



# 2021 Interconnection Process Enhancements – LSA & SEIA Proposed Issues

Stakeholder Workshop

October 19, 2021

# MAIN TOPIC AREAS

- Speeding up new resource implementation
- Using allocated TPD more efficiently
- Improving TPD allocation processes
- Other issues



**PHASE 1: NEAR-TERM  
ENHANCEMENTS FOR MAY  
2022 BOARD MEETING**

## Proposed issues to include in Phase 1:

- Speed up new resource implementation
  - Delays caused by new standards
  - Lack of transparency about Interim Deliverability
- Use existing TPD more efficiently
  - Network Upgrade (NU) re-stack
  - TPD transferability
- Reassessment accommodation

# SPEED UP NEW RESOURCE IMPLEMENTATION – DELAYS CAUSED BY NEW STANDARDS

- **Issue:**

- Implementation of new standards by PTOs can create significant delays, even though existing projects have been operating under the prior standards
- Can include CRAS, substation upgrades, BAAH conversions, new automation standards, new telecom requirements, etc.

- **Potential solutions:**

- Allow projects to interconnect using existing equipment/standards temporarily, and do the upgrades afterward if necessary
- Accelerate PTO work completion to prevent delays created by implementation of new standards.

# SPEED UP NEW RESOURCE IMPLEMENTATION – LACK OF TRANSPARENCY ABOUT INTERIM DELIVERABILITY

- **Issue:**

- Developers have no idea whether ID will be available, magnifying impacts of long-duration DNU by impeding PPA contracting and incenting COD delays to match DNU timelines.
- Better ID information could: (1) enable earlier RA contracting; and (2) inform developer COD decisions about whether to delay CODs to match DNU timelines, or to keep on schedule or even accelerate CODs to reach the earliest achievable COD.

- **Potential solution:** Provide best available information about potential ID availability, updated regularly.

- Non-binding multi-year ID forecasts, starting with Phase II Studies and updated via annual Reassessments,

# USE EXISTING TPD MORE EFFICIENTLY – NU RE-STACK

- **Issue:**

- Some earlier-queued project with later CODs may be assigned shorter-duration upgrades they don't need right away.
- Some later-queued projects with earlier CODs (or that could be accelerated) may be assigned longer-duration upgrades preventing them from reaching their desired CODs, or delaying FCDS (making them rely on ID).

- **Potential solution:** Better match NU in-service dates with project needs.

- “Re-stack” LDNUs & RNUs triggered in the interconnection process, allowing later-queued projects w/earlier CODs to reach FCDS sooner without impairing CODs/deliverability for earlier-queued projects w/later CODs.
- Keep cost responsibilities assigned in Interconnection Studies.

# USE EXISTING TPD MORE EFFICIENTLY – TPD TRANSFERABILITY

- **Issue:**
  - TPD transfers only allowed between Generating Units under the same GIA, even though impacts of different projects at the same POI should be the same regardless of contract structure.
  - Projects hold on to TPD as long as possible due to scarcity
  - Some pre-C<sub>4</sub> projects in key locations have no retention requirements.
- **Potential solutions** – allow TPD transfers between projects at the same POI, so it can be used where it adds the most value, e.g.:
  - Allow projects to sell their TPD to others that are more ready to move or can better use it
  - Allow projects to monetize TPD value and withdraw from the queue.
  - Consider CAISO payments to projects to drop out or convert to EO in deliverability-constrained areas, up to cost to relieve the constraint(s). <sup>8</sup>



# REASSESSMENT ACCOMMODATION

## Issue:

- For most projects, TPD allocation & retention requires PPA acquisition & retention. Annual Affidavits are due around the first week in December.
- Reassessment Reports usually issued ~July 31<sup>st</sup>, but several recent reports were not issued until August 31<sup>st</sup> or September 15<sup>th</sup>.
- Several recent Reassessment Reports have contained significant new information – some examples:
  - Circuit breaker upgrades delaying CODs by up to 2-5 years
  - Precursor DNUs previously shown with “TBD” in-service date now shown with ISD in 5 years
- New info jeopardizing PPA acquisition & retention, e.g., projects with already executed PPAs that could lose them, and projects about to execute PPAs

## Possible solutions:

- Allow an additional TPD allocation/retention cycle for compliance with acquisition/retention requirements disrupted by new info in annual Reassessments
- Would cover COD or FCDS delays > one year, & cost increases > set threshold.



