# High Level Comparison of NPCC CP-11 Working Group Document A-10 Revision

| Item | Existing A-10 | Proposed A-10 |
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| Testing Conditions & Assumptions | Vague direction in A-10 documentation regarding "Testing Conditions and Assumptions" such as "Power flow transfers, load and generation patterns expected to exist for the period under study which stress the system in a manner critical to the classification of the bus to be tested" has resulted in inconsistent application of assumptions between each Area within NPCC. | Consistent application of assumptions for all Areas within NPCC<br>• Assumptions documented in the Proposed A-10 Section 3.1 include more specific requirements for system conditions including load levels (at least two load levels are required to be evaluated), major interface transfer levels, generation dispatch, and reactive power dispatch.<br>○ E.g. Transfers on major inter- and intra-Area interfaces shall be set such that at least one base case, at any load level, contains transfer levels at or above the 98$^{th}$ percentile flow based on historical data for the major interfaces |
| Performance Requirements for Classification of BPS | The use of the NPCC term "Significant Adverse Impact" to determine whether a bus is BPS allows for each Area to apply various different interpretations to term in the identification of BPS buses. | A-10 defined performance requirements for all Areas within NPCC no longer uses the term "Significant Adverse Impact" to identify a BPS bus. Instead, three performance requirements are documented in the Proposed A-10:<br>1. System instability cannot be demonstrably contained within the Area or a defined portion of the system that crosses Areas<br>2. Cascading that cannot be demonstrably contained within the Area or a defined portion of the system that crosses Areas<br>3. Net Loss of Source or Loss of Load threshold greater than an Area's threshold, if applicable (meaning that the impact of applying a three-phase fault at a bus would result in a loss of generation in New York exceeding 1310 MW) |
| Testing Strategy | Unclear direction as to which buses had to be tested, leading to inconsistent application of | Specific testing strategy documented to identify the buses that should be tested (NOT all buses have to be tested) including:<br>• All buses above 200 kV |

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| | assumptions between each Area within NPCC. | • For buses between 50-200 kV, Area may forgo testing when a non-BPS bus is encountered (with additional considerations added to identify potential non-contiguous BPS results) |
| Classification of BPS Elements | An element connected to a BPS bus is classified as BPS element* (with some limitations)<br><br>*Subject to NPCC Directory 1 *Design and Operation of Bulk Power System* and NPCC Directory 4 *System Protection Criteria.* | Elements connected to a BPS bus are BPS with certain specific exclusions<br>• Some of the exclusions are automatic, such as all single terminal elements or radial multi-terminal elements**<br>• Additional study-based exclusion methodology was added for networked multi-terminal elements<br>  ○ Test: Evaluate N-2 contingencies at the boundary of the Network. If no violation to the Performance Requirements, the Network could be excluded from BPS.<br><br>** Radial/Network elements within BPS Substation will continue to be subject to NPCC Directory 4 *System Protection Criteria.* |