

Decisional Diagram & Examples

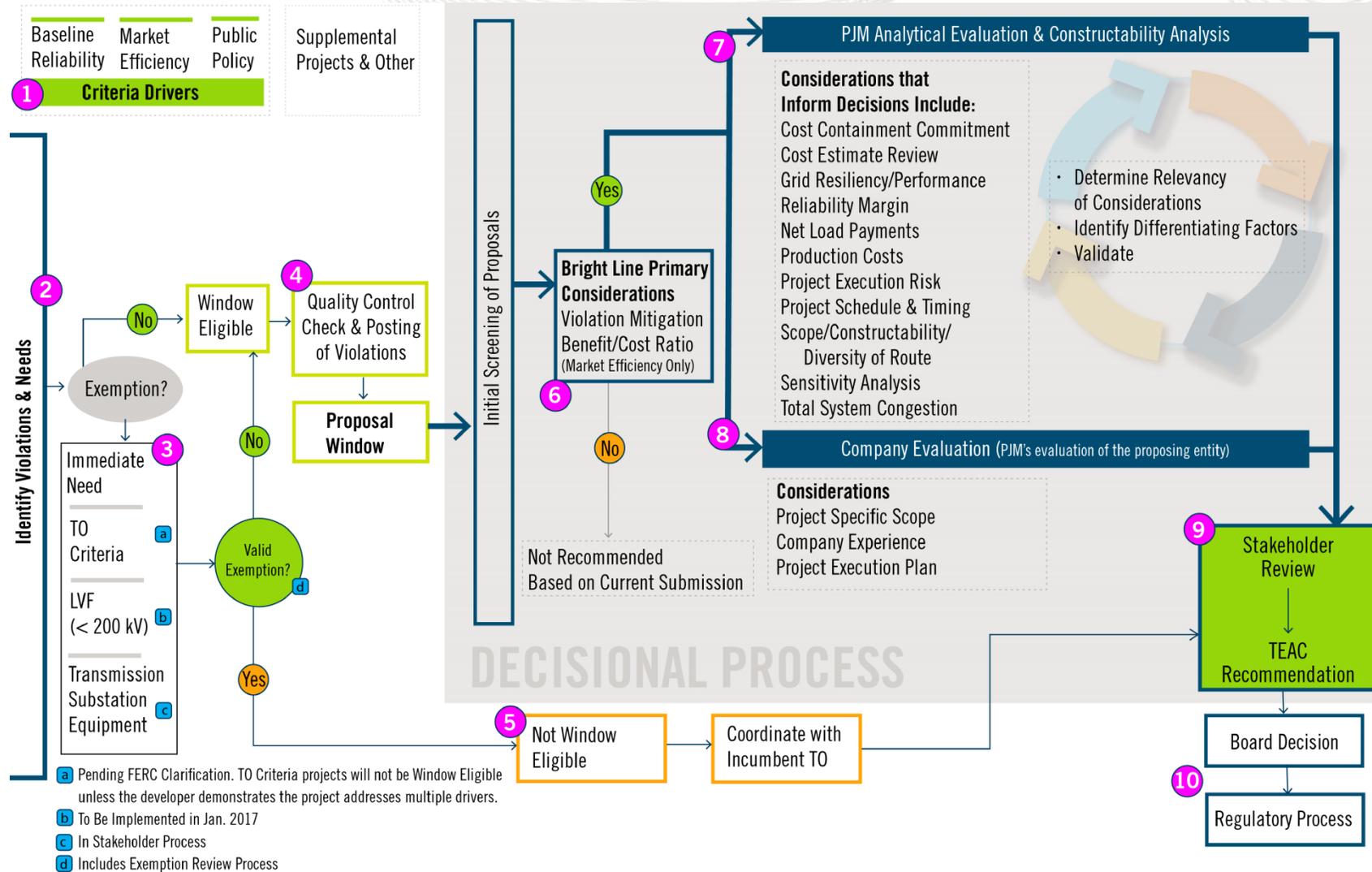
Special Planning Committee
January 13, 2017

Goal:
Enhance RTEP Process, Improve Rule Enforcement,
and Identify Legal Requirements
+
Improve Transparency for Members, Developers and
Stakeholders through the TEAC

**Quality Control
of Results**

**Decisional
Process
Documentation**

- Illustrates the flow of PJM's decisional process within the RTEP
- Objective: Increase transparency and provide stakeholders with increased understanding of the process



Please refer to accompanying PDF document.

