COMPLETED DRAFT

CARIS PROCEDURES

PROCEDURE FOR INCLUSION OF MBS & RBS IN CARIS BASE CASE
PROCEDURE TO SCALE BACK MBS
(ATTACHMENT Y: SECTION 11.3.b)

Tariff Requirement:

The CARIS will assume a reliable system throughout the Study Period, based upon the solutions identified in the most recently completed and approved CRP. The baseline system for the CARIS shall first incorporate sufficient viable market-based solutions to meet the identified Reliability Needs as well as any regulated backstop solutions triggered in prior or current CRPs. The NYISO, in conjunction with the ESPWG, will develop methodologies to scale back market-based solutions to the minimum needed to meet the identified Reliability Needs, if more have been proposed than are necessary to meet the identified Reliability Needs. Regulated backstop solutions that have been proposed but not triggered in the most recent CRP shall also be used if there are insufficient market-based solutions for the ten-year study period.

Possible Scenarios

There are four possible scenarios that may result from the CRPP process:

- **More than sufficient Market Based Solutions (MBS) to meet the reliability needs**
- **Sufficient MBS Solutions to meet the needs**
- **Insufficient MBS Solutions to meet the needs**
- **RNA/CRP finds no reliability needs through the 10-year study period**

Since it is possible for any of these four outcomes to occur, there must be procedures in place to address each outcome in order to develop the base case assumptions for the CARIS studies

METHODOLOGY

The intent of this procedure is to produce a CARIS base case that is unbiased by resource type or in the selection or location of particular resources. The NYISO will implement this procedure for each CARIS cycle, in collaboration with stakeholders through the ESPWG.

BASE ASSUMPTIONS:

- **In all cases, the base case resource additions (including updated TO Plans, if any) included in the current CRP shall be included in the CARIS base case—unless NYISO determines, based upon updated information, that such resource is no longer viable.**
- **All new projects that meet the criteria for inclusion in a RNA base case at the time of finalizing the CARIS base case, shall be so included.**
- **Any Regulated Backstop Solutions (RBS) that have been triggered and not subsequently halted shall be included in the CARIS base case—unless NYISO determines, based upon updated information, that such resource is no longer viable.**
- **If a TO, or an other developer, is proceeding with an alternative regulated solution that has been approved by the PSC and not subsequently halted, then such project shall be included in the CARIS base case.**
- **A gap solution that has previously been triggered shall be considered for inclusion in the CARIS base case consistent with the type and duration of that solution.**
- **If any such resource that was previously included in the CRP is determined by the NYISO to be no longer viable, the NYISO shall re-analyze the viable MBS solutions to determine whether they remain sufficient to meet the statewide LOLE of 0.1 throughout the study period**
- **The Statewide and LCR requirements shall be held constant over the ten-year Study Period**
- **Resources modeled in the CARIS base case are not evaluated as potential economic solutions**
- **Resources selected for inclusion in the CARIS base case under these assumptions shall not change during subsequent scaling of resources**
    - **Scenarios may be developed to include a resource mix that differs from the base case, but still meets applicable reliability criteria**

<u>More Than Sufficient MBS (This section to be finalized for the next CARIS cycle)</u>

- **All viable MBS resources from the current CRP shall be considered for inclusion in the CARIS base case—unless the NYISO determines, based upon updated information, that such resource is no longer viable**
- **MBS resources shall be "scaled back" to a level which is the minimum to meet the Reliability Need (i.e. – to achieve a statewide LOLE of 0.1) by the following methodology:**

    - **Sort all MBS by size—from largest to smallest—regardless of resource type**
    - **Sequentially test each MBS , one at a time for potential removal, starting from the largest and ending with the smallest. Remove from the base case if:**
        - **There is a surplus in the actual locational reserve and removal would not result in the locational reserve falling below the LCR**

        - **If the starting point is below a LCR, resources will not be added to meet that LCR. However, resources will not be removed that cause the locational reserve to fall to even lower levels.**
        - **Statewide LOLE requirement is still met**
        - **Any minimum requirements for a specific interconnection point for resources identified in the CRP to maintain transmission security requirements is met**
    - **If either the Statewide LOLE or the LCR requirement is not met with the removal of a specific unit, then that unit is retained in the base case and the removal of the next unit is tested**
    - **If both the Statewide LOLE and the LCR requirements are met with the removal of a unit, that unit is removed from the base case and subsequent units will be tested sequentially in the same manner**
    - **The initial determination will be made for the horizon year (e.g. – year 10) of the analysis**
    - **Considering each project's in-service date, verify each year of the study period to assure that both the Statewide LOLE and the LCR reliability criteria will be met (subject to the caveat that resources will not be added to achieve an LCR that is not met at the starting point).**
        - **If more resources are needed, add back starting with the smallest resource removed and increment to the next largest until the above requirements are met**
    - **Determine the minimum amount of MBS capacity needed to meet both the LCR and the statewide LOLE requirements**

<u>Sufficient MBS</u>

- **In the case that there are sufficient MBS to just meet the statewide LOLE of 0.1, all of the MBS contained in the current CRP will be included in the CARIS base case**
- **This situation will be determined if the removal of any single MBS will cause the statewide LOLE to exceed 0.1**

<u>MBS & Regulated Solutions Required</u>

- **In this situation, the combination of MBS and regulated solutions (whether or not yet triggered) designated in the current CRP as necessary for a reliable system over the 10-year planning horizon shall be included in the CARIS base case.**

<u>No Reliability Needs</u>

- **If the current RNA finds no reliability needs throughout the ten year study period, the CARIS base case shall include all resources included in the current RNA base**

case—unless the NYISO determines, based upon updated information that such resource is no longer viable

- **In the event that a RNA base case resource is no longer viable and this causes a violation of the statewide LOLE during the study period, generic resource amounts shall be added, in a manner similar to that used by the NYISO in the determination compensatory MW, until the statewide LOLE meets or exceeds 0.1**