Agenda

• Overall Objectives
• Market Efficiency Selection Process Objective
• BC Numerical Example
• Examples Project Comparison
• Future Discussion Topics
• Appendix – References
Overall Objective

• Discuss PJM’s Market Efficiency Selection Process
  – Concepts
  – Selection workflow diagram
  – Examples
• Discuss future education topics
Market Efficiency Selection Process Objective

- Objective is to approve overall most beneficial projects to relieve targeted PJM congestion

  - By evaluating project performance on:
    - Net Load Payments Benefits
    - Production Cost Benefits
    - Overall PJM Congestion Benefits
    - Other metrics considered by PJM

  - Considering the impact on reliability
Market Efficiency Cycle Timeline

- 12 month
  - Acceleration

- 24 month Cycle
  - Input assumptions
  - Base case development
  - Develop target congestion
  - Proposal submission
  - Evaluation
  - Approval
Market Efficiency Process Overview

1. Identify Target Congestion Drivers
2. Solicit Proposals for Congestion Drivers
3. Analyze /Compare Proposals*
4. Present Selected projects at TEAC
5. Board Approval

*Benefit/Cost Ratio at least 1.25 using the criteria as defined in Schedule 6, Section 1.5.7 of the PJM Operating Agreement and PJM Manual 14B, Attachment E.
Market Efficiency Process – Identify Congestion Drivers

• Historical Analysis
  – PJM Market Monitor Annual Report
  – Historical analysis of real-time constraint
  – NERC Book of Flowgates

• PROMOD simulations 2017, 2021, 2024, 2027
  – Analyzed for congestion drivers
Market Efficiency Process – Proposals Solicitation

• Long Term Window: November through March

• Pre-qualification Process

• Registration Requirements

• Proposal Requirements
Market Efficiency Process – Proposal Analysis

• Each valid proposal is tested for Benefits/Cost >1.25
  – Total Benefits = Energy Benefits + RPM Benefits
  – Energy Benefits
    • Regional Projects: 50% Change in Production Costs + 50% Change in Net Load Payments*
    • Lower Voltage Projects: 100% change in net load payments*
  – Reliability Pricing Model (RPM) Benefits
    • RPM Regional: 50% Change in Total System Capacity Cost + 50% Change in Load Capacity Payments
    • RPM for Lower Voltage Projects: 100% Change in Load Capacity Payments

• Candidates passing B/C tests:
  – Congestion driver reductions
  – Other factors: overall PJM congestion changes, PJM Load Payments, PJM Production Costs
  – Perform Sensitivities
    • Gas Sensitivity
    • Load Sensitivity
    • Other sensitivities as needed (Examples: gen exp, renewable penetration, carbon tax, imports/exports, etc.)

* Only zones with decrease in net load payments
Market Efficiency Process – Other Analyses

• Reliability Analysis
  – Additional reliability upgrades

• Independent Cost Analysis
  – Projects exceeding $50M Independent cost analysis

• Constructability Analysis
  – Verification of proposed schedule duration
  – Other risks to both cost and schedule

• Project Combinations
  – Combination of components of multiple projects
  – Incremental or multiple projects
Market Efficiency Process – Approval & Communication

- Selected Market Efficiency projects require PJM board approval

- Approved projects are communicated at TEAC meetings

- Letter from PJM notifying construction responsibility
Example – Single Project
Hypothetical Example – Single Project

• Scenario Assumptions:
  – Base case + 2 sensitivities

• Project Assumptions:
  – Low Voltage Projects
  – Sub-regional congestion target
  – 1 Project Proposal receive for a particular congestion driver
Market Efficiency Project Selection – Single Proposal per Congestion Driver

Start

Review proposals

Perform B/C

Does project pass B/C?

Yes

No

Does project reduce or fix congestion driver?

Yes

No

Does project cause additional unacceptable congestion?