Baseline
Reliability

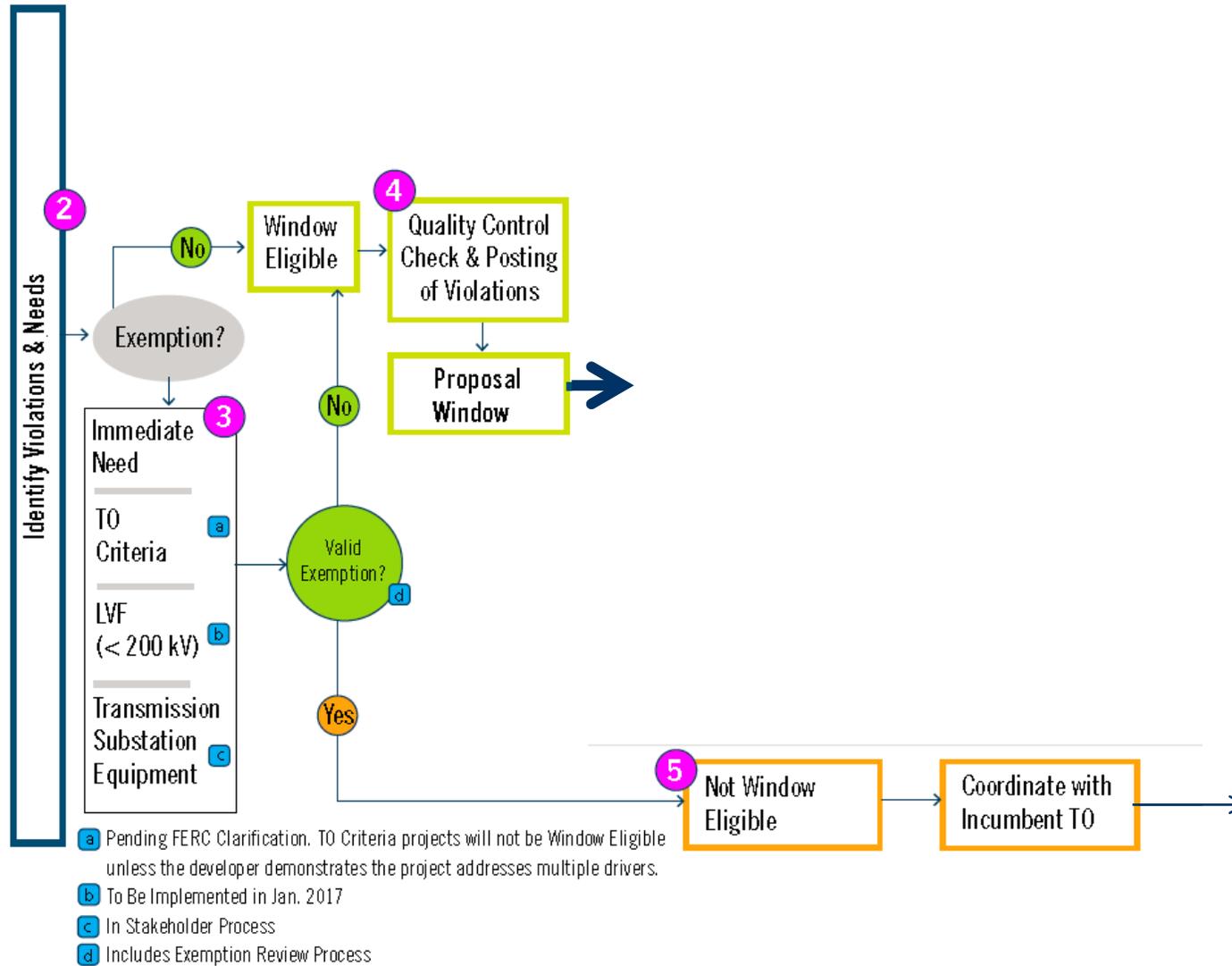
Market
Efficiency

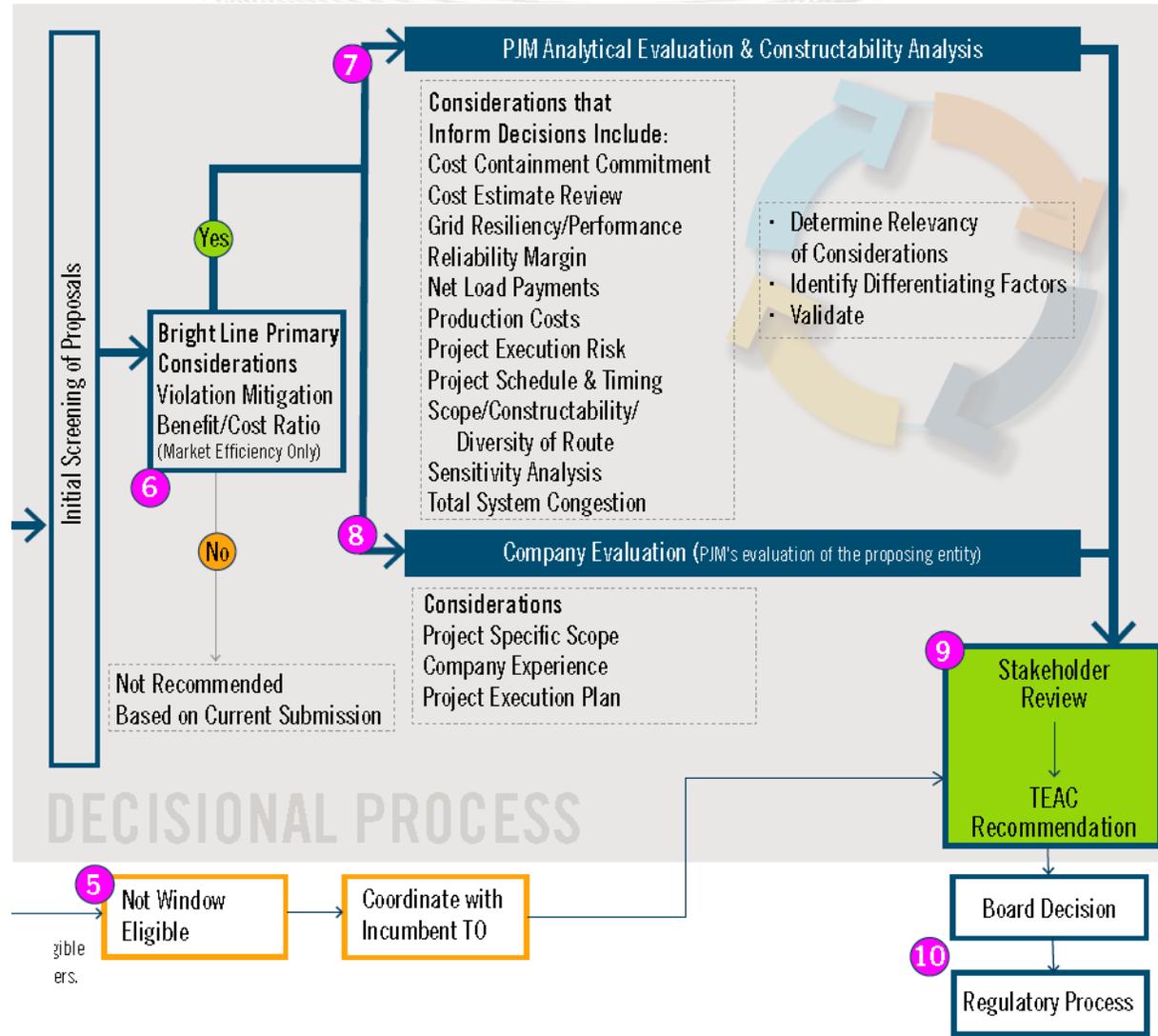
Public
Policy

