CRIS for External-to-ROS Transmission Investment

External-to-ROS Deliverability Right (EDR)

Ethan D. Avallone

Senior Market Design Specialist, Energy Market Design

ICAPWG/TPAS

October 24, 2017

Rensselaer, NY

NEW YORK INDEPENDENT SYSTEM OPERATOR

Agenda

- Background
- Participation Comparison
- EDR Enhancements
- Appendix: External-to-Rest of State Deliverability Rights (EDRs)

Background

Background

- **Joint IITF/TPAS Meetings**
  - HQUS proposed that NYISO develop a method of awarding CRIS to entities that create increased transfer capability into Rest of State (ROS) via transmission upgrades over external interfaces (*e.g.*, the Queue No. 430 Cedars Rapids Transmission intertie project)
- **January 19, 2011 ICAPWG**
  - The NYISO committed to reviewing the interaction between requests for External CRIS Rights from new non-UDR transmission and the current process for optimizing annual import limits
- **NYISO 12/15/2016 ICAPWG presentation**
  - Options presented:
    - Link the incremental transfer capability created by the transmission expansion process to the External CRIS Rights request in the CY Deliverability Study process, or
    - Obtain CRIS through a "UDR-Like" Model
    - Stakeholders commented that developing market rules surrounding External to ROS Deliverability Rights would incentivize transmission expansion and may provide significant benefits
- **HQUS requested and FERC granted a Waiver that permits HQUS to request, and be eligible to receive, CRIS corresponding to the incremental transfer capability (in MW) created by its Queue No. Cedars Rapids Transmission intertie project , see H.Q. Energy Services (U.S.) Inc., FERC Docket No. ER17-505-000; Order Granting Tariff Waiver, 58 FERC ¶ 61,098 (2017)**
- **The NYISO presented its market design concept proposal at the August 22, 2017 ICAPWG/TPAS***

*Link to the 8/22/2017 ICAPWG/TPAS presentation: http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2017-08-22/agenda%202%20M163_ICAPWG_8_22.pdf

Project Overview

- This project will allow an entity to receive CRIS corresponding to incremental transfer capability created by transmission upgrades on external interfaces that sink into ROS
- The NYISO intends to develop and propose to stakeholders draft tariff revisions to establish the applicable interconnection procedures for obtaining CRIS for such transmission upgrades and to establish market rules for participation using External-to-ROS Deliverability Rights (EDRs)

Market Principle

- Foster a market environment conducive to new investments

Participation Comparison

External CRIS Rights (ECRs)

- External CRIS Rights (ECRs)
  - ECRs are akin to long-term import rights in that they are awarded based on a determination of deliverability within the Rest of State Capacity Region of a specified number of MW of External Installed Capacity that satisfy the requirements set forth in Section 25.7.11 of Attachment S to the NYISO OATT
    - ECRs are awarded for a term (based on the duration requested of a minimum of 5 and a maximum of 20 years (with rules governing the option to renew)); EDRs would not have a term limitation
- ECRs could be suitable for increased intertie capability into Rest of State on existing capacity interfaces
- Unlike ECRs, which are not tied to any particular transmission or generation facility, the proposed EDR construct is tied to a particular transmission upgrade in ROS on an interface that is not the existing capacity interface, which is similar to the way that UDRs are tied to merchant transmission projects

Unforced Capacity Deliverability Rights (UDRs)

- **UDRs**
  - Are available to a new transmission project or a project incrementally increasing the capability of a line that already has UDRs
  - Must sink into a Locality
    - Must be controllable
- **While the EDR concept is consistent with that of UDRs, UDRs are not suitable for projects that increase intertie capability from an External Control Area into ROS because:**
  - Such projects do not sink into a Locality, and thus do not need to be controllable
    - E.g., HQ Cedars is not controllable because the amount of power flowing over the Dennison line is directly related to the amount of generation that is online and putting out power, offset by the Cornwall load pocket; the line itself is free flowing, and does not have a power control device.
- The NYISO is proposing that EDRs will, however, need to be a Scheduled Line
  - This is because upgrades to a Scheduled Line can provide a measurable and knowable increase in transfer capability

NEW YORK INDEPENDENT SYSTEM OPERATOR

EDR Enhancements

Stakeholder Feedback

- **At the August 22, 2017 ICAPWG/TPAS meeting, stakeholders identified additional concepts for consideration:**
  - Allowing EDRs for transmission upgrades external to the NYCA that increase transfer capability at an external interface
  - Allowing an EDR to sink into a Locality, but sell Capacity into ROS

