

Items in red font represent additional information and clarifications since the September 18, 2018 MRC Special Session.

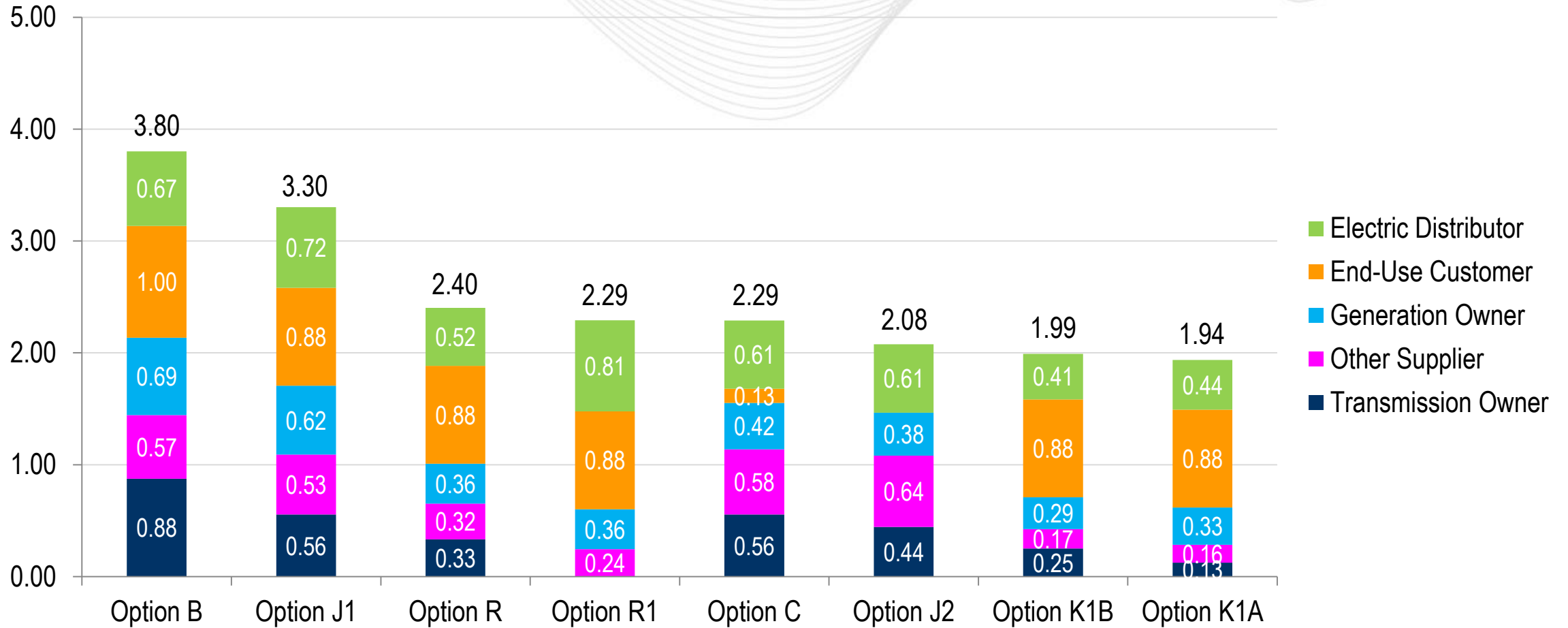
Potential FTR Liquidation Process Alternatives