**PHASE 2: LONG-TERM  
ENHANCEMENTS FOR  
NOVEMBER 2022 BOARD  
MEETING**

## Proposed issues to include in Phase 2:

- Improve TPD allocation processes (by next TPD allocation – otherwise, move to Phase 1)
  - Shared facilities
  - Allocation barriers
  - Complex/unfair allocation scheme
- Option B reform
- Battery storage degradation management
- Affected Systems issues
  - CAISO Network Upgrade refunds
  - Study options

# IMPROVE THE TPD ALLOCATION PROCESS – SHARED FACILITIES

- **Issue:** Adding capacity sharing Interconnection Facilities (IFs) and IRNUs with existing projects (especially projects already operating) is quicker and more cost-effective than completely new projects, with lower costs and less likelihood of permitting, environmental, or construction delays.
- **Possible solutions:**
  - Give priority in the TPD Allocation Process to projects interconnecting using IFs/IRNUs shared with earlier-queued or operating projects – could be new projects or additions to existing projects.
  - Consider a one-time a new allocation priority group for MMA storage additions to operating projects between the current Groups 2 & 3, to meet Mid-Term Procurement needs

## IMPROVE THE TPD ALLOCATION PROCESS – ALLOCATION BARRIERS

- **Issue:** TPD allocation rules for Energy Only capacity additions – requiring that the capacity be built before receiving a TPD allocation – prevents quick and cost-effective project additions through the MMA process, because the added capacity can't get PPAs without TPD allocations but can't get TPD allocations without PPAs.
- **Possible solution:** Allow EO capacity – especially that added to existing projects – to qualify for Allocation Groups 4-5 without being built first.

# IMPROVE THE TPD ALLOCATION PROCESS – COMPLEX/UNFAIR ALLOCATION SCHEME

- **Issues:**
  - New projects get priority for TPD allocations over projects already in the queue, even when both are similarly situated and qualified (e.g., have PPAs)
  - Projects already in the queue may be further along in development than new projects, and better able to move ahead.
- **Possible solution:** Simplify the TPD allocation scheme by merging Allocation Groups 1 & 4 and Allocation Groups 2 & 5.

# OPTION B REFORM

- **Issue:**
  - As CAISO has pointed out, current TPP practices may not result in approval of sufficient transmission upgrades in areas with high commercial interest.
  - Option B offers one way to finance such upgrades, but the rules are so punitive that it's possible that none have ever been build under those provisions.
- **Possible solution:** Reconsider the punitive aspects of this option to make it fairer and more viable, to more easily fund new ADNUs in areas of high commercial interest.

# BATTERY STORAGE DEGRADATION MANAGEMENT

- **Issues**
  - Continuous degradation, i.e., battery capacity declines over the year even though NQC is fixed, possibly leading to infeasible inserted bids and dispatches, especially later in the year. Problem will be more acute with large amounts of storage coming on-line soon.
- **Possible solution:** Systematic and more formal processes for addressing degradation and augmentation issues



# AFFECTED SYSTEMS ISSUES – NETWORK UPGRADE REFUNDS

- **Issues:**

- CAISO is proposing more formal “CAISO as an Affected System” procedures in COMA initiative, but NU financing issues deferred to this initiative.
- Projects connecting to other BAAs may serve CAISO load, just like inside-CAISO projects.
- CAISO-system NUs financed by such projects are available to other users, just like NUs financed by inside-CAISO projects.

- **Possible solutions:**

- Provide for reimbursement of CAISO-system NU costs for projects connecting to other BAAs.
- Consider qualifying criteria, e.g., Pseudo Ties to CAISO or PPAs with CAISO-area load during the refund period.

# AFFECTED SYSTEMS ISSUE – AFFECTED SYSTEMS STUDY OPTIONS

- **Issue:**
  - Affected Systems provisions continue to subject new projects to potential delays and cost increases late in the development process.
  - Developers have little recourse or options when faced with unreasonable financial demands.
- **Potential solution:** Optional CAISO study (upon request, applicant funding) of CAISO-system options to mitigate identified adverse Affected System impacts.



Questions?