



Capacity Market Triennial Review

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- **Variable Resource Requirement (VRR)**, or demand curve shape which can affect price stability and provides an investment signal for capacity
- **Cost of New Entry (CONE)** based on an engineering analysis which provides an estimation of the cost of new construction of the reference technology
- **Net Energy and Ancillary Services Revenue Offset (E&AS Offset)** methodology which provides an estimate of the non-capacity revenues that a generator can expect to earn



| Triennial Review - 2014 Work Plan | 4/29 | 5/9 | 5/15* | 5/23 | 6/2 | 6/13 | 6/30 | 7/11 | 7/18 | 7/25 | 7/31 | 8/1 | 8/8 | 8/14 | 8/21 | 8/22 |
|---|------|-----|-------|------|-----|------|------|------|------|------|------|-----|-----|------|------|------|
| Stakeholder Feedback Session (Brattle on 4/29 and PJM on 5/9) | X | X | | | | | | | | | | | | | | |
| Review Work Plan | | X | | | | | | | | | | | | | | |
| PJM Initial Recommendations / Education | | | X | X | | | | | | | | | | | | |
| Continued Education | | | | | | X | X | X | | | | | | | | |
| Interest Validation | | | | X | | | | | | | | | | | | |
| Design Components | | | | X | X | | | | | | | | | | | |
| Develop Solution Options | | | | | X | X | X | X | X | X | | | | | | |
| Develop & Refine Component Options | | | | | | X | X | X | X | X | | | | | | |
| Develop & Refine Solution Packages | | | | | | X | X | X | X | X | | X | | | | |
| Build Consensus | | | | | | | X | X | X | X | | X | X | X | | X |
| MRC First Read - Preview | | | | | | | | | | | X | | | | | |
| MRC/MC Vote | | | | | | | | | | | | | | | X | |
| * Electronic delivery of materials | | | | | | | | | | | | | | | | |

VRR Curve Shape

- Right-shift point "a"
 - PJM staff: right-shift plus 1% further from Brattle recommendation
- Stretch the VRR curve into a convex shape
- Local only - Increase the LDA price cap to 1.7 X Net CONE
 - PJM staff : Make local curves the same as the system curve
- Local only - Impose a minimum curve width equal to 25% of CETL
 - PJM staff: Make local curves the same as the system curve

Cost of New Entry

- Adopt updated CONE estimates
- Adopt level-real CONE for yearly escalation of values
 - PJM staff: Maintain level-nominal
- Consider replacing the Handy-Whitman Index
- Review CONE areas to align more closely to modeled LDAs
- Consider introducing a test for a separate Gross CONE for small LDAs-
 - PJM staff: Not adopted.
- Consider adopting the average of CC and CT net CONE values defining the VRR curve
 - PJM staff: Continue to use the CT as reference resource

