ISO NEW ENGLAND
ANCILLARY SERVICE SCHEDULE NO. 2
BUSINESS PROCEDURE

REVISION NO.: 4
EFFECTIVE DATE: APRIL 1, 2011

Introduction

Welcome to the Ancillary Service Schedule 2 Business Procedure. In this Introduction, you will find the following information:

- What you can expect from the ISO New England Manuals, ISO New England Operating Procedures and User Guides in general (see "About ISO New England Manuals, ISO New England Operating Procedures and User Guides").
- What you can expect from this ISO New England Business Procedure (see "About This Business Procedure").
- How to use this business procedure (see "Using This Business Procedure").

About the ISO New England Manuals, ISO New England Operating Procedures and User Guides

The ISO New England Manuals, ISO New England Operating Procedures and User Guides are the instructions, rules, procedures, and guidelines established by the ISO for the operation, planning, and accounting requirements of the New England Control Area and the Market. Table 1.1 lists the ISO New England Manuals, ISO New England Operating Procedures and User Guides.

About This Business Procedure

The *ISO New England Ancillary Service Schedule No. 2 Business Procedure* is listed along with a series of other transmission-based documents. This business procedure focuses on how dynamic reactive resources qualify for and are compensated for the reactive supply and voltage control that they provide in support of the New England Transmission System.

The Ancillary Service Schedule 2 Business Procedure consists of five sections. The sections are as follows:

- Section 1: Introduction
- Section 2: Capacity Cost (CC) Procedures
- Section 3: Lost Opportunity Cost (LOC) Procedures
- Section 4: Cost of Energy Consumed (CEC) Procedures
- Section 5: Cost of Energy Produced (CEP) Procedures

Target Users

The target users for the Ancillary Service Schedule 2 Business Procedure are:

- Generators and non-generators that have the capability to produce or absorb dynamic reactive power;
- The NEPOOL Reliability Committee;
- The Local Control Centers (LCCs); and
- ISO-NE (including the Customer Service Department., Settlement Department and System Operations Department)

References

The references to other documents that provide background or additional detail directly related to the Ancillary Service Schedule 2 Business Procedure are:

- Schedule 2 to the ISO Open Access Transmission Tariff
- Market Rule 1

Using This Business Procedure

Because we believe that explaining concepts is just as important as presenting the procedures, we start each section with the "big picture". We then present details and procedures. This philosophy is reflected in the way we organize the material in this business procedure. The following provides an orientation to this business procedure's structure.

What You Will Find In This Business Procedure

- A table of contents;
- An approval page that lists the required approvals and the revision history;
- The introduction; and
- Four sections containing general concepts as well as specific guidelines, requirements, or procedures. The sections describe the actions to be taken by the owners of generators and non-generators, the ISO and the Local Control Centers.

TABLE OF CONTENTS

Revision History

Approval

Approval Date: March 2, 2007 Effective Date: March 1, 2007

Revision History

Revision No. Revision 0.4	Approval Date NPC: April 1, 2011
Section No.	Revision Summary
Global Change	Ministerial formatting and punctuation changes
Table 1.1	Removed to be consistent with other ISO Manuals
1.4	Reorganized and added further detail to Responsibilities, shifted location of NRC responsibilities
2.2.4.1	Clarified and added language defining effective dates of data submittal and test information
2.2.4.2	Further defined Termination as a QRR (including incorporation of existing suspension provisions)
2.2.5.1	Added further definition to testing requirements, added a reference to following “voltage dispatch instructions”, and added language describing testing requirements for non-QRRs
2.2.5.2	Removed Lagging test requirement during On Peak hours and eliminated “strongly recommended” language for off peak hours for leading tests
2.2.5.3	Updated form name and ISO software system name
2.2.5.4	Added language allowing for the proposal of an alternative test date
2.2.5.5	Added clarification for testing of composite units
2.2.5.10	Modified language to be consistent with 2.2.4.2 changes
Revision No. Revision 0.3	Approval Date NPC: 8/6/10
Section No.	Revision Summary
Global Change	Replaced the term Qualified Reactive Resource with QRR after its initial use
2.2.1.1	Removal of expired 01/01/09 AVR Requirements implementation date
2.2.4.2.1.1	Removal of entire section related to expired transitional implementation language
2.2.4.2.1.a	Removal of expired 01/01/09 AVR Requirements implementation date
2.2.5.1	Added reference to following “voltage dispatch instructions”
2.2.5.2	Removal of entire section related to expired transitional implementation language
2.2.5.3	Added footnote allowing for the consideration of shorter test request submittal lead times
2.2.5.5	Added clarification for testing of composite units
2.2.6.2	Modified waiver process

2.2.6.2.1	Added new section addressing waiver duration
2.2.6.2.2	Modified waiver appeal requirements
2.2.7	Removal of expired 01/01/09 AVR Requirements implementation date
3, 4 and 5	Referenced ISO Tariff wherever applicable, standardized language, and specified Reactive Resource Provider CEC Data submissions.
Attachment 1	Deleted expired Attachment 1 - Transitional Leading Reactive Capability Test Dates
Revision No. Revision 0.2	Approval Date NTC: November 30, 2007
Section No.	Revision Summary
Table 1.1	Ministerial update to Table 1.1 to reflect current procedures.
Section 2	General ministerial cleanup, and modifications to the Capacity Cost Compensation Procedures to recognize the qualification and testing requirements of the Cross Sound Cable (CSC), which is a non-Generator Reactive Resource.
Section 2.1.3	Modified the entity to which CC compensation is distribution from the "Lead Participant or a designated entity" to the Qualified Reactive Resource's owners based on Ownership Share
Section 2.2.1	Added requirements that must be met prior to being recognized as a Qualified Reactive Resource to align with new Schedule 2 requirements
Sections 2.2.2 and 2.2.3	Clarified ISO's review and recommendation responsibilities and NEPOOL stakeholder advisory input language
Attachment 1	Updated Table. Moved FPL Unit 328 (Gulf Isle) from 2007 to 2008, Unit 621 (Williams) from 2008 to 2007, and Unit 1187 (Stony Brook GT1C) from 2009 to 2008.
Revision No. Revision 0.1	Approval Date NPC: October 12, 2007
Section No.	Revision Summary
Section 2.2.5.6	Added detail on the testing requirements for Combined Cycle Units or Pseudo Combined Cycle Generator Pseudo Combined Cycle
Revision No. Revision 0.0	Approval Date NPC: March 2, 2007
Section No.	Revision Summary
Entire Document	The *ISO New England Ancillary Service Schedule 2 Business Procedure* was developed to reflect the ISO New England Inc. and NEPOOL Participants Committee Amendments to Schedule 2 – Reactive Power Supply and Voltage Control of the ISO New England Inc. Open Access Transmission Tariff; Docket No. ER07-397-000, dated December 29, 2006

1 INTRODUCTION

1.1 Purpose

This Ancillary Service Schedule 2 Business Procedure ("Business Procedure") contains the general requirements for the qualification of generator and non-generator dynamic reactive resources for Capacity Cost ("CC") payment and the submittal, collection and processing of dynamic reactive resource and test data that allows for compensation under Schedule 2 - Reactive Supply and Voltage Control Service ("Schedule 2") under Section II of the ISO New England ("ISO" or "ISO-NE") Transmission, Markets and Services Tariff ("Tariff").[1]

1.2 Applicability

Providing adequate reactive supply and voltage control service ("VAR Service") under Schedule 2 from generator and non-generator dynamic reactive resources is necessary to maintain reliable transmission voltage levels on the New England Transmission System. All dynamic reactive resources (e.g., generators, SVCs, STATCOMs) within the New England Control Area that are under the ISO's operational control are required to provide VAR Service regardless of whether the resource receives compensation under Schedule 2. Accordingly, as system conditions dictate, a dynamic reactive resource may be directed by the ISO or a Local Control Center ("LCC") to provide VAR Service by producing or absorbing reactive power.

