

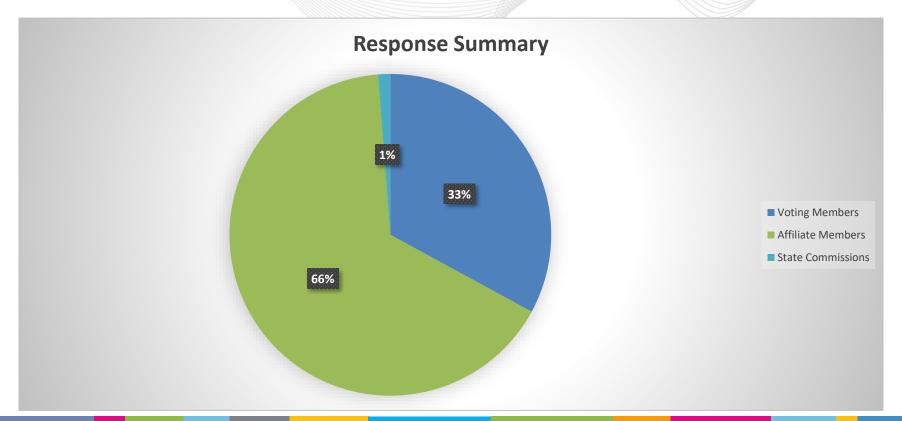
# Fuel Requirements for Black Start Resources Poll Results

PJM Interconnection 09/10/2019

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#### Fuel Requirements for Black Start Resources



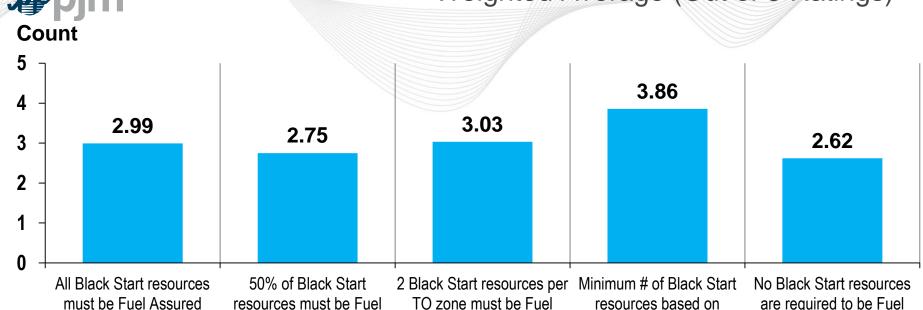


1. Weighing the projected costs versus the reliability benefits, please indicate your level of support for degrees of Black Start Resource Fuel Assurance.

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(Status Quo)



