J.P. Morgan Comments on CAISO Straw Proposal on Data Release & Accessibility *Phase 1: Transmission Constraints*

Submitted by	Company	Date Submitted
Steve Greenleaf (916) 802-5420	J.P. Morgan	December 16, 2009

General Comments

J.P. Morgan Ventures Energy Corporation and BE CA, LLC (collectively, "J.P. Morgan") appreciates this opportunity to provide comments on the California ISO's (CAISO's) December 3, 2009, Straw Proposal entitled Data Release & Accessibility *Phase 1: Transmission Constraints* ("Straw Proposal").

As stated in J.P. Morgan's November 23, 2009, comments on this matter, transparent markets facilitate better risk management and lead to greater liquidity. As market results become more consistent and predictable, market participants can better assess and manage the risks of market participation and thus are likely to increase their participation in the market. In its earlier comments, J.P. Morgan stated that the central elements of the CAISO's information release policy should be for the CAISO to provide:

- a clear explanation of all CAISO operating requirements, procedures and practices. This should include the appropriate release of procedures that are currently not public, with only specific market sensitive information redacted (as opposed to the entire procedure);¹
- a detailed description and explanation of all constraints, including nomograms², and contingencies modeled in the CAISO's market software (IFM, RUC, RTM and CRR);
- 3) a detailed description and explanation of all constraints, including nomograms, and contingencies *not* presently modeled in the CAISO's market software and an assessment of whether such constraints can be

¹ J.P. Morgan notes that the Full Network Model Business Practice Manual (FNM BPM) Section 2.1 (p.13), states that, "CAISO Operating procedures define constraints other than thermal limits of individual network branches, and state the conditions in which the constraints are valid, including variation by season, time of day, temperature, wind speed, existence of outages, market time horizon, etc." J.P. Morgan requests that a list of such operating procedures be provided and, if not already, such procedures be made public or available to market participants.

² Per the CAISO's request on p.18 of the Issue Paper, J.P. Morgan requests that a general description of all operating nomograms be provided and that the CAISO indicate whether such nomograms are modeled, or not, in the market software and whether such nomograms are enforced on a daily basis.

modeled and a schedule when they may be modeled. This would include a detailed list of the constraints that the CAISO is unable to enforce due to a lack of telemetry³;

- 4) As contemplated by the CAISO (Issue paper at p.17), a "Default Constraint List" that would be updated each time the CAISO's database model is updated. J.P. Morgan assumes such a list would be similar to that purportedly contained in CAISO Operating Procedure M-405 Attachment A (See also footnote 5).
- 5) Daily after-the-fact provision of what constraints were or were not enforced in the CAISO's day-ahead market on that day. Such reports would include a reconciliation with the "constraint enforcement adjustments" made in the D+2 and D+3 timeframes and the reasons for such adjustments⁴ (J.P. Morgan believes this is consistent with the "All Constraints List" discussed by the CAISO on p. 17 of the Issue Paper);
- 6) A periodic assessment and public report of the "Lessons from Market Results". Per FNM BPM Section 2.1.1.5, the CAISO uses market results to determine whether to enforce certain constraints or not. While J.P. Morgan presumes such assessments factor into the "constraint enforcement adjustment" referred to in (4) above, J.P. Morgan also recommends that the CAISO issue periodic (e.g., quarterly) assessments to identify important trends or systematic issues with constraint enforcement, including those where there is insufficient telemetry (see FNM BPM Section 2.1.1.1);
- 7) Clear and transparent development, implementation and notification processes for implementing new constraints and making other changes to the CAISO's market models. Such processes would include a discussion with stakeholders in the appropriate forum (perhaps Release Planning workshops) regarding how the CAISO intends to model certain constraints and the supporting rationale for the proposed methodology. In addition, as part of or in addition to the CAISO's database model release process, the CAISO would notify market participants of the schedule for implementing identified new constraints, including appropriate testing and market simulation activities.

The provision of such information is necessary for market participants to understand CAISO market outcomes. J.P. Morgan continues to recommended that the above information requirements be codified in the CAISO Tariff.

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³ See Issue Paper p.12 (bullet 8) and FNM BPM Section 2.1.1.1.

⁴ See Issue Paper at p.11 and FNM BPM, Section 2.1.1. In addition, J.P. Morgan notes that while the CAISO Issue Paper at p.11, indicates that CAISO Procedure M-405 defines the list of base contingencies that are activated all the time as default, the CAISO does not appear to make the list (contained in Attachment A to M-405) publicly available.

The CAISO's Straw Proposal outlines certain commitments regarding the release of specific information. J.P. Morgan generally supports the CAISO's proposal and offers the following specific comments.