Schedule 2 defines the extent to which (a) dynamic reactive resources are compensated for providing VAR Service and (b) transmission customers are charged for utilizing VAR Service. Dynamic reactive resources may recover their variable Lost Opportunity Cost ("LOC"), Cost of Energy Consumed ("CEC") and Cost of Energy Produced ("CEP") costs pursuant to Schedule 2. In addition, a dynamic reactive resource that qualifies as a Qualified Reactive Resource ("QRR") may receive Schedule 2 Capacity Cost ("CC") Rate compensation and be included in the capacity cost-compensation program ("CCCP"). The QRR will continue to receive CC compensation as long as it continues to meet the qualification requirements (including performing regular testing of its reactive capability ("Reactive Capability Test")) in Schedule 2 and this Business Procedure.

1.3 Scope

This Business Procedure is applicable to the following: (1) all Transmission Customers under the OATT; (2) all entities owning or controlling the reactive power capability of dynamic reactive resources ("Reactive Resource Providers") within the New England Control Area that are under the ISO's operational control and that are eligible to receive Schedule 2 payments; and (3) ISO employees who perform business functions for operating units of ISO.

1.4 Responsibility

1.4.1 Reactive Resource Providers

Reactive Resource Providers are responsible for, but not limited to:

a. Following ISO direction to provide VAR Service by producing or absorbing reactive power to control system voltage;

b. Providing the ISO with completed NX-12D forms for its dynamic reactive resources with minimum excitation limiter settings shown and associated one-line diagram submittals;

c. Submitting applications for its dynamic reactive resource to be recognized as a "QRR" in order to receive CC compensation under Schedule 2;

d. Submitting to the ISO:

   i. Reactive Capability Test Requests in the ISO Facility Outage Scheduling System;

[1] Section II of the ISO Tariff is the Open Access Transmission Tariff ("OATT").

ii. Offers in the Day-ahead and Real-time Markets, and operating its facilities to affect leading and lagging Reactive Capability Testing for the QRRs in accordance with Schedule 2 and this Business Procedure;

iii. Reactive Capability Test data;

iv. A revised NX-12D, when required; and

v. A completed *"QRR Termination Request Form",* when required;

e. Meeting the requirements of Schedule 2 and this Business Procedure.

1.4.2 Local Control Centers

The LCCs are responsible for, but not limited to:

a. Reviewing, approving, repositioning or rejecting Reactive Capability Test Outage Requests in the ISO Facility Outage Scheduling System based on forecasted system conditions;

b. On the day of a leading or lagging Reactive Capability Test, monitoring system conditions before and throughout the duration of the test and, in coordination with the ISO, providing the final approval for the testing of the QRR to begin. The LCC shall also be responsible for terminating the test if the test jeopardizes the system;

c. Providing to the ISO supporting data and explanation if system conditions prevent the successful completion of a QRR leading or lagging Reactive Capability Test;

d. Providing input into the decision to grant waivers of a Reactive Capability Test to QRRs; and

e. Meeting the requirements of Schedule 2 and this Business Procedure.

1.4.3 ISO New England

The ISO is responsible for, but not limited to:

a. Receiving from the Reactive Resource Provider and processing NX-12D and one-line diagram for each dynamic reactive resource;

b. Receiving from the Reactive Resource Provider, processing and approving/rejecting requests for dynamic reactive resources to be considered as QRRs;

c. Receiving from the Reactive Resource Provider, processing and approving/rejecting requests for QRR Short-term Termination or for Prolonged Termination;

d. Reviewing, repositioning or rejecting Reactive Capability Test Outage Requests in the ISO Facility Outage Scheduling System;

e. On the day of a leading or lagging Reactive Capability Test, monitoring system conditions before and throughout the duration of the test in coordination with the associated LCCs. The ISO shall also be responsible for terminating the test if the test jeopardizes the system;

f. Receiving and processing Reactive Capability Test data from Reactive Resource Providers. The ISO shall also assess the test data and, if appropriate, grant waivers;

g. On a monthly basis, posting on the ISO website a report that contains information on all QRRs participating in the CCCP;

h. On an annual basis, provide the NEPOOL Reliability Committee with a CCCP summary;

i. Calculating monthly charges and credits associated with VAR Service in accordance with Schedule 2 and this Business Procedure; and

j. Meeting the requirements of Schedule 2 and this Business Procedure.

1.4.4 NEPOOL Reliability Committee

The NEPOOL Reliability Committee is responsible for, but not limited to:

a. Reviewing and, if appropriate, supporting the ISO's recommendation of requests from the Reactive Resource Providers to have their dynamic reactive resources recognized as a QRRs and included in the CCCP; and

b. Providing advisory input into the decision on whether to support a Reactive Resource Provider's appeal of a waiver denial from a Reactive Capability Test for a QRR.

2 CAPACITY COST COMPENSATION PROCEDURES

2.1 Eligibility – Capacity Cost Compensation Program

The Reactive Resource Provider must submit a request to the ISO in order for its dynamic reactive resource to be recognized as a QRR and receive CC compensation. The ISO will validate that the dynamic reactive resource meets the associated requirements and, if appropriate, approve the resource's QRR status. Once recognized, the QRR must continue to meet all Schedule 2 qualification requirements (including the periodic testing of its leading and lagging reactive capability) in order to maintain its status as a QRR. QRRs receive CC compensation based on their verified leading and lagging reactive capability ("Qualified VARs"). Qualified VARs are the amounts of leading and lagging reactive capability that the ISO, with support from the NEPOOL Reliability Committee, initially approves for each dynamic reactive resource. Upon completion of a leading or lagging Reactive Capability Test, the Qualified VARs are adjusted according to the actual test results. Dynamic reactive resources that do not request to be recognized as a QRR or do not meet Schedule 2 QRR requirements are not eligible to receive CC compensation.

2.1.1 Generator Eligibility as a QRR

A generator is eligible to be considered a QRR if (a) it meets the requirements of Schedule 2 and (b) the Reactive Resource Provider submits a request to the ISO that its resource be recognized as a QRR. Once a generator is considered a QRR, the generator must continue to meet the requirements of Schedule 2 in order to maintain its status as a QRR.

2.1.2 Non-Generator Eligibility as a QRR

A non-generator is eligible to be considered a QRR if (a) it meets the requirements of Schedule 2 and (b) the Reactive Resource Provider submits a request to the ISO that its resource be recognized as a QRR. Once a non-generator dynamic reactive resource is considered a QRR the non-generator must continue to meet the requirements of Schedule 2 in order to maintain its status as a QRR.

2.1.2.1 Cross Sound Cable ("CSC") Requirements

All qualification and testing provisions (including testing periods and submittal of supporting NX-12D data) currently applied to Qualified Generator Reactive Resources within Section 2 of this Business Procedure shall apply to the CSC. Certain sections have been modified where there are recognized differences between the requirements that are applied to other QRRs and those that are applied to the CSC.

2.1.3 Entity to receive CC Compensation Payments

ISO will credit CC compensation to the Reactive Resource Provider that is associated with the QRR. If the QRR has multiple owners, ISO will distribute any and all CC compensation payments to the multiple owners based on Ownership Share of the QRR.

2.2 CC Compensation Program Detail

Dynamic reactive resources do not automatically receive CC compensation under Schedule 2. The Reactive Resource Provider must, in writing, specifically express the desire to participate in the CCCP. In addition, the Reactive Resource Provider must provide the necessary documentation to the

ISO Operations Department in support of its request to participate in the CCCP. As one of the last steps in this process, the QRR will be required to test and demonstrate its actual leading and lagging reactive capability. The QRR must continue to perform Reactive Capability Tests within the time frames described in this document and Schedule 2. The QRR's CC compensation will be based initially on its submitted reactive capability data and subsequently, following successful testing, on the results of its leading and lagging Reactive Capability Tests.

A brief outline of the CCCP follows:

Step 1 - Application for qualification and inclusion in the CCCP

Step 2 - ISO Review of Application

Step 3 - Approval qualification and inclusion in the CCCP

Step 4 - CC Compensation

Step 5 - Testing

2.2.1 Step 1 - Application for qualification and inclusion in the CCCP

To be included in the CCCP the Reactive Resource Provider must submit a completed "*Qualified Reactive Resource Request Form*" to the ISO via mvarcaptest@iso-ne.com. The *Qualified Reactive Resource Request Form* can be found on the ISO's website.

Along with the *Qualified Reactive Resource Request Form*, the Reactive Resource Provider must also include a completed NX-12D form and a one-line diagram.

