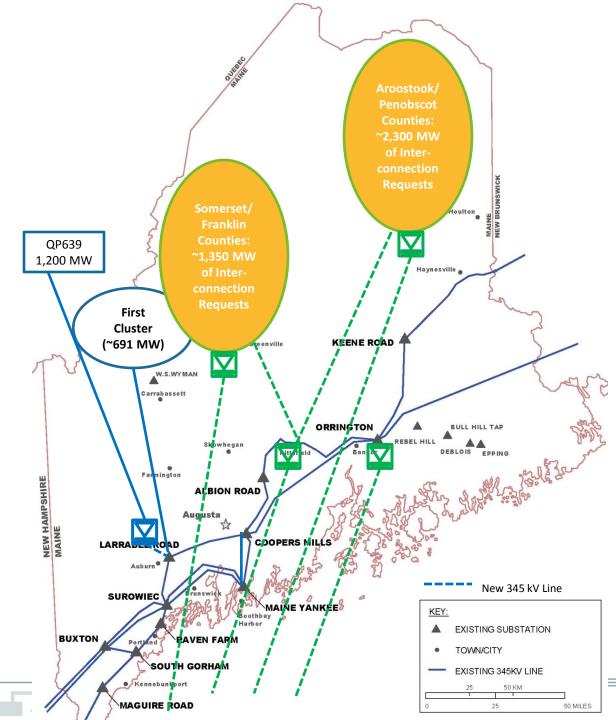
- Identify potential transmission infrastructure that could be used to interconnect queued generation in Maine
 - Quantify generation that could interconnect with new transmission pursuant to the Network Capability Interconnection Standard (NCIS)
- The conditions used in NCIS System Impact Studies are described in <u>Planning Procedure 5-6</u>
 - Peak load (mostly for steady state) and light load (mostly for stability) testing
 - Resources are modeled at their nameplate ratings (50 degrees F or 0 degrees F, as appropriate)
 - New Resources may dispatch against existing resources under the Network Capability Interconnection Standard
 - Interfaces modeled at the transfer limit
- The base case will include the first cluster and associated upgrades and QP639

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12

Initial Conceptual Transmission Upgrades

- Analysis of <u>new</u>
 <u>HVDC transmission</u>
 connecting to points
 in the southern part
 of the system
 - Either connecting radially to proposed generation or connecting to the existing network
- Examples of these approaches are in the ISO interconnection Queue



Next Steps

- Review any feedback from Stakeholders regarding the initial conceptual transmission upgrades
 - Please email any additional feedback to <u>PACmatters@iso-ne.com</u> by 07/13/18
- Present results of the second Maine Resource Integration Study
- Issue Draft Report for Comment
 - The ISO will use Reasonable Efforts to complete the Maine Resource Integration Study within twelve (12) months from this notice of the cluster initiation to the Planning Advisory Committee

Questions

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15