NYSRC Procedure for New York Control Area Transmission Reviews

1. Introduction

Requirement R1 of NYSRC Reliability Rule B.2, <u>Transmission System Planning Assessments</u>, <u>requires The NYSRC Reliability Rules require</u> that the NYISO annually conduct <u>an annual four types of transmission assessments to ensure compliance with the Rules. These assessments shall be incorporated in a single report to be provided to the NYSRC Reliability Compliance Monitoring Subcommittee (RCMS).</u>

A major assessment is the requirement for the NYISO to conduct annual review of the planned Bulk Power System of the New York Control Area (NYCA). The purpose of this these reviews is to demonstrate that the planned NYCA bulk power transmission system is in conformance with performance criteria in Requirements R1 through R4 of Reliability Rules. It is also the intention of the NYSRC that conformance with the NYSRC Reliability Rules assure consistency with the NERC and NPCC Standards and Criteria and NERC Standards. By this transmission review, the NYSRC will satisfy itself that the NYCA transmission system, as planned, is in conformance with NYSRC Reliability Rules, and in general, that the reliability of the NYCA bulk power system will be maintained. NYISO is in full compliance with the rules.

The NYCA Transmission Review shall be incorporated in a single report to the provided, when required, to the NYSRC Reliability Compliance Monitoring Subcommittee.

The purpose of the remaining three assessments is to ensure compatibility of the NYCA System Restoration Plan (SRP) and Local Rules with the planned transmission system, and to perform an analysis of Extreme System Conditions.

2. Relationship with NPCC Area Transmission Reviews

NPCC Directory #1, NPCC Design and Operation of the Bulk Power System, requires that each Planning Coordinator Area of NPCC prepare an annual assessment to determine whether its planned transmission system is in conformance with NPCC criteria. Procedures for conducting and reporting these transmission reviews are addressed in Appendix B of Directory #1. This NYSRC NYCA Transmission Review procedure adopts certain the NPCC assessment requirements as applied to NYCA, and supplements it with requirements for additional NYSRC assessments as required by the NYSRC Reliability Rule B.2s. Coordination

1

Formatted: Font: Italic

Formatted: Justified, Indent: Left: 0.31", Line spacing: Multiple 1.1 li

Formatted: Font: Not Italic

Formatted: Font: Italic

Formatted: Indent: Left: 0"

with preparation of the NYSRC Transmission Review required by NPCC is addressed in this procedure policy. It is the intention by the NYSRC that the NYISO not duplicate transmission system analyses and reporting already required by NPCC Directory #1.

3. <u>Assessments to be Included in Transmission Reviews</u>Scope of Transmission Reviews

The NYCA transmission review shall incorporate the following NYISO assessments for documenting compliance with NYSRC Reliability Rule B.2, in accordance with Requirement R1.3 with the following NYSRC Requirements:

Assessment 1:B R2_R2 — This — measurementassessment requires thermal, voltage, stability, and short circuit assessments in accordance with performance criteria in Requirement 1 of Reliability Rule B.1.

- Assessment 2:B-R2_R3 This measurement assessment requires the assessment of the risks and system performance resulting from extreme contingencies in accordance with criteria in Requirement 2 of Reliability Rule B.1.
- Assessment 3:B-R2_R4 This assessment requires the assessment of extremesystem conditions in accordance with criteria in Requirement 3 of Reliability Rule
 B.1. Compatibility with the NYCA system restoration plan.
- Assessment 4: B-R2_R5 This assessment requires fault duty assessments in accordance with criteria in Requirement 4 of Reliability Rules B.1Compatibility with NYSRC Local Operation Reliability Rules G-R1 to G-R4.
- Assessment 5: This assessment requires an analysis of the impacts that planned system expansion or reconfiguration plans have on the NYCA System Restoration Plan, as described in Requirement R1.3 of Reliability Rule B.2. B-R2_R6 Extreme system conditions.

The <u>aboveB-R2_R2 and B-R2_R3</u> transmission assessments shall cover the 4-6 year planning horizon <u>and</u> shall be coordinated with NPCC and NERC assessment requirements. They shall cover system performance results of simulation tests and include all supporting documentation specified in NPCC Directory <u>#</u>1, Appendix B, *Guidelines and Procedures for NPCC Area Transmission Reviews*.