2.2.1.1 Requirements that must be met prior to being recognized as a QRR

2.2.1.1.1 To qualify as a QRR, a generator dynamic reactive resource must satisfy the requirements for participation set out in Schedule 2 of the ISO OATT. Those requirements have been broken down into greater detail for implementation in the following list:

a. Be registered with the ISO by a Market Participant;

b. Be registered with the ISO as a Generator Asset in the ISO market system;

c. Be released for commercial operation and be an active asset;

d. Be interconnected to the New England Transmission System; or

   Be interconnected to the New England distribution system and participating in the New England markets;

e. Have a current (new or updated) NX-12D form and one-line diagram on file at the ISO (see Sections 2.2.1.2 and 2.2.1.3);

f. Have its telemetered MW and MVAR data displayed within the ISO and LCC Control Rooms;

g. Have a functioning automatic voltage regulator ("AVR") and have the AVR data telemetered to the ISO and LCC;

h. Have a voltage schedule assigned by the ISO within ISO New England Operating Procedure No. 12 - Voltage and Reactive Control ("OP12") or by the LCC;

i. Maintain the voltage schedule and adjust its reactive output as directed by ISO and LCC;

j. If there is any other load (other than station service load) behind the GSU or the metering point where reactive capability is measured, such load must have separate and distinct OP 18 compliant metering that is telemetered to the ISO; and

k. Have been interconnected in accordance with Section I.3.9 (or its predecessor or successor), and Schedules 22 or 23 of the ISO OATT, as applicable, for generator dynamic reactive resources that have interconnected after the effective date of those schedules.

2.2.1.1.2 To qualify as a QRR, a non-generator dynamic reactive resource must satisfy the requirements for participation set out in Schedule 2 of the ISO OATT. Those requirements have been broken down into greater detail for implementation in the following list:

a. Be registered with the ISO by a Market Participant;

b. Be registered with the ISO as a Non-Generator Reactive Resource Asset in the ISO market system;

c. Be released for commercial operation and be an active asset;

d. Be interconnected to the New England Transmission System;

e. Have a current (new or updated) NX-12D form and one-line diagram on file at the ISO (see Sections 2.2.1.2 and 2.2.1.3);

f. Have its telemetered MVAR data displayed within the ISO and LCC Control Rooms;

g. Have a functioning AVR (or equivalent device) and, have the AVR data telemetered to the ISO and LCC;

h. Have a voltage schedule assigned by the ISO within OP12 or by the LCC;

i. Maintain the voltage schedule and adjust its reactive output as directed by ISO and LCC;

j. If there is any other load (other than station service load) behind the step-up transformer or the metering point where reactive capability is measured, such load must have separate and distinct OP 18 compliant metering that is telemetered to the ISO;

k. Have been interconnected in accordance with Section I.3.9 (or its predecessor);

l. Be covered by an operating agreement or protocol to which the ISO is a party and the document includes language that defines the lead and lagging reactive capability testing and operational requirements;

m. Be of a type of dynamic reactive power equipment that is within a category of equipment approved by the ISO, with advisory input from the NEPOOL Reliability Committee; and

n. Not be compensated for its dynamic reactive power capability costs under any other ISO OATT cost recovery mechanism.

2.2.1.2 The NX-12D Form

The **NX-12D form** that must be submitted by the Reactive Resource Provider can be found in Appendix B - Generator Reactive Data Explanation of Terms and Instructions for Data Preparation for ISO Form NX-12D to ISO New England Operating Procedure No. 14 - Technical Requirements Generators, Demand Resources and Asset Related Demands (“OP14”) (“Appendix B to OP14”).

2.2.1.2.1 Generator Dynamic Reactive Resources

The NX-12D form and attached curve described above must contain the Qualified Generator Reactive Resource’s lagging reactive capability at its Summer Seasonal Claimed Capability (“S-SCC”) MW value as well as the leading reactive capability at the EcoMin MW value as described in Appendix B of OP14. The associated leading reactive capability must reflect the MVAR capability at all output levels between the EcoMin and S-SCC points on the MW/MVAR capability curve adjusted to recognize the generator’s Minimum Excitation Limiter (“MEL”) settings. When appropriate, the NX-12D data shall include a hydrogen pressure-based or temperature-based MW/MVAR capability curve(s) for generator dynamic reactive resources that recognize the generator’s Minimum Excitation Limiter (“MEL”) settings and, for hydrogen cooled generators, a statement of the hydrogen pressure at which the generator normally operates.

2.2.1.2.2 Non-Generator Dynamic Reactive Resources

The NX-12D form and attached curve must contain the Qualified non-Generator Reactive Resource’s lagging reactive capability at its maximum MW loading level, as well as the leading reactive capability at its minimum MW loading level.

2.2.1.2.2.1 CSC NX-12D Submittal Requirement

The CSC shall submit NX-12D data reflecting its reactive capability at the Halvarsson converter terminal over the full MW transfer loading range. The CSC's full MW transfer loading range covers the CSC external node (.I.SHOREHAM138 99 (Location ID 4014)) being loaded between (a) 330 MWs of energy flowing from New England to New York; and (b) 346 MWs of energy flowing from New York to New England. The NX-12D form and MW/MVAR capability curve must contain the CSC's lagging reactive capability at its full MW transfer loading of 330 MW in the southerly direction (which corresponds to the S-SCC point for Qualified Generator Reactive Resources), as well as its leading reactive capability at 0 MW flow (which corresponds to the EcoMin point for Qualified Generator Reactive Resources).

2.2.1.3 One-line Diagram Submittal

A one-line diagram must be included with each submitted *Qualified Reactive Resource Request Form*. The one-line diagram shall reflect the electrical system between the dynamic reactive resource and its interconnection with the New England Transmission System or distribution system. The one-line diagram must include the dynamic reactive resource, its step-up transformer, its station service and any other load fed by the electrical system (if any), and the metering point where the reactive capability is measured.

2.2.2 Step 2 - ISO Review of Application

The ISO will review and assess the completed *Qualified Reactive Resource Request Form* received from the Reactive Resource Provider. The ISO will seek input from the Reactive Resource Provider and the associated LCC to verify that the information contained in the *Qualified Reactive Resource Request Form* is accurate. Once the ISO is satisfied that the application is complete, the ISO will make a determination as to whether the dynamic reactive resource meets all of the QRR requirements as specified in Section 2.2.1.1. and develop a recommendation (acceptance or denial) as to whether the dynamic reactive resource should be designated as a QRR. The recommendation will be presented at the next available regularly scheduled meeting of the NEPOOL Reliability Committee for advisory input.

2.2.3 Step 3 - Approval of qualification and inclusion in the CCCP

The ISO will present to the NEPOOL Reliability Committee the submitted *Qualified Reactive Resource Request Form* and its recommendation as to whether the dynamic reactive resource should be designated as a QRR. The ISO will seek advisory input from the NEPOOL Reliability Committee on the recommendation. A dynamic reactive resource is eligible for CC compensation only after the NEPOOL Reliability Committee has provided advisory input and the ISO has made the final determination to designate the resource as a QRR. The ISO will notify the applicant of the final determination.

2.2.4 Step 4 - CC Compensation

The CC compensation will (a) begin in the month following the month in which the QRR status is granted by the ISO, with the advisory input of the NEPOOL Reliability Committee, and (b) initially be based on its approved reactive capability data and, following that, the results of its leading and lagging Reactive Capability Tests. Leading and lagging reactive capability data (and the associated CC compensation) will be adjusted to reflect reactive losses between the QRR and the high side of its step-up transformer. Reactive losses between the QRR and the high side of its step-up transformer will be added to the QRR's leading reactive capability, but subtracted from its lagging reactive capability when establishing the Qualified VARs for the tested capability of a QRR that has tested or the stated capability of a QRR that has not yet tested. All modifications will be implemented on a prospective basis starting with the following month.

