IMM Regulation Market Recommendations: Alternative Proposal

MRC/MC

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Majority Proposal

- **Shoulder Hour LOC:**
  - **Shoulder Hour LOC should recovered.**
    - **Shoulder Hour LOC should be recovered via safety net if net regulation revenues are not sufficient to cover them**
  - **Shoulder Hour LOC should not be part of clearing price.**
    - **Cannot properly attribute to multiple hour case**
    - **Cannot be fully calculated for commitment until after the fact**
- **Marginal Benefits Factor for Settlement**
- **Benefits Factor should be consistently applied throughout the market construct**

Alternative Proposal: Modifies Majority Proposal

- **Complete the consistent application of offer modifiers and units of measure throughout the market construct (as suggested for the benefits factor in the Majority Proposal).**

- **Make the components of the regulation prices reflect the offers of marginal resources.**

Alternative Proposal: Modifies Majority Proposal

- **Total Cost = A + B**
  - **Where**
    - **A = Total Capacity Cost**
    - **B = Total Cost of Performance**

- **Properly defined Total Cost, can then be used to define:**
  - **Total Cost/MW = $/MW**
  - **Total Cost/Effective MW = $/Effective MW**
  - **Total Cost/Mile = $/Mile**

Alternative Proposal: Modifies Majority Proposal

- **Results in performance price that reflects marginal resource ($/MW)**
- **Provides regulation at a cost reflective of actual offers to provide service**
- **Consistent with 755 Requirements (capability and performance offers and capability and performance payments)**
- **Rank ordering of resources consistent with relative actual costs to system**
- **Provides consistent application of scalars in pricing and settlement. (miles, MW, benefits factor, performance scores)**

Alternative Proposal

- **All of "Majority" Items, plus**
- **Item 1: Use actual cost for relative offers.**
  - **Expected and actual cost per MW or effective MW should be used consistently for clearing and within hour pricing of performance.**
  - **(Remove performance factor from denominator of performance component.)**
- **Item 2: Capacity credits (awarded per MW) should be adjusted by performance.**
  - **Consistent application of performance factor in pricing and credits.**
  - **Same logic as consistent application of the benefits factor.**

Alternative Proposal, Item 1: Use Actual Cost

Actual cost of provided miles:

$$TotalPerformanceCost = (\$ / Mile) * (Miles / MW) * Performance\% * MW$$

IMM and PJM proposal (Alternative):

$$TotalPerformanceCost = (\$ / Mile) * (Miles / MW) * Performance\% * MW$$

Current Proposal (Majority):

$$TotalPerformanceCost = (\$ / Mile) * \frac{(Miles/MW)}{Performance\%} * MW$$

- Majority multiplies MW by (1/performance).
- Results in low performers credited with more miles (per MW) than good performers
  - Calculated performance cost would exceed actual performance cost

Alternative Proposal, Item 1: Correct Performance Cost Calculation

Example		Case 1		Case 2
Capability MW		2		2
$/Mile	$	1.00	$	1.00
Signal Miles/MW		2		2
Performance		100%		50%
Actual Miles		**Case 1**		**Case 2**
Miles = Signal Miles/MW * Capability MW * Performance		4		2
Performance Cost = $/mile * Actual Miles	$	4.00	$	2.00
Option 2 Proposal		**Case 1**		**Case 2**
Miles = Signal Miles/MW * Capability MW * Performance		4		2
Performance Offer = $/mile * Actual Miles	$	4.00	$	2.00
Option 1 Proposal		**Case 1**		**Case 2**
Miles = (Signal Miles/MW * Capability MW)/(Performance)		4		8
Performance Offer = $/mile * Actual Miles	$	4.00	$	8.00

Poorer performance = More Miles?

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Alternative Proposal, Item 2: Capacity Credits Should Be Adjusted by Performance

- **Charge:**

$$CapabilityCharge = \frac{(\$/MW)}{BF*Performance\%} * CapMW$$

If applied here

Performance scalar

No scalar

- **Majority Credit:**

$$CapabilityCredit = CapabilityRMCP(\$/MW) * capMW * BF$$

- **Alternative Credit:**

Must apply here

$$CapabilityCredit = CapabilityRMCP(\$/MW) * capMW * BF * Performance\%$$

- **Same logic as uniform application of benefit factor (BF)**

Alternative Proposal: Modifies Majority Proposal

- **Price components better reflect actual offers**
- **Market prices better reflect marginal offers**
- **Market provides a clearer signal regarding the incremental cost to provide service**
- **Payments to marginal resources do not exceed marginal resource offers**
- **Rank ordering of resources consistent with relative actual offers and costs to system.**
- **Consistent application of scalar adjustments to prices and settlement.**
  - **Majority Proposal does not completely correct the inconsistencies**

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