Supplemental
Projects & Other

1

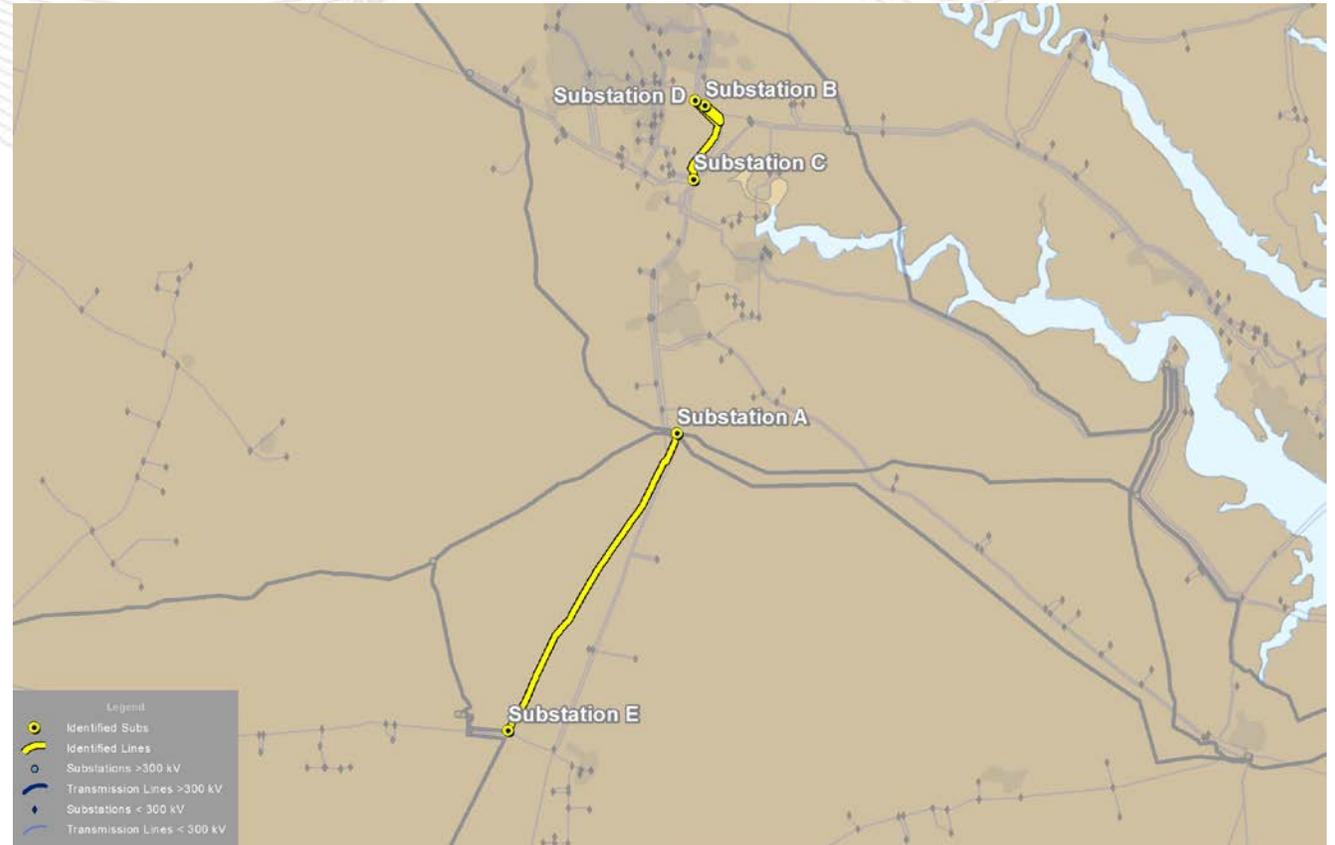
Criteria Drivers





- Will use examples to show the flow of the decisional process.
- These examples are *ILLUSTRATIVE* in nature and do not reflect any specific project or window scenario.