Yes

No

Sensitivity Analysis Other Factors considered*

Yes

No

No

No

No

Finish

Project Recommended

No

Project Not Recommended

Yes

No

Project Not Recommended

Yes

No

Project Not Recommended

Other factors considered such as PJM Overall Production Cost, load Payments, and congestion

www.pjm.com
Project Benefits for Non-Simulated Years

Regional Transmission Expansion Plan Model year: 2021  
Project In-service Year: 2021  
Promod IV Simulation Years: 2017, 2021, 2024 & 2027

<table>
<thead>
<tr>
<th>Year</th>
<th>Period 1 benefits</th>
<th>Period 2 benefits</th>
<th>Period 3 benefits</th>
<th>Period 4 benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>2018 - 2020</td>
<td>2022 - 2023</td>
<td>2025 - 2026</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2027</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**2017 Benefit** + \( \frac{2021 \text{ Benefit} - 2017 \text{ Benefit}}{2021 - 2017} \) \( x \) (year - 2017)

**2021 Benefit** + \( \frac{2024 \text{ Benefit} - 2021 \text{ Benefit}}{2024 - 2021} \) \( x \) (year - 2021)

**2024 Benefit** + \( \frac{2027 \text{ Benefit} - 2024 \text{ Benefit}}{2027 - 2024} \) \( x \) (year - 2024)

**Excel Formula:** trend (known y-values, known x-values, new x's)  
e.g. trend ([2017, 2021, 2024, 2027 Energy Market Benefits], [2017, 2021, 2024, 2027 years], 2028)
Determining Revenue Requirement

**Project Voltage:** 500 kV or 230 kV  **Project Cost:** $110 Million Dollars  **Project Benefit Period:** 15 yrs

**PJM Fixed Carrying Charge Rate** = 15.3%  **PJM Discount Rate** = 7.4%

**Project Annual Revenue Requirement** =  Project Cost x Fixed Carrying Charge Rate
= $110 Million x 15.3% = $16.83 Million Annually

**Excel Formula:**  $\text{pv}(rate, \# \text{ periods}, \text{ payment per period})$

**Net Present Value of Project Costs** = $\text{pv}(7.4\%, \ 15, \ -16.83) = $149 Million
Selecting Zones Based on Net Load Payment

The Project is not in-service until 2021. Therefore the benefits are evaluated between 2021 and 2035, the first 15 years of in-service life.

Zones 1, 2 and 4 all have Net Load Payment benefits with an NPV > 0 for the 15 year analysis period. These zones will be included in the total system benefit.

The Net Present Value of Net Load Payment Benefits in Zone 3 do not exceed zero for the 15 year analysis period. This zone will be excluded from the total system benefit calculation.

