Energy - Docket Optical System

From: Mahone, Douglas [DMahone@trcsolutions.com]
Sent: Friday, December 20, 2013 5:08 PM
To: Energy - Docket Optical System
Cc: Tang, Otto@Energy
Subject: EPIC Investment Plans - Docket# 12-EPIC-01 - Comment

This comment, and a concluding question, is submitted by Douglas Mahone, of TRC Energy Solutions, an energy efficiency consulting firm with a long history of participation in the PIER research program, as well as in the Title 24 energy standards proceedings. (Many people may be more familiar with as the Heschong Mahone Group, Inc. (HMG), which was acquired by TRC at the beginning of 2013.)

We are very concerned about the question of allowable profit for the upcoming EPIC research program, and also about the requirements for match funding.

As we understand it, there is a very important distinction between the choice of contracts or grants as the funding mechanism. In the context of CEC state contracting rules, it was stated that grants do not permit any profit to be included in the research funding, while contracts do allow profit. Unfortunately, the CEC used the grant mechanism in its last round of PIER funding, and seems intent on using it for future EPIC funding as well.

Whatever the CEC's reason for using the grant mechanism, the practical consequence is to limit EPIC research to two classes of organizations:

1) non-profit entities, such as universities or industry research organizations, and

2) product developers who will forego their profit. Product developers can justify giving up this profit, because they intent to make it up from the products or IP that they develop with shareholder monies.

By not allowing for profit, the grant mechanism excludes a third class of organizations:

3) consulting firms and other companies who do research on a work-for-hire basis and do not intend to develop any proprietary IP or products.

In past PIER research, such firms have conducted research into energy efficient lighting and daylighting system design practices which have been incorporated into Title 24 standards. They have developed strategies and tools for designing more efficient hot water systems for multifamily buildings. They have helped the CEC develop market connection strategies for air conditioning systems in hot/dry climates, and for advanced lighting systems. There are numerous other examples. These research efforts have not been directed to developing proprietary products, but they have significantly advanced energy efficiency goals in California.

The companies doing this kind of research are able to focus on systems design and integration issues which can be applied to classes of products by multiple manufacturers, but the researchers have had no financial interest in those products or manufacturers. If this kind of research were not supported by public funds, no researcher would have an interest in doing it. Nor would the manufacturers support this kind of public research, because it would also benefit their competitors.

We urge the Commission to recognize that, by using the CEC grant mechanism for funding EPIC research, it is choosing to limit the participation of this third type of organization. As for-profit companies, they cannot justify foregoing (donating) the profit that they need to survive as businesses, and so their participation is effectively ruled out by the choice of funding mechanism.

Disallowing profit limits the kinds of integrated systems research that will be needed to meet key state policy goals, such as zero-net-energy buildings, AB32 GHG reductions, AB 758 comprehensive retrofits, etc. Disallowing profit also limits the economic development spillover benefits that EPIC could provide to California businesses.

The same arguments apply to requirements for match funding. When a researcher has no financial interest in the outcome of a research project, there is no economic justification to providing match funding. In this context, requiring match funding is equivalent to denying profit, because it reduces the amount of research revenue without providing a concurrent promise of future product revenue. In cases where the research products will not produce future revenue from IP or product development, the contractor should not be required to provide match funding, and should be allowed to charge ordinary and reasonable profit for the work-for-hire research project.

Please explicate the rationale the CEC will apply in choosing the grant mechanism, rather than the contract mechanism, for EPIC research funding.

Thank you for your consideration.

Doug.

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Formerly: **Heschong Mahone Group.** Merged with TRC on 1/1/2013. Please update email address (above).