2.2.4.1 Modifications to CC compensation without being Terminated as a QRR

The Qualified VARs for a QRR will be modified under the following conditions:

a. A submitted NX-12D (i.e., a revised NX-12D or an initial NX-12D) indicates reactive capability that is different from the current reactive capability on file with the ISO. Once the submitted NX-12D data is verified by the ISO, the Qualified VARS will be modified, effective the first day of the month following the NX-12D effective date, to reflect the Reactive Capability supported by the submitted NX-12D data;

b. The verified leading or lagging Reactive Capability Test results (or historic data submittal) differ from the QRR's current reactive capability data that the ISO has on file. The Qualified VARS will be modified, effective the month following the testing date, to reflect the Reactive Capability Test results;

   In this case, the Reactive Resource Provider must revise the resource's NX-12D to reflect the new reactive capability and submit a revised NX-12D within 30 days from the date of the valid test. Failure to submit a revised NX-12D within this timeframe will cause the QRR to be noncompliant with the CCCP and its Qualified VARs (depending whether leading or lagging reactive capability was being tested) will be set to '0'. Once a valid revised NX-12D is received by the ISO at mvarcaptest@iso-ne.com then the CC compensation will be re-instated for the following month; or

c. The QRR fails to complete a valid Reactive Capability Test for one operating mode (e.g., leading) within the allotted timeframe (or its associated waiver expires), but has successfully completed a valid Reactive Capability Test (or has a valid waiver) for the other operating mode (e.g., lagging). The Qualified VARS for the operating mode that was not tested will be modified effective the month following the conclusion of the applicable testing period.

   In this case, the QRR will remain in the CCCP and continue to receive CC compensation only for the operating mode for which there is a successfully completed Reactive Capability Test or a valid Reactive Capability Test waiver in place.

2.2.4.2 Termination as a QRR

2.2.4.2.1 Short-term Termination as a QRR

A Reactive Resource Provider may be terminated as a QRR for a limited period of time (up to a maximum of 30 consecutive months) by the ISO or at the request of the Reactive Resource Provider ("Short-term Termination").

A dynamic reactive resource in Short-term Termination status is no longer considered a QRR and will not receive CC compensation (i.e., its Qualified VARs are set to '0'). This change in QRR status does not relieve that resource from adhering to any other ISO New England Operating Document requirements (e.g., OP12).

The dynamic reactive resource will remain in Short-term Termination status until the earlier of the following:

(a) the ISO determines that (i) the Reactive Resource Provider has corrected the reason for not meeting the Schedule 2 qualification requirements, (ii) the dynamic reactive resource performs a valid leading or lagging Reactive Capability Test that results in a non-zero Qualified VARs value, or (iii) a valid Reactive Capability Test waiver is issued by the ISO;

(b) so long as the reasons outlined in Section 2.2.4.2.1.1 are not outstanding, the Reactive Resource Provider requests that the dynamic reactive resource be reinstated as a QRR; or

(c) the dynamic reactive resource is terminated for a prolonged period as provided in Section 2.2.4.2.2.

2.2.4.2.1.1 Short-term Termination as a QRR by the ISO

A QRR will be placed in Short-term Termination status by the ISO for the following reasons:

a. When the QRR fails to meet Schedule 2 qualification requirements;

b. When the QRR that receives CC compensation for only one reactive capability (e.g., is only compensated for its lagging reactive capability and does not have a valid leading Reactive Capability waiver) and (i) fails to successfully perform an associated Reactive Capability Test within the stated testing periods and (ii) does not have an associated valid Reactive Capability Test waiver in place;

c. When the QRR that receives CC compensation for both leading and lagging reactive capability (i) fails to successfully perform its leading and lagging Reactive Capability Tests within the stated testing periods and (ii) does not have a valid leading or lagging Reactive Capability Test waiver in place; or

d. When a QRR fails to successfully perform a Reactive Capability Test due to modification of its capability, as described in Section 2.2.5.10.

2.2.4.2.1.2 Short-term Termination as a QRR at the request of the Reactive Resource Provider

A QRR may also be placed in Short-term Termination status at the request of the Reactive Resource Provider. To accomplish this, the Reactive Resource Provider must submit a completed "*QRR Termination Request Form*" to the ISO at mvarcaptest@iso-ne.com. The *QRR Termination Request Form* can be found on the ISO-NE website. A Reactive Resource Provider may also complete and submit a *QRR Termination Request Form* to extend a Short-term Termination if the original request was for less than thirty (30) months, or to end a Short-term Termination earlier than originally requested.

The following must be addressed within the completed *QRR Termination Request Form*:

a. The completed form must be received by the ISO at mvarcaptest@iso-ne.com on or before the 15th day of the month preceding the start of the Short-term Termination; and

b. The Short-term Termination must:

i. start on the first day of a future month;

ii. end on the last day of a future month;

iii. be no less than one (1) month in length; and

iv. be no greater than thirty (30) months in length.

ISO-NE will review the completed *QRR Termination Request Form* received from the Reactive Resource Provider. A submitted *QRR Termination Request Form* will only be rejected by the ISO if the ISO determines that the required information is incomplete or invalid. If the required information is determined to be incomplete or invalid, the ISO will work with the Reactive Resource Provider to attempt to resolve the discrepancy. The ISO shall notify the Reactive Resource Provider via e-mail and indicate whether the submitted request has (i) been approved and the QRR is terminated on a short-term basis for the requested period of time, or (ii) has been rejected because of incomplete or invalid data. A dynamic reactive resource that has been terminated on a short-term basis will not receive CC compensation (i.e., its Qualified VARs set to '0') for the requested period of time.

At the conclusion of the Short-term Termination period, ISO shall reinstate the dynamic reactive resource as a QRR without additional NEPOOL Reliability Committee review and support. Unless otherwise superseded, the Qualified VARs of the reinstated QRR shall be set to the values that existed just prior to the Short-term Termination period; provided that, if the QRR had been placed in Short-term Termination status by the ISO prior to the Reactive Resource Provider's request for Short-term Termination, the Qualified VARs of the QRR will be continue to be set to '0' until the reasons for which the ISO placed the QRR on Short-term Termination status have been corrected pursuant to Section 2.2.4.2.1. A QRR returning from Short-term Termination must: (a) meet the requirements of Schedule 2 and this Business Procedure; and (b) perform its next regularly scheduled leading and lagging Reactive Capability Tests within its current 5 year testing window.

2.2.4.2.2 Prolonged Termination as a QRR

A dynamic reactive resource's QRR status will be terminated for a prolonged period ("Prolonged Termination") by the ISO for the following reasons:

a. At the request of the Reactive Resource Provider.

   A Reactive Resource Provider may voluntarily request that its QRR status and participation in the CCCP be terminated for a prolonged period of time. To accomplish this, the Reactive Resource Provider must submit a completed *QRR Termination Request Form* to the ISO. Such notice must be (a) received by the ISO at mvarcaptest@iso-ne.com on or before the 15th day of the month preceding the start of the QRR termination and (b) effective on the first day of a future month;

b. If the dynamic reactive resource is on Short-term Termination for a period greater than 30 consecutive months; or

c. When the QRR is retired.

A dynamic reactive resource in Prolonged Termination status is no longer considered a QRR and will be removed from the CCCP. The dynamic reactive resource will no longer receive CC compensation (i.e., its Qualified VARs are set to '0'). This change in status does not relieve the dynamic reactive resource from adhering to any other ISO New England Operating Document requirements (e.g., OP12).

A Reactive Resource Provider may apply for QRR status for its dynamic reactive resource and request participation in the CCCP by following "*Step 1 – Application for qualification and inclusion in the* CCCP" in Section 2.2.1.

2.2.5 Step 5 - Leading and Lagging Reactive Capability Tests under the CCCP

2.2.5.1 Overview of Leading and Lagging Reactive Capability Tests

Once a dynamic reactive resource is granted QRR status, the Reactive Resource Provider shall ensure that the QRR meets the requirements of Section 2.2.5 (i.e., successfully perform initial leading and lagging Reactive Capability Tests) by the end of the next applicable Reactive Capability Test Period. A dynamic reactive resource that is granted QRR status (a) prior to the start of a testing period, must test in the upcoming testing period, or (b) within a testing period, may test in the current testing period but must test before the conclusion of the next testing period. Example: A dynamic reactive resource that is granted QRR status in April 2011 must perform (a) a lagging Reactive Capability Test prior to the conclusion of the 2011 lagging Reactive Capability Test Period and (b) a leading Reactive Capability Test prior to the conclusion of the 2012 leading Reactive Capability Test Period.