Low Voltage Project Net Load Payment Benefit

Zone 1 + Zone 2 + Zone 4 = $223.85 Million

Regional Project Net Load Payment Benefit

50% ( Zone 1 + Zone 2 + Zone 4 ) = $111.92 Million

<table>
<thead>
<tr>
<th>Year</th>
<th>Zone 1</th>
<th>Zone 2</th>
<th>Zone 3</th>
<th>Zone 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$8.00</td>
<td>$3.00</td>
<td>$0.50</td>
<td>$5.00</td>
</tr>
<tr>
<td>2018</td>
<td>$9.00</td>
<td>$2.50</td>
<td>$0.40</td>
<td>$5.30</td>
</tr>
<tr>
<td>2019</td>
<td>$10.00</td>
<td>$2.00</td>
<td>$0.30</td>
<td>$5.50</td>
</tr>
<tr>
<td>2020</td>
<td>$11.00</td>
<td>$1.50</td>
<td>$0.20</td>
<td>$5.80</td>
</tr>
<tr>
<td>2021</td>
<td>$12.00</td>
<td>$1.00</td>
<td>$0.10</td>
<td>$6.00</td>
</tr>
<tr>
<td>2022</td>
<td>$12.30</td>
<td>$1.30</td>
<td>($0.30)</td>
<td>$6.70</td>
</tr>
<tr>
<td>2023</td>
<td>$12.70</td>
<td>$1.70</td>
<td>($0.60)</td>
<td>$7.30</td>
</tr>
<tr>
<td>2024</td>
<td>$13.00</td>
<td>$2.00</td>
<td>($1.00)</td>
<td>$8.00</td>
</tr>
<tr>
<td>2025</td>
<td>$14.00</td>
<td>$2.20</td>
<td>($1.70)</td>
<td>$7.70</td>
</tr>
<tr>
<td>2026</td>
<td>$15.00</td>
<td>$2.30</td>
<td>($2.30)</td>
<td>$7.30</td>
</tr>
<tr>
<td>2027</td>
<td>$16.00</td>
<td>$2.50</td>
<td>($3.00)</td>
<td>$7.00</td>
</tr>
<tr>
<td>2028</td>
<td>$16.60</td>
<td>$2.80</td>
<td>($2.80)</td>
<td>$7.90</td>
</tr>
<tr>
<td>2029</td>
<td>$17.40</td>
<td>$1.90</td>
<td>($3.20)</td>
<td>$8.20</td>
</tr>
<tr>
<td>2030</td>
<td>$18.20</td>
<td>$1.90</td>
<td>($3.50)</td>
<td>$8.40</td>
</tr>
<tr>
<td>2031</td>
<td>$18.90</td>
<td>$1.90</td>
<td>($3.80)</td>
<td>$8.70</td>
</tr>
<tr>
<td>2032</td>
<td>$19.68</td>
<td>$1.84</td>
<td>($4.19)</td>
<td>$8.90</td>
</tr>
<tr>
<td>2033</td>
<td>$20.45</td>
<td>$1.81</td>
<td>($4.53)</td>
<td>$9.15</td>
</tr>
<tr>
<td>2034</td>
<td>$21.21</td>
<td>$1.78</td>
<td>($4.87)</td>
<td>$9.40</td>
</tr>
<tr>
<td>2035</td>
<td>$21.97</td>
<td>$1.75</td>
<td>($5.22)</td>
<td>$9.64</td>
</tr>
</tbody>
</table>

NPV (Millions) $138.97 $16.17 ($19.77) $68.71
System Adjusted Production Cost Benefits

- The Project is not in-service until 2021. Therefore the benefits are evaluated between 2021 and 2035.

- NPV Adjusted Production Cost Benefit = NPV(7.4%, Adjusted Production Cost Savings)

- Regional Adjusted Production Cost Benefits = 50% x $121.2 Million

<table>
<thead>
<tr>
<th>Year</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$8.00</td>
</tr>
<tr>
<td>2018</td>
<td>$8.50</td>
</tr>
<tr>
<td>2019</td>
<td>$9.00</td>
</tr>
<tr>
<td>2020</td>
<td>$9.50</td>
</tr>
<tr>
<td>2021</td>
<td>$10.00</td>
</tr>
<tr>
<td>2022</td>
<td>$10.70</td>
</tr>
<tr>
<td>2023</td>
<td>$11.30</td>
</tr>
<tr>
<td>2024</td>
<td>$12.00</td>
</tr>
<tr>
<td>2025</td>
<td>$12.70</td>
</tr>
<tr>
<td>2026</td>
<td>$13.30</td>
</tr>
<tr>
<td>2027</td>
<td>$14.00</td>
</tr>
<tr>
<td>2028</td>
<td>$14.50</td>
</tr>
<tr>
<td>2029</td>
<td>$15.10</td>
</tr>
<tr>
<td>2030</td>
<td>$15.70</td>
</tr>
<tr>
<td>2031</td>
<td>$16.30</td>
</tr>
<tr>
<td>2032</td>
<td>$16.88</td>
</tr>
<tr>
<td>2033</td>
<td>$17.48</td>
</tr>
<tr>
<td>2034</td>
<td>$18.08</td>
</tr>
<tr>
<td>2035</td>
<td>$18.68</td>
</tr>
</tbody>
</table>

NPV (Millions) $121.2
Does Project Pass Criteria

• REGIONAL METHOD
  – Total Energy Market Benefits = Load Payment Benefit x 50% + Production Cost Benefit x 50%
  – Total Benefits = $112 Million + $60.6 Million = $172.51 Million
  – Does the Project Pass: Benefits / Costs = $172.51 / $149 = 1.15 > PROJECT FAILS

• Low Voltage Method
  – Total Benefits = 100% Load Payment Benefit = $223.85 Million
  – Does the Project Pass: Benefits / Costs = $223.85 / $149 = 1.49 > PROJECT PASSES
Examples – Single Proposal

• Example 1: The project BC ratio < 1.25
  – The project doesn't pass the BC ratio threshold in the base case.
  – Decision: The project is not selected.

