

# Pseudo Modeled Combined Cycle Minimum Run Time Guidance

## Issue Source

PJM and the IMM are bringing this forth as a result of the disaggregation of many multiple block combined cycles into individual pseudo model market units.

## Issue Content

Each pseudo model market unit can submit its own individual unit specific parameter limits into PJM's Energy Market. Parameters such as Minimum Run Time are parameter limited on the unit's price based PLS and cost based schedules. Unless the Market Seller submits a unit specific parameter adjustment request, each of the combined cycle's pseudo modeled units will be assigned a Minimum Run Time parameter limit of 4 hours. However, the combined cycle 4 hour Minimum Run Time parameter limit was developed based on the operating restriction of a 2x1. The 4 hour parameter limit includes the time to start the steam turbine in cold conditions. For the pseudo model units, only the first unit would include the steam turbine startup. The startup of any subsequent pseudo unit would still have a Minimum Run Time parameter limit of 4 hours, even though the steam turbine may already be running. If the subsequent pseudo unit is started some time after the first unit, PJM would be unable to release the subsequent pseudo unit until the 4 hour Minimum Run Time has been honored. This limits PJM's operating flexibility even when dispatching units on parameter limited schedules and can potentially increase uplift.

## Key Work Activities and Scope

Stakeholders will develop guidance for Market Sellers in regards to offering operating parameter for pseudo modeled combined cycle units.

## Expected Deliverables

- Education (conducted coincident with the review of the issue charge)
- Manual 11, or other governing document revisions, to provide guidance regarding the Minimum Run Time parameter for pseudo modeled combined cycles.

## Decision-Making Method

Tier 1, consensus (unanimity)

## Stakeholder Group Assignment

This issue will use the Consensus Based Issue Resolution (CBIR Lite) process in accordance with Manual 34 section 8.6.2, and will be presented to the Market Implementation Committee (MIC) for approval.

## Expected Duration of Work Timeline

Market Sellers have already disaggregated a number of combined cycle units into pseudo model units. PJM plans to present the issue charge and education at the December 1st MIC, and follow the normal endorsement path through the MIC and MRC. PJM would like this issue to be completed in coordination with the next Unit Specific Parameter Adjustment request review period which opens February 28, 2022.

Start Date	Priority Level	Timing	Meeting Frequency
12/1/2021	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	<input checked="" type="checkbox"/> Immediate <input type="checkbox"/> Near Term <input type="checkbox"/> Far Term	<input type="checkbox"/> Weekly <input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Quarterly

## Charter

(check one box)

<input type="checkbox"/>	This document will serve as the Charter for a new group created by its approval.
<input checked="" type="checkbox"/>	This work will be handled in an existing group with its own Charter (and applicable amendments).

*More detail available in M34; Section 6*