After the initial test and on an ongoing basis, QRRs must continue to meet the requirements of Section 2.2.5 (i.e., successfully perform leading and lagging Reactive Capability Tests) and perform leading and lagging Reactive Capability Tests at least once every five-years in order to maintain eligibility for continuing participation in the CCCP. The Reactive Resource Provider can elect to retest the QRR at any time within the allowed leading and lagging Reactive Capability Test Periods. As an alternative to actually performing a leading or lagging Reactive Capability Test, a Reactive Resource Provider may submit historical data of its QRR to substantiate its reactive capability and meet its leading or lagging Reactive Capability Test requirement. If the QRR does not perform a valid leading or lagging Reactive Capability Test as prescribed in this Business Procedure, its CC compensation will be adjusted appropriately. The Reactive Resource Provider assumes the responsibility for all costs incurred while performing the Reactive Capability Tests.

The ISO or LCCs reserve the right to require that a QRR perform a leading or lagging Reactive Capability Test as reliability needs dictate or if the QRR has failed to meet the voltage schedules or voltage dispatch schedules set by the ISO or the associated LCC.

If the reactive power output or absorption by a QRR is less than the Qualified VARs from that QRR and the QRR is failing to meet the voltage schedules or voltage dispatch schedules set by the ISO or the associated LCC, the QRR shall be required to retest its lagging or leading capability during the

next appropriate testing period and the Qualified VARs (lagging or leading, as appropriate) for calculating CC payments shall be reduced to the maximum value observed in the historical data until the QRR has retested.

Currently the leading or lagging Reactive Capability Test requirements are defined to apply specifically to Qualified Generator Reactive Resources and the CSC (a non-Generator Reactive Resource), and not to any other Qualified non-Generator Reactive Resources. Prior to other specific types of Qualified non-Generator Reactive Resources being added to the CCCP, this Business Process will be modified to incorporate testing criteria that will be applied to that type of Qualified non-Generator Reactive Resource.

2.2.5.2 Reactive Capability Test Periods

There are two Reactive Capability Test Periods within which the associated leading or lagging Reactive Capability Test must be held: a lagging Reactive Capability Test Period and a leading Reactive Capability Test Period.

2.2.5.2.1 Lagging Reactive Capability Test Period

The lagging Reactive Capability Test Period starts on June 1st and ends on September 15th of each year. This is the period of time when a QRR must perform its lagging Reactive Capability Test for purposes of the meeting the CCCP testing requirements.

The exception to this requirement is applied to QRRs that are classified as run of river hydro generators. For these types of QRRs the lagging Reactive Capability Period starts on March 1st and ends on October 31st.

2.2.5.2.2 Leading Reactive Capability Test Period

The leading Reactive Capability Test Period starts on March 1st and ends on October 31st of each year. This is the period of time when a QRR must perform its leading Reactive Capability Test for purposes of the meeting the CCCP testing requirements.

2.2.5.3 Submitting a Request for a Reactive Capability Test

A Reactive Resource Provider must request to conduct a QRR's "leading or lagging Reactive Capability Test" ("Reactive Capability Test") by submitting a completed *"Reactive Capability Test Outage Request Form"* (which can be found on the ISO website) in the ISO Facility Outage Scheduling System. The request must:

a. Be submitted at least five (5) business days prior to the day for which the Reactive Capability Test is requested; and

b. Request a testing date and time within the time frames noted in Section 2.2.5.2.

The requested time and date of the Reactive Capability Test must be selected by the Reactive Resource Provider such that the MVARs that are produced or absorbed by the QRR during the test do not degrade system reliability. The Reactive Resource Provider may elect to consult with the LCC or the ISO to assist with the determination of preferred testing dates and times. Depending on the conditions of the system, the QRR may have to attempt to test several times to successfully perform a valid Reactive Capability Test. A request to conduct a QRR Reactive Capability Test will be considered an "approved request" when the Reactive Resource Provider, LCC and ISO have agreed upon a date and time. The Reactive Resource Provider, LCC and ISO shall negotiate in good faith to arrive at a mutually agreeable Reactive Capability Test date and time. The outcome of the actual test shall have no bearing on the status of the "approved request".

The Reactive Resource Provider can submit a request for a QRR's Reactive Capability Test when scheduled to perform its Summer Seasonal Claim Capability Test.

If the Reactive Resource Provider desires, it may submit additional requests to test a QRR's Reactive Capability during a Reactive Capability Test Period.

As an alternative to performing a QRR Reactive Capability Test, the Reactive Resource Provider has the option to submit equivalent real-time data that meets the requirements in Section 2.2.5.9.

2.2.5.4 LCC/ISO New England Response to a Reactive Capability Test Request

The LCC will:

a. Verify that Reactive Capability Test request meets the requirements of this Business Procedure and Schedule 2; and

b. Conduct studies to ensure that local system reliability is not jeopardized during the requested Reactive Capability Test.

The LCC, in coordination with the ISO and per System Operating Procedures, will conduct area studies to ensure that regional system reliability is not jeopardized during the requested Reactive Capability Test. No later than 96 hours prior to 00:01 on the day the Reactive Capability Test is requested to be held, the LCC will forward its approval or denial of the requested Reactive Capability Test to the ISO and, if appropriate, propose an alternative date and time for performing the test.

The ISO, in coordination with the impacted LCCs and per System Operating Procedures, will conduct studies to ensure that regional system reliability is not jeopardized during the requested Reactive Capability Test. No later than 48 hours prior to 00:01 on the day the Reactive Capability Test was requested to be held, ISO will distribute an approval or denial notification to the impacted LCC for the requested Reactive Capability Test and, if appropriate, propose an alternative date and time for performing the test. If the request is denied, then a reason for denial will be provided along with a suggestion for a more appropriate date and time for performing the Reactive Capability Test. The LCC will notify the Reactive Resource Provider as soon as possible but no later than 24 hours prior to the beginning of the requested test date regarding the outcome of the Reactive Capability Test request.

Based on the above studies or real-time system conditions, the LCC and ISO shall have the ability to approve, propose an alternate testing time or day, deny or cancel a Reactive Capability Test due to system reliability criteria at any time prior or during the actual test.

2.2.5.5 Performing the Reactive Capability Test

It is the sole responsibility of the Reactive Resource Provider to submit offers in to the New England Markets to ensure that the QRR is dispatched to the required MW testing level (i.e., S-SCC, EcoMin) during the approved Reactive Capability Test date and time. The Reactive Resource Provider should also ensure that any necessary ramp time needed to reach and sustain the required MW testing level is considered within its submitted offers so as to not hinder the 60-minute test period.

For QRRs that are Combined Cycle Units or Pseudo Combined Cycle Generator, the Reactive Capability Tests must be performed in such way that the full combined cycle unit is tested at the same time (e.g., if there are three CTs and one ST, all four turbines must be loaded at the composite SCC during a Lagging Reactive Capability Test and at a composite EcoMin during a Leading Reactive Capability Test) in order to test common equipment, unless otherwise instructed by the ISO. If there is no common equipment that could affect reactive capability output (e.g., the generators of a composite facility each have separate GSUs), then the ISO and LCC may approve Reactive Capability Tests of certain components of a composite facility. The ISO and LCC will make this determination on a case-by-case basis. For compensation purposes, the total tested reactive capability of the QRRs will be divided equally between the registered QRRs (e.g., if there are three CTs and one ST, then the total tested capability will be divided by 33% per each registered asset from that full combined cycle unit) and utilized to establish the individual Qualified VARs.

With regard to Sections 2.2.5.5.1 and 2.2.5.5.2, the ISO shall monitor the associated test data and provide a summary of such data to the NEPOOL Reliability Committee once every two years.

2.2.5.5.1 Performing the Lagging Reactive Capability Test

During the lagging Reactive Capability Test, the QRR must be generating at its full S-SCC on a non-temperature adjusted basis (e.g., if the unit's S-SCC is "105" MW, then the unit must be producing within the allowed tolerance band around "105" MW for the duration of the lagging VAR test

irrespective of ambient temperature during the test) for a minimum duration of sixty (60) consecutive minutes. The average MVAR value achieved over the course of the test will be utilized to determine the Qualified VARs. If the QRR fails to generate MWs at a level within 95-105% of its S-SCC for at least 60 consecutive minutes then the lagging Reactive Capability Test will be regarded as unsuccessful. The average of the 5-minute interval MVAR values achieved over the course of the test will be utilized to determine the Qualified VARs. If the minimum of any recorded 5-minute interval MVAR value is less than 75% of the average of the recorded values, the lagging Qualified VARs will be set to that minimum value.

