



# NYISO ICAP Working Group

## Development of Phase II UDRs/UCCs

Kevin B. Jones

518-464-2718

[kjones@navigantconsulting.com](mailto:kjones@navigantconsulting.com)

# Resource Adequacy and Other Benefits Must Be Allocated to the Merchant Transmission Expander

LMP alone will not ensure that structural improvements to the grid are developed. Supportive market structures are essential. Some important rules include:

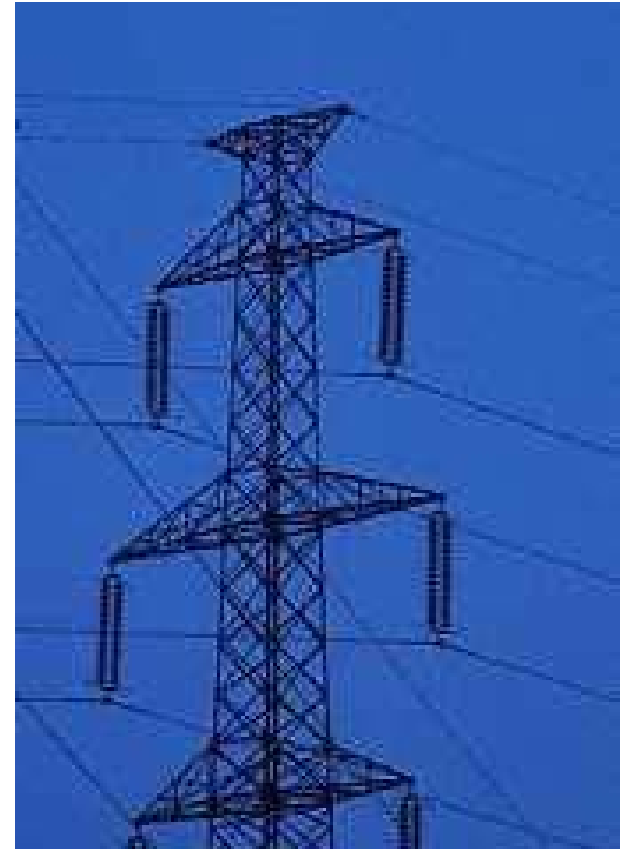
1. Benefits of transmission expansion must be identified;
2. Property rights associated with the added value must be allocated to the transmission expander;
3. Property rights must be transferable;
4. While regulatory certainty cannot be assured, the property rights must be as robust and permanent as reasonable;
5. Old and new regional seams that artificially devalue property rights must be avoided.

Without the appropriate market design the resource adequacy benefits of merchant transmission expansion will accrue to all load serving entities in the region and as a result it is less likely that cost-effective transmission expansion will occur.

# Benefits of Transmission Expansion to Resource Adequacy

Transmission Expansion may improve resource adequacy by improving the deliverability of generation to load and;

- Increasing limited capacity import rights from a neighboring control area;
- Decreasing internal locational capacity requirements;
- Reducing total ISO resource adequacy requirements.



# Added Value through Capacity Markets



- Benefit
  - Transmission expansion can improve system reliability or for the same level of reliability, allow reduction of regionwide or local installed reserve requirements.
- Appropriate Market Structure
  - FERC approved transferable UCAP deliverability rights (UDRs) capture the value created when transmission expansion allows capacity to be delivered from lower value area to a higher value area.
    - UDRs, as implemented, currently only allocate the capacity deliverability benefit achieved for locational requirements and do not award the benefit for the additional statewide reliability.
    - UDRs currently do not apply to free-flowing AC expansions.

# Summary of UDRs as Implemented in NYISO

UCAP Deliverability Rights (“UDR”s ) are rights associated with new incremental controllable transmission projects that when combined with capacity in an external or non-constrained internal region allow such capacity to be treated as if it were located in the constrained region.

- The ISO, based on reliability studies and other factors, determines the amount of UDRs assigned to a transmission project.
- UDRs are awarded for the life of the project and subject to periodic availability adjustment.
- UDRs are transferable.
- UDRs are available for both external and internal resources.
- UDRs when combined with qualified capacity can be offered in ISO-administered capacity auctions but may not be offered separately.
- Associated energy must be deliverable to the UDR facility.

# Proposal for Stage II UDRs

The following improvements should be discussed and adopted by the ICAP WG as next steps in the process of awarding the benefits of transmission expansion to the expander:

1. Award UDRs for new capability of free-flowing AC expansions.
2. Award the contribution to statewide reliability of an AC or DC expansion to the firm rights holder of the expansion in the form of Unforced Capacity Credits (UCCs).
3. Allow UDRs to be offered into the relevant UCAP auctions to be combined with qualified capacity to meet Local UCAP requirements.

# UDRs for Free-Flowing AC Expansions

- Free-flowing AC expansions were excluded from Stage I UDR consideration as a matter of expediency not as a result of technical considerations.
- Benefit of free-flowing AC lines can be calculated as a result of MARS analysis with and without the AC expansion included.
- In terms of allocating deliverability rights to transmission expansion there is no reason to discriminate against free flowing AC expansions.
  - AC transmission expansions from Upstate to Long Island or NYC should be eligible for the award of UDRs.
- Implementation of UDRs for free-flowing AC would only require BIC and MC approval of tariff and associated manual changes.

# Transmission Expansions Contribution to Statewide Reliability

- Transmission Expansion can improve statewide reliability by improving the deliverability of generation to load or alternatively, for the same level of reliability, reduce statewide Installed Reserve Requirements.
- Statewide reliability benefits of transmission expansion should not be socialized
- NYSRC/NYISO can calculate the impact on the statewide installed reserve requirement of a transmission expansion through MARS analysis.
- The quantified benefit should be awarded to the transmission expander in the form of a Unforced Capacity Credit (UCC) measured in MWs that could be used by an LSE to meet their UCAP requirement.
- FERC has ordered ISO-NE to award HQICCs to the firm rights holders of the HQ Phase II tie.



# UDRs/UCCs Offered in UCAP Auctions

- UDRs when combined with qualified capacity can be offered in ISO-administered capacity auctions but may not be offered separately.
- UDRs should be able to be offered separately into the UCAP auctions and when matched with qualified capacity be awarded as locational UCAP.
- Implementation details would need to be worked out by ICAP WG.



Questions?

Next Steps....