Transmission Agency of Northern California

Implications of the CAISO’s IBAA Proposal on the California-Oregon Transmission Project

Bryan W. Griess
TANC Assistant General Manager

CAISO IBAA Stakeholder Meeting

March 6, 2008
Implications of the CAISO’s IBAA Proposal on COTP

Overview of COTP and TANC

- The California-Oregon Transmission Project (COTP) is a 340 mile 500-kV transmission facility extending from the California-Oregon Border (COB) to central California. The COTP has a rating of 1600 MW in the north-to-south direction and a rating of 1225 MW in the south-to-north direction.

- The COTP is one of the three legs of the high-voltage transmission facilities that comprise the California-Oregon Intertie (COI).

- The Transmission Agency of Northern California (TANC) is a joint powers agency organized under the laws of the State of California, consisting of 15-member agencies. TANC is the Project Manager for, and the largest Participant in, the COTP.

- The COTP was built to, among other reasons, allow TANC Members and COTP Participants the opportunity to capture economic value of regional electricity prices between the Pacific Northwest and northern California.
Implications of the CAISO’s IBAA Proposal on COTP

COTP Operations

• On December 1, 2005, the COTP was transferred from the California Independent System Operator’s (CAISO) Control Area to the Sacramento Municipal Utility District’s (SMUD) Control Area (within the Western Area Power Administration’s Sub-Control Area).

• SMUD’s coordination of its Control Area operations, including operation of the COTP, is provided for under the Interconnected Control Area Operations Agreement (ICAOA) between SMUD and the CAISO. Under that Agreement, the Tracy 500-KV substation is designated at the interchange point for the COTP between the CAISO and SMUD.

• The COTP is operated in coordination with the other COI facilities under the Owners Coordinated Operations Agreement (OCOA). Coordinated operations include:
  – Coordinated operations of reliability (See, e.g., OCOA Section 2.11, 8.2.1, 8.2.2.2)
  – Pro-rata sharing of curtailments (See, e.g., OCOA Section 11, 11.2.1, 11.2.2, 11.3)
  – Sharing of ratings between COI facilities (See, generally OCOA Section 9)
  – No charges between Owners for unscheduled flows (See, generally, COI Path Operating Agreement Section 8.3.19)
  – All Owners obligated to maintain ratings and usefulness of COI facilities (See, e.g., Section 9, 5).
Implications of the CAISO’s IBAA Proposal on COTP

COTP Operations (Cont’d)

• The CAISO serves as the Path Operator for the COTP and other COI facilities under the COI Path Operating Agreement (CPOA):
  – Ensures coordinated reliable operation of COI facilities in cooperation and coordination with multiple BAAs south of COB and the Pacific Northwest Path Operator

• As Participants in the COTP and Participating Transmission Owners in the CAISO, both the City of Vernon and Pacific Gas and Electric Company (PG&E) turned operational control of their COTP transmission entitlements to the CAISO.

• These entitlements total 154 MW (north-to-south direction) of COTP transmission capacity under CAISO control:
  – 121 MW from the City of Vernon
  – 33 MW from PG&E

• TANC has reached an agreement to purchase the City of Vernon’s COTP transmission entitlement of 121 MW. This results is 33 MW remaining under CAISO control at the time of MRTU implementation (the CAISO has removed the City of Vernon’s transmission entitlement from future Firm Transmission Rights auctions).
Implications of the CAISO’s IBAA Proposal on COTP

Key Concerns

- IBAA proposal is based on modeling data which may not accurately reflect appropriate system configuration.

- IBAA proposal prices transactions on transmission facilities not under CAISO control.

- IBAA proposal charges for transmission losses that the CAISO does not incur.

- IBAA proposal results in congestion charges on transmission facilities not under CAISO’s control.

- Tracy and Captain Jack are in separate and distinct BAAs from CAISO. IBAA proposal incorrectly prices COTP transactions at Captain Jack. The interchange point between SMUD and CAISO is Tracy 500.
Implications of the CAISO’s IBAA Proposal on COTP

Key Concerns

• TANC is concerned that the CAISO's actions will skew existing price signals reflecting the value of the COTP [and/or the COI], which may incorrectly encourage scheduling practices that could impact reliability.

• The CAISO is unilaterally determining pricing nodes within the IBAA, not at the interchange points between the CAISO and IBAAs.

• The ISO's unilateral proposal disrupts the balance struck between the various owners of the COI facilities by imposing charges in violation of existing contracts, including the OCOA and the ICAOA.
Implications of the CAISO’s IBAA Proposal on COTP
Key Concerns (Cont’d)

IBAA proposal prices transactions on transmission facilities not under its control
Implications of the CAISO’s IBAA Proposal on COTP

Key Concerns (Cont’d)

IBAA proposal results in the CAISO charging for transmission losses that it does not incur

Monthly Average Loss Components Calculated for April 2005 from CAISO LMP Study 3C
Implications of the CAISO’s IBAA Proposal on COTP
Key Concerns (Cont’d)

IBAA proposal results in the CAISO charging congestion on transmission facilities not under its control

- ISO Responsible for Cong in its BAA
- Western Responsible for Cong in its BAA

ISO BAA

PGE LAP
MCC = ($1.44)/MWh
MCC V. Capt Jack = $0.36/MWh
MCC V. Malin = $0.38/MWh
MCC V. Tracy = $0.02/MWh

Malin
MCC = ($1.82)/MWh

Captain Jack
MCC = ($1.80)/MWh

COI

BPA BAA

Western BAA

MCC V. Capt Jack = $0.34/MWh
MCC V. Malin = $0.36/MWh
MCC V. Tracy = $0.02/MWh

Tesla
MCC = ($1.46)/MWh

PACI

Monthly Average Congestion Components Calculated for April 2005 from CAISO LMP Study 3C
Implications of the CAISO’s IBAA Proposal on COTP

TANC Conclusions

• The Information sharing by the ISO has been problematic, including TANC receiving partial responses to its February 20th questions late on March 4th

• TANC needs more information to verify the assumptions and findings of the CAISO’s technical studies used in developing the IBAA proposal

• Pricing of transactions between the CAISO and IBAAAs should be priced at the interchange points between the respective BAAs

• The CAISO should not price transactions on non-CAISO controlled transmission facilities absent mutual agreement with the neighboring BAAs

• The CAISO IBAA proposal cannot unilaterally abrogate FERC approved agreements for operation of COI facilities
Implications of the CAISO’s IBAA Proposal on COTP
TANC Conclusions (Cont’d)

• TANC is concerned that the CAISO’s IBAA proposal will create seams issues, phantom congestion, and threaten reliability under MRTU

• TANC does not oppose the CAISO’s efforts to accurately model its system; however, TANC has concerns with the CAISO inaccurately and unilaterally pricing transactions outside the CAISO BAA

• The CAISO proposed designation of a pricing point off the CAISO controlled grid (e.g. Captain Jack) for COTP transactions surfaced late in the IBAA stakeholder process. TANC and its Members have identified concerns with IBAA pricing at every opportunity the CAISO has afforded, but to date the CAISO has failed to acknowledge an issue exists or a willingness to consider alternatives.