Assured

Winimum # of Black Start

Ro Black Start resources

are required to be Fuel

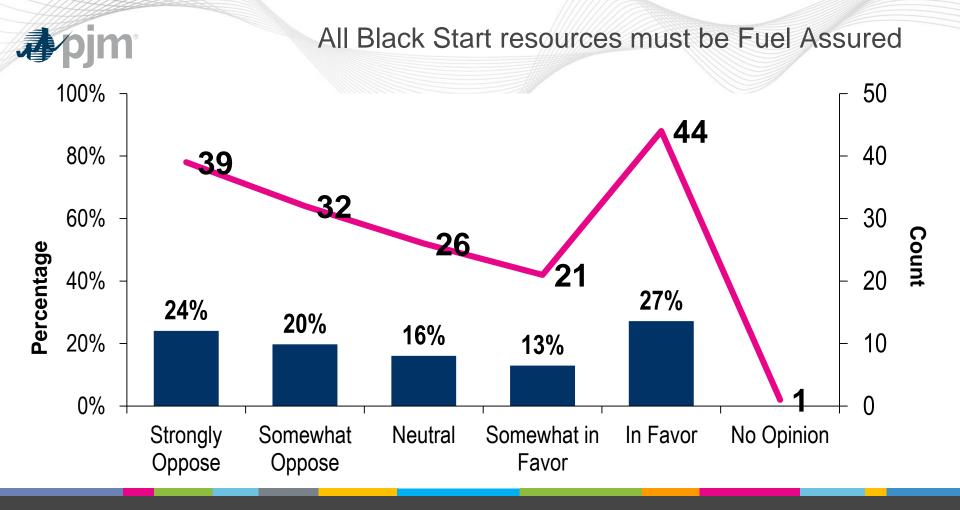
Assured, but PJM should

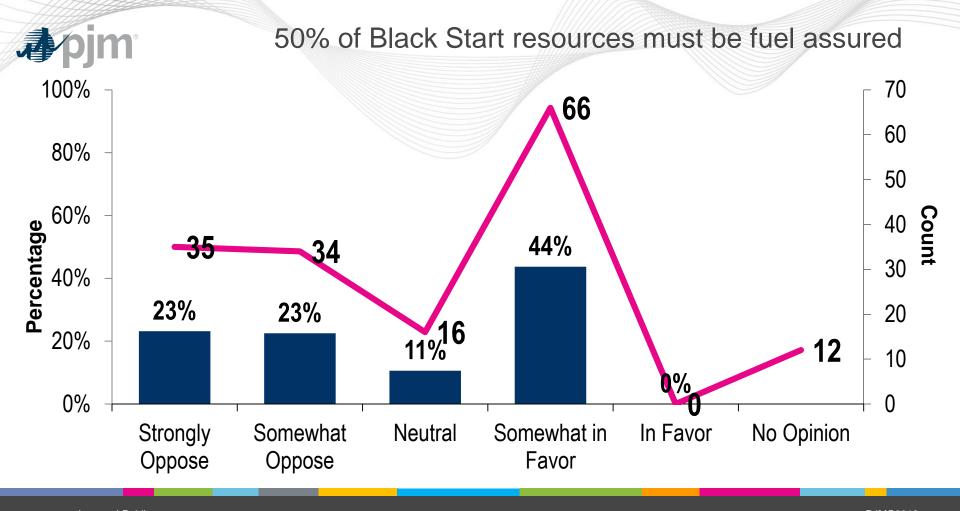
weight fuel assurance

higher along with other

reliability benefits in Black

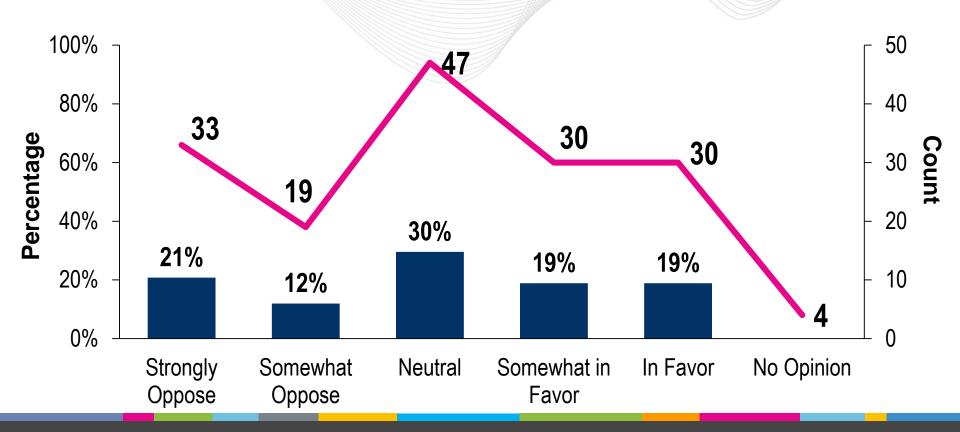
Start RFP evaluation

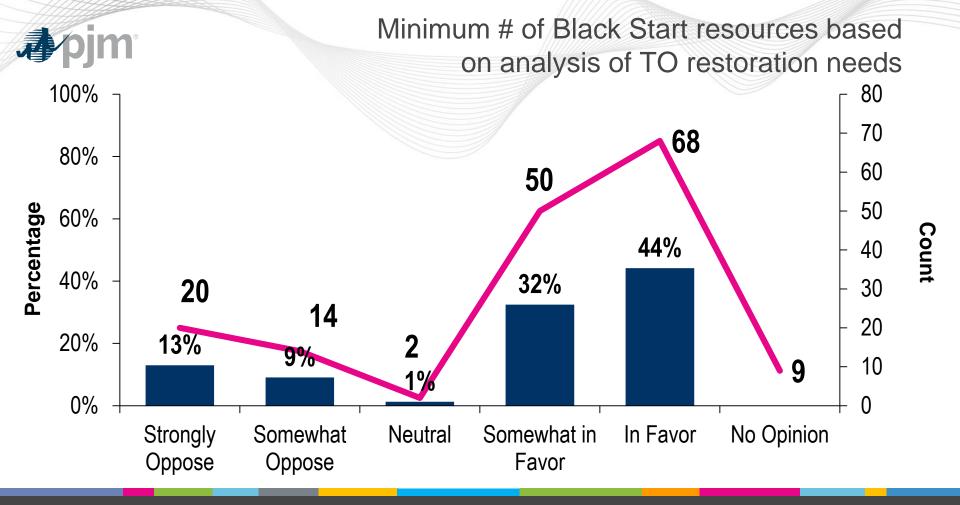






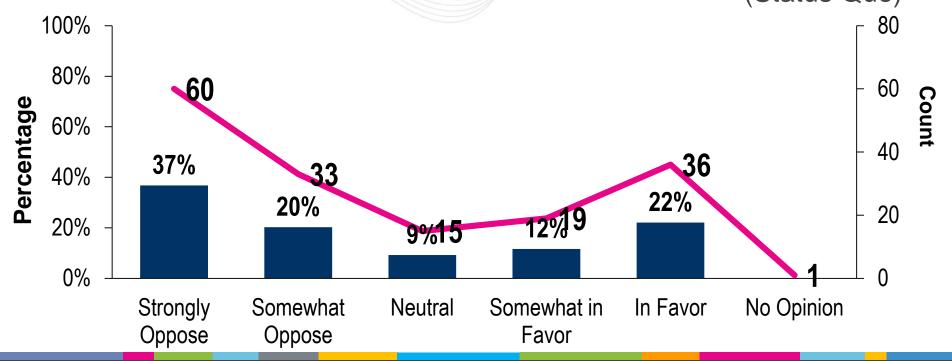
#### 2 Black Start resources per TO zone must be Fuel Assured







No Black Start resources are required to be Fuel Assured, but PJM should weight fuel assurance higher along with other reliability benefits in Black Start RFP evaluation (Status Quo)

