**Multi-Stage Generator (MSG) Configuration Group Registration**

**PROCEDURE AND FORM**

**BACKGROUND**

Minimum Up Time (MUT) and Minimum Down Time (MDT) constraints are enforced at the MSG Resource (plant) level and at individual MSG Configuration levels. MUT and MDT may also be specified for a group of MSG Configurations.

* Plant level: MUT includes the Transition Times of all the MSG Configurations being switched.
* Grouped configurations level:
  + MUT represents the total time that the MSG Resource must stay within the group. For example, suppose a MSG Resource has 6 configurations, with configurations 5 and 6 part of a group with a MUT of 6 hours. Once dispatched into either configurations 5 or 6, the resource may transit freely between configuration 5 and 6, but cannot move to a different configuration until the 6-hour MUT has passed. Transition time between MSG configurations within the group is considered as “ON” Time of the group.
  + MDT represents the total time that the MSG Resource must stay outside of the group. When considering the MDT of a group of configurations, the time that the MSG Resource is operating in a configuration outside the group or within transition outside of the group is considered as the “OFF” time period for the group, in addition to the time that the resource is off line.
* Configuration level: When considering the MDT of a given MSG Configuration, the time that the MSG Resource is operating on a different configuration or transitioning is considered as the “OFF” time period for the given MSG Configuration, in addition to the time that the resource is off line.

**TO REGISTER**

Use the form on the following page to create an MSG configuration group and to add or update the MUT and MDT constraints for the configuration group. Email the completed form to [RDT@caiso.com](mailto:RDT@caiso.com).

Items of note:

* To update the MUT or MDT of the MSG resource or configuration, submit an updated Generator Resource Data Template (RDT) through the Master File User Interface.
* The configuration grouping information is not viewable in the RDT. To see the information once the group is created, send an email to [RDT@caiso.com](mailto:RDT@caiso.com).

**Please submit completed form to RDT@caiso.com.**

|  |  |
| --- | --- |
| **Resource ID:** | *<Enter the resource ID to which this constraint applies>* |
| **Configuration Group MUT (in minutes)[[1]](#footnote-1)** | **Configuration Group MDT (in minutes)1** |
| *<in Minutes>* | *<in Minutes>* |
| **List of Configurations[[2]](#footnote-2)** | |
| *[enter CONFIG ID]* | |
| *[enter CONFIG ID]* | |
| *[enter CONFIG ID]* | |

|  |  |
| --- | --- |
| **Resource ID:** | *<Enter the resource ID to which this constraint applies>* |
| **Configuration Group MUT (in minutes)1** | **Configuration Group MDT (in minutes)1** |
| *<in Minutes>* | *<in Minutes>* |
| **List of Configurations2** | |
| *[enter CONFIG ID]* | |
| *[enter CONFIG ID]* | |
| *[enter CONFIG ID]* | |

*<Please copy and paste one of the above tables if registering more than two configuration groups >*

1. For any group A,

   MUT(Plant) >= MUT(A)

   MDT(Plant) <= MDT(A)

   These rules are used for data error checking. If a registration violates these rules, then ISO will discuss with market participants for verification and/or reasoning. [↑](#footnote-ref-1)
2. All configurations must belong to the same resource and a configuration may be included in only one group. [↑](#footnote-ref-2)