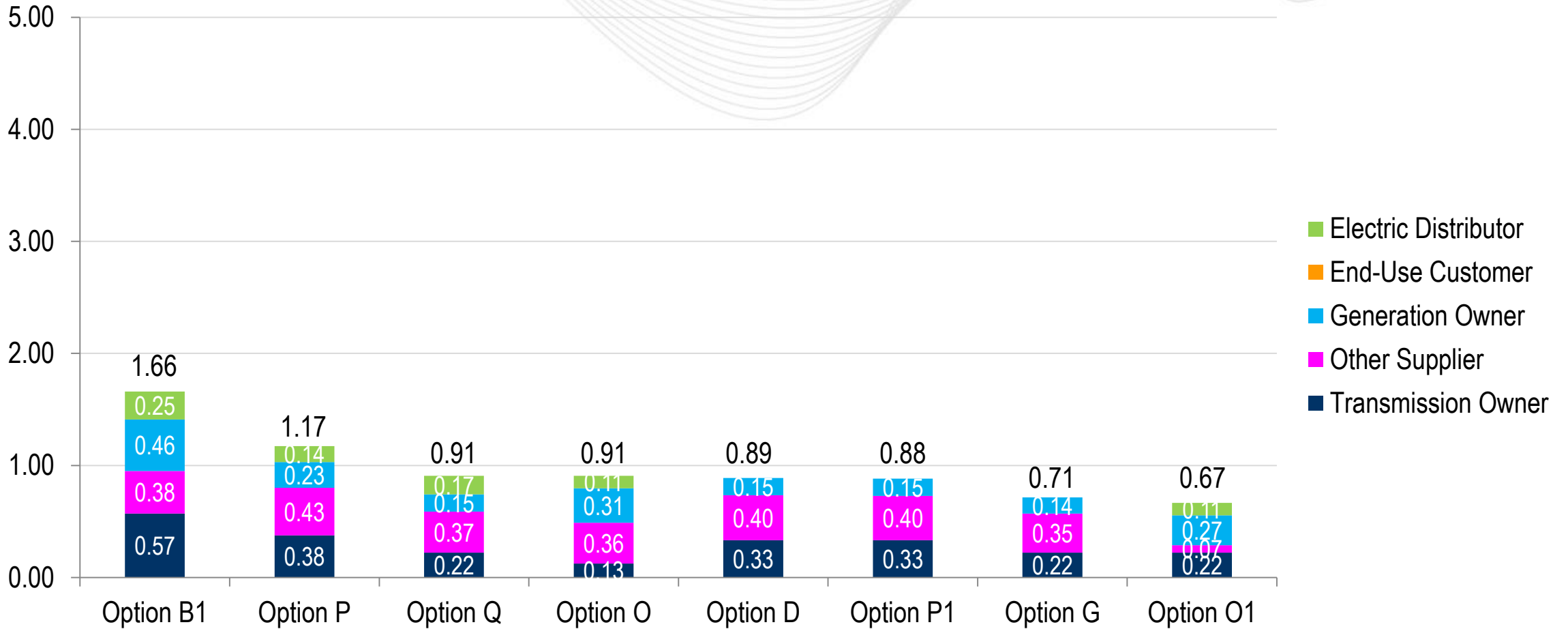
Suzanne Daugherty
Markets and Reliability Committee
September 27, 2018

- August 10 – Special Markets and Reliability Committee (MRC) education session
- August 23 – MRC approved problem statement and issue charge
- Special MRC Meetings – September 7 and September 18, with non-binding sector-weighted poll during week of September 14
- September 27 – MRC and Members Committee voting on packages developed during Special MRC meetings that received highest non-binding sector-weighted support via poll **plus two additional packages moved by Macquarie Energy and seconded by Apogee Energy Trading and Vitol subsequent to the September 18 Special MRC meeting**

