



DATE: January 30, 2023
TO: CDS / MIRA Users
FROM: Monitoring Analytics
SUBJECT: Start Cost and Environmental Credits Changes

On January 10, 2023, FERC (Order ER23-557-000) approved changes to the definition of start costs and the requirements to include renewable credits (RECs) in cost-based offers for all unit types that offer nonzero cost-based offers.¹

Start Cost

The start cost changes include:

- Extending the end of the period used in the start cost calculation from the time the unit synchronizes to the time the unit becomes dispatchable: This modification increases the amount of fuel (start heat input) included in the start cost calculation and reduces (likely to a negative number) the station power used in the start cost calculation since the unit has to account for the energy produced between synchronization and becoming dispatchable. This change applies to all units with a steam process (e.g. steam turbines and combined cycles).
- Limiting the periods used to calculate the inputs in the calculation of start costs to starts that meet the approved operating parameter limit schedules (PLS). The definitions are in Manual 15. This change applies to all units with a steam process (e.g. steam turbines and combined cycles).
- Removing staffing costs: Additional staffing costs are removed from cost-based offers in the energy market and are includable in units' avoidable costs rates (ACR) in the capacity market. This change applies to all unit types.

These changes will become effective June 1, 2023.

The Market Monitor recommends that Market Participants submit their data and calculations to the Market Monitor. The Market Monitor will review these requests to validate that the start cost inputs are determined correctly. Market Sellers can send the Market Monitor their operating data via email (MMU_Energy_Offers_Review@monitoringanalytics.com) or via the MIRA Secure Communications module (preferred). Please contact the Market Monitor via email if you decide to use the MIRA Secure Communications module in order for the Market Monitor to create the location for the files.

¹ See **Order ER23-557-000 (2023)**. <<https://pjm.com/directory/etariff/FercOrders/6644/20230110-er23-557-000.pdf>>

For more background, please see PJM's Markets and Reliability Committee [May 25, 2022 presentation](#).

For an extended description of the start cost calculation and an example, please see the Market Monitor's Cost Development Subcommittee [December 2, 2021 presentation](#).

Environmental Credits

The January 10, 2023, order included revisions to the fuel cost policy requirements for all units receiving environmental credits (e.g. renewable energy credits and/or production tax credits). Units receiving environmental credits (RECs) that opt to submit nonzero cost based offers will be required to update their fuel cost policies to include the offset from these revenues. This requirement had previously been explicit only for wind units. This order expanded the requirement to all unit types.

Units that opt to submit cost based offers at zero are not required to make any changes.

Market Sellers that own units receiving environmental credits and that have opted to submit nonzero cost-based offers must submit a new fuel cost policy incorporating such credits by June 1, 2023.

For background please see PJM's Markets and Reliability Committee [August 24, 2022 presentation](#).