• Example 2: The project BC ratio >= 1.25
  – The project passes the BC ratio threshold in the base case.
  – Decision: The project is selected for further analysis.
Examples – Single Proposal (cont.)

• Example 3: The project BC ratio >= 1.25 and does not reduce the congestion driver
  – The project doesn’t decrease the congestion driver.
  – Decision: The project is not selected.

• Example 4: The project BC ratio >= 1.25 and reduces the congestion driver
  – The project passes the BC ratio threshold in the base case and it decreases the congestion driver.
  – Decision: The project is selected for further analysis.
Examples – Single Proposal (cont.)

• Example 5: The project causes unacceptable congestion.
  – The project passes the BC ratio threshold in the base case.
  – The project decreases the congestion driver.
  – The project causes unacceptable congestion on other facilities.
  – Decision: The project is not selected as submitted.

  Additional market efficiency upgrades to address additional congestion may be considered.
  To be approved the project with upgrades must pass the BC threshold.

• Example 6: The project does not cause unacceptable congestion.
  – The project passes the BC ratio threshold in the base case.
  – The project decreases the congestion driver.
  – The project does not cause unacceptable congestion on other facilities.
  – Decision: The project is selected for further analysis.
Examples – Single Proposal (cont.)

• Example 7: The project fails on one or more sensitivities.
  – The project passes the BC ratio threshold in the base case.
  – The project decreases the congestion driver.
  – The project does not cause unacceptable congestion on other facilities.
  – The project fails on one or more sensitivities.
  – Decision: The project is not selected.

<table>
<thead>
<tr>
<th>Proj01</th>
<th>Sponsor</th>
<th>Sponsor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Cost</td>
<td>$80.00</td>
<td></td>
</tr>
<tr>
<td>ISD</td>
<td>2021</td>
<td></td>
</tr>
<tr>
<td>Delta Congestion - Congestion Driver</td>
<td>$ (30)</td>
<td></td>
</tr>
<tr>
<td>Delta PJM Total Congestion</td>
<td>$ (10)</td>
<td></td>
</tr>
<tr>
<td>B/C Ratio Base Case</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td>B/C Ratio base Sensitivity 1</td>
<td>2.05</td>
<td></td>
</tr>
<tr>
<td>B/C Ratio base Sensitivity 2</td>
<td>1.24 FAIL</td>
<td></td>
</tr>
</tbody>
</table>

• Example 8: The project passes the BC ratio threshold in all sensitivities.
  – The project passes the BC ratio threshold in the base case.
  – The project decreases the congestion driver.
  – The project does not cause unacceptable congestion on other facilities.
  – The project passes the BC ratio threshold in all sensitivities.
  – Decision: The project is selected for further analysis.

<table>
<thead>
<tr>
<th>Proj01</th>
<th>Sponsor</th>
<th>Sponsor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Cost</td>
<td>$80.00</td>
<td></td>
</tr>
<tr>
<td>ISD</td>
<td>2021</td>
<td></td>
</tr>
<tr>
<td>Delta Congestion - Congestion Driver</td>
<td>$ (30)</td>
<td></td>
</tr>
<tr>
<td>Delta PJM Total Congestion</td>
<td>$ (10)</td>
<td></td>
</tr>
<tr>
<td>B/C Ratio Base Case</td>
<td>1.25 PASS</td>
<td></td>
</tr>
<tr>
<td>B/C Ratio base Sensitivity 1</td>
<td>2.05</td>
<td></td>
</tr>
<tr>
<td>B/C Ratio base Sensitivity 2</td>
<td>1.25 PASS</td>
<td></td>
</tr>
</tbody>
</table>
• Example 9: The project requires additional upgrades.
  – The project passes all the previous tests: BC ratio threshold in the base, and sensitivity cases, decreases the congestion driver, and it does not create unacceptable additional congestion.
  – However the project requires additional reliability upgrades.
  – Decision: The cost of the project is increased with the cost of the upgrades. The project with the upgrades must pass the BC ratio threshold in the base, and sensitivity cases, it should decrease the congestion driver, and it should not create unacceptable additional congestion.

