



Use Limit Registration Clarifications

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ISO PUBLIC

Topics

- Use Limit eligibility changes and new process
- Difference between generation plans and limitations
- Scenarios of incomplete submissions cause delay



USE LIMIT ELIGIBILITY CHANGES AND NEW PROCESS

Use-Limited Resources – Operating Today

- Current definition: resource that, due to design considerations, environmental restrictions on operations, cyclical requirements, or other non-economic reasons, is unable to operate continuously
- Status gives three functions today:
 - Exempts Resource Adequacy Use-Limited Resource from bid generation (Section 40.6.8(e))
 - Access to Annual Use Limit Reached, Monthly Use Limit Reached, Other Use Limit Reached, Short Term Use Limit Reached cards
 - Access to Registered Cost Option for Commitment Costs
- ~35,000 megawatts of total capacity (~50% of CAISO BAA)

Use-Limited Resources – Effective 11/1/2018

New Use-Limited Definition (30.4.1.1.6.1)

- Has one or more limitations affecting its number of starts, runhours, or Energy output due to (a) design considerations, (b) environmental restrictions, or (c) qualifying contractual limitations
- Process used to dispatch resource cannot recognize limitation(s)
- Ability to select hours of operation not dependent on energy source being available during such hours being outside of resource's control

***Bid generation exemption for VER, hydro, PDR, RDR, & load

Use-Limited Resources – Effective 11/1/2018

- Status gives three functions in November 2018:
 - Retains ability to exempt Resource Adequacy Use-Limited Resource from bid generation (Section 40.6.8(e))
 - Retains access to Annual Use Limit Reached, Monthly Use Limit Reached, Other Use Limit Reached, Short Term Use Limit Reached cards
 - Replaces existing methods for accounting for opportunity cost for use limitations with the ability to seek the opportunity cost for use limitations through a calculation or negotiation based approach

Refer to Use Limit Registration Process webinar for details on the registration

- <http://www.caiso.com/Documents/UseLimitRegistrationProcess-Jun262018.pdf>



DIFFERENCE BETWEEN GENERATION PLANS AND LIMITATIONS

ISO supports SC registering a use limitation where:

- In the use limit registration process, ISO must validate that there is a qualifying limitation imposed on the resource through its design limits or environmental limits (largely regulatory in nature)*.
- SC must provide documents provided by outside party (e.g. FERC, CPUC, Air Quality District, Water Districts) describing the nature of the limitation.
- Limitation values are the amount of starts, runhours, energy output, or other type of limit available across granularity of limit.
- Other types of limits include emission limitations and water elevation requirements.
- CAISO requires SC to attempt to translate limitations into start, runhour, or energy output limitations.

*There is a short-term exception for qualifying contractual limitations approved by LRA prior to 2015.

ISO does not utilize generation plans in determining whether there is a qualifying limit

- ISO has received submissions with generation plan as supporting documentation for limitation values. Generation plans are not inputs to the use limit registration process. These plans seem to be trying to communicate the following and should utilize the appropriate process:
 - **Maintenance plans** need to be provided in the form of outages so ISO operations can perform its outage management obligations.
 - **Expectations in “fuel” input variations** due to forced outages or differing levels of fuel insufficiency need to be reflected in the form of outages so ISO market can consume that firm operational limit.
 - **Resource characteristics** such as max starts per day or Pmin levels need to be contained in the Resource Data Template so the market can effectively consume these firm operational limits.

Difference between generation plan and limitation

- Generation plans seem to be focused on providing information to the ISO for how much forecasted generation a resource will provide.
- Use limitations provide a limit on operations that can be managed over period of time greater than the ISO dispatch process through bids
 - E.G. Design Limit: standard states 50,000 runhours across 30 year lifecycle, SC reduces by 20,000 runhours operated to-date with 15 years remaining → runhours available are 30,000 runhours across the remaining 15 years of the lifecycle. Limitation registered as annual runhour limit of 2,000.
 - E.G. Design Limit Hydro: regulatory obligation to meet end-of-month water elevation targets (H_{target}) given current elevation (H_{current}) plus net of forecasted inflows and forecasted outflows and produces limitation available based on flow rates (efficiency)
 - $H_{\text{current}} + \text{Net Inflows} - H_{\text{target}} = \text{Excess water}$
 - Convert excess water or power generation into MWH based on flow rate

SC registration submission must support it has a qualifying limitation

- Use Limit Registration process requires attaching the Use Limit Plan Data Template to show proposed values for registering use limitations to the request
 - **Attach as supporting documentation:**
 - <http://www.caiso.com/Documents/UseLimitPlanDataTemplate.xls>
- Resource Adequacy Resources obligation under Section 40.6.4.2 Use Plan of tariff is separate from this process
 - **Do not attach as supporting documentation:**
 - http://www.caiso.com/Documents/Registration_UsePlanTemplate_Use-LimitedResources.xls



SCENARIOS OF INCOMPLETE SUBMISSIONS CAUSE DELAY

Scenario 1: No air permit attached when SC seeking to register emission limitations

- Scenario 1:
 - SC does not attach the plan documentation – the air permit
 - SC attaches ULPDT with record for the limitation
 - SC attaches translation methodology
- ISO cannot process request until all 3 documents are attached
- ISO is required to validate the inputs to the translation methodology and that the granularity and effective dates in the ULPDT can be referenced directly in the air permit

Scenario 2: No use limit plan data template with the definition of limit seeking registration attached

- Scenario 2:
 - SC attaches supporting documentation (various)
 - SC does not attach use limit plan data template
 - SC does not attach translation methodology (if applicable)
- ISO cannot process request until it has all 3 documents (if translation is required)
- SC is seeking registration of the limitation records in the ULPDT without the requested records the validation cannot be done

Scenario 3: No translation methodology attached when SC seeking to register limitations needing translations

- If plan does not specifically state the number of starts, runhours, or energy output the resource is limited to a translation methodology is required. Examples are air permit and limited storage capacity.
- Scenario 3:
 - SC attaches the plan documentation – the air permit
 - SC attaches ULPDT with record for the limitation
 - SC does not attach translation methodology
- ISO cannot process request until all 3 documents are attached
- ISO is required to validate the methodology and its inputs