Appendix C

Adverse Reliability Impact Study Requirements

Purpose

Adverse Reliability Impact Study is the analysis (steady-state screening and if required dynamic stability analysis) performed by a functional entity that wishes to apply for exclusion of a radial system which exceeds the triggering parameter defined by the "Study Triggers" from the Regional Bulk Electric System (BES).

Study Triggers

Studies are necessary to determine if an Adverse Reliability Impact[1] can result from the loss of a radial Element / System if the peak loads or generation resources within the radial Element / System exceed one-half of the largest single loss of source contingency in the FRCC region.

If the entity's proposed radial system is above the established triggering parameter the entity will be required to perform an Adverse Reliability Impact Study and submit for approval in accordance with the 'Approval Process' defined in this document. This impact study should evaluate the loss of the proposed radial system applying the following study parameters.

Study Parameters

- Cover critical system conditions and study years as deemed appropriate by the responsible entity.
- Study FRCC Region transmission facilities to ensure that they remain within applicable ratings and voltage limits.
- Include loss of entire radial system as a contingency event.
- At a minimum, studies should cover a five (5) year period.
- Additional studies as requested by the FRCC Regional Entity Planning Committee.

Study Frequency

Adverse Reliability Impact Studies will be conducted every five (5) years or when system configuration changes dictate a need for re-evaluation or as requested by the FRCC Regional Entity (RE)

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[1]The *NERC Glossary of Terms (dated: April 20, 2009)* defines Adverse Reliability Impact as: The impact of an event that results in frequency-related instability; unplanned tripping of load or generation; or uncontrolled separation or cascading outages that affects a widespread area of the Interconnection.

Planning Committee (PC). FRCC Standing Committees may also make a request to the FRCC RE PC for studies to be performed.

FRCC Regional Entity Planning Committee Approval Process

All requests for Radial Element/System Exclusions should be submitted to the FRCC RE PC for review and approval. The FRCC RE PC will review the Adverse Reliability Impact Study (steady-state screening and if required dynamic stability analysis) and will determine if the identified Radial Element/System meets all criteria for exclusion.

- Requests for radial exclusions (below triggering parameters) should include the following:
    - Executive Summary/Outcome Justification
    - Assumptions and Methodologies
- Requests for radial exclusions (at or above triggering parameters) should include the following:
    - Executive Summary/Outcome Justification
    - Assumptions and Methodologies
    - Study Results