• Example 10: The project does not require additional upgrades.
  – Decision: The project is selected to be recommended for approval.

<table>
<thead>
<tr>
<th>Proj01</th>
<th>Sponsor</th>
<th>$100.00</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISD</td>
<td></td>
<td>2021</td>
<td></td>
</tr>
<tr>
<td>Delta Congestion - Congestion Driver</td>
<td>$ (50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delta PJM Total Congestion</td>
<td>$ (30)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B/C Ratio Base Case</td>
<td>1.25</td>
<td>PASS</td>
<td></td>
</tr>
<tr>
<td>B/C Ratio base Sensitivity 1</td>
<td>1.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B/C Ratio base Sensitivity 2</td>
<td>1.26</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Examples – Multiple Proposals
Market Efficiency Project Selection – Multiple Proposals per Congestion Driver

Start

Review proposals

Perform B/C

Does project pass B/C?

Yes

No

Project Not Recommended

Does project reduce or fix congestion driver?

Yes

No

Project Not Recommended

Do project cause additional unacceptable congestion?

Yes

No

Project Not Recommended

Sensitivity Analysis

Other Factors considered*

Yes

No

Project Not Recommended

Does project require additional upgrades?

Yes

No

Project Not Recommended

Does Reliability and Constructability Analysis (if necessary) require additional changes?

Yes

No

Project Recommended

Is the project competitive?

Yes

No

Project Not Recommended

Finish

* Other factors considered such as PJM Overall Production Cost, load Payments, and congestion
Hypothetical Examples

- Scenario Assumptions:
  - Base case + 2 sensitivities

- Project Assumptions:
  - Low Voltage Projects
  - Sub-regional congestion target
  - 2 Project Proposals
Examples – Multiple Proposal

- Example 1: Some projects have BC ratios < 1.25
  
  - Decision: The projects that pass the BC ratio threshold are selected for further analysis.
    
    The projects that don’t pass the BC ratio threshold in the base case are discarded.

<table>
<thead>
<tr>
<th></th>
<th>Proj01</th>
<th>Proj02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsor</td>
<td>Sponsor 1</td>
<td>Sponsor 2</td>
</tr>
<tr>
<td>Project Cost</td>
<td>$80.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>ISD</td>
<td>2021</td>
<td>2021</td>
</tr>
<tr>
<td>Delta Congestion - Congestion Driver</td>
<td>$(30)</td>
<td>$(35)</td>
</tr>
<tr>
<td>B/C Ratio Base Case</td>
<td>1.25</td>
<td>1.24</td>
</tr>
</tbody>
</table>

FAIL
Example 2: Some projects do not reduce the congestion driver

- At this step, all projects pass the BC ratio threshold.
- Some projects do not address the congestion driver.

- Decision: The projects that reduce the congestion driver are selected for further analysis. The projects that don’t reduce the congestion driver are discarded.

<table>
<thead>
<tr>
<th></th>
<th>Proj01</th>
<th>Proj02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsor</td>
<td>Sponsor 1</td>
<td>Sponsor 2</td>
</tr>
<tr>
<td>Project Cost</td>
<td>$80.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>ISD</td>
<td>2021</td>
<td>2021</td>
</tr>
<tr>
<td>Delta Congestion - Congestion Driver</td>
<td>(50)</td>
<td>$5</td>
</tr>
<tr>
<td>B/C Ratio Base Case</td>
<td>1.35</td>
<td>1.27</td>
</tr>
</tbody>
</table>

FAIL
Examples – Multiple Proposal (cont.)

• Example 3: Some projects cause unacceptable congestion.
  – At this step, all projects pass the BC ratio threshold in the base case, and decrease the congestion driver.
  – Some projects cause unacceptable congestion on other facilities.
  – Decision: For the projects that cause unacceptable congestion, additional market efficiency upgrades to address additional congestion may be considered.