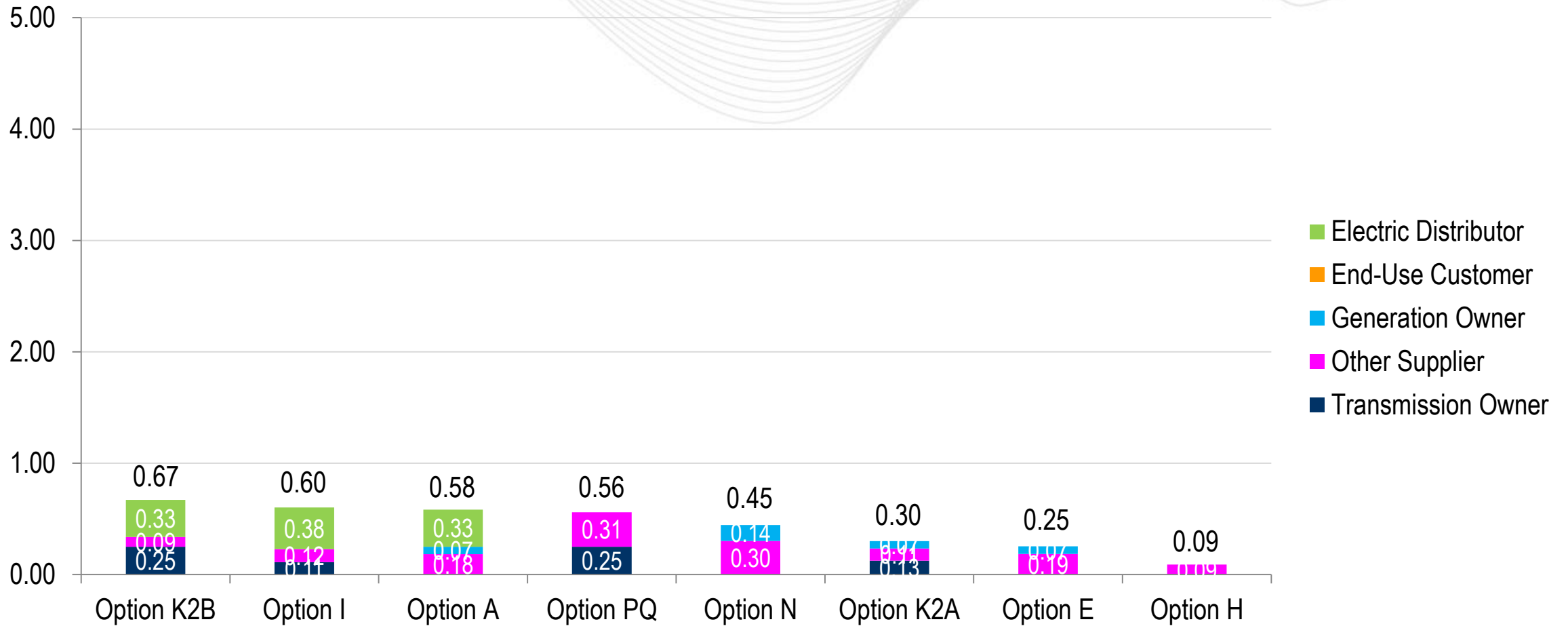
Potential FTR Liquidation Process Alternatives Non-Binding Sector-Weighted Poll Results

- 24 Options polled during week of September 14, including Status Quo
- 108 Respondents
- 0.58 Sector Support to Retain Status Quo; **4.42 Sector Support to Make a Change from Status Quo**
- Options Receiving ≥ 2.50 Sector-Weighted Support:
 1. Option B (Do not offer positions for liquidation) = 3.80
 2. Option J1 (Settle current planning year positions; liquidate future planning year positions in applicable annual FTR auction) = 3.30
- **Additional Options Moved and Seconded for MRC September 27 Voting limiting the application of an alternative FTR liquidation process to the current default portfolio:**
 3. Option B' (Do not offer positions in current default portfolio for liquidation)
 4. Option J1' (Settle current planning year positions in current default portfolio; liquidate future planning year positions in current default portfolio in applicable annual FTR auction)





