

## Synchronous Condensing Costs

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- Synchronous condensers incur certain costs when operating in condensing mode.
  - Providing reserves, reactive support or post contingency operation
- Condensers provide PJM with three operating parameters and three financial parameters as part of their offer
  - Operating parameters: Energy Use (MW), Condense Notification Time,
     Condense to Generate Time
  - Financial parameters: Condense Startup Cost, Condense to Gen Cost,
     Condense Hourly Cost
- Issue originally brought to CDS in July, 2023



- Condensing costs are referenced in five sections of Schedule 1 of the Operating Agreement
- Problem: Terms are not defined in OA
- Current OA references to Condensing costs include:
  - "... offered prices for synchronous condensing.."
  - "... condense start-up cost..."
  - "... cost to provide synchronous condensing..."
  - "... startup cost of providing synchronous condensing..."
- Costs also referenced in M-11, M-15 and M-28



- Add definitions of the following terms to OA and update appropriate sections of OA, M-11, M-15 and M-28 to reference these definitions
  - Condense Startup Cost
  - Condense to Generate Cost
  - Condense Energy Use
- No change to intent of these terms, just adding definitions to OA

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- Condense Hourly Cost was removed from M-15 as part of Reserve Price Formation changes on 10/1/22
  - Clean up M-11 and applicable OA sections to remove references to Condense Hourly Cost
  - Remove Condense Hourly Cost data field from Markets Gateway
  - Not being used currently

No updates to cost offers or action by stakeholders is required

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