

Synchronous Condensing Costs

CDS

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Synchronous Condensing Costs

- **Synchronous condensers incur certain costs when operating in condensing mode. Units operate in condensing mode to provide reserves, reactive support or post contingency operation.**
- **Condensers provide PJM with three operating parameters and three financial parameters as part of their offers. These parameters are:**
 - **Condense Energy Use (MW), Condense Notification Time, Condense to Generate Time.**
 - **Condense Startup Cost, Condense to Gen Cost, Condense Hourly Cost.**

Problem Statement

- The definitions of these parameters need to be reviewed, clarified or corrected when necessary, and documented in Manual 15 and the Operating Agreement.
- The references to Condense Hourly Cost were removed from Manual 15 as part of the Reserve Market changes in October 1, 2022.
- Manual 11, Manual 28 and the OA uplift related sections of synchronous condensing were not revised.

OA References

- **Condensing costs are referenced in five sections of Schedule 1 of the Operating Agreement.**
 - **3.2.3: Operating Reserves (Uplift)**
 - **3.2.3A: Synchronized Reserves**
 - **3.2.3A.01: Secondary Reserves**
 - **3.2.3B: Reactive Services**
 - **3.2.3C: Post-Contingency Operation**
- **Condensing costs are referenced in Manual 11, 15 and 28.**

OA References

- **None of the sections include definitions.**
- **Terms used:**
 - **offered prices for synchronous condensing**
 - **condense start-up cost**
 - **cost to provide synchronous condensing**
 - **startup cost of providing synchronous condensing**

PJM/IMM Proposal

- **Clearly define and document all condensing costs.**
- **Remove Condense Hourly Cost.**
- **Update OA and manuals.**
- **All redlines have been included in a separate material.**

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