Attachment C -
Contingency Impact Evaluation

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I. Contingency Impact Evaluation

The following presents the general philosophy/method for determining if a contingency will have unacceptable Inter RCA/BAA impact.

1. Simulate the contingency.
2. Identify any elements that are overloaded at or above their STE rating.
3. Open each STE overloaded element and rerun the EMS powerflow or other loadflow application.
   A. Do not perform any manual switching of reactive devices between cascade steps
4. Repeat steps 2) and 3) and determine Inter RCA/BAA impact as follows:
   A. If the element STE overloads/openings stop and the case solves without severe voltage/reactive conditions (such as voltage at or below 328 kV on the 345 kV system or voltage at or below 207 or 104 kV, respectively, on the 230 / 115 kV systems), Inter RCA/BAA impact is acceptable.

      - Treat as an IROL if either of the following post-contingent conditions occur:
        - When voltage on two or more non-radial 345 kV stations is below 95% of nominal voltage (328 kV) or
        - When transmission stations serving 500 MW or more net load have post-contingent voltage at or below 95% of nominal voltage on the 345 kV system, or less than 90% of nominal voltage on the 230 or 115 kV systems.
      - In outage coordination, note the scope of voltages at or below the above noted thresholds

   B. If the element STE overloads/openings continue to the point where an element in the New York ISO RCA/BAA becomes overloaded at or above its LTE rating, [STE allowed for underground cable circuits (except NNC, Y49, Y50 901 and 903 circuits, which are cable circuits)] unacceptable Inter RCA/BAA impact is indicated.

   C. If the element STE overloads/openings continue to the point where the case will **not** solve, demarcate the subarea in the New England Transmission System that would separate from the rest of the system. This should be based on the cascading overload pattern evidenced by the load flows. Then go back to the original case and calculate the net power flow into or out of the subarea that would be separated. Unacceptable Inter RCA/BAA impact is possible if the subarea is supplying ≥ 1,200 MW to the rest of the system or if it is absorbing ≥ 1,200 MW of power. If the subarea is supplying < 1,200 MW or absorbing < 1,200 MW, the contingency would **not** have unacceptable Inter RCA/BAA impact.

M/LCC 15 Attachment C Revision History

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