Non-Binding, Sector-Weighted Poll Results





Summary Descriptions of Options Polled

Option	Summary Description	Option	Summary Description
A	Status Quo	K1B	Cancel All defaulting Long-Term FTRs and default allocate FTR auction charges using existing default allocation mechanism; Settle 18/19
B	Do Not Offer for Liquidation	K2A	Cancel All Defaulting Long-Term FTRs; Liquidate 18/19 in Prompt Months
B1	Do not offer for Liquidation but create an aggregate FTR representing the defaulting FTR portfolio to facilitate participants managing default exposure if they wish to do so	K2B	Cancel All defaulting Long-Term FTRs and default allocate FTR auction charges using existing default allocation mechanism; Liquidate 18/19 in Prompt Months
C	Only Offer Prompt Month Positions for Liquidation	N	Qualified Members May Assume Their Portion of the Portfolio
D	Current Liquidation Process with Cap on Liquidation Costs	O	Each Member Opts for Settlement or Liquidation
E	Allow Members to Assume Their Portion of the Portfolio	O1	Option O without the positions being offered for liquidation published prior to the auction in which PJM would attempt to liquidate the positions
G	Only Liquidate Positions in Periods with "Sufficient" Liquidity	P	Members May Assume Their Portion of an Equivalent Aggregate Portfolio
H	Only Liquidate Expected Positive Value Positions	P1	For all FTR auctions where defaulting FTR positions must be settled or liquidated, split 50% between settlement and liquidation
I	Modified Status Quo	PQ	Option P and residual positions sold in multi-round auctions
J1	Liquidate Long-Term FTRs in Annual Auctions; Settle 18/19	Q	Positions Sold as Tranches in Multi-Round Auction
J2	Liquidate Long-Term FTRs in Annual Auctions; Liquidate 18/19 in Prompt Months	R	Cancel All defaulting member FTRs
K1A	Cancel All defaulting Long-Term FTRs; Settle 18/19	R1	Cancel All defaulting member FTRs and default allocate remaining FTR auction charges using existing default allocation mechanism



Potential FTR Liquidation Process Alternatives for September 27, 2018 MRC Consideration

1. FERC approval would be required for any revisions to the current Tariff and Operating Agreement FTR liquidation provisions.
2. PJM cannot predict the final total Default Allocation Assessment under any option or even directionally which options might result in a higher or lower final total Default Allocation Assessment compared with another option.
3. Past periods' (a) congestion patterns and levels; (b) default allocation assessment amounts; (c) liquidation prices; and (d) auction bidding volumes are not indicators of what any of these amounts may be in any future periods.
4. Based on the 4.42 non-binding sector-weighted poll results favoring making a change from the status quo, the FERC filing for the option that receives the highest super-majority sector support from the Members Committee would include a provision requesting FERC extend by 90 days the current section 205 filing to settle positions *if* FERC does not approve the alternative approach filed to be effective December 1, 2018. This would avoid reverting to the FTR liquidation process status quo if FERC does not approve the proposal supported by the Members Committee to be effective on December 1, 2018.

Description: Do not offer any more positions for liquidation.

Considerations:

- Members will know monthly Default Allocation Assessment (DAA) amounts at the same time that PJM issues each applicable month-end invoice (or possibly on a one-month lag basis).
- Members will know the total DAA amount for each planning year the month after the planning year ends.
- The DAA amount will be the actual net losses on each remaining month's positions.
- Members could hedge risk exposure on open positions via acquisition of offsetting or negatively correlated positions.
- Bilateral FTRs may be assumed by Indemnifying Counterparty for FTRs for which the most recent FTR auction clearing price, before the default was declared (or before the effective date of this Option B in the case of the GreenHat default), is less than the purchase price.
- The \$10,000 per member maximum portion of the DAA applies once to a default for which the DAA charges span multiple calendar years.

Description: Do not offer any more positions in current default portfolio for liquidation.

Considerations:

- Members will know monthly Default Allocation Assessment (DAA) amounts at the same time that PJM issues each applicable month-end invoice (or possibly on a one-month lag basis).
- Members will know the total DAA amount for each planning year the month after the planning year ends.
- The DAA amount will be the actual net losses on each remaining month's positions.
- Members could hedge risk exposure on open positions via acquisition of offsetting or negatively correlated positions.
- Bilateral FTRs may be assumed by Indemnifying Counterparty for FTRs for which the most recent FTR auction clearing price before the effective date of this Option B2 is less than the purchase price.
- The \$10,000 per member maximum portion of the DAA applies once to a default for which the DAA charges span multiple calendar years.
- Status quo FTR liquidation provisions would apply to any future FTR defaults

Description: Liquidate Long-Term FTRs in Annual Auction; however, do not offer for liquidation the remaining 2018/2019 positions.