    To be considered for further analysis, the projects with their corresponding additional upgrades must pass the BC threshold, and decrease the congestion driver.

    The projects that don’t create additional unacceptable congestion go straight to the next step.

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Proj01</th>
<th>Proj02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsor</td>
<td>Sponsor 1</td>
<td>Sponsor 2</td>
</tr>
<tr>
<td>Project Cost</td>
<td>$80.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>ISD</td>
<td>2021</td>
<td>2021</td>
</tr>
<tr>
<td>Delta Congestion - Congestion Driver</td>
<td>$ (40.00)</td>
<td>$ (45.00)</td>
</tr>
<tr>
<td>Delta PJM Total Congestion</td>
<td>$ 45</td>
<td>$ (20)</td>
</tr>
<tr>
<td>B/C Ratio Base Case</td>
<td>1.35</td>
<td>1.28</td>
</tr>
</tbody>
</table>
• Example 4: Some projects fail on one or more sensitivities.
  - At this step, all projects pass the BC ratio threshold in the base case, decrease the congestion driver, and don’t cause unacceptable congestion on other facilities.
  - Some projects fail on one or more sensitivities.
  - Decision: The projects that fail the BC ratio threshold on one or more sensitivities are discarded.

The projects that pass all sensitivities go straight to the next step.

<table>
<thead>
<tr>
<th></th>
<th>Proj01</th>
<th>Proj02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsor</td>
<td>Sponsor 1</td>
<td>Sponsor 2</td>
</tr>
<tr>
<td>Project Cost</td>
<td>$80.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>ISD</td>
<td>2021</td>
<td>2021</td>
</tr>
<tr>
<td>Delta Congestion - Congestion Driver</td>
<td>$ (40.00)</td>
<td>$ (45.00)</td>
</tr>
<tr>
<td>Delta PJM Total Congestion</td>
<td>$ (10)</td>
<td>$ (20)</td>
</tr>
<tr>
<td>B/C Ratio Base Case</td>
<td>1.35</td>
<td>1.28</td>
</tr>
<tr>
<td>B/C Ratio base Sensitivity 1</td>
<td>2.3</td>
<td>2.54</td>
</tr>
</tbody>
</table>
| B/C Ratio base Sensitivity 2 | 1.25 | 1.24 | FAIL
Examples – Multiple Proposal (cont.)

- Example 5: Some projects don’t pass the BC ratio threshold after the upgrades

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Proj01</th>
<th>Proj02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Cost</td>
<td>$80.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>Required Upgrades Cost</td>
<td>$30.00</td>
<td>$20.00</td>
</tr>
<tr>
<td>Total Project Cost with Upgrades</td>
<td>$110.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>ISD</td>
<td>2021</td>
<td>2021</td>
</tr>
<tr>
<td>Delta Congestion- Congestion Driver</td>
<td>($20)</td>
<td>($30)</td>
</tr>
<tr>
<td>B/C Ratio Base Case</td>
<td><strong>1.2</strong></td>
<td>1.25</td>
</tr>
</tbody>
</table>

- Example 6: Some projects don’t pass the BC threshold after the cost review

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Proj01</th>
<th>Proj02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Cost</td>
<td>$80.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>Reviewed Cost</td>
<td>$110.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>ISD</td>
<td>2021</td>
<td>2021</td>
</tr>
<tr>
<td>Delta Congestion- Congestion Driver</td>
<td>($10)</td>
<td>($30)</td>
</tr>
<tr>
<td>B/C Ratio base Case</td>
<td><strong>1.2</strong></td>
<td>1.25</td>
</tr>
</tbody>
</table>
Future Discussion Topics

• Continue Hypothetical Examples – Comparing Projects

• Project Selections Regional Metric

• Begin Guidelines Discussion
Appendix 1 – Operating Agreement & Manual References
References

• Scope, PJM requirements & Member requirements
  http://www.pjm.com/about-pjm/member-services.aspx

• PJM Manual 14B, Section 2.6:
  http://www.pjm.com/~media/documents/manuals/m14b.ashx

• PJM Operating Agreement, Schedule 6, Section 1.5.7: