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June 2, 2017

Mr. Steve Berberich
President and Chief Executive Officer
California Independent System Operator
250 Outcropping Rd
Folsom, CA 95630

Dear Mr. Berberich, Steve

Given deteriorating market dynamics, substantial capital required to maintain availability, and the absence of compensatory contracts, Calpine is currently assessing whether to make Metcalf unavailable for CAISO dispatch effective January 1, 2018. Metcalf Energy Center ("Metcalf") is in a local, constrained sub-area of the Greater Bay Area.[1]

In order to facilitate Calpine's operational planning, capital commitments and approvals needed for the potential suspension of operations of the facility, we ask that you direct CAISO staff to undertake the studies necessary to confirm that the absence of Metcalf generation will not create unacceptable reliability impacts.[2] We ask that the results of that review be communicated to Calpine as soon as practicable.

The CAISO is well-aware of the financial distress that is mounting upon natural-gas fired resources. In fact, the Department of Market Monitoring indicates that the preponderance of zero (or negative) marginal cost resources have driven energy margins for combined-cycle gas generation facilities (CCGTs), like Metcalf, down to roughly $1 per kw-month. Resource Adequacy payments have not risen concomitantly, in part because the local RA requirements are enforced by the CPUC at the aggregate (and oversupplied) level of the "Greater Bay Area," and not at the constrained local sub-area level in which Metcalf resides (the South Bay/Moss Landing sub-area).

In addition, Metcalf's key generating components (each of the two gas-turbines and the steam turbine) are all expected to require major maintenance, which is currently planned for spring 2018. Current estimates place the expenditures required to complete such major maintenance at well over $20 million. It would be economically irrational for Calpine to

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[1] Metcalf is a 2x1 combined cycle plant with an August NQC of 570 MW. The plant was commissioned and on-line in 2005 and uses reclaimed water for all cooling purposes.

[2] We are aware that there are other facilities in this constrained sub-area that will quickly be facing similar decision points, including at least the following Calpine facilities, which are nearing the end of their contractual commitments: 120 MW Gilroy Cogeneration (contracted through December 2018), 28 MW Agnews (contracted through Spring 2021), and 135 MW Gilroy Peakers (contracted through December 2021).

undertake that investment without a clear line-of-sight to compensation that yields capital recovery.[3]

Our expectations of compensation are clear – the prevailing RA market prices will not support continued operation of Metcalf. In fact, Metcalf has no RA contracts for any part of calendar year 2018 and we do not expect any such contracts to materialize. Of course, we will keep the CAISO apprised of any unexpected success we might have in contracting.

With these uncertainties evident, Calpine cannot and will not defer operational and capital decisions regarding Metcalf until late 2017. As we have informed you previously and again recently, we conclude that the provisions of the Capacity Procurement Mechanism (CPM) do not allow a sufficient planning period, or "runway" for such complicated and transformational activities, such as major maintenance, budgeting and personnel planning. As such, *we will not pursue such a CPM designation.*

We are aware, however, that if the CAISO determines that Metcalf is required for reliability, the CAISO retains the unilateral right to designate it as Reliability Must Run (RMR) under CAISO Tariff §41. As noted earlier, in order to provide for reasoned planning and coordination of activities, Calpine asks that the CAISO complete any reliability analysis and communicate the results to Calpine as soon as practical.

As always, we stand ready to meet with you when further discussions are advisable.

Mark

Mark Smith
Vice President, Governmental & Regulatory Affairs

cc Keith Casey, ISO

[3] We note that the CPUC once again has proposed to reject a multi-year forward RA procurement requirement.