CAISO Proposal Regarding Changes in Constraint Management:

With regard to advance notice requirements regarding the modeling and implementation of new constraints in the CAISO's market software, the CAISO proposes the following:⁵

- A new Full Network Model (FNM) is dropped into production generally every 4 to 8 weeks. To the extent feasible, the CAISO will issue a Market Notice ten (10) days before implementation of a new FNM Database in the market software.
- 2. If the list of changes is different when the model is deployed, an unlikely but possible event, to the extent feasible, the CAISO will issue a Market Notice on the Trade Day the model goes into effect.
- 3. If once a Market Notice is provided and the deployment date changes, the CAISO will provide a new Market Notice with the revised date. In some instances, the CAISO has needed to move [sic] the deployment date for various reasons, including but not limited to, a change required in the model, a software issue, a new issue is raised in end-to-end testing or events on the real-time grid.
- 4. In some instances, primarily due to operating issues, the CAISO may need to add a new constraint or contingency into the model in between FNM Database builds. To the extent possible, the CAISO will notify participants in advance if additional changes will be made to the topology. These types of changes are changes that are highly likely to become a permanent change in the next FNM Database build. The CAISO will make every effort to provide participants with the ten days advance notice prior to deployment into production. However, in some instances the event that requires the new constraint or contingency may not provide such lead time due to reliability issues. In the case where the CAISO cannot provide ten days notice, the CAISO will provide notice to the participants as soon as possible outlining the new constraint or contingency.

J.P. Morgan supports the CAISO's proposal to issue a market notice ten days prior to implementation of a new FNM Database and implementation of a new constraint or contingency in the market model. In addition to notification, J.P. Morgan recommends that the CAISO also provide a detailed description of the change(s) and the reasons they are being implemented. Such information could be provided as "release notes" with the market model. In addition, as stated in item (7) above, J.P. Morgan recommends that, prior to implementation, the CAISO facilitate a discussion with stakeholders in the appropriate forum (perhaps

⁵ Straw Proposal at pp. 5-6.

Release Planning workshops) regarding how the CAISO intends to model the constraint(s) at issue and the supporting rationale for the proposed methodology.

CAISO Proposal Regarding Network Terminology or Nomenclature

The CAISO proposes to explore the possibility of creating additional data mapping that would correlate the transmission facilities in outage reports with the proposed constraints list. The CAISO further states that it will strive to evolve the data and nomenclature to use consistent naming conventions and common data elements that could be eventually linked between outage information and other data. The CAISO states that the process to coordinate the data will occur over a longer period of time and will likely occur in incremental steps.⁶

J.P. Morgan supports the earlier comments made by DC Energy, Reliant and Calpine on this matter. J.P. Morgan also supports the CAISO's commitment to address these issues. As understood by J.P. Morgan, one prerequisite to the daily pre-market release of information regarding the constraints and contingencies and related limits that are to be enforced or not in the market model is that CAISO operators use consistent terminology and accurately label new/modified constraints so that the appropriate local market power mitigation measures will apply to those constraints in the CAISO's market runs. If that is the case, then the consistent use of the same network terminology and nomenclature across CAISO systems (e.g., correlation of the transmission facilities in the outage report (SLiC) with the constraints list in the FNM) is critical. J.P. Morgan urges the CAISO to expeditiously address these issues so that all necessary information can be released to the market in a timely and accurate manner.

CAISO Proposal Regarding Constraint and Contingency Lists

The CAISO proposes to create a Daily All Constraints List for information associated with the Day Ahead Market.⁷ The information will be published daily at the close of the Day Ahead Market. The list would include information on:

Flowgate Constraints - Name of the flowgate. Type of flowgate: line, transformer, phase shifter holding the controlling flow, series device (capacity reactor), or transmission corridor. Enforcement status and competitive constraint flags (yes/no).

Branch Group Constraints - Name of the branch group. Equipment Type: line or transformer. Station name, voltage level, and equipment name.

Nomogram Constraints - Nomogram name, the resource name, the coefficient, the corridor name, the flowgate, and the station name. Enforcement status and competitive constraint flags (yes/no).

Transmission Contingencies – Contingency title, enforcement status flag (yes/no), zone, Equipment Station, Equipment Voltage, PTI4 From Bus

 $^{^{6}}$ Id. at pp.6-7.

⁷ Id. at pp.8-9 and Appendix B.

Number, PTI From Bus kV, PTI To Bus Number, PTI To Bus kV, PTI Circuit ID, and Equipment Status.

In addition, the CAISO proposes to provide information regarding Transmission Corridor Constraints with each model build.

