



MMU Evaluation of the Proposed Public Policy Transmission Projects in Western NY

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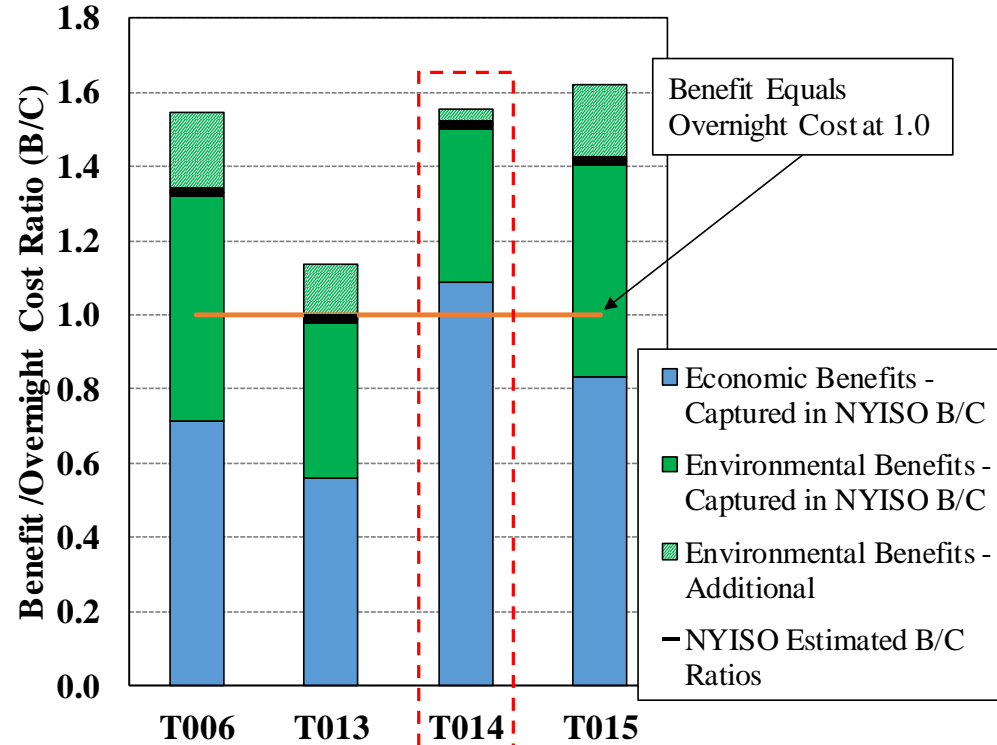
Principles for Evaluating of Market Impacts of Public Policy Projects

- MMU must “review and consider” impact on NYISO markets of proposed solutions
- Projects provide wholesale market *and* public policy benefits
 - ✓ PPTN seeks economic, environmental, and reliability benefits
- But uneconomic transmission investment can harm markets by:
 - ✓ Inefficiently altering energy and capacity prices,
 - ✓ Crowding-out efficient private investment, and
 - ✓ Raising the cost of satisfying public policy objectives
- Criteria for determining whether a transmission project is uneconomic:
 - ✓ *Priced and unpriced benefits exceed project costs*

Evaluation of the Economics of Proposed Public Policy Transmission Projects

- *Economic benefit:* lower fuel & other production costs
- *Environmental benefit:* value of CO₂ abatement
- These benefits capture some of the qualitative metrics and reliability benefits

Figure 1: Results for Tier 1 Projects





Estimating Economic and Environmental Benefits

- Example 1:
 - ✓ Increase NY unit: \$2 of fuel/VOM costs and no emissions
 - ✓ Reduce NY unit: \$20 of fuel/VOM costs and \$8 of allowances
 - ✓ Environmental Benefit = \$8 = \$8 minus \$0
 - ✓ Economic Benefit = \$18 = \$20 minus \$2
 - ✓ NYISO Prod Cost Saving = \$26 = Enviro + Economic Benefit
- Example 2:
 - ✓ Increase Ontario unit and reduce PJM unit with same fuel/VOM costs and emission rates.
 - ✓ GE MAPS simulation has no allowance cost for PJM unit, so NYCA Production Cost Savings = \$18 = \$20 minus \$2
 - ✓ Environmental Benefit + Economic Benefit = \$26



Conclusions

- Regarding estimated impacts:
 - ✓ Estimated economic and environmental benefits exceed overnight cost for Tier 1 projects
 - ✓ Project T014 exhibits highest economic benefits, which are less subject to uncertainty regarding future allowance prices
 - ✓ Recommended project will not harm the NYISO markets
 - ✓ We find that the NYISO's recommendation of T014 is reasonable
- The MMU Report also recommends several enhancements to the NYISO's methodology for future PPTP processes