Transmission outage transparency discussion

Western Power Trading Forum

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RESERO

CAISO's current transmission outage rules

- Requires outages that may affect CRR revenue adequacy to be submitted for approval no less than 30 days in advance of the first day of the month of the outage (9.3.6.3.2 and 35.4.3)

- Posts daily snapshot of transmission outages that start within the next seven days

- Posts snapshot of all transmission outages modelled by the monthly CRR model prior to nomination windows opening

CAISO's transmission outage transparency could be improved

1. Improve outage data clarity and format

   – Match equipment names in the full network model

   – Indicate whether outage represents a piece of equipment that is out-of-service

2. Increase transparency by posting all transmission outages regardless of when the outage is scheduled to begin

   – WPTF seeks MSC opinion on whether there is reasonable cause to limit outage posting horizon

Posting outages consistent with common practice

- WPTF proposes the ISO posts each day all transmission outages without a time horizon limitation
  - Outage report dates can be estimated values only
  - Outage report would not be binding
- Majority of other ISO's post transmission outages without a time horizon limit

Transmission outage time horizon by ISO

RTO	Reporting Updates	Outage Horizon
MISO	Hourly	None
CAISO	Daily / Monthly	7 days / 30 days
NE-ISO	Daily	None
PJM	Hourly	None
NY ISO	Daily	None
SPP	Hourly	None
ERCOT	Hourly	None

*References in slides 10 & 11

Benefits of outage transparency – improve risk management and hedging strategies

- Allow resource owners to better understand and mitigate the deliverability risk of AS and energy schedules, i.e. an outage might impact the ability of a resource to source contracted AS and energy

- Help rationalize the cost of hedging products as actual risks can be measured more accurately in the cost of products

- Incent forward contracting as market participants would no longer need to wait seven days prior to trade settlement in order to have the best available outage information

The ISO has been hesitant to increase outage transparency due to DMM concerns

- We understand there are no technical objections to increasing outage transparency; however, the DMM has expressed concerns with the WPTF proposal

- DMM posits that posting outages will potentially increase CRR revenue inadequacy because it will allow entities to target modeling discrepancies between the CRR network model and day-ahead model

The DMM's concerns seem unlikely to materialize

- All outages that may affect CRR revenue adequacy are required to be submitted prior to when monthly outage snapshot is posted; therefore there is only a very small subset of impactful outages that might become available after the "snapshot" is published, but before auction close

- Transparently posting outages may decrease entities ability to target discrepancies because information will be publically available to all CRR participants

- Additionally, transparency is likely to cause discrepancies to be priced into the auction prices theoretically yielding little to no net impact CRR revenue inadequacy when taking into consideration auction revenues

WPTF seeks MSC's opinion on the following proposal

- Propose the ISO post all transmission outages without a time horizon limitation
  - Outage report dates would be estimated values only
  - Outage report would not be binding
- No tariff changes needed
- Benefits strongly outweigh the potential costs

References

- **MISO BPM 008 Outage Operations**
  - https://www.misoenergy.org/MarketsOperations/Pages/OutageCoordination.aspx
  - 6.2 Outage Scheduler MISO's OS is the application for defining and maintaining equipment outage requests and schedules in a central repository for access by other applications. The OS is integrated with NERC SDX – posting outages to the NERC SDX and retrieving external outages on an hourly basis. A planned outage report is also developed from the OS database and posted to MISO's OASIS to meet FERC requirements. The planned outage report only contains transmission outage schedules; generation resource outage schedules are not posted. Once an outage has been entered it is available on the report after the next hourly update.

- **NYISO**
  - http://www.nyiso.com/public/markets_operations/market_data/power_grid_data/index.jsp

- **PJM Manual 03**
  - http://www.pjm.com/~/media/documents/manuals/m03.ashx\
  - All planned transmission outages will be posted on OASIS within 20 minutes of Transmission Owner submittal of the outage through the PJM eDart system, with further updates as new information is provided in eDart system

References, cont.

- **ERCOT protocols section 3**
  - http://www.ercot.com/mktrules/nprotocols/current
  - 3.1.5.13 Transmission Report ERCOT shall post on the MIS Secure Area: (a) All proposed Transmission Facilities Outages that have not yet been approved or rejected within one hour of receipt by ERCOT; and (b) Any approved, accepted or rejected Transmission Facilities Outage within one hour of approval, acceptance or rejection of the Outage.

- **SPP outage report**
  - https://sppoasis.spp.org/documents/Trans_Out.cfm
  - at the link shows outages planned to start all the way into 2016; many of which are in the study and approval phases

- **ISO-NE outage report**
  - http://www.iso-ne.com/isoexpress/web/reports/operations/-/tree/long-trm-out-rpt
  - at the link shows outages planned to start all the way into 2016; many of which are in the study and approval phases

References, cont. 2

- 2015 CRR and monthly outage snapshot schedule: http://www.caiso.com/Documents/2015MonthlyCRRAllocation_AuctionSchedule_Jan-Dec.pdf

- Tariff section 36.4.3: http://www.caiso.com/Documents/Section36_CongestionRevenueRights_Oct1_2014.pdf

- Tariff section 9.3.6.3.2: http://www.caiso.com/Documents/Section9_Outages_Dec1_2014.pdf