CAISO EIM Non-Conforming Load FAQ

Document Owner: **Alai, Joanne**

	Technology	Template Version:	1
California ISO		Document Version:	2.0
CAISO EIM Non-Conforming Loads FAQ		**Date Created:**	**12/3/2020**

REVISION HISTORY

VERSION NO.	DATE	REVISED BY	DESCRIPTION
1.0	8/20/2020	Kenneth Swain	Document created for EIM entities.
2.0	12/3/2020	Nancy Strouse	Edited and updated template.

TABLE OF CONTENTS

Purpose

The purpose of defining and segregating non-conforming loads from the historical load forecast is to remove anomalies (noise) from the dataset, thus improving forecast accuracy. There is not a hard and fast rule in delineating non-conforming load; i.e., it is a qualitative and iterative process that is discussed between the EIM entity and CAISO. The CAISO can provide guidance but ultimately it is the EIM entity that must make this determination.

Frequently Asked Questions

1. What is the Criteria for Designating Non-Conforming Loads?

CAISO has provided a generic guideline considering industrial (or other) loads which account for approximately 5% of the EIM entity's total system load as potential candidates to be modeled as non-conforming. Furthermore, Non-conforming loads tend to not follow a typical load pattern; i.e., patterns based on weather and temperature profiles. Loads that meet these criteria are candidates for being classified and modeled as non-conforming.

In CAISO's experience, usually the EIM entity's Operations personnel already have a clear indication of existing non-conforming loads based on their system operations' considerations and mitigate accordingly. If the BA is typically not treating the load (industrial, e.g.) separately with reference to scheduling and forecasting, then it may not need to be treated as non-conforming.

2. Does the CAISO have any documents to guide on-boarding EIM entities?

This document serves as an additional artifact on the non-conforming loads in addition to the generic 5% criterion listed in the readiness criteria.

3. If an EIM entity does designate a load as non-conforming, what are the steps that need to be followed to account for this classification?

- The load needs to be represented in the network model.
- The load needs to be represented in the Master file as DDR.
- The DDR representation can be at an aggregate level with one DDR to many loads in the network model mapping or at an individual level – one DDR to one load in the network model mapping.
- The load needs to be telemetered (at an individual and aggregate level if applicable).
- The telemetry on the load needs to be associated to the network model in the CIM file and ICCP mapping file.

Owner: Alai, Joanne   Program Management Office

4. Do we need to remove the load from the historical actual data and re-submit?

Yes. The non-conforming load(s) need to be excluded from the historical actual data. The data for the non-conforming loads is to be provided separately.

5. What does CAISO want us to do with the non-conforming load historical data?

Provide it separately.

a) If we do provide it separately and have more than one non-conforming load, should it be aggregated or provided separately?

Separate for each non-conforming load.

6. Do we need to identify specific Loads in the Network Model associated with this non-conforming load? Station? Load ID?

Yes, station name and load RDFID.

7. Do we need to provide the telemetry for each of these loads to CAISO; i.e., to identify an ICCP point?

Yes.

8. Are we expected to provide a forecast for the non-conforming loads to CAISO as well as the actual? If so, what is the mechanism?

The resource will be modeled as a DDR, the entity will submit a base schedule for the resource in BSAP representing the hourly load profile.

9. Are you requiring all Non-conforming Load to be registered as a Dynamic Demand Resource (DDR), even if they are not able to participate? (Significant impact to software)?

It is Dispatchable Demand Response (DDR) resource. They are modeled as negative GENs in the market. CAISO does not usually expect Non-conforming loads to participate, but this allows

---

Owner: Alai, Joanne   Program Management Office

the system to take the energy consumption - not part of the system load into consideration, and will be part of the hourly balance of the EIM entity.

10. What is CAISO going to be providing in terms of the BA Load Forecast via OASIS?

a) If the non-conforming loads are not DDRs, then is the non-conforming and the weather-dependent conforming load going to be added together for the OASIS LF Postings?

Usually, yes. The load profile that the entity provides CAISO will contain the Non-conforming load; our forecasting system will attempt to forecast for this, treating it like a normal BA load impacted by weather, temperature, day of the week, and holiday.

b) Will it just be the weather dependent conforming load available in OASIS, which means our software would have to add the non-conforming to the number received from CAISO?

No. CAISO's system will treat it as weather base BA load. Once it is not a DDR, it will be part of the BA load if the non-conforming loads are DDRs.

11. Seems like the forecast in OASIS is just weather dependent because the DRRs are negative generation in the base schedules. Do we need to balance to the conforming load plus the negative generation?

Yes. The system will compare hourly load to sum of gen+ sum of NCL+ interchange.

12. What does the Short-term Load Forecast represent in BAAOP if we have non-conforming loads? (Same as question as number 10 above but for real-time) Are you adding the weather conforming forecast and non-conforming telemetry together?

The short-term forecast in BAAOP is only the weather-based forecast. The Non-conforming load(s) will be represented as resources.

13. How would outages to these loads be recorded if required to be a DDR?

They will be able to provide resource outages in addition to the transmission outages.

Owner: Alai, Joanne   Program Management Office

Doc ID: GNFDMDEHU6BB-46-19   Page 6 of 6