## **Bottle Rock**

 The Commission should approve the amended Bottle Rock PPA to support the continued operation and expansion of a baseload geothermal facility in Lake County, California.

• Technology: Geothermal

• Size: 10-25 MW, expected annual production – 85-219 GWh

Price: \$113/MWh

• **Delivery Term:** 20 years (6 years initially, extended to 20 upon performance)

Project viability:

- The Project is operational and has operated at high levels of availability since declaring commercial operation in 2007. Under the amended PPA, PG&E expects the Project to continue to operate at high levels of availability.
- O The amended PPA requires increased output from the Project as well as an investment of up to \$30 Million in steam field expansion and improvement of the Project as the primary means for increasing output. PG&E has the right to terminate if Bottle Rock does not increase production to 15 MW by March 2018. In addition, if Bottle Rock does not achieve 15 MW of sustained annual energy production by this time, it must either demonstrate at least \$30 million of investment or pay damages equal to \$30 million less the amount invested.
- o Bottle Rock uses a well-known and proven geothermal generation technology that has been in operation since 1985
- o Bottle Rock is in a known geothermal area, the Geysers Geothermal Field
- In-state resource: The Project is within California and Bottle Rock is required to maintain a minimum of 25 full time equivalent local in-state jobs in the economically depressed Lake County region. Bottle Rock has estimated the Project will also maintain 50 indirect jobs.
- **Integration:** The Project is a baseload facility and as such, does not present the same integration issues that intermittent facilities present.
- **Transmission Costs:** The Project is operational, and does not require any additional transmission network upgrades.
- Local RA: The Project is located in a desirable part of Northern California, where it provides long-term local resource adequacy benefits.
- **PTC:** The amended PPA will enable Bottle Rock to operate at cash flow positive, qualifying the Project for tax equity financing and allowing the plant to monetize both its PTCs and depreciation to finance expansion activities