EDR Enhancements

- The NYISO intends to include the suggested enhancements for consideration as part of the 2019 project prioritization process (*i.e.*, as an add-on to the rules established in this proposal)

2019 Project Prioritization

- The following are draft project prioritization descriptions for potential 2019 projects, should the EDR concept be approved by stakeholders and FERC in 2018:

External-to-ROS Deliverability Rights (EDRs) for External Transmission Upgrades

This project will consider expanding upon the External-to-ROS Deliverability Right (EDR) participation model. As part of this endeavor, the NYISO will examine the potential for a Market Participant to receive EDRs to participate in the Capacity market by funding transmission system upgrades external to the NYCA that increase transfer capability at an external interface.

External-to-ROS Deliverability Right (EDR) Development

This project will consider expanding upon the External-to-ROS Deliverability Right (EDR) participation model. As part of this effort, the NYISO will consider rules allowing an EDR to sink into a Locality, but sell Capacity into ROS.

Next Steps

NEW YORK INDEPENDENT SYSTEM OPERATOR

Timeline

- **October 2017 ICAPWG/TPAS meeting**
  - Continue EDR discussion
- **Future ICAPWG/TPAS meetings**
  - Review draft tariff language with stakeholders
- **Q2 2018 BIC/MC**
  - Vote on draft tariff language
- **Q2 2019**
  - Targeted implementation

Appendix: External-to-ROS Deliverability Rights (EDRs)

EDR Features

- **Allow entities to request CRIS associated with EDRs in Class Year**
  - A Developer can propose a transmission upgrade to increase transfer capability by submitting an application under the Transmission Interconnection Procedures
    - A System Impact Study (SIS) and a Facilities Study (FS) would be performed as part of the Transmission Interconnection Procedures
  - The project is evaluated for CRIS in a Class Year
    - The request cannot pre-date the completion of the System Impact Study of the transmission upgrade that creates the incremental transfer capability for which the Developer is requesting CRIS
    - The proposed project must meet the Class Year base case inclusion rules
  - The CRIS requested can be no greater than the MW of the incremental transfer capability determined by the NYSIO in the SIS to be created by the transmission upgrade

EDR Features

- **External to ROS Deliverability Rights (EDR)**
  - Used for new or incremental transfer capability on a designated scheduling path over an External interface, caused or created by investment in transmission facilities
  - Must sink in ROS (*i.e.*, not a Locality)
- **External capacity will sink in ROS and will be treated like other imports into ROS**
  - Does not require the addition of interfaces in the ICAP auction

EDR Features

- **For a Scheduled/Designated Schedule Line**
  - Provides a measurable and knowable increase in transfer capability
  - Will not apply to AC tie lines into ROS
- **There is no obligation to offer capacity associated with the EDRs**
- **No minimum price offer**
- **Line Availability and Line Losses will be accounted for**

EDR Features

- CRIS can be transferred to an EDR project from either a generator, UDR, or another EDR project
- The Developer/holder of the CRIS associated with an EDR can change (subject to ISO Procedures)
  - The holder of the CRIS will have the same opportunity as other ICAP Suppliers to identify a different billing organization or bidding organization
- EDRs would not be limited in duration

EDR Features

- **Annual Election**
  - Rightsholder may elect to return a MW amount of their EDRs, up to the maximum MW awarded
  - MW returned will be available to be treated as emergency assistance in the IRM and LCR studies
  - UCAP associated with the MW of EDRs “returned” cannot be offered in the ICAP market

EDR Features

- If a New Capacity Zone (NCZ) is created, EDRs that 1) sink into the NCZ at the time that NCZ is proposed and 2) do not satisfy the criteria for UDRs will no longer exist
- An existing EDR that satisfies all requirements for a UDR that sinks in a NCZ at the time that NCZ is proposed will become a UDR
  - If all of the characteristics of a specific EDR satisfy the criteria for a UDR, it will be a UDR
  - Because the EDR would have already been evaluated in the Deliverability Study in the same manner as for a UDR, no additional planning studies are required for it to be a UDR when the NCZ is proposed (new Locality is established)

The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system

www.nyiso.com

NEW YORK INDEPENDENT SYSTEM OPERATOR