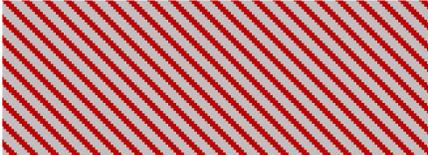
- Common Mode Outage (FG# 999):
- Substation A to Substation E 345 kV circuit #2 is overloaded for loss of the Substation A to Substation E 345 kV circuit #1.
- **Alternatives considered:**
 - 20XX_X-1 (\$30M)
 - 20XX_X-2 (\$40M)
 - 20XX_X-3 (\$20M)
 - 20XX_X-4 (\$10M)
 - 20XX_X-5 (\$30M)
- **Status:**
 - Evaluation is in progress



	Violation Mitigation
Project 1 Cost: \$30M	✓
Project 2 Cost: \$40M	✓
Project 3 Cost: \$20M	✗
Project 4 Cost: \$10M	✓
Project 5 Cost: \$30M	✓

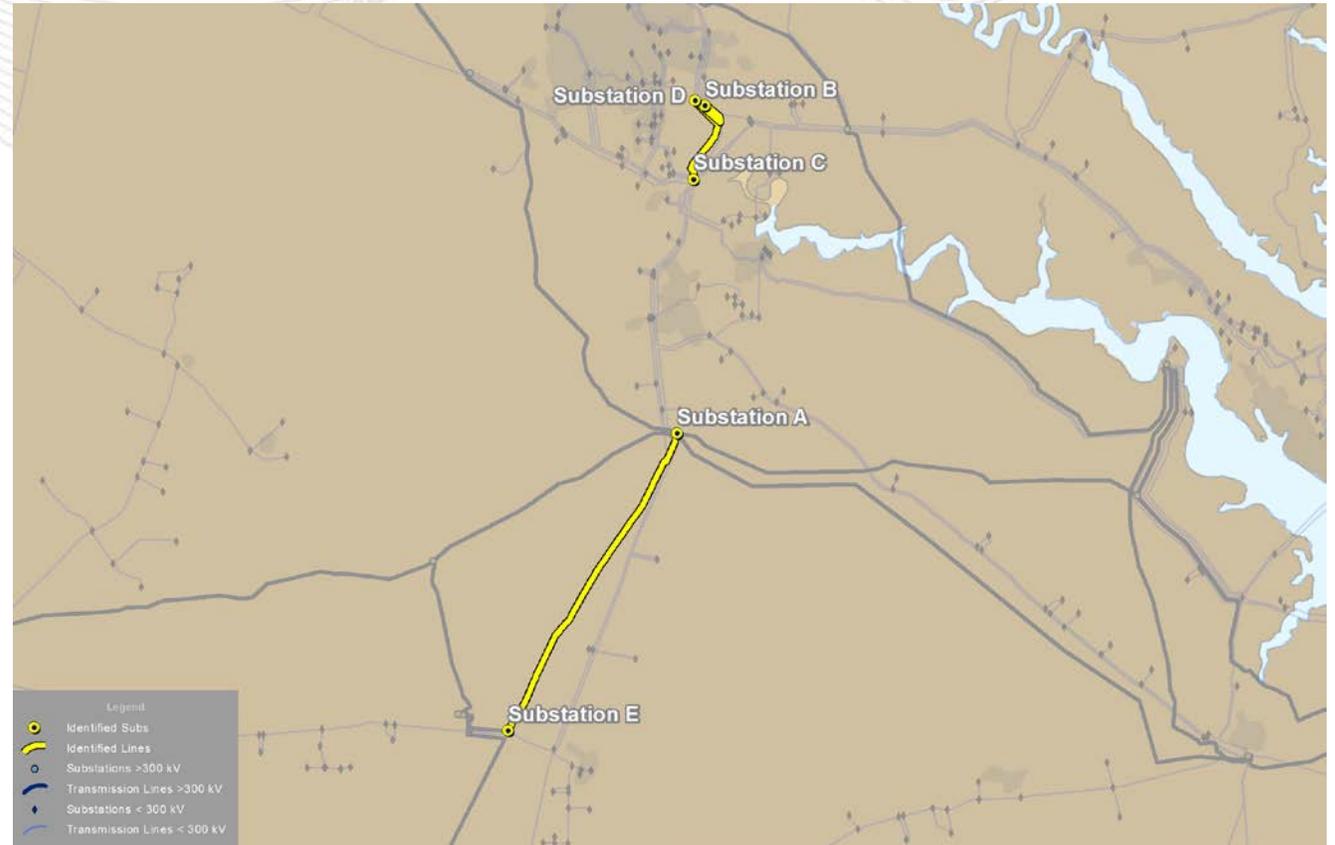
	Violation Mitigation	Margin
Project 1 Cost: \$30M		
Project 2 Cost: \$40M		
Project 3 Cost: \$20M		
Project 4 Cost: \$10M		
Project 5 Cost: \$30M		

