

DESTF Phase 1 Overview

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Scenario Analysis and Special Studies

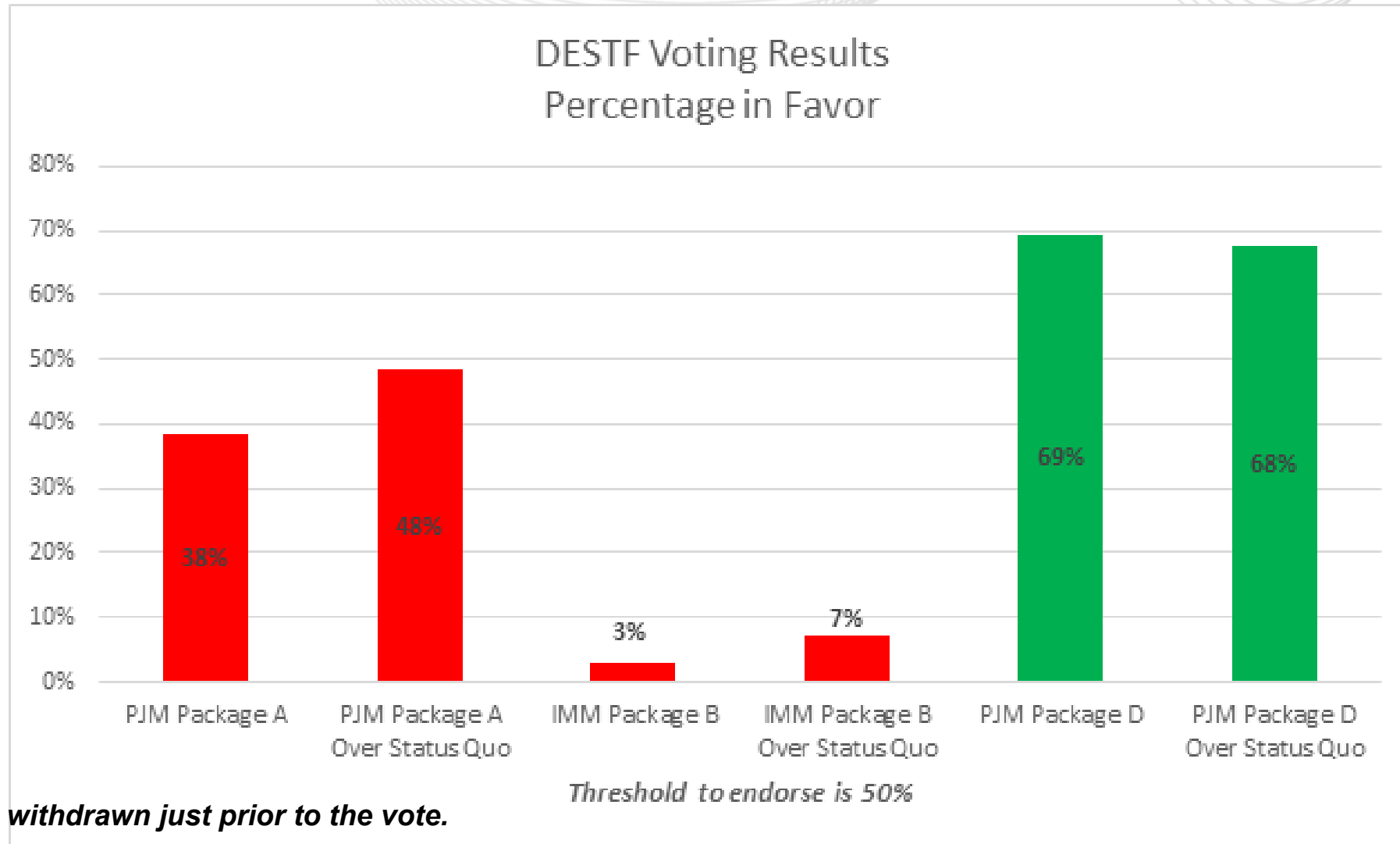
Deactivation Enhancements Senior
Task Force

