

**Presented by Meredith Wingate, Policy Director, Center for Resource Solutions (CRS)
TVA Board Listening Session, March 5, 2008**

Thank you for inviting me to participate on this panel today. CRS is a non-profit organization located in San Francisco, CA. We promote renewable energy and energy efficiency through policy assistance, and our certification programs. We run the nation's leading certification program for renewable energy sold in voluntary markets, known as the Green-e Energy Program. TVA was one of the first organizations to become certified by our program, nearly eight years ago, and now over 100 of TVA's distributors are selling Green-e certified products. I'd like to take this opportunity to thank TVA's directors for recognizing the importance of offering customers a certified green power option and your participation in the Green-e program over the years.

There is an urgency today, like never before, to address the problem of climate change and local air pollution. Simply put, more needs to be done to lessen our country's dependence on coal power. I applaud TVA's Directors for taking a leadership role in developing a Strategic Plan for Renewable Energy and Energy Efficiency.

You are not alone in thinking about these issues. Many utilities are thinking about and planning for a transition to cleaner electricity generation. There is a very good chance that some sort of federal climate legislation or a federal RPS or both will be passed in the next few years and companies need to be proactive. It is possible that there will be a tradable credit mechanism that would allow TVA and others to meet their federal obligation with renewable certificates from outside of the region, but if you do this, you will miss out on the very real economic, environmental and health benefits that will result from a local renewable industry.

You can not build a local renewable industry in a day or a year or even five years. Voluntary markets can only get you so far; what is needed are good policies that help create stability that renewable developers can bank on and clear goals that internally guide and prioritize where to put new investments of efforts and resources.

I'd like to introduce four policies solutions that I hope TVA will consider to encourage new renewable development in the region.

The first is the establishment of a loading order. Renewables and energy efficiency should be integrated into TVA's resource planning process. This may require a shift in thinking so that renewables and efficiency are no longer viewed only as customer "programs," and instead are integrated more directly into internal procurement decisions. In California, we have adopted a loading order, which directs the utilities to meet all new demand first with energy efficiency, second with demand response, third with renewables and fourth with clean fossil generation. I would encourage TVA to adopt a similar loading order in their resource planning process. This has been a valuable tool in my state, both the regulatory agencies and the utilities, understand the priority for new investments of time and money.

You spent half a day talking about EE, so I'm going to focus the rest of my remarks on how to encourage new renewable energy development.

You've heard already from my colleague Ed Holt a bit about the importance/magnitude/value of the renewable market. Today, more than 750 utilities and marketers offer green power products to electricity consumers.¹ Nationally, voluntary renewable demand is supporting roughly 3500 MWs of primarily new renewable generation in the form of renewable certificates and renewable electricity sales. In 2006 purchases are estimated to total about 12 million MWh. If the voluntary market continues to grow as it has, it will reach about 40 million MWh by 2010 and represent about one-quarter of the total demand from voluntary and compliance markets.²

I hope TVA will continue to support its green pricing customers. Your green pricing programs offer citizens the ability to make meaningful choices about their electricity supply, and in so doing, help address climate change, reduce air pollution, and support the transition to a cleaner energy future.

The voluntary renewable electricity market can play an important role in transforming the electricity sector to cleaner, low-carbon generation. But, it is important to recognize that it alone can not drive significant large scale renewable development in the region.

In addition to voluntary programs, what is needed is a series of well-designed policies to:

- (1) help renewables overcome market barriers
- (2) spur investment and facilitate financing for renewable projects
- (3) help achieve economies of scale

I'm recommending two policies to do this: a feed-in tariff and a Renewable Portfolio Standard (RPS).

A feed-in tariff is a tariff that the utility agrees to pay all renewable generation that meet certain specifications. It is also known as a standard offer contract. If designed well, and priced appropriately, a feed-in tariff is one of the most effective policy tools that we know of for getting installed MWs of new renewable generation. It has been hugely successful in California and Europe, and it is one of the most tried and true policies for building up renewable supply quickly.

The other great thing about a feed-in tariff is that it can be structured to encourage certain technologies, certain size projects utility scale or distributed generation and it can be adjusted for resource quality, and just about any other factor you can think of. It is a very flexible policy that is administratively simple and has a low overhead cost. The price offered can be adjusted over time as you gain experience.

The next policy I recommend to create a demand for renewable electricity is a renewable portfolio standard. Some believe that an RPS is the most cost-effective way to drive new renewable development, but I believe an RPS works best when there is already some existing renewable generation that obligated parties can draw upon. The RPS should be the second policy adopted. RPS is good at creating market pull for renewables, but it doesn't provide the

¹ National Renewable Energy Lab, <http://www.eere.energy.gov/greenpower/>

² See NREL Oct 2007, *Interaction of Compliance and Voluntary Renewable Energy Markets*
<http://www.eere.energy.gov/greenpower/pdfs/42096.pdf>

predictability and financial security that renewable developers need to get the financing to build projects. For this reason, RPS is a good policy when used in conjunction with other policies, like either a feed-in tariff or a competitive tender for renewable generation.

So to summarize my main points:

(1) There is some urgency to be proactive in anticipation of federal legislation on carbon or renewables. If you wait, you will miss out on the very real economic and environmental benefit that accrues from having a local renewable industry.

(2) Voluntary markets are good to support, but they can only get you so far in terms of bringing on-line new renewable generation. Good policies are needed that help create a predictable and stable market that project financiers require. Two such policies are a feed-in tariff and a renewable portfolio standard.

(3) Finally, renewables and energy efficiency need to be integrated into TVA's resource planning decisions. The creation of a loading order can be very helpful way to articulate the organizations commitment to renewable energy and energy efficiency and to establish some goals that will help direct where to put new investments.

I thank you very much for your time today, and I look forward to working with you and my esteemed colleagues on the panel in the future.