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External Load Forward Scheduling Rights Process

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External Transmission Rights Must Be Respected

- Current CPUC Import RA requirements and CAISO market rules **undermine** the external transmission rights that are necessary to bring energy to the CAISO boundary
 - Purchasers invest in these transmission rights to receive physical priority and economic value (congestion rent)
 - Undermining these rights harms western energy and transmission markets, while eroding long-term transmission investment incentives
- It is not sustainable to have the rights of the entities that fund transmission facilities ignored and/or undermined through market/program design choices in another region
 - New/modified transmission frameworks outside of California may eventually be necessary if critical improvements are not achieved in CAISO stakeholder processes

A Phased Approach Is Needed

- The development of a new long-term physical transmission right in the CAISO BAA would require a comprehensive solution impacting many areas
 - Defining the cost and allocation framework for entities seeking forward transmission rights
 - Entities that purchase such rights would need to receive 1) priority to flow, 2) congestion rent
 - This would require re-examining CRRs and MIC, making it a very comprehensive stakeholder initiative
- Long-term solution not realistic prior to Summer 2022, and therefore Powerex recommends a phased approach for this initiative
- Proposed near term focus:
 - Establishing objectives for a long-term solution
 - Evaluating near-term enhancements that can be implemented for Summer 2022

A Set of Core Objectives Must Drive CAISO's Initiative

- Discussion should start with developing a set of agreed upon objectives for a durable solution:
 - Support regional reliability through near-term enhancements (additional transparency and coordination)
 - Respect transmission rights on external transmission systems
 - Ensure that users that fund the internal and external transmission facilities *that are actually congested* receive physical priority and the economic value
 - Seek competitive market outcomes, including:
 - Efficient uses of the transmission system for highest value purpose(s) – long-term and short-term
 - Accurate investment signals for long-term transmission funding

Near-Term Enhancements Are Possible

- Initial focus should be on narrow, achievable enhancements to the Summer 2021 approach
- Powerex believes two key changes would be both beneficial and achievable prior to Summer 2022:
 1. Provide additional transparency of Import RA and PT Wheel requests
 - Reporting to provide market participants with the quantity of RA contracts and PT Wheels at each intertie
 2. Require valid e-Tags for Import RA and PT Wheels prior to initiating curtailments
 - Will avoid risk of inefficiently over-curtailing real Import RA and PT Wheel schedules

Additional Transparency Is Needed

- CAISO should consider publishing the total quantity of confirmed Import RA contracts and PT wheels registered at each intertie
 - Regular updates leading up to, and immediately after T-45 day deadline for each month
 - CAISO could also request that Import RA contracts and PT Wheels be registered as soon as possible
- Advance reporting (prior to T-45) would improve efficiency by informing forward contracting
 - Allows market participants to evaluate remaining “priority capability” at a given intertie
 - Entities can proactively adjust Import RA contracts and PT Wheels to intertie locations with fewer existing commitments to reduce risk of curtailment
- Final reporting (after T-45) would provide entities with an ability to assess the maximum pro-rata curtailment that could occur under stressed system conditions
 - Would allow LSEs in CAISO and other BAAs to more accurately evaluate the potential curtailment risk of energy deliveries across the CAISO transmission system

Current Solution Can Result in Unnecessary Curtailments

- Current solution can result in unnecessary curtailments to real Import RA and PT Wheel schedules based on Import RA contracts that are not ultimately delivered
 - It is well known that some Import RA contracts reflect “paper capacity” where sellers are speculating on their ability to acquire supply and transmission, and may fail to do so in critical hours
 - These delivery failures are not known until the e-Tagging deadline (t-20 minutes prior to the operating hour)
- Creates risk of inefficient outcomes if a real Import RA contract or PT Wheel is pre-emptively curtailed and then a “paper capacity” Import RA contract fails to deliver
 - Delivery failures associated with speculative Import RA are most likely to occur during stressed system conditions when spot market supply is not available to backfill the seller’s RA obligation
 - May be infrequent, but could result in material (and unnecessary) curtailments and transmission capacity going unused during critical conditions
- CAISO should only initiate curtailments if there are more **valid e-Tags** than the transmission path can accommodate

Day-Ahead e-Tags Would Reduce Risk of Over-Curtailment

- Consider establishing a day-ahead e-Tag requirement for Import RA and PT wheels
 - Energy profile set to match IFM energy award
 - Transmission profile set to match RT must offer obligation / RUC schedule
- Would align CAISO e-Tag timelines with standard practice across the west for scheduling forward and day-ahead transactions
- Would provide improved visibility to CAISO operators of whether Import RA is actually being made available, enabling more options to address failures
- Reduces risk of last-minute delivery failures and inefficient curtailments in real-time

Other Alternatives to Reduce Risk of Over-Curtailment

Alternative 1: Establish an e-Tag deadline for Import RA and PT wheels prior to running post-HASP allocation

- Energy profile set to HASP schedule, transmission profile set to Import RA must offer obligation
- Post-HASP allocation (and manual dispatch of additional Import RA) based on **valid e-Tags** only

Alternative 2: Delay curtailments until the current e-Tag deadline of t-20

- First run post-HASP allocation (and manual dispatch of additional Import RA) at approximately t-60
 - Do not issue curtailments until valid e-Tags have been confirmed at t-20
- Both options are incremental improvements, but would not eliminate potential for unexpected delivery failures and over-curtailment
 - Adopting a day-ahead e-Tag requirement is a more straightforward and effective solution



Thank You

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