



PJM Market Implementation Committee

**Agenda Item #6
Variable O&M Cost Development**

August 10, 2022

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Constellation Package - Modifications to PJM Package

Constellation package mimics the terms of the PJM Package except for the definition of Major Maintenance and the description of allowable expenses

The screenshot shows a section of the PJM Allowable and Unallowable Expenses document. The title 'Allowable and Unallowable Expenses' is at the top. Below it are three sections: '2.6.1.1 Major Maintenance', '2.6.1.2 Minor Maintenance', and '2.6.1.3 Unallowable Expenses'. The 'Major Maintenance' section defines it as overhaul, repair, or refurbishment requiring disassembly of major components like the boiler, reactor, steam turbine, etc. The 'Minor Maintenance' section covers repair or refurbishment of components directly related to electric production. The 'Unallowable Expenses' section lists costs like preventative maintenance, buildings, HVAC, and software. The bottom of the page includes the PJM logo, a navigation bar with links like 'Home', 'About PJM', 'Regulation', 'Markets', 'Transmission', 'Power Plants', 'Services', 'PJM.com', and 'Contact Us', and a footer with 'www.pjm.com | Public', '8', and 'PJM © 2022'.

-Strike references to “reactor” and “reactor refueling”
-Add to the following addendum to the OA and Manual provisions to be developed from the provisions described in Matrix Row 5a (Allowable Expenses on Systems Directly Related to Electric Production) and 8d (Definition of Major Maintenance):

Notwithstanding the foregoing, for the purposes of this provision, nuclear refueling and associated major maintenance are considered fixed costs not directly attributed to the production of energy and therefore not includable in VOM.

Constellation Package Rationale

- Costs that vary directly with run time or starts, such as LTSAs, are properly classified as variable costs and properly includable in VOM and a unit's cost-based offer, as reflected in the PJM package.
- The PJM proposal incorrectly defines projects associated with a nuclear planned outage as Major Maintenance costs.
 - PJM defines Major Maintenance as costs that “vary directly with electric production.”
 - Costs that “vary with electric production” are typically measured by number of run hours or number of starts (e.g., LTSA).
 - Cost accounting for most (if not all) PJM nuclear facilities treats costs incurred during planned refueling outages as *fixed*.
- The PJM proposal mandates that all costs classified as Major Maintenance must be included in VOM and reflected in a unit's cost-based energy offer.
 - Conversely, costs includable in VOM are not allowed as a component of gross costs in developing an ACR.
- Nuclear units, due to the must-run nature of the technology, are self-scheduled and thus would not likely have the opportunity for cost recovery via the cost-based offer.
- Defining planned outage costs as a component of VOM may not permit financially challenged nuclear units from developing an accurate ACR to assess retirement.