# Briefing on transmission access charge wholesale billing determinant initiative

Lorenzo Kristov, Ph.D.
Principal, Market and Infrastructure Policy

Market Surveillance Committee Meeting
General Session
June 17, 2016

# Initiative will consider whether to modify wholesale billing determinant applied to collection of Transmission Access Charge (TAC).

- TAC is the settlement vehicle used to recover PTOs' costs of owning, operating & maintaining transmission assets turned over to ISO operational control
  - FERC-approved "transmission revenue requirements" (TRR)

TAC has two components applied to hourly settlements:

- Postage stamp "regional" rate to recover TRR for all facilities rated > 200 kV under ISO operational control
  - $/MWh charge to all ISO internal load and exports
- PTO-specific "local" rates to recover TRR for all facilities < 200 kV under ISO operational control
  - $/MWh charge to internal load in each PTO's territory

# The central question is how “internal load” should be calculated for TAC purposes.

- TAC rate is the quotient of PTOs’ total FERC-approved TRR divided by forecast of internal load & exports
  - TAC rate may be adjusted mid-year for changes in TRR amount or differences between forecast v. actual load & exports
- ***Internal load is currently defined as the total of end-use customer metered load (EUML)***
- Clean Coalition’s proposal to define internal load subject to TAC as ***“transmission energy downflow” (TED)*** measured as the energy flow from transmission to distribution at each T-D interface substation

# TED will be less than EUML at T-D interfaces & hours where “Local DG” produces significant energy.

- T-D interface substation is where operational control transfers from ISO to utility distribution company (UDC)
- “Local DG” (as defined by Clean Coalition) equals energy generated by distributed generation (DG) on the UDC side of the customer meter, plus energy produced by behind-the-meter DG in excess of customer load in the same hour
  - Load offset by BTM DG in the same hour is already exempt from TAC because it does not show up in EUML
- In general, for each T-D interface, each settlement hour:

  **TED = EUML – Local DG + (adjustment for losses)**

- For now we set aside effects of losses, to simplify the issue and focus on the central question of TED v. EUML.

# The issue paper identifies a number of questions and issues for stakeholder input and discussion.

1. What policy objectives should TAC billing support?
    a. More accurate comparison of RPS procurement options?
    b. Improve distribution resources plans (DRPs)?
    c. Avoid or defer T or D investments?
    d. Reduce line losses?
    e. Enhance local environment, economy, resilience?
2. What guiding principles should apply?
    a. How should “usage pays” principle apply? Is it true that load offset by Local DG gets no benefit from transmission?
    b. Could it be true that load offset by Local DG gets less benefit from transmission? If so, how could this be quantified?
    c. Some parties commented that cost shifts must be prevented. How can the principle of aligning costs with system usage and benefits be balanced against cost-shift concerns?

# Policy issues and design questions - continued

3. Should any change to TAC billing determinant distinguish between TRR for facilities in service vs. avoidance of future upgrades? If so, how might this TAC be designed?
    a. How could we measure the benefit of DG in reducing transmission investment?
4. If the benefit of DG in reducing transmission cost is related to peak load reduction rather than total energy, how might TAC allocation reflect peak impacts?
5. What is the linkage between adopting a TED-based TAC and increased investment in DG?
    a. How does TAC figure into LSE procurement decisions?
6. What other questions and issues need to be considered?