Energy Emergency Alert 3 Report

NERC requires that a deficient control area or load-serving entity declaring an Energy Emergency Alert 3 must complete the following report. Upon completion of this report it is to be sent to the reliability coordinator for review within two business days of the incident.

Requesting Control Area: Comision Federal de Electricidad (CFE)

Entity experiencing energy deficiency (if different from Balancing Authority):

Date/Time Implemented: 8/29/2013 11:38 PDT (CFE notified WECCRC to request EEA3)

Date/Time Released: 8/29/2013 15:05 PDT (EEA 3 to EEA 0)

Declared Deficiency Amount (MW): 500 MW

Total Energy supplied by other Balancing Authority during the Alert 3 period: 280 MW during HE 12 & HE 13 and 150 MW during HE15

The forecasted load of the system for August 29th was lower than normal for this time of the year, even though, in the coast, the actual temperature was above normal but in the valley (desert), where the load is more sensitive to temperature, was below than normal for this time of year. In fact, CFE had 2 units in cold reserve (160 mw each one): one in warm condition and the other in cold.

On 08/29/2013 at 10:32 PDT CFE loss La Rosita Power (CCM) Steam Unit (U04) loaded at 230 MW due to differential H2 seals oil pressure. This unit is part of a 3X1 combined cycle. For this trip CFE activated its contingency reserve, requested emergency assistance from the CAISO and schedule energy from the market. During Reserve Restoration Period, La Rosita Power (CCM) informs CFE that Unit 01 (1C), combustion turbine, has to be taken out of service due to cold reheat broken pipes. Unit was put out of service at 11:50 PDT. For this event, the contingency reserve was still on service and energy from the market were not granted; several factors added to this condition, such as:

Effective 08/29/2013 at 10:15 PDT The CAISO declared a Southern CA Region RESTRICTED MAINTENANCE OPERATION for the period from 08/29/2013 09:37 trough 08/29/2013 23:59. Reason The ISO was anticipating high loads and temperature across the San Diego Region.

These combined outages represented a generation resources loss of 500 MW. A block of 100 MW of load to be shed was account as non-spinning reserve to comply with Required Operative Reserve. Any other trip or forced generation outage, which might require CFE the deployment of non-spinning reserve, will be cover partially with load shedding.
If “Energy Deficiency Alert 3” had not been called, would firm load be cut? If no, explain: Yes

Explain what action was taken in each step to avoid calling for “Energy Deficiency Alert 3”:

1. All generation capable of being on line in the time frame of the energy deficiency was on line (including quick start and peaking units) without regard to cost. Yes.

2. All firm and nonfirm purchases were made regardless of cost. Yes.

3. All nonfirm sales were recalled within provisions of the sale agreement. CFE did not have nonfirm sales in this season.

4. Interruptible load was curtailed where either advance notice restrictions were met or the interruptible load was considered part of spinning reserve. Not applicable. No non-firm load exists on CFE’s system.

5. Available load reduction programs were exercised (public appeals, voltage reductions, etc.). No, no load reduction programs were utilized.

Operating Reserves being utilized. Yes, all of it. Even a block of 100 MW of load to be shed was account as non-spinning reserve to comply with Required Operative Reserve.

Comments:
11:38 PDT WECCRC implemented EEA 3 upon request from CFE given the generation resources shortage.
13:46 PDT La Rosita Power (CCM) Steam Unit (U04) synchronizes to CFE’s system.
14:00 PDT CAISO provides Emergency Assistance Energy: 330 MW for HE 15.
14:02 PDT La Rosita Power (CCM) Steam Unit (U04) reaches Pmin.
14:03 PDT CAISO’s Emergency Assistance Energy adjusted from 330 MW to 150 MW for HE 15.
14:52 PDT Presidente Juarez Unit 05 (thermal, 160 MW) synchronizes to CFE’s system.
15:05 PDT WECCRC released EEA 3 to EEA 0.

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