February 11, 2025

- Given the anticipated volume of generation resource retirements expected in the coming years and confusion about how the current compensation mechanisms operate and should operate, there are areas where the provisions of Part V and potentially other provisions of the Tariff need to be reevaluated.
- Provide education around the general deactivation process and the provisions in the Tariff, mostly Part V, regarding requests for units to operate beyond their desired deactivation date, including, but not limited to, how units requested to operate beyond their desired deactivation date are included in the capacity and energy supply stack, and the criteria for and mechanism to account for units operating beyond their desired deactivation date in capacity market auctions.
- Provide education around the current issues associated with situations where units have been requested to operate beyond their desired deactivation date.

- The DESTF (Phase 1) met 14 times from October 2023 through November 2024.
- Education: History, PJM Deactivation process, Other ISO/RTO process, RMR
- Areas of Focus:
 - Compensation mechanism
 - Rate, Adder, Cost, Review process, RMR Services
 - Deactivation notification timeline
 - Timeline, exceptions, notification, withdrawal
 - Transparency
 - RMR, Arrangement, extension, early termination, notification
 - Modeling
 - Market Offers, Modeling of RMR units

- The CBIR process resulted in four packages proposed as follows. *(Reference Package Executive Summary Appendix)*
 - PJM Package A
 - IMM Package B
 - Calpine Package C
 - PJM Package D
- The DESTF voted following their October 2024 meeting.



Notification Time

- Units that plan to participate in RPM must provide at least 12 months' notice prior to desired deactivation date
- Units that do not plan to participate in RPM due to deactivation must provide notice consistent with existing RPM must offer exception process
- Existing quarterly deactivation implementation process will continue

Compensation Mechanism

- Status Quo (maintain the Cost of Service Recovery Rate filing option and the existing Deactivation Avoidable Cost Credit formula) with the following changes to the Deactivation Avoidable Cost Credit:
 - Removal of the \$2 million cap on Project Investment
 - Limit the yearly adder that is applied to Project Investment to 10%
 - Removal of the clause that triggers the credit to be paid using the Daily Deficiency Rate rather than Deactivation Avoidable Cost Rate (DACR) if $\text{DACR} + \text{Applicable Multiplier}$ is greater than the Daily Deficiency Rate.

Transparency

- Improvements on top of Status Quo to make additional details including deactivation response letters, IMM market power letters, and RMR arrangement notifications available to stakeholders
- Publish estimated RMR revenue allocation zonal rate for impacted zones

Modeling

- Status quo. No changes to Planning and Markets modeling of RMR units

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<ul style="list-style-type: none"> The DESTF began meeting in October 2023 and held a series of 14 meetings. 	<ul style="list-style-type: none"> Following its October 2024 meeting, the DESTF voted on three proposed solutions resulting with a single package, Package D, endorsed to move forward to the MRC. 	<ul style="list-style-type: none"> Package D was endorsed at the January MRC & MC meetings.

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DESTF Solution Package Overview



Member Hotline

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Appendix

Acronym	Term & Definition
RPM	Reliability Pricing Model is PJM's capacity market design that includes a series of auctions to satisfy the reliability requirements of the region PJM serves for a delivery year.
BRA	Base Residual Auction is the capacity auction conducted by PJM three years in advance of the delivery year to procure unforced capacity to satisfy reliability requirements on behalf of load-serving entities.
CETO	Capacity Emergency Transfer Objective is the amount of electric energy that a given area must be able to import in order to remain within a loss of load expectation of one event in 25 years when the area is experiencing a localized capacity emergency.
CETL	Capacity Emergency Transfer Limit is the capability of the transmission system to support deliveries of electric energy to a given area experiencing a localized capacity emergency as determined in accordance with the PJM manuals.
DACR	Deactivation Avoidable Cost Rate is the default formula rate, as defined in OATT Part V, section 115, used for compensating for a generating unit that continues operating beyond its desired deactivation date.
DACC	Deactivation Avoidable Cost Credit is the credit paid to a generating unit that continues operating beyond its desired deactivation date and elects to be compensated per the defined formula in OATT Part V, section 114, rather than electing to be credited based on a cost of service rate filed with the FERC.