2.2.5.5.1.1 CSC Lagging Reactive Capability Test Requirement

CSC shall perform its lagging Reactive Capability Test of the Halvarsson converter terminal during hours in which the CSC is scheduled at its full MW transfer loading in the southward direction. CSC's full MW transfer loading in the southward direction is achieved when the total net sum of external transactions submitted by Market Participants and scheduled by the ISO in the ISO Real-time Energy Market at the CSC external node (.I.SHOREHAM138 99 (Location ID 4014)) results in 330 MWs of energy flowing from New England to New York. The 330 MWs flow will be considered to be the equivalent of the S-SCC value used by Qualified Generator Reactive Resources.

2.2.5.5.2 Performing the Leading Reactive Capability Test

During the leading Reactive Capability Test the QRR must be generating at its EcoMin value on the test date for a minimum duration of sixty (60) consecutive minutes. For the purpose of the Reactive Capability Test, the QRR must be generating within 95-105% of its submitted EcoMin value. If the QRR fails to generate within 95-105% of its EcoMin value for at least 60 consecutive minutes then the leading Reactive Capability Test will be regarded as unsuccessful. The average of the 5-minute interval MVAR values achieved over the course of the test will be utilized to determine the Qualified VARs. If the minimum (absolute value) of any recorded 5-minute interval MVAR value is less than 75% of the average of the recorded values, the leading Qualified VARs will be set to that minimum value.

2.2.5.5.2.1 CSC Leading Reactive Capability Test Requirement

CSC shall perform its leading Reactive Capability Test of the Halvarsson converter terminal during hours in which the Halvarsson Converter Station is Deblocked and the total net sum of external transactions submitted by Market Participants and scheduled by the ISO in the ISO Real-time Energy Market at the CSC external node (.I.SHOREHAM138 99 (Location ID 4014)) results in zero ('0') MWs of energy flowing on the CSC. The 0 MW flow will be considered to be the equivalent of the EcoMin value used by Qualified Generator Reactive Resources.

2.2.5.6 Test Day Communication between LCC and QRR

The Reactive Resource Provider shall contact the LCC on the day that the approved Reactive Capability Test is scheduled and seek permission to conduct the test. The LCC, in consultation with the ISO, shall issue instructions as to whether the QRR can proceed with the test. The Reactive Resource Provider and the LCC will agree upon the maximum and minimum voltage limits as well as the precise time for the test to begin and terminate. Prior to the test the LCC, in coordination with the ISO, shall adjust the transmission system in a manner that facilitates the test but does not jeopardize system reliability. At the completion of the test and prior to ramping the QRR back to its economic MW dispatch point and on automatic voltage regulation, the Reactive Resource Provider must seek permission from the LCC.

Based on real-time system conditions, the LCC and ISO shall have the ability to approve, deny or cancel a Reactive Capability Test due to system reliability criteria at anytime prior or during the actual test. If the LCC or the ISO deny or cancel a test, the Reactive Resource Provider will be required to submit a new Reactive Capability Test request.

2.2.5.7 Capturing and Submitting the Reactive Capability Test Data

Prior to the Reactive Capability Test, the Reactive Resource Provider is encouraged to review the *"Reactive Capability Test Data Recording Form"* (which can be found on the ISO web-site) and determine what QRR data needs to be collected and reported in support of the test.
During the Reactive Capability Test, the Reactive Resource Provider is required to collect pertinent QRR, step-up transformer and station service data on 5-minute intervals for the duration of the 60 minute test.

Figures 1.1 and 1.2 describe the two types of configurations and the metering points required to be captured during a Reactive Capability Test.

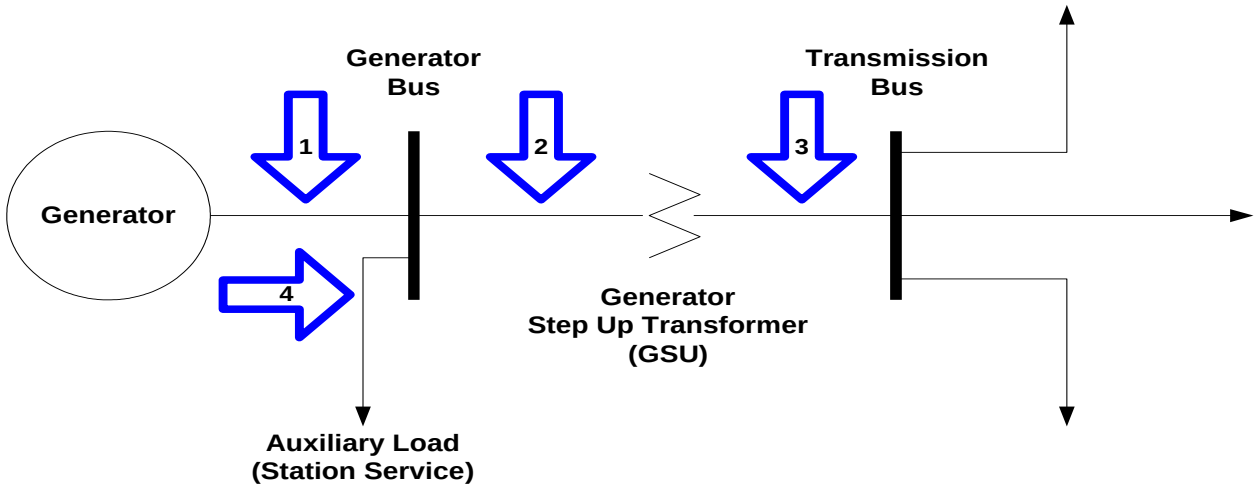

Figure 1.1: Configuration A - Potential Data Metering Points associated with Reactive Capability Tests.

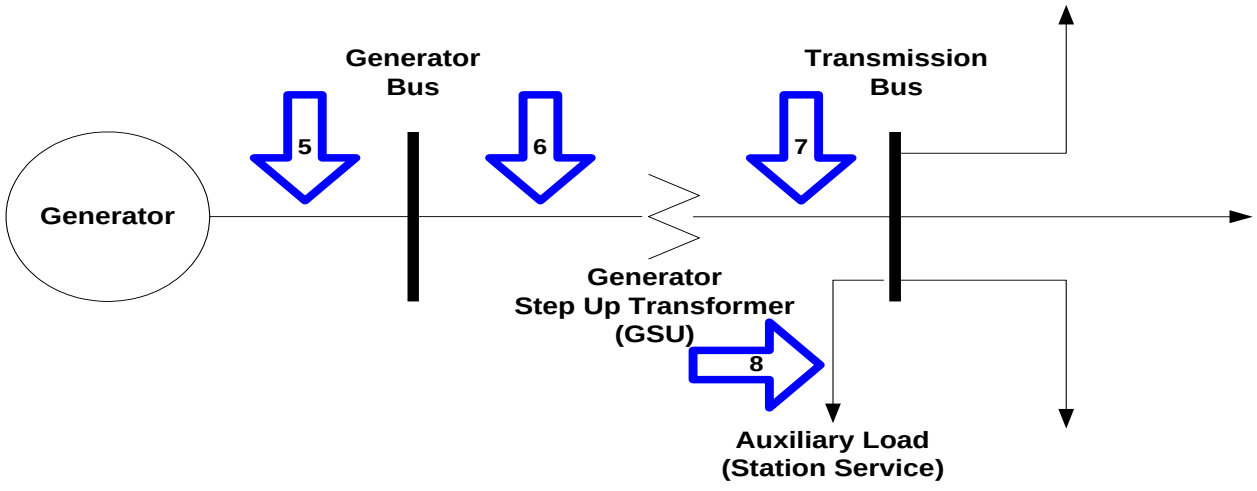

Figure 1.2: Configuration B - Potential Data Metering Points associated with Reactive Capability Tests.

Once the Reactive Capability Test is complete and no later than five (5) business days following the day of the test, the completed *Reactive Capability Test Data Recording Form* must be sent to the

ISO, via mvarcaptest@iso-ne.com, according to the instructions provided within the form. Failure to submit the test data within this timeframe will cause the test to be deemed as unsuccessful.