J.P. Morgan supports the CAISO's proposal to release the identified information and in the format proposed by the CAISO. However, consistent with the discussion at the December 10, 2009, stakeholder meeting, J.P. Morgan supports release of the above information prior to the market run and perhaps consistent with CAISO timeline for updating the market model in the D+2 and D+3 timeframe. In addition, J.P. Morgan recommends that, consistent with the views expressed by WPTF and PG&E, the CAISO also include in the above information the actual limits associated with the identified constraints. Absent provision of information regarding the established limits, market participants may be unable to ascertain the impact of enforcing or not the identified constraint.

While J.P. Morgan's previous comments supported release of the aboveidentified information after the market runs, that position was informed by CAISO concerns about release of information prior to the market run. Specifically, that such information may be used to manipulate the market. As stated above, J.P. Morgan now understands that the CAISO may be amenable to the release of this information prior to the market run as long as the applicable market power mitigation measures are in place and effective, i.e., the CAISO's LMPM measures are applied to all constraints deemed non-competitive, include\ding those adjusted due to outages, derates and other factors. Notwithstanding J.P. Morgan's position that such information be provided prior to the market run, J.P. Morgan recommends that the CAISO also provide post-market information regarding the constraints/contingencies enforced in the market.

Finally, and in summary, J.P. Morgan renews its earlier request that the CAISO adopt an information release policy that provides for the release of information in various timeframes and on a regular basis. Specifically, as it does today, the CAISO should release on at least an annual basis the CRR FNM, including a list and explanation of the "default" constraints included in such model and any relevant changes thereto. On a 6-8 week basis consistent with the update and release of the FNM Database, the CAISO should publish and identify and describe the defaults constraints/nomograms/contingencies modeled and included in the database, as well as all relevant changes/updates to the database. Consistent with the comments above, the CAISO should release, prior to the market run and in the D+2 and D+3 timeframe, all updates/changes to the market model. Such changes would include an identification of known outages and other CAISO-determined limit adjustments. Consistent with item (6) on page 2 above, J.P. Morgan recommends that the CAISO conduct a periodic assessment to identify important trends or systematic issues with constraint enforcement, including those where there is insufficient telemetry (see FNM BPM Section 2.1.1.1).

Information on Binding Constraint and Cause

The Straw Proposal states that the CAISO agrees with stakeholder comments that information on the nature and causes of binding constraints be provided to market participants. The CAISO states that, at this time, the CAISO is exploring how this data can be provided.

J.P. Morgan supports the comments and recommendations put forth by Powerex, Dynegy and SCE on this issue. Specifically, J.P. Morgan supports the recommendations that the CAISO provide information on each binding constraint and whether it occurred for the base case or because of a specific defined contingency. Included in that information would be the time, the duration, the congested facility, the facility whose contingency caused the congestion (if applicable) and the congestion shadow price. Moreover, SCE's proposed format appears workable.

Constraint Management Guidelines

Attachment B to the CAISO's Straw Proposal includes draft CAISO Tariff language that attempts to codify the CAiSO's high-level guidelines regarding constraint management. J.P. Morgan generally agrees that the proposed language is consistent with the CAISO's representations and actual practice regarding *how* the CAISO will manage constraints, i.e., the general circumstances under which and the mechanisms it will use to manage constraints. However, the proposed language could provide greater detail on: 1) the criteria the CAISO will use to determine whether and when to exercise the measures discussed in the draft language; and 2) the CAISO's obligations to release information regarding the actions taken by the CAISO.

With respect to item (1), J.P. Morgan recommends that the CAISO make explicit that it will not consider market/price impact when evaluating whether or not to enforce a constraint or adjust a limit in the market model. While J.P. Morgan acknowledges that the proposed tariff language explicitly states that the CAISO will rely on "good utility practice" when managing constraints, the language also states that the CAISO may or may not enforce constraints when CAISO markets produce "results that are inconsistent with observed or reasonably anticipated conditions." J.P. Morgan is concerned that the language could be interpreted as allowing adjustments if market price results are not as expected.

Regarding item (2), J.P. Morgan recommends that the CAISO codify the sevenpart guidelines outlined above and in J.P. Morgan's previous comments. The provision of such information is critical to understanding the CAISO's constraint management practices.

Conclusion

J.P. Morgan generally supports the CAISO's Straw Proposal and the measures detailed therein. The CAISO's proposal is a step in the right direction. However, while the CAISO's proposals are necessary elements of data release and

accessibility policy, they are not sufficient. As detailed in the above comments, J.P. Morgan recommends that the CAISO modify and expand its proposal.

J.P. Morgan appreciates the opportunity to provide these comments and encourages the CAISO to be a leader among RTOs in the area of data release and accessibility.