E&AS Offset

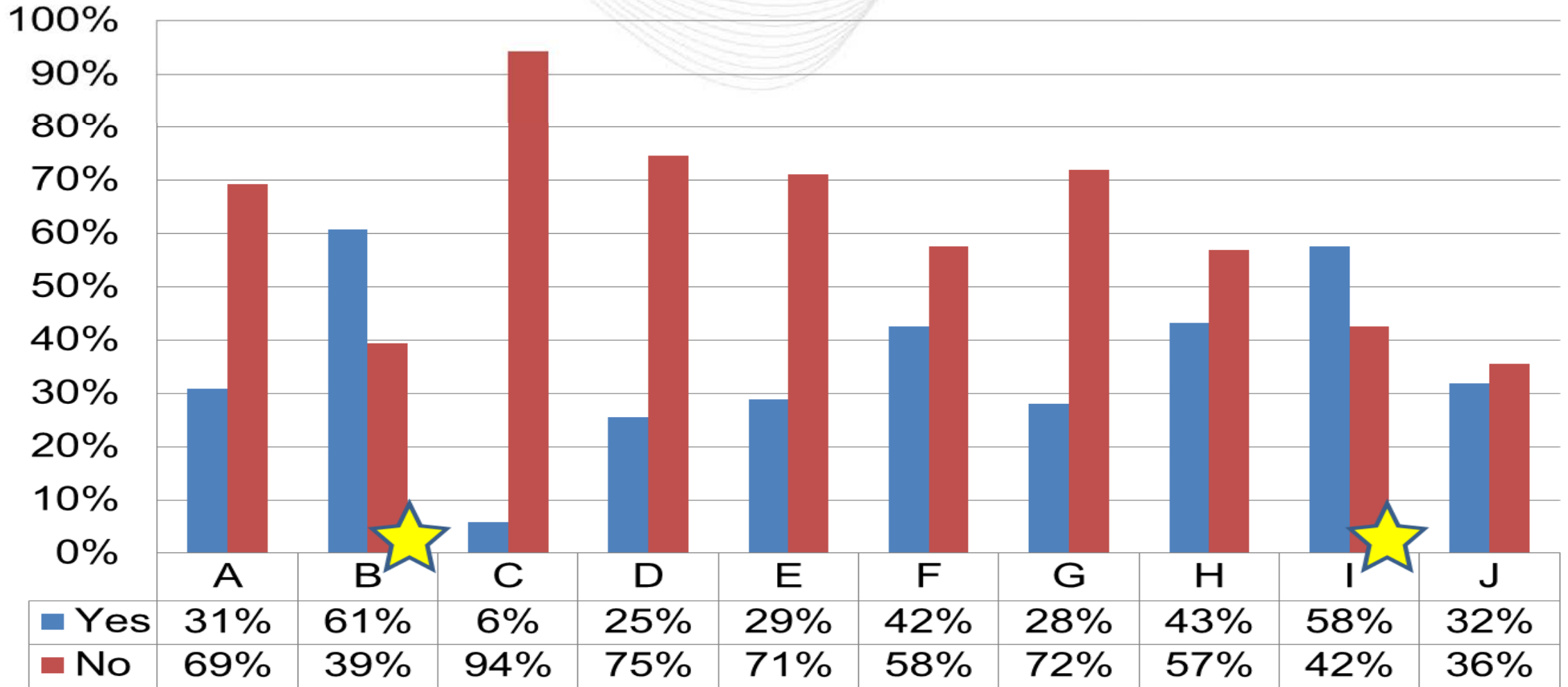
- Calibrate historical E&AS estimates to reflect plan actuals
- Develop a forward-looking E&AS calculation methodology
- Align E&AS Offset and Net CONE calculations more closely to modeled LDAs
- Consider imposing the parent-LDA Net CONE values as a minimum for sub-LDA Net CONE values



Alternate Package Development

| Design Component | Description | A | B | C | D | E | F | G | H | I | J |
|-----------------------------|-----------------------------|------|--------|--------|--------|-----------|-------|--------------|--------------|--------------|--------|
| Gross CONE | WACC Changes and IMM | Blue | Yellow | Orange | Purple | Dark Blue | Blue | Blue | Blue | Blue | Grey |
| Levelization Method | Real/Nominal | Blue | Blue | Blue | Purple | Blue | Blue | Light Orange | Blue | Blue | Blue |
| Reference Resource | CT | Blue | Blue | Blue | Blue | Blue | Blue | Blue | Blue | Blue | Blue |
| Net E&AS Offset | Backward/Forward | Blue | White | Orange | Purple | Blue | Blue | Light Orange | Light Orange | Light Orange | Blue |
| VRR Shape – System | Varies | Blue | Yellow | Orange | Purple | White | Green | White | Blue | Red | Grey |
| VRR Shape – Local | Same as System | Blue | Blue | Blue | Blue | Blue | Blue | Blue | Blue | Blue | Blue |
| CONE Escalation Index | BLS | Blue | Blue | Blue | Blue | Blue | Blue | Blue | Blue | Blue | Blue |
| RTO Wide Gross CONE | Average/Lowest | Blue | Blue | Orange | Blue | Blue | Blue | Blue | Blue | Blue | Grey |
| Net CONE Method – CONE Area | PJM/IMM | Blue | Blue | Orange | Blue | Blue | Blue | Blue | Blue | Blue | Yellow |
| Net CONE Method – RTO | Varies | Blue | Blue | Orange | Blue | Blue | Green | Blue | Blue | Green | Yellow |
| Net CONE Method – LDA | PJM/IMM/PJM no parent floor | Blue | Blue | Orange | Purple | Purple | Blue | Purple | Blue | Blue | Yellow |

- 174 member companies represented
- 36 respondents
- Two packages received greater than 50% support, Package B and Package I



- Tariff
 - Status Quo
 - PJM Recommendation
 - Alternative Recommendations - Majority Votes from CSTF
 - Package B
 - Package I