2.2.5.8 Test Result Review and an updated NX-12D Requirement

The ISO will review the submitted Reactive Capability Test data and verify the information is consistent with data collected from the EMS and other sources as needed. Any issues found in the submitted test data will be discussed with the Reactive Resource Provider and resolved. The ISO shall have the ability to reject submitted test data that can reasonably be considered as an attempt to receive more credit for Qualified VARs than the resource can provide over the course of an entire hour. Upon successful review and verification of the test data by the ISO, the Reactive Resource Provider will be notified in writing of the acceptance of the test data.

If during the Reactive Capability Test the QRR demonstrates reactive capability that is not within +/- 5% of the reactive capability reported in the latest NX-12D, the Reactive Resource Provider will be required to submit a revised NX-12D for the QRR within 30 days from the date of the test. Failure to submit a revised NX-12D within the allotted timeframe will result in adjustment of the associated Qualified VARs to zero.

2.2.5.9 Submittal of Historical Real-time Reactive Capability Data

The Reactive Resource Provider may submit historical Reactive Capability data from its QRR. The submitted data must meet the following requirements:

a. Must not be older than 365 days from the time of submittal;

b. Must have been recorded during the appropriate Reactive Capability Test Period;

c. Must have been recorded at a real power generation level:

   i. within 95-105% of its S-SCC for at least 60 consecutive minutes for lagging reactive capability; or

   ii. within 95-105% of its EcoMin value for at least 60 consecutive minutes for leading reactive capability;

d. Cannot be outside of +/-5% from the previously submitted NX-12D reactive capability value; and

e. Must be submitted by the Reactive Resource Provider and received by the ISO, at mvarcaptest@iso-ne.com,15 days prior to the end of the applicable Reactive Capability Test Period. If accepted by the ISO, the historic data will replace the leading or lagging Reactive Capability Test requirement.

Leading or lagging Reactive Capability Test waivers will not be issued on the basis of the submitted historical data.

The Reactive Resource Provider will be allowed to submit historical data in support of a Reactive Capability Test that is required under Section 2.2.5.10 only if the operational data provided meets the requirements of this section and is captured during an applicable Reactive Capability Test Period that follows the completion of the QRR's modification.

2.2.5.10 Changes to the Reactive Capability of the QRR

In the event that a QRR has been modified (e.g., due to overhaul, rewinding or any other type of electromechanical alteration) in a manner that impacts its real power or reactive power capability then the Reactive Resource Provider will be required to:

a. Submit a revised NX-12D for the QRR no later than 30 days from the time when the new MW/MVAR change comes into effect in the ISO market system;

b. Perform a Reactive Capability Test to verify the new reactive capability of the QRR.

i. ISO will assess if a Reactive Capability Test is required only for one operating mode (i.e., leading or lagging only) or if a Reactive Capability Test is required for both operational modes (i.e., leading and lagging).

ii. If the date when the new MW/MVAR capability change comes into effect in the ISO market falls:

- Within the associated Reactive Capability Test Period but prior to thirty (30) days before the end of the test period, then the QRR shall perform a test during that test period; or
- Outside of the associated Reactive Capability Test Period or within the final thirty (30) days of the test period, then the QRR shall perform a test during the next applicable test period.

iii. Submit a revised NX-12D to the ISO within thirty (30) days after the Reactive Capability Test if during that test the QRR demonstrates capability that is +/- 5% different from the NX-12D data that ISO has on file.

Failure to follow these requirements will result in the Short-term Termination of the QRR by the ISO described in Section 2.2.4.

2.2.6 Exceptions to the Reactive Capability Test requirements

2.2.6.1 Receiving Waivers from Reactive Capability Tests

Every QRR is expected to successfully complete an initial and all successive Reactive Capability Tests. However, certain extraordinary circumstances may prohibit the QRR from performing to its full Reactive Capability. Therefore, a waiver may be received in lieu of performing a leading or lagging Reactive Capability Test.

2.2.6.2 Eligibility to receive a Waiver from a leading or lagging Reactive Capability Test

The Reactive Resource Provider may submit to the ISO a request for its QRR to receive a waiver from the required leading or lagging Reactive Capability Test. QRRs are eligible to receive a waiver when the ISO has determined that both of the following conditions are met:

a. The Reactive Resource Provider submits at least two valid Reactive Capability Test requests for its QRR during the appropriate Reactive Capability Test Period and both requests are considered “approved requests” (in accordance with Section 2.2.5.3); and

b. System conditions are such that the QRR cannot complete a Reactive Capability Test on either the requested test dates or the alternate test dates proposed by the ISO or LCC.

The ISO, in consultation with the associated LCC, will review the conditions of the system during the Reactive Capability Test and determine whether the requested waiver is warranted and should be granted. The determination of a waiver request will be issued by the ISO within 30 days of receiving a valid waiver request. The effective date for an awarded waiver shall be the first day of the month following the end of the applicable Reactive Capability Test Period. Should the waiver request be denied, the submitted Reactive Capability Test data, which shall be submitted and reviewed in accordance with Section 2.2.5.5, will be used to establish the Qualified VARS for the QRR.

2.2.6.2.1 Waiver Duration

A waiver from a leading or lagging Reactive Capability Test may be issued by the ISO for a duration of at least one year up to a maximum of five years. The reasons that justify the waiver will determine the duration. If the ISO and the LCC determine that there are transmission system conditions (which limit the QRR from fully demonstrating its reactive capability) that are expected to continue and that those conditions will not impact the ability of the QRR to provide VAR Service during a system emergency, then the ISO may grant a waiver that has a duration that is greater than one year.

If ISO or the LCC determine that the limiting transmission system conditions have changed during the active period of a multi-year waiver, then the ISO shall require the QRR to conduct a leading or lagging Reactive Capability Test, in accordance with Section 2.2.5 of this Business Procedure, during the next applicable Reactive Capability Test Period. The ISO shall notify the Reactive Resource Provider of the change in the limiting transmission system conditions and the need to conduct a Reactive Capability Test prior to the start of the applicable Reactive Capability Test Period. If the ISO and the LCC determine (based on real-time analysis during the performance of the test) that system conditions are no longer limiting the QRR from fully demonstrating its reactive capability, then the ISO shall terminate the waiver on the last day of the applicable Reactive Capability Test Period. The Reactive Capability Test data will establish the Qualified VARS for the QRR for the month following the date that the waiver was terminated. If the QRR performs multiple Reactive Capability Tests during the applicable Reactive Capability Test Period the ISO will utilize the highest of the submitted Reactive Capability Test data to establish the Qualified VARS for the QRR. If the QRR fails to perform a Reactive Capability Test during the applicable Reactive Capability Test Period, then the ISO shall set the associated Qualified VARs to zero.

2.2.6.2.2 Waiver impact on NX-12D Information

Following the determination by the ISO of the status of a submittal of a requested waiver, the Reactive Resource Provider does not have to submit a revised NX-12D under the following conditions:

a. In response to the issuing of a leading or lagging Reactive Capability Test waiver by the ISO;

b. In response to the denial of a waiver by the ISO if the reason for the denial of the waiver request was based on the failure of the Reactive Resource Provider from meeting the Section 2.2.6.2a. requirements, and system conditions were the limiting factor in the ability of the QRR to perform its test, and

   i. the QRR did perform an associated valid Reactive Capability Test, which resulted in a reduction of its Qualified VARs; or

   ii. the QRR did not perform an associated valid Reactive Capability Test, which resulted in a reduction of its Qualified VARs.

   It is recognized that in these cases, the Qualified VARs will differ from the current NX-12 D.

2.2.6.2.3 Appeals for Waiver Denials

If the ISO does not support the Reactive Resource Provider's request that its QRR receive a waiver from the leading or lagging Reactive Capability Test requirement, then the Reactive Resource Provider may request an appeal recommendation from the NEPOOL Reliability Committee. In order for the ISO to consider reversing its decision not to grant a waiver to the QRR, the NEPOOL Reliability Committee must support the Reactive Resource Provider's request with a vote that is equal to or greater than two thirds of the aggregate Sector Voting Shares. The Reactive Resource Provider cannot pursue an appeal of a waiver denial if it did not meet the requirements of Section 2.2.6.2a. or any of the exemptions from testing allowed under the verification of reactive power capability criteria within applicable NERC or NPCC Standards. It is the responsibility of the Reactive Resource Provider to pursue an appeal recommendation from the NEPOOL Reliability Committee. If (based upon the NEPOOL Reliability Committee support of the Reactive Resource Provider's request for a waiver) the ISO reverses its decision not to grant a waiver, the issued waiver shall become effective on the later of (a) the first day of the month following the end of the applicable audit period or (b) the first day of the month following the ISO's decision to issue the waiver.

