

Terra-Gen Dixie Valley, LLC

August 2014

DOE Monthly Report

FROM: Douglas Brown – Site Manager

DATE: September 10, 2014

PRODUCTION AND GENERATION DATA

Data for insertion into DOE report		
Binary Production	August	YTD
Gross Generation MWHs	933	17,290
Site Load MWHs	436	4,770
Net Generation MWHs	498	12,520
Average Monthly Net Generation MWs	0.67	2.17
Hours in Service	350.65	4,064.73
Availability	47.13%	70.25%

SUMMARY

Power Plant

During the month of August there were 393 hours of unscheduled outage time related to high ambient temperature and no net power exports.

The unit is overall limited by brine handling capabilities and air cooled condenser heat rejection.

The brine pump discharge rating / motive force to move hot water flow through the heat exchangers cannot overcome the high differential pressure (post heat exchanger cleaning) with the addition of a brine line booster pump.

Scheduled Outages:

There were no scheduled outages during the month.

Unscheduled Outages:

There were 24 days related to high ambient temperature that were classified as unscheduled outage time. The total off line time was 393 hours. The rotation of fan motors to the repair facility for inspection and subsequent warranty work for the lower bearings significantly contributed to the low availability. All fans were back on site and installed by August 14th.

A warranty claim for the ACC lower motor bearings had been submitted based on grease analysis. The response from TAS and SAIC has not been proactive. The issue was identified in May 2013 follow preventive maintenance greasing and subsequent grease analysis that clearly show metal wear and overheated grease. TG purged all bearing with new grease in October 2013 and sampled purged grease. All sample results yielded high metal wear and overheated grease.

F cooling tower fan motor tripped on vibration and was removed and sent to Reed Electric for inspection on June 27. The lower bearings had failed. Following this inspection, the remainder of the fans on the binary were removed and sent to the shop for inspection. All had bad lower bearings. Baldor did cover the bearings and shop labor under warranty.

TG had Reed Electric install bearing and winding RTD's for monitoring.

GEA, the cooling tower manufacturer, Baldor and TAS were on site the week of June 23 to install air ducts on the ACC fan motors to increase air flow. The grease analysis on each motor as well as air flow data collected previously clearly show insufficient air flow to the motors. Air flow data was collected, though somewhat erratic and sent to GEA and Baldor.

Curtailments:

No curtailments affected the binary production during the month.