



Generation Interconnection Informational Call – GIP Operational Studies

April 15, 2021

Operational studies as part of GIP – Deliverability

- Year-by-year deliverability assessment is performed based on generator COD and transmission upgrade in-service date.
- The following year's study is used to establish the NQC list; all other future year studies are for information only.
- Determine FCDS/IDS for each cluster in each year.
- Deliverability constraints are identified for each year.
- NQC reduction is calculated for next year if constraints are identified as follows:
 - NQC is reduced for projects not achieving FCDS first, in the order of later cluster to earlier cluster.
 - If not sufficient, NQC is reduced for all FCDS generators behind the constraint using weighted least square allocation.

Operational studies as part of GIP – Reliability

- Operational studies are performed for SCD and bus flow upgrades as part of the Phase II studies. If new upgrades are identified in the Reassessment, the Reassessment may include operational studies as well.
- The operational studies are performed annually, year by year for the next 3 years from the current year. All transmission upgrades and generation projects are modeled based on the in-service date/COD. The SCD/bus flow upgrades are not modeled in order to:
 - Determine when the upgrades are needed in the next 3 years in order to meet the Queue projects in service dates.
 - Upgrades with construction duration ≤ 3 years will be planned to be in service in order to meet the Queue projects in service dates.

Operational studies as part of GIP – Reliability (cont.)

- Further operational studies include all generation projects with COD beyond 3 years, one without DNU and one with DNU that have in-service date beyond 3 years.
- The operational studies do not determine when the upgrades are needed beyond 3 years.
- The report establishes the achievable COD of the Queue projects based on the longest duration of RNU once the GIA is executed.
- The results of operational studies are for information only and are not binding in regards to projects being able to come online in absence of required RNUs.

Limited Operational Study

- All projects intending to come online in absence of required RNUs will need to request for and go through the Limited Operational Study process no earlier than 5 months prior to the project's initial synchronization date, which will determine if the project can come online.
- The project's initial synchronization date is established based on the in-service date of the RNUs. Projects advancing their established COD will need an MMA approval. If changing their COD impacts the cost or schedule of any other projects in the queue, then the MMA will be rejected.