2.2.6.3 Small Generator Exceptions

There may be instances when a request for a Reactive Capability Test cannot be accommodated due to limited reactive and voltage metering in the area where the QRR is located. Generally, this condition applies to small generators with a total MW output of less than five (5) MW that would be very difficult to monitor or test in real-time. These generators must submit a NX-12D form, which will

be the basis for CC compensation. The ISO and the LCC will determine the cases where these conditions will apply.

2.2.6.4 Run of River Hydro Generator Exceptions

Run of river hydro generators are not required to achieve S-SCC or EcoMin in the lagging and leading Reactive Capability Tests, respectively. This exception is provided to a QRR given the unique nature of the run of river hydro generators having limited storage capability that is primarily dependant on river flow. The lagging Reactive Capability Test must be conducted at the maximum possible MW output at the time of the test. The test results will then be compared to the corresponding curve data as supplied in the NX-12D. If the test results can be plotted on the existing MW/MVAR curve then the Qualified VARs will be taken from the curve at the S-SCC and EcoMin MW level for the lagging and leading Reactive Capability respectively. If the test results cannot be plotted on the existing curve then a new parallel curve will be drawn using the test data and the Qualified VARs will be taken from the new curve at the S-SCC and EcoMin MW level for the lagging and leading Reactive Capability respectively.

2.2.7 AVR Status and Telemetering

Unless otherwise directed by ISO or the LCC, each QRR must have its AVR turned on and in terminal voltage control mode at all times.

Each QRR is required to have its AVR data, including operating mode (VAR output, power factor output, or terminal voltage control) and setpoint, telemetered to the ISO and LCC as a condition for receiving CC compensation.

3 LOST OPPORTUNITY COST ("LOC") PROCEDURES

3.1 LOC Defined

The LOC for generators that are dispatched down by, or at the request of, the ISO or a LCC for the purpose of providing VAR Service will be calculated pursuant to Section III of the ISO Tariff.[2]

3.2 LOC Data Submissions and Communication of Status

3.2.1 The LCC must notify the ISO Control Room staff when a generator has been dispatched down by the LCC for the purpose of providing VAR Service.

3.2.2 The ISO Control Room staff will log all instances of a generator having been dispatched down by ISO or a LCC for the purpose of providing VAR Service.

3.2.3 The ISO staff will retrieve the appropriate data as outlined in Section III.F.2.6 of the ISO Tariff for each hour that the generator was dispatched down for the purpose of providing VAR Service.

4 COST OF ENERGY CONSUMED ("CEC") PROCEDURES

4.1 CEC Defined

The CEC associated with hydro and pumped storage generators that are motoring at the request of the ISO or a LCC for the purpose of providing VAR Service will equal the cost of energy to motor and will be calculated in each hour as follows:

> CEC = (MWhUnit * (LMP or actual energy cost), where the MWhUnit is calculated in accordance with Section 4.2.4a. (below), and the actual energy cost shall apply only when the motoring energy is purchased through a retail power contract.

[2] Section III of the ISO Tariff is Market Rule 1 ("Market Rule 1").

4.2 CEC Data Submissions and Communication of Status

4.2.1 The associated LCC must notify the ISO Control Room staff of a generator having been instructed by the LCC to motor for the purpose of providing VAR Service.

4.2.2 The ISO Control Room staff will log all instances of a generator having been instructed by ISO or a LCC to motor for the purpose of providing VAR Service.

4.2.3 The ISO Settlements staff will collect the flags set by the ISO Control Room in the ISO Control Room logs to determine which generators had been instructed to motor for the purpose of providing VAR Service.

4.2.4 The ISO Settlements staff will collect the following data for each hour that a generator was motoring for the purpose of providing VAR Service:

a. The hourly incremental MWh from the generator reflecting the energy in each hour required to support VAR Service while motoring above that which is required when not providing VAR Service;

b. If the energy to supply the generator is being met by the hourly Energy Market, the hourly Locational Marginal Price (LMP);

c. If the energy to supply the generator is being met by a retail power agreement, the actual cost of energy associated with the retail power agreement along with supporting contractual documentation; and

d. An invoice for the generator that includes a total net cost and an hourly cost detail that includes the hourly data noted in Section 4.2.4(a).

4.3 Hydro or Pumped Storage Generators must be reported under a distinct and unique Load Asset

The energy (MWh) required by a hydro or pumped storage generator that is motoring for the purpose of providing VAR Service shall be reported under a distinct and unique Load Asset pursuant to the time constraints set forth in Market Rule 1.

4.4 CEC Data submissions by Reactive Resource Providers notifying ISO of Hydro or Pumped Storage Generators

Reactive Resource Providers that have generators that motor at the request of the ISO or a LCC for the purpose of providing VAR Service shall provide the following data to the ISO:

a. Direction as to whether the LMP of the generator or the actual energy cost will be applied to the CEC calculation (the LMP is to be selected only if the Reactive Resource Provider does not have a retail power agreement to supply the generator's station service requirements) must be submitted by the Reactive Resource Provider, with supporting contractual documentation, to ISO Settlements prior to the month in which the hydro or pumped storage generator is called to motor for VAR Service. The Reactive Resource Provider does not have the option to bounce back and forth between LMP and actual energy cost.

b. If the energy to supply the generator is being provided under a retail power agreement, the actual cost of energy associated with the retail power agreement must be provided to the ISO by the Reactive Resource Provider by 1300 on the second Business Day after the Operating Day of the generator having been motored;

c. The hourly incremental MWh for the generator reflecting the energy in each hour required to support VAR Service while motoring above that which is required when not providing VAR Service must be provided to the ISO by the Reactive Resource Provider by 1300 on the second Business Day after the Operating Day of the generator having been motored; and

d. An invoice for the generator that includes a total net cost and an hourly cost detail must be provided to the ISO by the Reactive Resource Provider by 1300 on the second Business Day after the Operating Day of the generator having been motored.

A Reactive Resource Provider shall submit any revised meter data reflecting the hourly incremental MWh for the generator reflecting the energy in each hour required to support VAR Service prior to the Correction Limit as described in Section 9.1.1(16) of ISO New England Manual for Market Rule 1 Accounting (M-28).

4.5 Power System Modeling of Hydro and Pumped Storage Generators that can be motored for the purpose of providing VAR Service

The energy (MWh) required by a hydro or pumped storage generator that is motoring for the purpose of providing VAR Service shall be reported under a distinct and unique Load Asset. Reactive Resource Providers will register the generator as a unique Load Asset with a Load Asset subclass of (a) “Motoring Hydro – AEC”, if they have a retail agreement to supply the unit’s station service requirements or (b) “Motoring Hydro – ECP”, if they intend to be reimbursed using the LMP.

4.5.1 Impact of Hydro or Pumped Storage Generators motoring for the purpose of providing VAR Service on the calculation of Load Obligation

The MWh reported under a distinct and unique Load Asset for the motoring of a hydro or pumped storage generator will be excluded from the calculation of Load Obligation. The MWh that have not been reported under a distinct and unique Load Asset for the motoring of a hydro or pumped storage generator will neither be excluded from the calculation of Load Obligation nor be compensated under Schedule 2.

5 COST OF ENERGY PRODUCED (“CEP”) PROCEDURES

5.1 CEP Defined

The CEP associated with thermal, hydro, or pumped storage generators that are brought on-line by the ISO or a LCC for the purpose of providing VAR Service shall equal the portion of the total NCPC to be paid that resource for a day that is attributed to the hour(s) during which the resource is run to provide VAR Service in accordance with Market Rule.

5.2 CEP Data Submissions and Communication of Status

5.2.1 The associated LCC must notify the ISO Control Room staff of a generator having been brought on-line by the LCC for the purpose of providing VAR Service.

5.2.2 The ISO Control Room staff will log all instances of a generator having been brought on-line by ISO or a LCC for the purpose of providing VAR Service.

5.2.3 The ISO staff will retrieve the appropriate data as outlined in Sections III.F.2.1, III.F.2.2 and III.F.2.5 of the ISO Tariff for each hour that the generator was brought on-line for the purpose of providing VAR Service.