

Incorporating New Transmission Projects in the New York ICAP Market

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Presentation Summary

- Current NYISO rules do not permit new transmission projects from receiving ICAP credit
- New transmission projects reduce the need for installed reserve margins (IRM)
- Not allocating ICAP credit to new transmission projects reduces reliability, increases costs to consumers, and is discriminatory

Current NYISO Rules

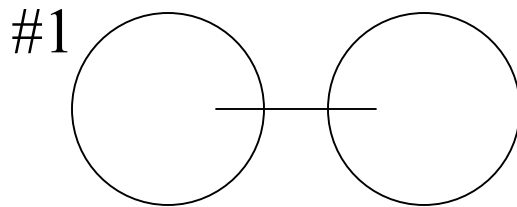
- Current NYISO Tariffs do not credit new transmission projects with the associated reduction in installed reserve margin (IRM) that these projects create
 - No credit for reduction in overall IRM
 - No credit for reduction in locational ICAP requirements for applicable projects
- Recent rule changes more accurately reflect the ICAP value that different resources provide
 - Change from ICAP to UCAP
 - Expanded participation by small generator and load management resources in the ICAP market

New Transmission Projects Reduce the Installed Reserve Margins

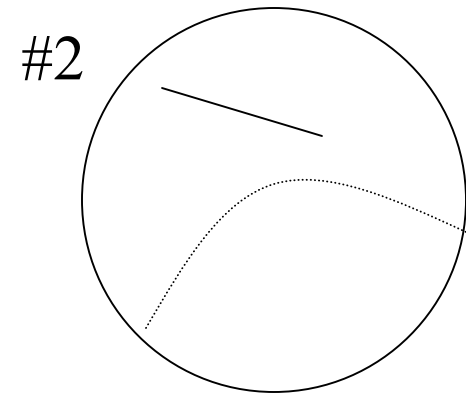
“The adequacy of the generating capacity in a power system is normally improved by interconnecting the system to another power system. Each interconnected system can then operate at a given risk level with a lower reserve than would be required without the interconnection. This condition is brought about by the diversity in the probabilistic occurrence of load and capacity outages in the different systems. The actual interconnection benefits depend on the installed capacity in each system, the total tie capacity, the forced outage rates of the tie lines, the load levels and their residual uncertainties in each system and the type of agreement in existence between the systems.”

Roy Billinton and Ronald N. Allan, *Reliability Evaluation of Power Systems (2nd Edition)*, p. 117.

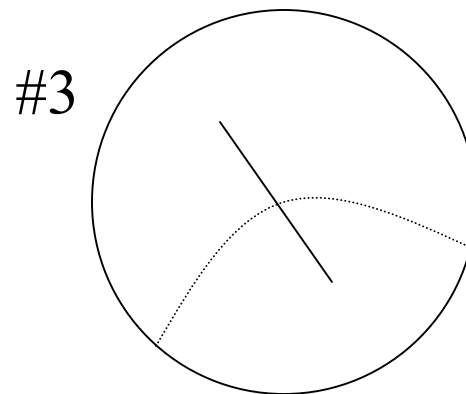
New Transmission Projects Reduce the Installed Reserve Margins - Examples



Between Control Areas



Within a Control Area



Within a Control Area and Between ICAP Subzones

Key

- Transmission line
- Control Area
- Subzone boundary

New Transmission Projects Reduce Installed Reserve Margins

- Even if loads in the two connecting areas are perfectly correlated, new transmission projects reduce IRM due to the largely independent outages of generation units in both areas
- Connecting an area with excess generation to an area short of generation reduces the IRM in both areas (i.e., reliability benefits do not flow only in the direction of power flows)
- In general, transmission projects have larger availabilities than generation projects

New Transmission Projects Should Receive Appropriate ICAP Credit

- Granting ICAP credit to transmission enhances reliability and reduces customer costs
 - Transmission projects may provide greater reliability benefits than similarly situated generation projects and could be less expensive
 - Granting ICAP credit only to generation projects makes generation more attractive to investors than transmission projects, irrespective of which alternative provides the lowest cost
 - As a result, the additional reliability benefits and potential cost reductions of transmission projects will not occur

New Transmission Projects Should Receive Appropriate ICAP Credit (con't)

- Granting ICAP credit to transmission places all solutions on equal footing
 - Non discriminatory treatment allows all solutions -- generation, distributed generation, load management initiatives, and transmission projects -- to compete to provide consumers with inexpensive delivered electricity
 - Non discriminatory treatment allows all solutions to be fairly compensated for the reliability value that each provides