[PJM Glossary](#)

	Package A (PJM)	Package B (IMM)	Package C (Calpine)	Package D (PJM)
Compensation	<p>IMM Option and Cost of Service Recovery Rate filing option</p>	<p>Payment</p> <ul style="list-style-type: none"> a. Actual costs paid as incurred b. Plus a percent adder <ul style="list-style-type: none"> i. Propose 10 percent; subject to change c. No sunk costs d. Net revenues offset costs <p>Review process</p> <ul style="list-style-type: none"> a. IMM reviews project investments; invoices b. PJM reviews project investments; invoices <p>Nonperformance</p> <ul style="list-style-type: none"> a. Reduces incentive payments b. Based on algorithm for relative significance c. Evaluated at year end <p>Return to service as market unit</p> <ul style="list-style-type: none"> a. Pay back all project investment b. Pay back all major maintenance 	<p>Same as PJM Package D</p>	<p>Status Quo (maintain the Cost of Service Recovery Rate filing option and the existing Deactivation Avoidable Cost Credit formula) with the following changes to the Deactivation Avoidable Cost Credit:</p> <ul style="list-style-type: none"> a. Removal of the \$2 million cap on Project Investment b. Limit the yearly adder that is applied to Project Investment to 10%. c. Removal of the clause that triggers the credit to be paid using the Daily Deficiency Rate rather than DACR if DACR + Applicable Multiplier is greater than the Daily Deficiency Rate.

	Package A (PJM)	Package B (IMM)	Package C (Calpine)	Package D (PJM)
Notification	<ul style="list-style-type: none"> • Units that participate in RPM must provide at least 12 months' notice prior to desired deactivation date • Unit that don't participate in RPM due to deactivation must provide notice consistent with existing RPM must offer exception process • Existing quarterly deactivation implementation process will continue 	12 months prior to auction	Same as PJM Package A	Same as Package A
Transparency	Improvements on top of Status Quo to make additional details including deactivation response letters and RMR arrangement notifications available to stakeholders		Same as PJM Package A	Same as Package A

	Package A (PJM)	Package B (IMM)	Package C (Calpine)	Package D (PJM)
Modeling Impacts	No changes to Planning and Markets modeling of RMR units	<p>RMR in capacity market</p> <ol style="list-style-type: none"> Include in CETO/CETL Include in supply curve at zero cost <ol style="list-style-type: none"> Not an offer from owner <p>RMR in energy and ancillary services markets</p> <ol style="list-style-type: none"> No must offer Committed and dispatched by PJM as needed for reliability 	<p>RMR units shall not participate in capacity market. No must offer requirement. Not included in CETO/CETL for RPM purposes.</p> <p>No PAI bonuses or PAI penalties</p> <p>Participation in energy market and reserve markets only allowed for reliability purposes limited to:</p> <ol style="list-style-type: none"> Needed for reactive/frequency/voltage support Needed for a thermal constraint that cannot be relieved by other generating units through redispatch Need in the case of an emergency alert, warning, and actions for <ol style="list-style-type: none"> "Capacity shortage emergency" encompassing the TO zone where the RMR unit is located "Transmission Security Emergencies" encompassing the TO zone where the RMR unit is located "Sabotage/Terrorism Emergencies" encompassing the TO zone where the RMR unit is located Does not include market participation for "General Assistance to Adjacent Control Areas" 	Same as Package A

**PROTECT THE
POWER GRID**
**THINK BEFORE
YOU CLICK!**



**BE ALERT TO
MALICIOUS PHISHING
EMAILS**



Report suspicious email activity to PJM.
Call (610) 666-2244 or email it_ops_ctr_shift@pjm.com