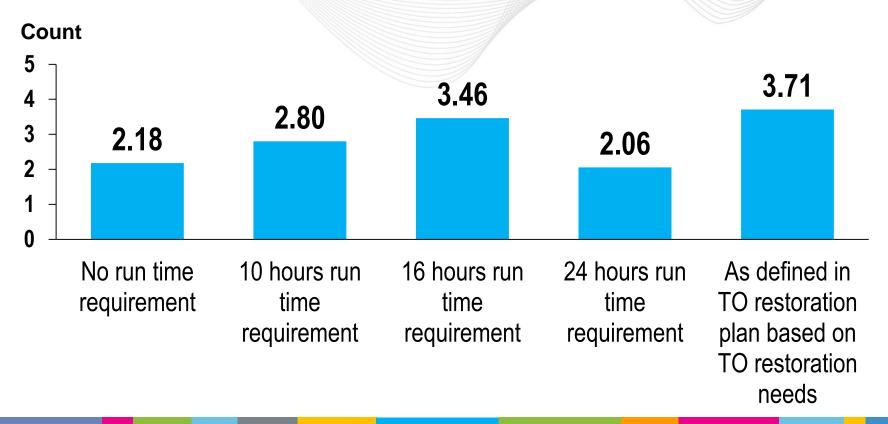


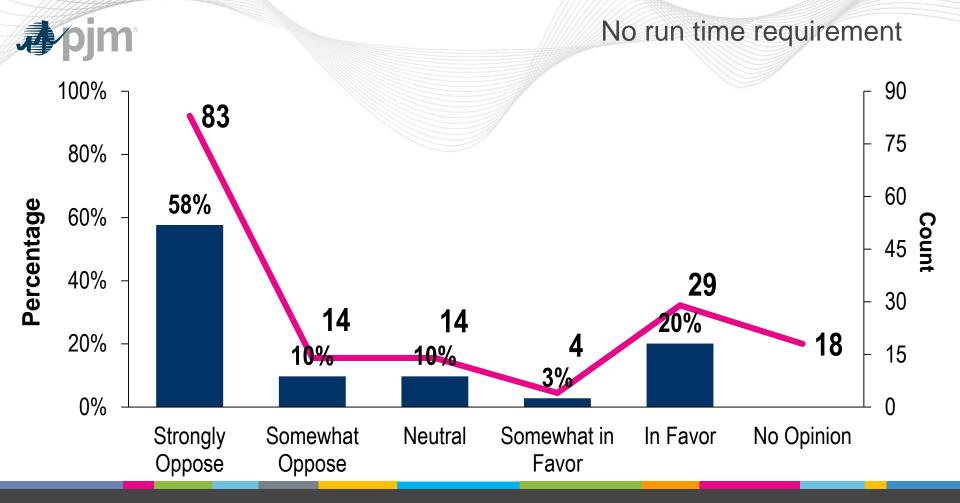


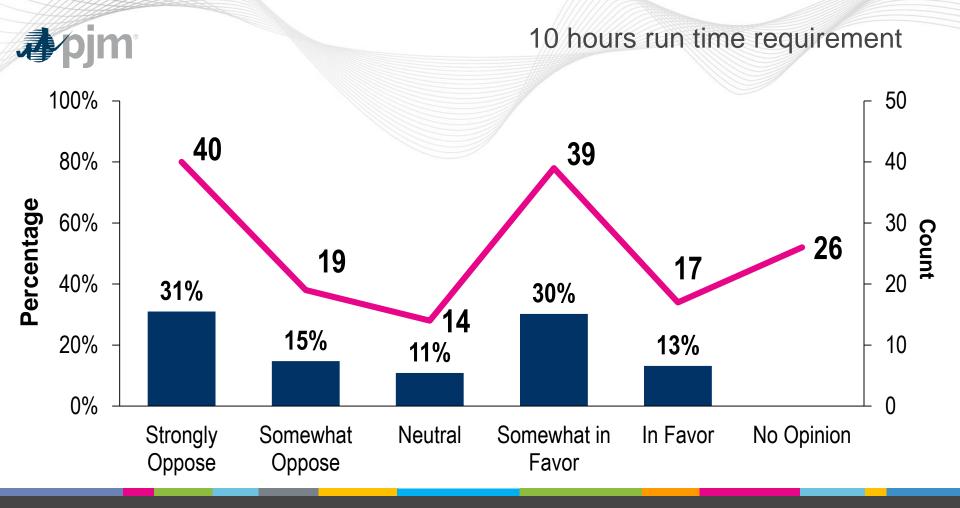
2. Please indicate your level of support for the minimum run time requirement options for black start resources to be considered fuel assured (i.e. fuel available for run hours at max load).

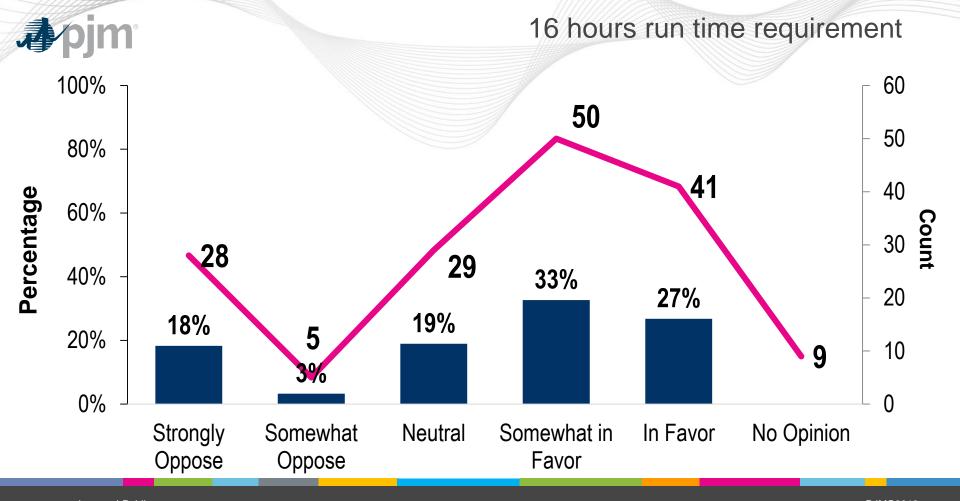
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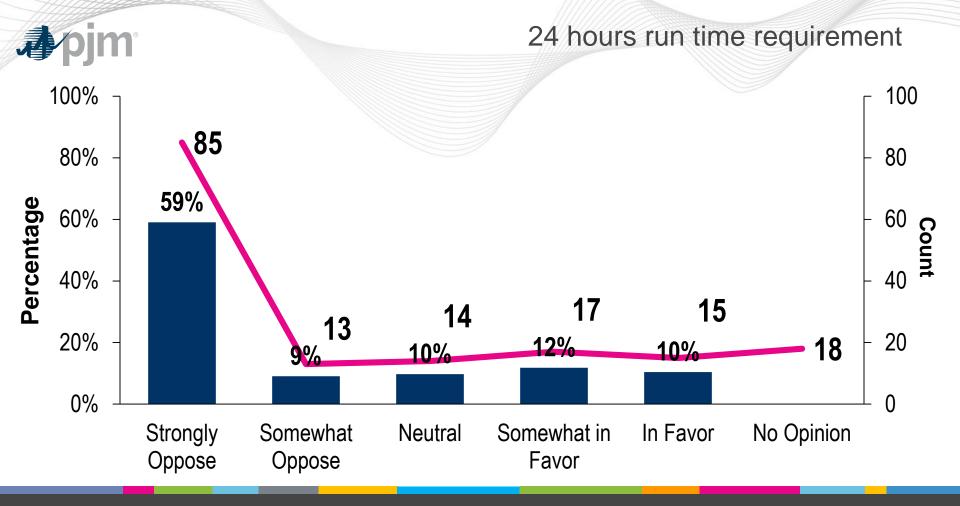


