BERMAN ECONOMICS
The Berman Group

January 2, 2011

California Energy Commission
Dockets Office, MS4
RE: Docket # 10-IEP-1A
1516 Ninth Street
Sacramento, CA 95814-5512

RE: Docket # 10-IEP-1A
Final 2010 IPER Update Comments

Dear Chairman Douglas and Commissioner Byron:

Berman Economics is an economic consulting firm specializing in energy, environmental, and natural resource issues. Berman Economics also has substantial experience in electric utilities economics and investment decisions. Berman Economics is pleased to provide comments on the CEC's Final 2010 IPER Update for your consideration in advance of the January 12, 2011 Business Meeting. Our comments are based on analyses of the potential for substantial energy savings resulting from efficiency improvements on distribution systems generally, and on distribution systems of California utilities in particular.

Berman Economics notes that Senate Bill 1389 requires the CEC to conduct assessments of all aspects of energy industry supply, including delivery and distribution on California electric power systems. Indeed, the CEC specifically acknowledges this responsibility in its December 15, 2010 notice of its January 12, 2011 meeting to consider the adoption of the Final 2010 IPER Update. We note that the CEC has yet to conduct an assessment of California's electric distribution systems, and hoe that the CEC will commit to such an assessment in the near future.

The CEC explained that the 2009 IPER did not address distribution system efficiency because, "The 2007 IEPR dedicated a chapter to California's electric distribution system. The information covered and recommendations provided are still relevant and are not repeated in the 2009 IEPR." (2009 IEPR, page 204). However, although 2007 IEPR acknowledged that, "The distribution system accounts for a higher share of delivery losses than transmission, and may offer a significant opportunity for improvements in efficiency." (2007 IEPR, page 157), there was no further discussion of distribution system delivery losses or policies or programs to address those losses.

Our analyses, the details of which were separately provided to your staff, indicate that distribution transformer losses, averaging about 2 percent of total generation annually, were about 8.6 million mWh in California in 2007. More efficient transformers can save about 3 million mWh annually – the equivalent of 16 small power plants, based on CEC procedures used in evaluating the 2009 Appliance Efficiency Standards. This would also reduce carbon emissions by 1.8 million tons annually. California utilities purchase several 10s of thousands of distribution transformers annually.

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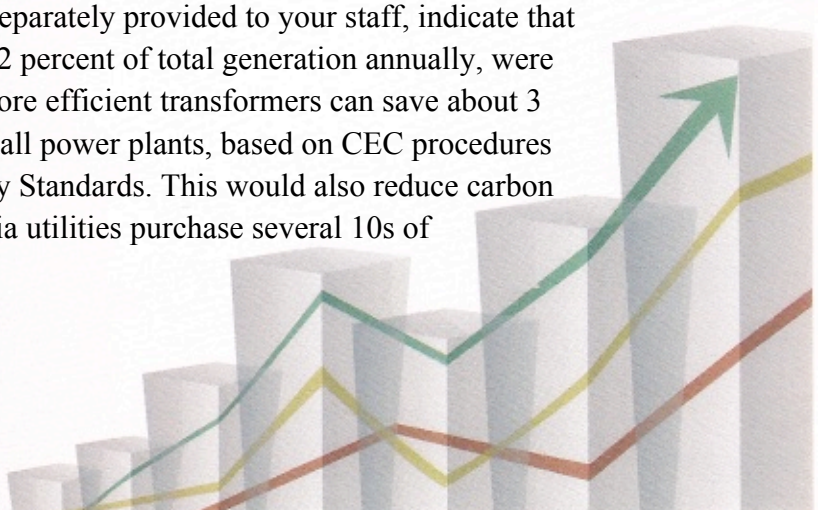

Berman Economics also included these observations in our comments the 2010 Update plan and in response to the Draft Scoping Order for the 2011 IPER. In response to our comments on the Draft Scoping Order for the 2011 IPER, the CEC explained that, "While the IEPR Committee has not explicitly included your suggestion to include the efficiency on the distribution systems within the Scoping Order itself, the Committee does intend to look at the distribution system as part of the IEPR's overall assessment of the infrastructure needs of the electricity system." However, the current staff draft gives no consideration to distribution system efficiency.

Reducing losses reduces fossil fuel consumption to the same extent as reduction in end-use demand, but requires no change in consumer behavior. However, in measuring energy efficiency improvements, California appears to measure only reductions in consumer demand; and does not appear to provide any credit towards energy savings targets for reduction in losses, even though such losses are typically easier to measure.

Although failure to acknowledge the benefit of reduced losses would not be expected to impact efficiency investments by California's municipally-owned utilities, failure to recognize loss reductions or enunciate a policy on avoiding losses where cost-effective may actually serve as a disincentive for California's investor-owned utilities. Because ratepayers and stockholders are the same for a municipal utility, minimizing long-run costs is a common interest. To the extent that investor-owned utilities can earn a higher return for stockholders in their unregulated investments, they have an incentive to avoid investment in regulated infrastructure as the additional fuel and generation costs are simply passed through to the ratepayer.

Indeed, our analyses show a sharp contrast in the purchasing policies of municipally-owned utilities versus IOUs. Both SMUD and LADWP include the capitalized values of both no-load and load related losses in their transformer specifications, and make their purchase decisions based on sum of the first cost of each transformer plus the cost of no-load losses and the cost of load losses. In addition, SMUD tests the losses and penalizes contractors whose transformer fail to meet specifications at a rate of twice the cost of no-load and load losses for each such transformer. IOUs, by contrast purchase transformers that meet minimal DOE standards based on first cost alone, without regard to the cost of losses.

In summary, Berman Economics strongly encourages the CEC finally to conduct assessments of California's electric delivery and distribution systems. A policy that would require IOUs to give consideration to minimizing total costs (including losses), as do municipally-owned utilities, rather than only first cost would lower costs to consumers as well as saving fossil fuels.

Sincerely,

Robert A. Berman, Principal