

October 10, 2008

California Energy Commission  
Docket Office, MS-4  
Attn: Docket No. 08-IEP-1 and No. 03-RPS-1078  
1516 Ninth Street  
Sacramento, CA 95814

03-RPS-1078

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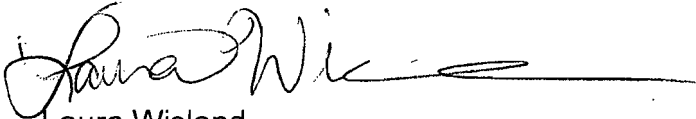
Re: Docket No. 08-IEP-1 and No. 03-RPS-1078

Docket Office:

Please find attached comments from the Union of Concerned Scientists on the workshop held October 1, 2008 regarding "2009 IEPR - Feed-in Tariffs."

If you have any trouble viewing this material, please contact me through the information listed below.

Sincerely,



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**COMMENTS OF THE UNION OF CONCERNED SCIENTISTS ON THE  
2008 IEPR UPDATE / 2009 IEPR FEED-IN TARIFF WORKSHOP**

The Union of Concerned Scientists (UCS) appreciates this opportunity to submit comments following the Energy Commission's October 1, 2008 Renewable Energy Feed-in-Tariff Workshop. In summary, UCS supports a feed-in tariff (FIT) that complements the existing Renewable Portfolio Standard (RPS) competitive bid solicitation process and is limited in application - at least in the beginning phase - to small-scale projects. Projects sized at 20 MW or less are less likely to experience project delays due to the state's lack of transmission, but may otherwise be discouraged from building in California because of the high transaction costs of negotiating an RPS contract. FITs are a tool to help these smaller projects secure financing and reduce administrative hurdles to project deployment. Encouraging the financing and construction of these facilities is an important step towards taking advantage of the most cost-effective and near-term solutions to meet California's renewable energy goals.

**Feed-in tariffs may encourage the development of renewable energy projects that are not constrained by California's transmission upgrade needs**

The lack of adequate transmission capacity has been cited numerous times as one of the primary obstacles to delivering more renewable energy in California. The California Public Utilities Commission's (CPUC) most recent (July 2008) RPS update report indicates that barriers to project development are keeping the state from meeting its current goal of 20% renewables by 2010. According to the July report, almost 50% of the RPS-eligible generation that is under contract is at risk because of transmission barriers.<sup>1</sup> While UCS believes a FIT should not replace the current RPS competitive solicitation process, a FIT may be a useful tool for stimulating the development of renewable energy projects that are not dependent on transmission upgrades. Projects that are able to deliver renewable energy at the wholesale distribution level may offer opportunities to increase the amount of in-state renewable energy on a faster timeframe with less risk of delay than the larger, transmission-dependent projects.

Analysis from the ongoing Renewable Energy Transmission Initiative (RETI) process has indicated that significant potential exists to develop small-scale renewable projects in California. The RETI Phase 1B report that was released this August identified 1,375 potential photovoltaic projects or 27.5 GW (assuming a project size of 20 MW) that would be able to connect at the wholesale distribution level.<sup>2</sup> Tapping into this wholesale distributed generation (WDG) market will be an essential strategy for meeting the state's policy goal of 33% renewables by 2020.

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<sup>1</sup> Renewable Portfolio Standard Quarterly Report, California Public Utilities Commission, July 2008, available at: [http://docs.cpuc.ca.gov/word\\_pdf/REPORT/85936.pdf](http://docs.cpuc.ca.gov/word_pdf/REPORT/85936.pdf)

<sup>2</sup> Renewable Energy Transmission Initiative Draft Phase 1B resource report, August 2008, P.6-8, available at: [http://www.energy.ca.gov/reti/documents/2008-08-16\\_PHASE\\_1B\\_DRAFT\\_RESOURCE\\_REPORT.PDF](http://www.energy.ca.gov/reti/documents/2008-08-16_PHASE_1B_DRAFT_RESOURCE_REPORT.PDF)

## **Feed-in tariffs should be designed to reduce project risk and enable project financing**

The costs to bid and negotiate a contract in the current RPS competitive bid solicitation process are incurred by all developers, but may account for a higher percentage of total budget costs and risk for smaller projects. A FIT for small-scale projects that streamlines the contracting process would reduce contracting risk by ensuring a project will be accepted if it is able to meet the terms of the standard offer contract. This would not only help to finance WDG projects, but would also help developers of large-scale projects to secure financing for smaller initial projects as well. FITs could provide these developers an opportunity to demonstrate an emerging technology at a financeable project size. Scaling up from small projects could lower manufacturing costs and reduce the construction costs for larger deployments. RPS policies that encourage scalable projects are an important tool for reaching 33% renewables by 2020 and transitioning California to an even deeper reliance on renewable energy as a way to reach our post-2020 greenhouse gas reduction goals.

## **UCS positions on CEC Staff/KEMA FIT Paper Policy Options**

In general, UCS supports FIT policies that complement the existing RPS competitive bid solicitation process, reduce risk and enhance financing opportunities for cost-effective and near-term renewable projects, and provide contract prices at a level that will encourage viable project developers to enter the market.

