

### **Bottle Rock PPAs Pricing History**

- The original Bottle Rock PPA is one of the lowest priced RPS PPAs that PG&E has signed. PG&E has been receiving deliveries of geothermal energy under this PPA at a levelized price close to \$70/MWh since Bottle Rock repowered the former DWR facility in 2007.
- In 2008, Bottle Rock approached PG&E to amend the 2007 PPA stating that, due to large cost increases and geothermal well losses, the 2007 PPA terms did not allow for future geothermal well development. As a result, the parties negotiated and executed the 2010 PPA.
- The 2010 PPA had a complex pricing structure that provided higher payments as the production of the facility increased. Under the 2010 PPA, if the production of the facility exceeded 15 MW, Bottle Rock's payments for volumes greater than 15 MW were based on a formula that increased with more deliveries to a cap of \$134/MWh. This Commission approved PPA provides that if plant's production level increases to 55 MW, it will be paid a levelized price of \$118/MWh.
- This specific pricing structure is unique and was intended to provide an incentive for increased production given the capital investment required to improve a geothermal facility. The challenge with this pricing structure is that it did not facilitate sufficient financing to actually increase the plant's production.
- After the CPUC approved the 2010 PPA, Bottle Rock made efforts to raise the capital necessary to expand the steam field and increase generation as required in the 2010 PPA. Bottle Rock was unsuccessful in raising the required capital as investors were concerned about several issues: (1) the pricing structure in the 2010 PPA only allowed for higher payments after the steam field had been expanded, (2) significant accrued under-performance damages were not waived in the 2010 PPA, (3) a lawsuit had been filed that challenged Bottle Rock's use permit on a parcel of land leased and targeted by Bottle Rock for expansion (lawsuit dismissed May 2012), and (4) Bottle Rock did not have an agreement for waste water, which it would need to sustain higher levels of output over the long term (water rights secured March 2012).
- As a result, while Bottle Rock has 30 months from CPUC approval to do so, it has not yet reached the production level necessary to receive higher payments under the 2010 PPA. Since the 2010 PPA was executed, Bottle Rock has delivered an average of 77 GWh of geothermal energy to PG&E's customers per year. Deliveries of at least 133 GWh/year were necessary for Bottle Rock to begin receiving higher payments under the 2010 PPA. The pricing provisions in the 2007 PPA, therefore, have been operative, even though the 2010 PPA remains valid.
- Bottle Rock approached PG&E in 2011 to discuss alternate contract terms that would improve Bottle Rock's chances of obtaining financing for steam field expansion, and that would support the facility's continued operation. Bottle Rock indicated that without a price amendment, the plant would shutdown given the significant losses being incurred under the

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2007 PPA pricing provisions. After extensive negotiations, the parties agreed to the 2012 PPA to support the facility's continued operation and expansion. In exchange for the front-loaded price adjustment, Bottle Rock agreed to a lower maximum saleable output and remains subject to meeting minimum performance metrics over the first 6 years of the PPA.

- The following table sets forth the levelized prices resulting from the pricing provisions in the current PPAs and the 2012 PPA.

Contract MW	10	15	16*	20	25	55
GWh/yr	83	125	133	167	208	458
Current Contract(s)	\$73/MWh	\$73/MWh	\$81/MWh	\$88/MWh	\$98/MWh	\$118/MWh
Proposed 2012 PPA	\$113/MWh	\$113/MWh	\$113/MWh	\$113/MWh	\$113/MWh	N/A**

- PG&E's advice letter described the customer impact of the 2012 PPA as compared to the current price of \$73/MWh recognizing that Bottle Rock has not yet reached the production level necessary to receive higher payments under the 2010 PPA and Bottle Rock represented that it could not reach these production levels with the pricing structure in the 2010 PPA, as discussed above.

\*The facility must sustain a 95% capacity factor to receive this pricing.

\*\* The 2012 PPA is up to 25 MW.