	Violation Mitigation	Margin	Project Execution Risk / Constructability
Project 1 Cost: \$30M	✓		
Project 2 Cost: \$40M	✓		
Project 3 Cost: \$20M	✗		
Project 4 Cost: \$10M	✓		
Project 5 Cost: \$30M	✓		

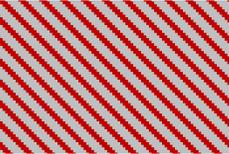
	Violation Mitigation	Margin	Project Execution Risk / Constructability	Cost Estimate Review
Project 1 Cost: \$30M	✓			\$30M
Project 2 Cost: \$40M	✓			\$40M
Project 3 Cost: \$20M	✗			
Project 4 Cost: \$10M	✓			\$10M
Project 5 Cost: \$30M	✓			\$30M

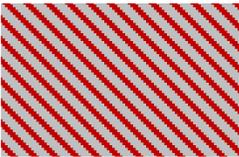
	Violation Mitigation	Margin	Project Execution Risk / Constructability	Cost Estimate Review	TEAC Recommendation
Project 1 Cost: \$30M	✓			\$30M	<p>All projects demonstrated equivalent margin and project execution risk. After independent cost estimate review, Project 4 is recommended because it most cost effectively solves the violation.</p>
Project 2 Cost: \$40M	✓			\$40M	
Project 3 Cost: \$20M	✗				
Project 4 Cost: \$10M	✓			\$10M	
Project 5 Cost: \$30M	✓			\$30M	

- Generator Deliverability (FG# 101,102):
- Substation C to Substation D 345 kV circuit #1 is overloaded for several single contingencies.
- **Alternatives considered:**
 - 20XX_X-1 (\$40M)
 - 20XX_X-2 (\$45M)
 - 20XX_X-3 (\$45M)
 - 20XX_X-4 (\$40M)
 - 20XX_X-5 (\$60M)
- **Status:**
 - Evaluation is in progress



	Violation Mitigation
Project 1 Cost: \$40M	✗
Project 2 Cost: \$45M	✓
Project 3 Cost: \$45M	✓
Project 4 Cost: \$40M	✓
Project 5 Cost: \$60M	✓

	Violation Mitigation	Cost Estimate Review
Project 1 Cost: \$40M		
Project 2 Cost: \$45M		\$45M
Project 3 Cost: \$45M		\$45M
Project 4 Cost: \$40M		\$40M
Project 5 Cost: \$60M		\$60M

	Violation Mitigation	Cost Estimate Review	Schedule / Timing
Project 1 Cost: \$40M	✗		
Project 2 Cost: \$45M	✓	\$45M	
Project 3 Cost: \$45M	✓	\$45M	
Project 4 Cost: \$40M	✓	\$40M	
Project 5 Cost: \$60M	✓	\$60M	

	Violation Mitigation	Cost Estimate Review	Schedule / Timing	Performance
Project 1 Cost: \$40M				
Project 2 Cost: \$45M		\$45M		 FG# 101
Project 3 Cost: \$45M		\$45M		 FG# 102
Project 4 Cost: \$40M		\$40M		 FG# 101
Project 5 Cost: \$60M		\$60M		 FG# 101 & 102

	Violation Mitigation	Cost Estimate Review	Schedule / Timing	Performance	TEAC Recommendation
Project 1 Cost: \$40M					<p>Although Project 5 has a larger cost, it is recommended because the proposal solves multiple violations and alleviates the need for multiple projects where the total cost to solve the same violations would be greater.</p>
Project 2 Cost: \$45M		\$45M		 FG# 101	
Project 3 Cost: \$45M		\$45M		 FG# 102	
Project 4 Cost: \$40M		\$40M		 FG# 101	
Project 5 Cost: \$60M		\$60M		 FG# 101 & 102	

Questions?