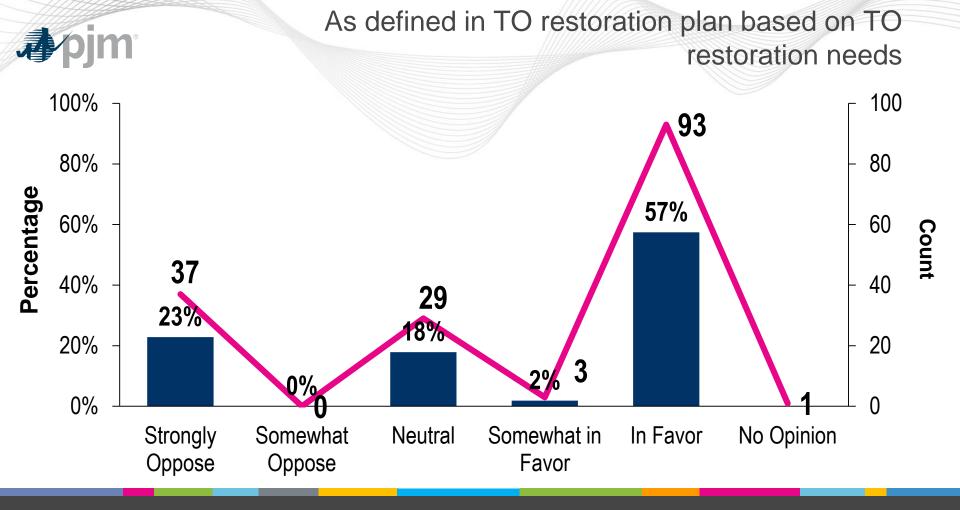












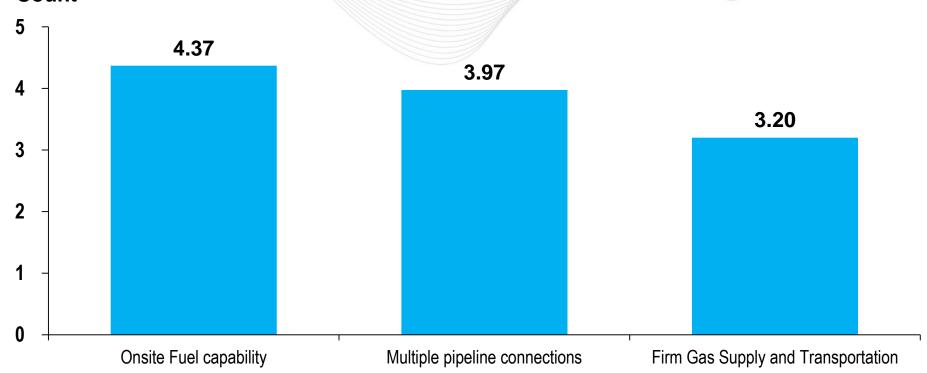


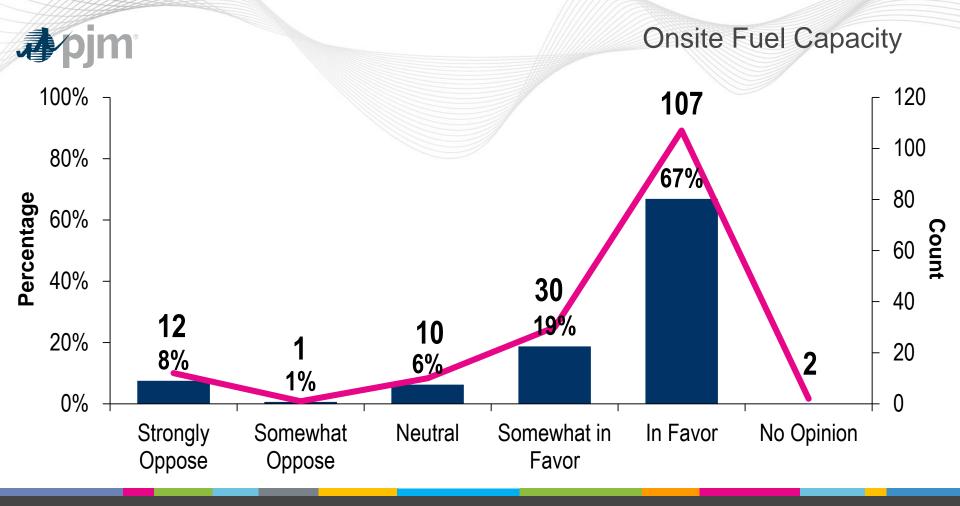
3. Please indicate your level of support for the following natural gas black start options to be considered fuel assured.

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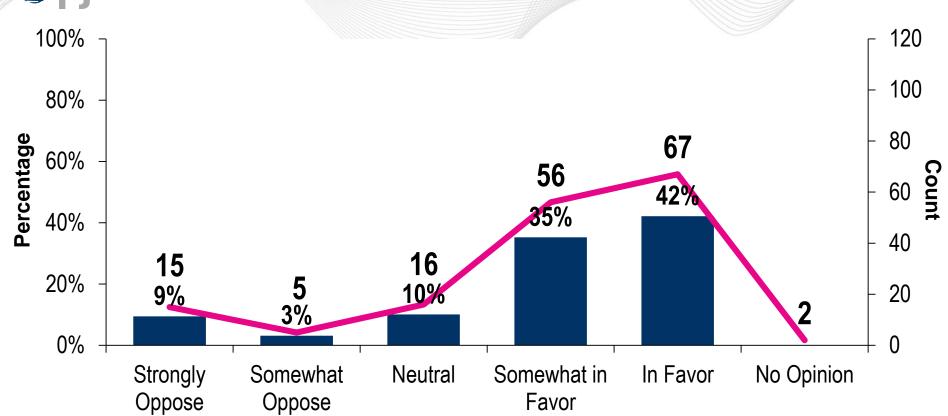
#### Count





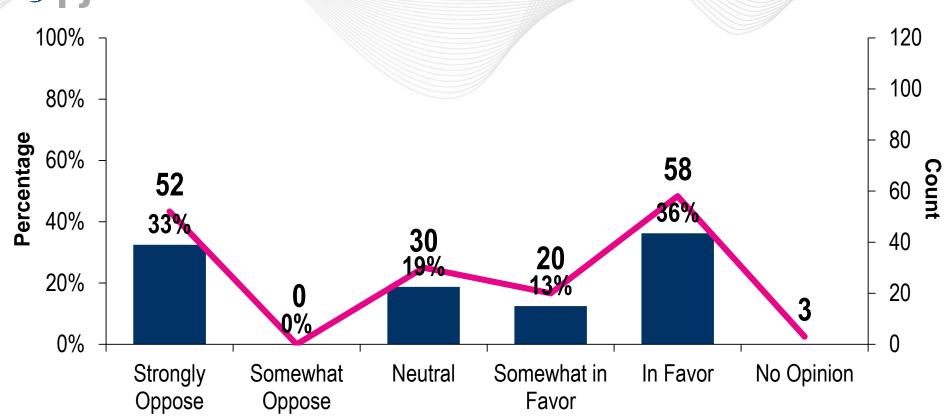


#### Multiple Pipeline Connections





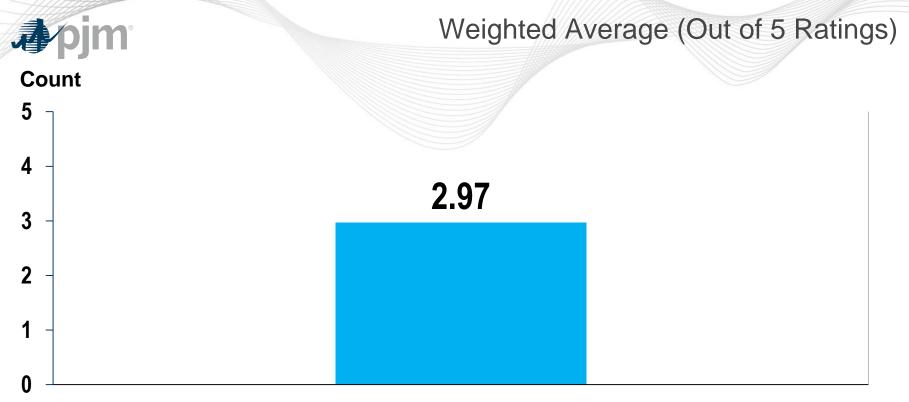
#### Firm Gas Supply and Transportation





4. Please indicate your level of support for a tiered run hour requirement (eg. 10 Hours or 16 Hours) with a tiered compensation for black start resources to maintain black start resource diversity (eg. Hydro – run of river, pumped storage, intermittent resources, ESR).

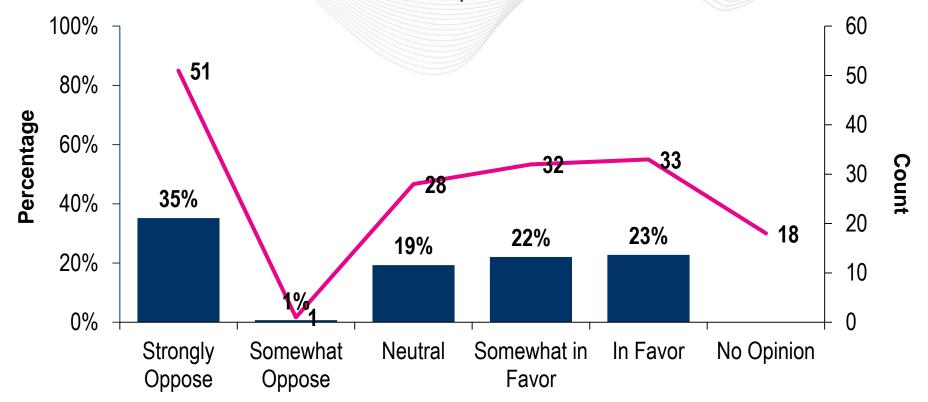
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A tiered run hour requirement (eg. 10 Hours or 16 Hours) with a tiered compensation for black start resources



A tiered run hour requirement (eg. 10 Hours or 16 Hours) with a tiered compensation for black start resources

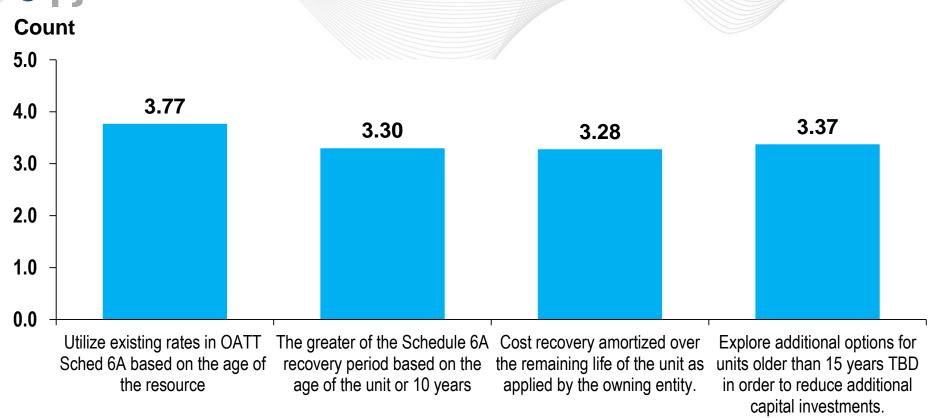


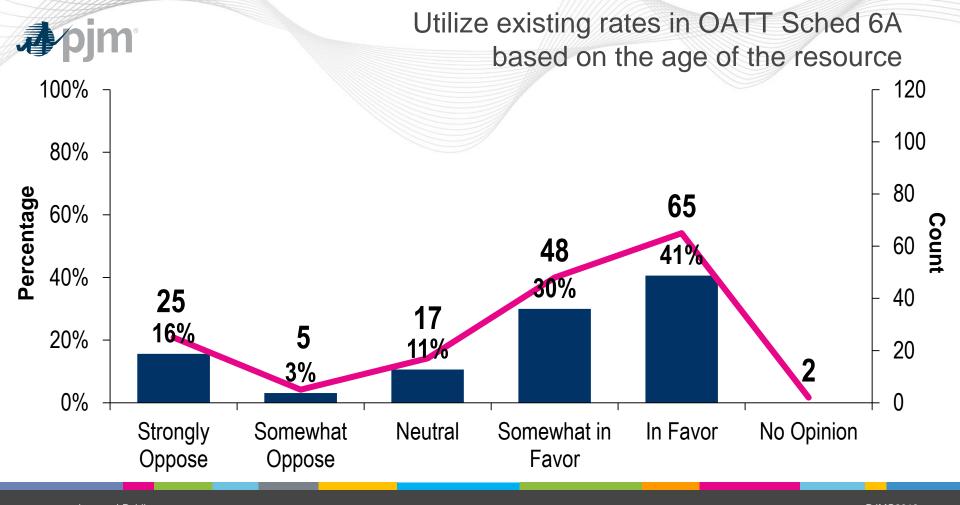


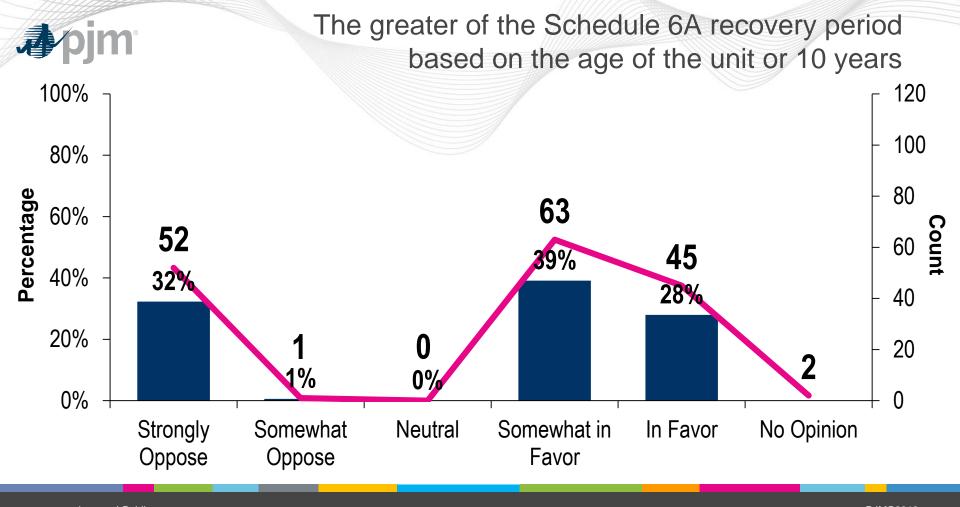
5. If a Black Start resource makes capital improvements in order to become fuel assured, please indicate your level of support for each of the following options for capital recovery period.

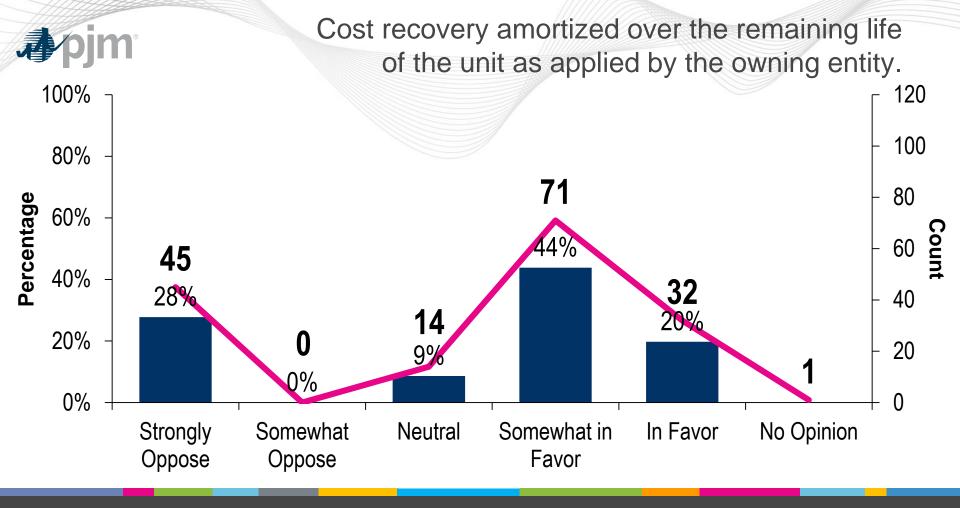
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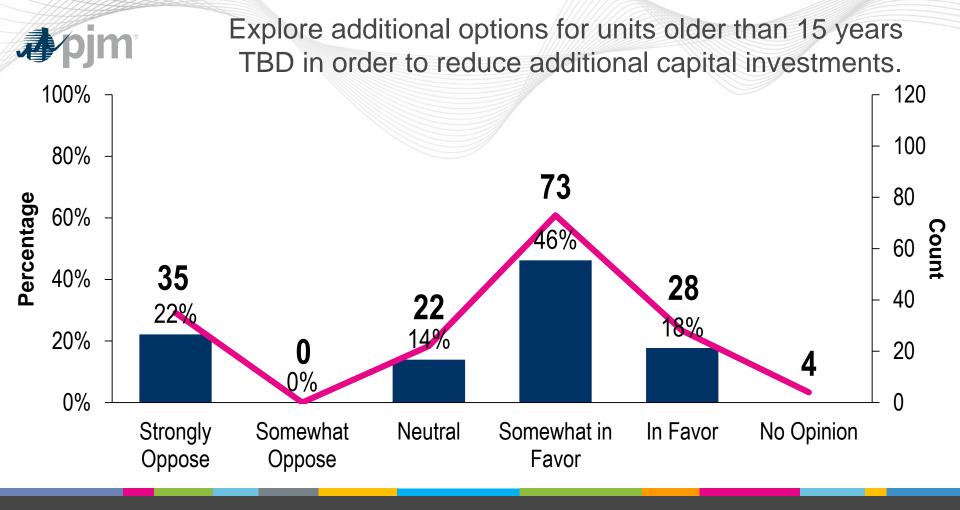










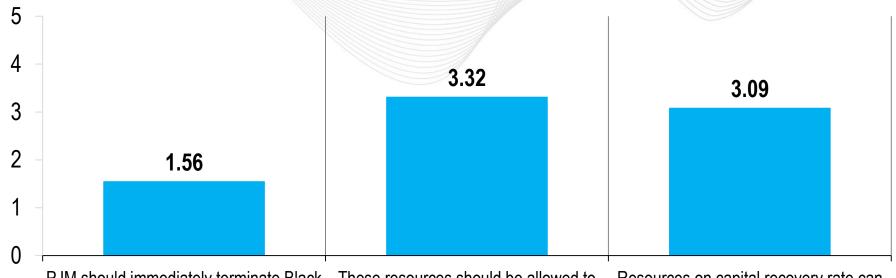




6. Please indicate your level of support for the options listed below for addressing Black Start resources that are not fuel assured.

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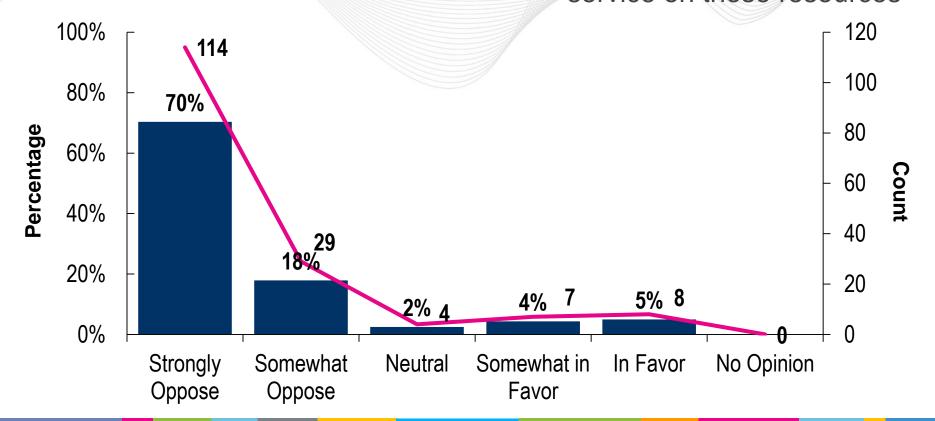


PJM should immediately terminate Black Start service on these resources These resources should be allowed to continue to provide Black Start service but be phased out over time

Resources on capital recovery rate can continue to provide Black Start service and will be included in the restoration plan but their MWs will not be included in the calculation of M36 black start to critical load requirements

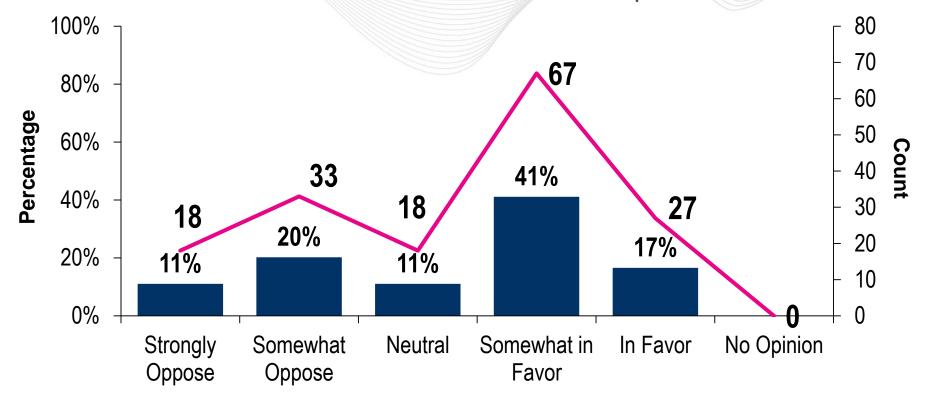


PJM should immediately terminate Black Start service on these resources



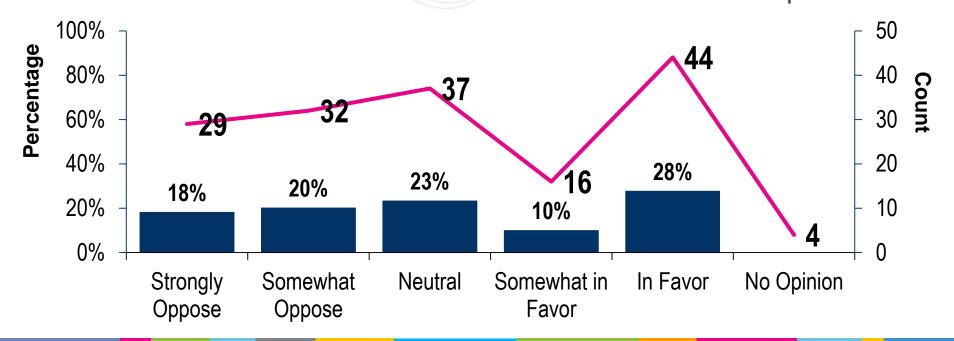


These resources should be allowed to continue to provide Black Start service but be phased out over time





Resources on capital recovery rate can continue to provide Black Start service and will be included in the restoration plan but their MWs will not be included in the calculation of M36 black start to critical load requirements



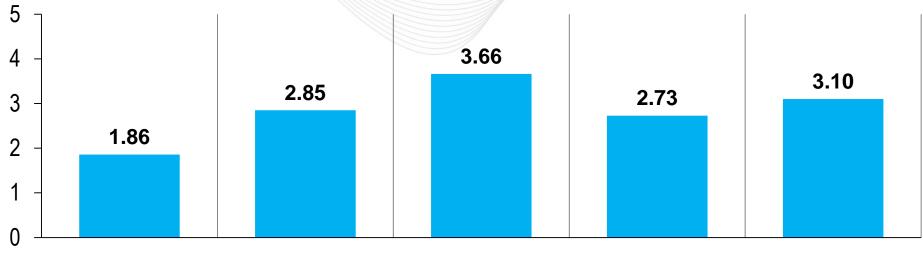


7. Please indicate your level of support for the options below regarding the transition to Black Start Fuel Assurance requirements.

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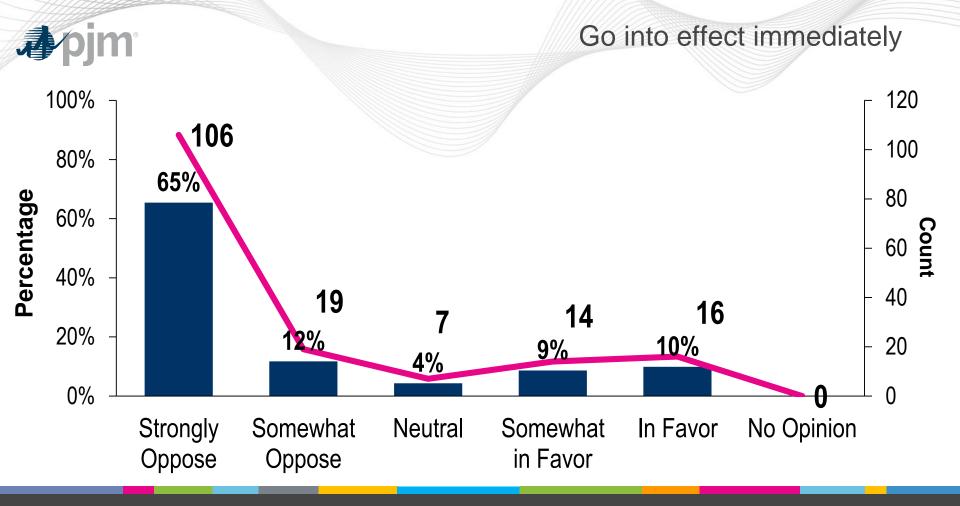
Go into effect immediately

Transition over a short Go into effect for next Transition in over the period (2-3 years)

RTO wide RFP (5 years)

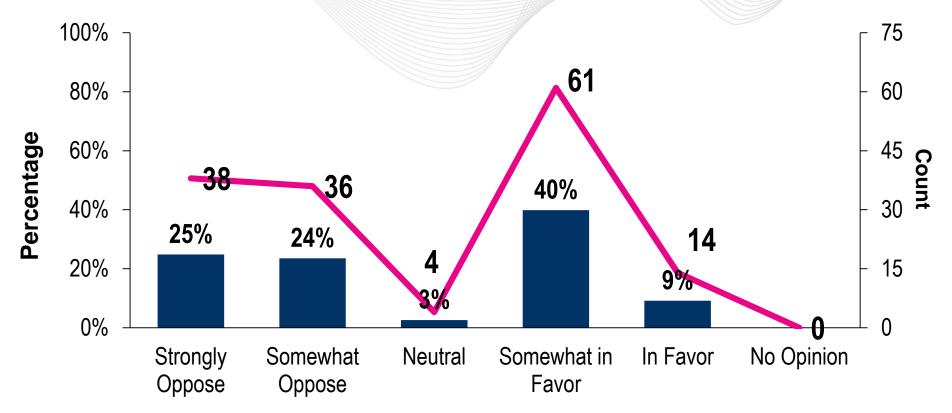
next 2 RTO wide RFPs (approx. 10 years)

Coordinate implementation timing with any related Fuel Security Senior Task Force initiatives



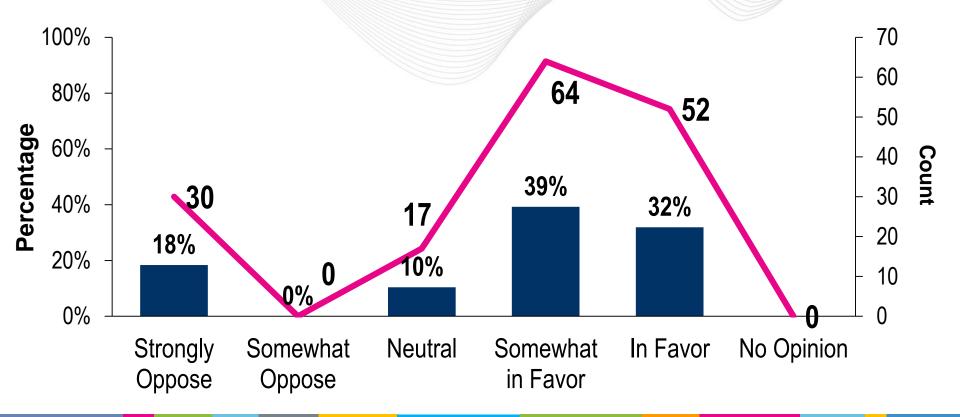


### Transition over a short period (2-3 years)



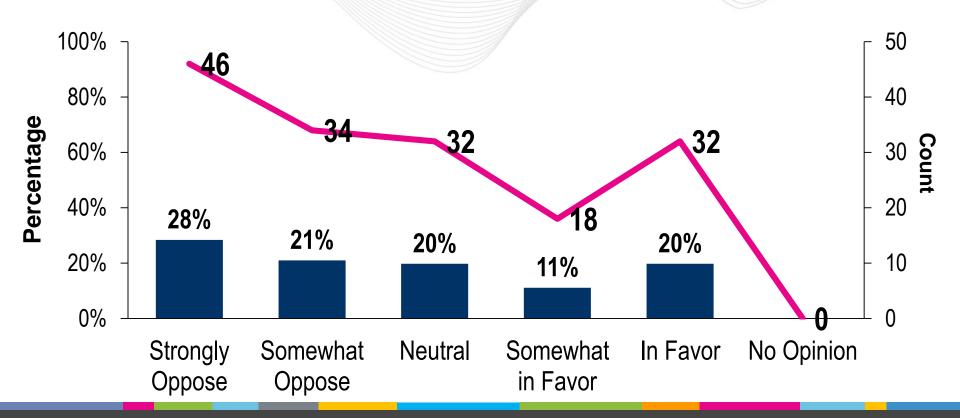


#### Go into effect for next RTO wide RFP (5 years)





Transition in over the next 2 RTO wide RFPs (approx. 10 years)





## Coordinate implementation timing with any related Fuel Security Senior Task Force initiatives

