



NASA Ames Research Center
Electric Power Office (EPrO)
Moffett Field, California 94035-1000

December 30, 2003

Reply to Attn of: FEF:213-8

Mr. Tom Carter, Power Operations Manager
Western Area Power Administration
Sierra Nevada Region
114 Parkshore Drive
Folsom, CA 95630-4710



Re: Comments on Federal Register Notice on Post-2004 Operational Alternatives

Dear Mr. Carter:

The NASA-Ames Research Center (NASA-Ames) is pleased to submit these comments on Western Area Power Administration's (Western) December 2, 2003 Federal Register Notice (FRN) regarding post-2004 operational alternatives. NASA-Ames commends Western for its extremely thorough analysis of its operational alternatives and supports the decision to negotiate a contract-based sub-control area with either the California Independent System Operator (ISO) or Sacramento Municipal Utilities District (SMUD). In NASA-Ames' view, a contract-based sub-control area that satisfies the conditions set forth in the FRN is the most-promising option available to Western and its customers at the present time. If, within a reasonable amount of time, Western is unable to negotiate an agreement that meets these conditions, NASA-Ames supports Western's commitment to proceed immediately to establish a Federal Control Area (FCA). We recognize that "remote" customers would not initially be included within a contract-based sub-control area or FCA. However, NASA-Ames urges Western to develop arrangements to include "remote" customers in whichever alternative is implemented at the earliest possible time. NASA-Ames also appreciates Western's recognition of the potential for substantial increases in transmission costs and cost shifts to customers not directly connected with Western's transmission system when Contract -2948A terminates. Since NASA-Ames and other "remote" customers will bear the brunt of the cost impacts, we urge Western to prevent or mitigate such cost shifts by whatever means are appropriate.

Background on NASA-Ames

NASA-Ames, located at Moffett Field, California, is a federal Preference power customer that operates one of the largest research laboratories in the United States. With over \$3.5 billion in capital equipment and 2,800 research personnel, NASA-Ames plays a central role in the nation's aeronautics and space programs and in conducting the leading-edge research and development required to support these programs. NASA-Ames is also the federal government's lead center for astrobiology and administers major research programs in the areas of nanotechnology, biotechnology and information technology; aerospace operations systems and aviation systems capacity; thermal protection materials and systems; atmospheric chemistry and physics; and flight simulation and wind tunnel facilities and testing.

For the past 50 years, access to cost-based federal power from the Central Valley Project (CVP) has been extremely important to NASA-Ames' ability to carry out these diverse federal research missions. Access to CVP power at stable rates will be even more important in the future as competition for scarce federal budgetary resources grows.

Comments on the Proposed Decision

The following sections provide NASA-Ames' comments on the FRN.

1. Selection Criteria. As discussed in the FRN, Western used five criteria to evaluate post-2004 operational alternatives: flexibility, certainty, durability, operating transparency, and cost-effectiveness. NASA-Ames believes that these were the right criteria to use in the evaluation process and that Western properly employed them in reaching its decision. Certainty and durability are of particular importance to NASA-Ames, nearly all of whose functions operate on a full-cost accounting basis. Under full cost accounting, NASA-Ames must be able to accurately project the costs of electrical power and other major inputs for its research departments and other functions. Stable and predictable power costs are especially important to the wind tunnels, which must be able to provide accurate cost estimates to military and private aerospace contractors in order to effectively schedule major wind tunnel tests.
2. Selection of a Contract-Based Sub-Control Area. Based on its analysis with respect to the above criteria, Western has rejected the No Action, Participating Transmission Owner (PTO), and Metered Subsystem (MSS) Alternatives and proposed to negotiate a contract-based sub-control area within either the ISO or SMUD control areas. To be considered by Western, the contract-based sub-control area must satisfy two critical conditions: (a) it must not place Western's relationship with the ISO under the ISO Tariff; and (b) the terms and conditions of the contract must not change during the life of the contract. NASA-Ames supports Western's conclusion that a contract-based sub-control area is the best alternative available at the present time. NASA-Ames agrees that it would not

be prudent to implement the No Action Alternative and that the PTO Alternative will not provide the cost certainty required by Western's customers.

3. Federal Control Area (FCA) Option. NASA-Ames appreciates Western's clear statement of the conditions under which it will consider a contract-based sub-control area with either the ISO or SMUD. If Western concludes that it is unable to negotiate an agreement that meets both of the conditions outlined above, NASA-Ames urges Western to immediately proceed to form an FCA. Given the very limited time available before the start of the Post-2004 Marketing Plan, NASA-Ames recommends that Western set a firm deadline for concluding an agreement and be prepared to terminate the negotiations if the deadline passes without an agreement. NASA-Ames also urges Western to continue to develop the infrastructure and other arrangements needed to establish an FCA, so that it can immediately pursue this option if negotiations with the ISO and SMUD fail.
4. Reliability. During the public process, the ISO and other parties raised several operational issues that, in their view, argue against the establishment of an FCA. Included was the concern that creation of an FCA could cause the electrical grid to be operated less reliably. NASA-Ames agrees with Western's conclusion that such concerns are baseless. As the FRN states, in the event an FCA is implemented, the operating issues raised by these parties, including the potential impacts on reliability, will be identified, analyzed, and mitigated, if appropriate, as part of the WECC/NERC control area certification process. Western is correct, therefore, in concluding that these issues are not matters of policy, but will be handled as a matter of meeting specific technical performance criteria.
5. Service to Remote Customers. In the analysis of the PTO, MSS, and FCA alternatives, Western states that,

"Under the terms and conditions of Contract 2948A, PG&E agreed to provide transmission service to Federal Project Use and Preference customers instead of the Federal Government constructing its own transmission system. Although this contract expires, since PG&E's actions precluded the Federal Government from constructing its own facilities, Western asserts that PG&E is responsible for assuring the delivery of Federal power at rates consistent with its embedded cost of service. Therefore, any cost increases for transmission service beyond those already established under the terms and conditions of Contract 2948A constitute a cost-shift to Project Use loads and Preference customers. Since PG&E is now paying those costs, costs to statewide ratepayers would not increase if the current arrangements continue" (FRN at p. 67427, 67431, and 67434).

NASA-Ames fully concurs in Western's assessment of the long-term nature of the commitments PG&E made in Contract -2948A. As a "remote" customer not directly connected with Western's transmission system, NASA-Ames has relied upon these commitments to receive its allocation of Preference power ever since Contract -2948A was implemented nearly forty years ago. NASA-Ames and other "remote" customers will bear the brunt of the increase in transmission costs and cost shifts that would result if PG&E is able to "walk away" from the historic commitments contained in Contract -2948A. NASA-Ames therefore appreciates Western's efforts to mitigate these potential costs shifts through whatever means are appropriate. NASA-Ames also urges Western to incorporate "remote" customers in whatever operational alternative is ultimately implemented for the Post-2004 period. While we recognize that, for practical reasons, "remote" customers would not initially be included in either a contract-based sub-control area or FCA, NASA-Ames urges Western to develop arrangements to include "remote" customers in whichever arrangement is implemented at the earliest possible time.

NASA-Ames looks forward to continuing to work with Western in executing the proposed decision and related matters in the coming months.

Respectfully submitted,



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