Considerations:

- For the 2018/2019 planning year, Members will know monthly DAA amounts at the same time that PJM issues each applicable month-end invoice (or possibly on a one-month lag basis).
- DAA for long-term FTRs will be known after the applicable annual auction in which the positions are liquidated, if possible to liquidate.
- The DAA amount for any months that are not liquidated will be the actual net losses on each month's positions.
- Offer 25% of positions in 1st applicable FTR annual auction round and then offer equal volumes of remaining unliquidated positions in each of the remaining annual auction rounds.
- Would offer positions in auctions for which the liquidity is higher than in the long-term FTR auctions. However:
 - There may be a shortfall in annual auction revenue to satisfy the ARR target allocations.
 - The Annual Auction prices, which determines the ARR values, may be significantly different than expectations.
 - There may be the potential for negative ARRs which could impact ARR requests.
- Bilateral FTRs may be assumed by Indemnifying Counterparty for FTRs for which the most recent FTR auction clearing price, before the default was declared (or before the effective date of this Option J1 in the case of the GreenHat default), is less than the purchase price.
- The \$10,000 per member maximum portion of DAA applies once to a default for which the DAA charges span multiple calendar years.

Option J1' – For Positions in Current Default Portfolio, Liquidate Long-Term FTRs in Annual Auctions and Settle 18/19 *New Option Since Non-binding Sector Weighted Poll*

Description: Liquidate Long-Term FTRs **in current default portfolio** in applicable Annual Auction(s); do not offer for liquidation the remaining 2018/2019 positions **in current default portfolio**.

Considerations:

- For the 2018/2019 planning year, Members will know monthly DAA amounts at the same time that PJM issues each applicable month-end invoice (or possibly on a one-month lag basis).
- DAA for long-term FTRs will be known after the applicable annual auction in which the positions are liquidated, if possible to liquidate.
- The DAA amount for any months that are not liquidated will be the actual net losses on each month's positions.
- Offer 25% of positions in 1st applicable FTR annual auction round and then offer equal volumes of remaining unliquidated positions in each of the remaining annual auction rounds.
- Would offer positions in auctions for which the liquidity is higher than in the long-term FTR auctions. However:
 - There may be a shortfall in annual auction revenue to satisfy the ARR target allocations.
 - The Annual Auction prices, which determines the ARR values, may be significantly different than expectations.
 - There may be the potential for negative ARRs which could impact ARR requests.
- Bilateral FTRs may be assumed by Indemnifying Counterparty for FTRs for which the most recent FTR auction clearing price, before the **effective date of this Option J1'** is less than the purchase price.
- The \$10,000 per member maximum portion of DAA applies once to a default for which the DAA charges span multiple calendar years.
- **Status quo FTR liquidation provisions would apply to any future FTR defaults**

Voting on Alternative FTR Liquidation Process Options

1. September 27th MRC non-mutually exclusive voting on four options and status quo; all options receive supermajority support will be provided to the MC for consideration in rank order of MRC endorsement
2. If an alternative FTR liquidation process is endorsed by the MRC and approved by the MC on September 27th, then FERC filing by October 1st with requested December 1, 2018 effective date.
3. If no alternative FTR liquidation process is endorsed by the MRC on September 27th, then:
 - a. MRC consideration of the motion to request PJM extend the effective date of the August 23, 2018 filing pending at FERC to settle defaulted FTRs, instead of offering for liquidation, from the currently proposed November 30, 2018 expiration date to February 28, 2019.
 - b. If this motion is endorsed by the MRC, then same day MC consideration will be requested.
4. If no alternative FTR liquidation process endorsed by the MRC is approved by the MC on September 27th, then:
 - a. MC consideration of the motion to request PJM extend the effective date of the August 23, 2018 filing pending at FERC to settle defaulted FTRs, instead of offering for liquidation, from the currently proposed November 30, 2018 expiration date to February 28, 2019.
 - b. Additional Special MRC sessions could be scheduled to continue discussion of FTR liquidation process alternatives.
5. If the motion in item 4 is not approved by the MC, then the status quo FTR liquidation process would be in effect commencing December 1, 2018.