Formatted: Justified

Formatted: Justified

Formatted: Justified

Formatted: Font: Italic

4. Study Year

The NYCA transmission assessments for meeting Requirement 1 of Reliability Rule B.2 B-R2_R2 and B R2_R3 shall generally cover the 4-6 year planning horizon, as required by NPCC (refer to NPCC Directory #1, Appendix B, Section 3.0).

5. Frequency of Reviews

The *NYISO* shall submit the *NYCA* transmission review annually to the Reliability Compliance (RCMS) Subcommittee. The schedule for this submission shall be coordinated with NPCC reliability assessment program due dates. The *NYISO* shall notify RCMS of the NPCC due date of the next review as soon as it is announced by NPCC (refer to NPCC Directory #1, Appendix B, Section 4.0).

÷

6. Scope of AssessmentsFormat of Transmission Review Report

6.1. Thermal, Voltage, Stability, Short Circuit, and Extreme Contingency, and Extreme System Condition Assessments – Assessments 1 through 4

These assessments may include one of the following types: a Comprehensive (or Full) Review, an Intermediate (or Partial) Review, or an Interim Review. The type of assessment required to be submitted by the *NYISO* in any given year is defined in NPCC Directory #1, Appendix B, Section 4.0. The types of assessments to be prepared for the NYSRC by the *NYISO* for *NYCA* transmission reviews shall be consistent with these NPCC requirements. These assessments shall demonstrate conformance with Directory #1 criteria, as well as the more stringent and specific NYSRC performance criteria in Requirements R1 through R4 of Reliability Rule B.1.

The scope of thermal, voltage, stability, and short circuit a<u>A</u>ssessments <u>1-4</u> in the *NYCA* transmission review shall be consistent with the assessment presentation formats as defined in NPCC Directory #1, Appendix B, <u>S</u>sections 5.0, 6.0, and 7.0.

6.2. System Restoration—Assessment — Assessment 5

<u>This assessment is specific to only NYSRC requirements.</u> <u>Assessment 5B-R2_R4</u> requires the *NYISO* to evaluate the *NYCA* reliability impacts of system expansion plans on the *NYCA* system restoration plan (SRP). This assessment further requires that the

3

Formatted: Font: Italic

NYISO identify modifications in the SRP required if such reliability impacts are found. The *NYISO* shall provide documentation or references for this assessment.

6.3. NYSRC Local Rules Assessment

B-R2_R5 requires the NYISO to consider Local Operating Reliability Rules G-R1 to G-R4 in its development of the base case of the transmission assessments described in Section 5.1. These local rules address NYC operating reserves and unit commitment, loss of generator gas supply in NYC and LI, NYC thunderstorm watch. The local rules assessment discussion shall describe how local rules are applied in the system model used for the transmission assessment.

6.4. Extreme System Condition Assessments

As described in B R2_R6, analytical studies shall be conducted under the following Extreme System Conditions:

a. A transmission assessment assuming extreme peak load conditions.

b. Loss of generating unit fuel supply.

Supporting information for these assessments shall be provided. An evaluation of measures to mitigate the impact of Extreme System Contingency events, when serious consequences are determined, shall be provided.

From time to time, the NYSRC may request the NYISO to conduct analyzes of other Extreme System Condition events.

Assessments for the above Extreme System Contingency events may not have to be provided required by NPCC criteria. According, such NYISO assessments conducted for NPCC shall be referenced.

7.0 Corrective Action Plans

Requirement R1.4 of Reliability Rule B.2 requires the NYISO to include in itstransmission reviews, Corrective Action Plans for avoiding criteria violations and achieving conformance with Reliability Rule B.1 performance requirements. The transmission review report shall include a tabular presentation that summarizes all corrective action plans described in the report's assessment discussions. The table shall provide for each Corrective Action Plan: a description of the planned

Formatted: Indent: Left: 0.63", No bullets or numbering

Formatted: Indent: Left: 0.63", No bullets or numbering

Formatted: Indent: Left: 0.5", No bullets or

Formatted: Indent: Left: 1", No bullets or numbering

Formatted: Indent: Left: 0"

Formatted: Justified, Indent: Left: 0.63"

Draft - January 18, 2016

Formatted: Font: Italic

<u>transmission upgrade or operating procedure for achieving compliance, the responsible TO, and the proposed in-service date.</u>