UCS has been specifically asked to provide feedback on the September 2008 report that Energy Commission staff and KEMA, Inc. prepared on FIT design in California.<sup>3</sup> The report describes six different FIT designs and nine implementation options that would provide the basic structure for a FIT in California. Each of these nine implementation options creates the need for a more in-depth policy discussion, but our comments are limited to impressions of these six paths and nine options which were presented in the paper and subsequent workshop.

Of all the policy options presented in the KEMA paper, UCS supports Option 6. Until the use of FITs has been proven an effective policy tool in California, UCS believes that a FIT for projects that are 20 MW or less is most appropriate. Option 6 targets a size category of renewable projects that represent the most promising near-term prospects for building renewable projects in California, and is technology neutral, which leaves the door open for new and appropriate projects from all technology types.

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<sup>3</sup> California Feed-in Tariff Design and Policy Options, California Energy Commission, prepared by KEMA, Inc., September 2008, CEC-300-2008-009D.

## **UCS Positions on CEC Staff/KEMA FIT Paper Implementation Options**

### *Resource Type*

UCS believes there is no reason to limit a well-designed FIT for projects up to 20 MW to a specific resource type.

### *Vintage*

FITs should be available to new projects up to 20 MW in size. If the economics of building a project versus repowering the same project are significantly different, separate FITs for repowered projects should be developed.

### *Size*

To reduce transaction costs and stimulate least-cost project connection opportunities, UCS believes that FITs are best suited at this time to projects that are 20 MW or less. Projects above this level will continue to benefit from the existing RPS individual contract negotiation process, which is better suited to address the value of larger renewable projects. A FIT cap at 20 MW would provide California with a meaningful opportunity to explore the benefits of FITs without disrupting the current RPS solicitation process or introducing new concerns about grid reliability. Once a FIT for 20 MW or less projects has been successfully designed and implemented, UCS believes it would be appropriate to consider expanding FITs to the larger renewable energy market.

### *Timing*

UCS does not see any value to placing a time-sensitive trigger on a FIT policy.

### *Scope*

While UCS is not opposed to a FIT pilot, we do not see the value in limiting a pilot to one utility (as suggested in Policy Options 2 and 4 of the KEMA paper). Ideally, a well-designed FIT should be applicable to the entire renewable energy market in California. Renewable developers should be able to use FITs to contract with investor-owned as well as publicly-owned utilities.

### *Setting the Price*

UCS believes that setting the price of a FIT is critical to designing a successful policy. A FIT that is too high could over-stimulate the market and cause ratepayers to pay for at least some renewable projects that could otherwise have been built for lower costs. A FIT that is too low will do nothing to entice additional renewable development in the state.

UCS believes that a FIT based on project costs plus a reasonable rate of return is the most straightforward way to set a price for FIT-eligible renewables. While a value-based pricing system may be designed with the intent to encourage the most cost-effective projects with highest locational and time delivery to the grid, the methodology to create the necessary subtleties of that structure may become burdensomely complex and time-consuming. A value-based pricing system may also not be as transparent or be able to ensure the same level of financial certainty for investors. For instance, a value-based pricing system indexed to a dynamic benchmark like the fluctuating price of natural gas

or wholesale electricity prices could slow the renewable market if prices were to suddenly drop. The KEMA report indicates that this is what happened to Germany in the late 1990s.

Any FIT price adjustments or revisions must occur in a predictable and orderly manner to provide as much price stability and policy certainty as possible. Tying price adjustments to technology experience curves may prove too speculative for solar technologies that have not yet been built in California for the first years of FIT implementation.

*Contract Duration*

UCS believes a FIT tariff should be applied to long-term contracts for bundled renewable energy deliveries.

*Tariff Differentiation*

UCS believes that FITs should be developed for all RPS-eligible technologies with projects up to 20 MW in size and differentiated by fuel-type for biomass.

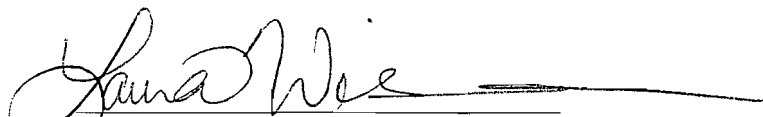
*Limits*

UCS believes that limiting a FIT to projects 20 MW or less may function as a natural cap. In the advent that FITs are used for a larger scope of projects, placing a cap on aggregate generating capacity or total funds spent may be appropriate, at least in the short-run, to assess the value and impact of a FIT that is applied to the *entire* scope of the renewable energy market.

**Conclusion**

UCS supports a FIT for RPS-eligible projects that are 20 MW or less to encourage the development of in-state renewable energy that is able to connect at the distribution level and therefore less likely to suffer project delays because of the state's current lack of transmission infrastructure. A FIT in California should complement the existing Renewable Portfolio Standard (RPS) competitive bid solicitation process and to lower financial risk for small-scale renewable project developers, in order to set California in place for meeting and surpassing its current and planned RPS goals.

Respectfully submitted,

  
Laura Wisland