

Policy Directives
related to a
National Renewable Portfolio Standard

By a group of concerned market participants

On April 20, 2009

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Policy Directives for a National Renewable Portfolio Standard

Our nation faces an unprecedented set of challenges in the years ahead. The Obama administration has inherited a financial crisis of historic proportions, as well as entrenched problems in most industries, including energy. The energy industry faces serious issues related to transmission, efficiency, and climate change, to name a few. Effective and bold new policy is needed to get our nation on the right track.

The Obama administration has made clear that it will fearlessly tackle difficult issues with innovative policy initiatives. A national renewable portfolio standard has been brought up several times in the last few years, but has not been passed. We believe that the time for a comprehensive, well written, and intelligently implemented national renewable portfolio standard (RPS) is now. We understand that Congress is currently considering such legislation, and is aiming to pass a national RPS in short order.

We, the undersigned, have come together as a group to respectfully submit our policy recommendations for a national RPS. We offer our combined nearly 100 years of experience in the renewable energy and environmental markets to provide useful direction for a national RPS. Each of us is intimately involved in the renewable energy market and has significant expertise in markets for renewable energy and renewable portfolio standards. We believe that an RPS can be a powerful tool for harnessing markets to achieve challenging goals in the most cost-efficient and streamlined manner. We are also aware that the success of an RPS depends in large part on the details in the rules. Some state-level RPSs have failed to meet even basic goals because poorly written rules hindered the objectives.

The National RPS will not be written on a clean slate. The majority of states have already adopted renewable energy requirements and some of these states now have many years of experience managing their policy and the markets those policies create. The time is now for enhancing these experiences through a single, nation-wide standard for renewable energy supply, implemented through the creation of a national market for federal compliance certificates that layers atop the existing state systems and voluntary REC market without the adverse potential impacts of blanket preemption and double counting. The new certificate market can tap the power of the national market for electricity, the diversity of state renewable energy resource development, and the efficiency of markets, all at the same time as serving both the federal and state-level goals of building more renewable energy, increasing employment in the renewable energy sector, reducing the emissions associated with electricity production, building confidence in the integrity of retail green electricity-based claims, and diversifying the electricity resource mix.

This proposal presented herein is simple. The Federal law will create a specific percentage requirement for renewable electricity as a fraction of electricity sales from load serving entities. Compliance can be met with Federal Compliance Certificates—a new certificate that represents and reflects ONLY the characteristic of compliance with the federal obligation. These Federal Compliance Certificates will be deemed created at the same time that qualifying generation occurs, and as an attribute of the broader Renewable Energy Certificate, which

represents and embodies the full range of attributes arising from the generation of renewable energy. The Federal Compliance Certificates must be retired against accounts established by the cognizant federal regulatory agency, probably the FERC, and may be retired against mandatory or voluntary accounts. The Federal Compliance Certificate can be traded entirely apart from the remainder of the REC without fear of double-counting or consumer confusion as long as proof of retirement of a Federal Compliance Certificate accompanies the retirement of any REC.

In practical effect, this will mean that in the early years of the new national RPS, states with more developed renewable energy resources will have the opportunity to earn extra revenues by selling Federal Compliance Certificates to load serving entities in states with less developed resources. However, the federal obligation can be set low enough that the cost of compliance in early years is relatively modest—especially since the Federal Compliance Certificate does not and cannot represent the environmental or other valuable attributes of a REC. As the federal obligation grabs hold, and as/if the federal obligation exceeds the cumulative average RPS requirements of the states, the national RPS will act as a market pull mechanism to ensure a national minimum level of renewable energy is in place and at the same time, create an incentive for states to increase their renewable energy requirements in order to grow the environmental, employment, and other benefits of renewable energy inside their states.

We have put together a set of policy directives that create what we believe to be the policy that most effectively meets its own goal: that of building and operating new renewable power generation capacity. Our goal is to provide basic, as well as nuanced, guidance to building such an important national policy. We have used a bullet point format to keep the document easy to read. We have included a series of comments and explanations to clarify the background thinking related to some points. We have sought to include only the points most important and salient to your work. We stand ready to provide further information, clarification or suggestions. We encourage you in your work and remain at your service.

Thank you for considering our suggestions.

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- **GOAL, OBJECTIVES and MEASURES of SUCCESS¹ for the National Renewable Portfolio Standard (RPS):**
 - **The Goal² is:**
 - *The construction of new renewable energy facilities in the US.*
 - The **Objectives** that the National RPS can achieve are diverse
 - Reduction in global warming pollution
 - Diversification of U.S. electricity generating resources
 - Improvement in air quality
 - Enhancement in national security
 - Creation of jobs
 - Maintenance and enhancement of existing state renewable energy initiatives
 - Reduction in criteria pollutants
 - Reduction in environmental consequences of fossil fuel extraction
 - The **Measures of Success are more concise:**
 - MWs of new renewable energy capacity brought online
 - Global warming pollution reduced
 - Air quality improvement
 - Jobs created
- **The RPS should be founded on a clearly articulated Vision and Mission.** The Vision and Mission are the best *means* to an *end* (the *end* being the Goal: building new renewable energy facilities.) The Vision and Mission provide guidance to maintain focus on the Goal
 - **The Vision** - A diverse energy economy that is part of a more environmentally sustainable future, that helps our country meet its climate goals, and that plays a role in the revitalization of our nation's economy
 - **The Mission**
 - Create rules and regulations that allow for the sustained, orderly, long-term deployment of new renewable energy generation
 - Craft legislation complimentary to legislation related to the economic stimulus package and carbon cap and trade regulations, and complimentary to existing state RPSs
 - Achieve the Goal by creating a *highly efficient market, streamlined processes* to reduce transaction costs, *centralized information* to best educate market participants, *limited bureaucracy* that keeps market signals clear

#1 Clearly defining your **Goal, Objectives and Measures of Success** creates critical guideposts for crafting this policy and for returning, again and again, to the original reason for this law.

#2 Most questions about how to write this policy can be answered by going back to this fundamental Goal: does the policy bring new renewable power generation online?

- **Harmonizing State and National RPSs**

- The national RPS should create a stand-alone market and compliance mechanism that operates separately from, and on top of, any and all state RPS systems. The compliance tool for the national RPS should be a Federal Compliance Certificate, as differentiated from a REC. These two terms are defined next
- A REC should be defined as³:
 - The full bundle of attributes associated with the generation of electricity at a qualified renewable energy generation facility. Denominated in MWh, the REC is governed by market rules that exist and are broadly familiar today, including those established and maintained by state RPS authorities, the Federal EPA Green Power Partnership Program, the Federal Trade Commission (especially part 260 regulations), non-governmental best practices certification standards (like the Green-e Certification Standard created by the Center for Resource Solutions,) and others
- The Federal Compliance Certificate should be defined as:
 - A characteristic of a REC; one of the attributes of a REC
 - A new credit, pulled out of and made separate from the REC
 - Created as a means for implementing the national RPS in the most efficient means possible. A Federal Compliance Certificate represents only the attribute of compliance with the national RPS obligation, and nothing more

#3 There has been heated debate in renewable energy policy circles recently regarding what the Compliance Certificate is and how it should be defined. A similar debate took place about the definition of a REC at the onset of the REC markets in 2001. While it may not be obvious from the outset, it is critical to correctly define the Federal Compliance Certificate. It is best to define it as an attribute of a REC, as opposed to a separate, somehow different, REC. And it is crucial that it contain none of the non-energy environmental attributes – it therefore does not confer any of the ‘bragging rights’ to the green aspect of the renewable facility.

- **Should Federal Compliance Certificates be required to be retired if the corresponding REC is retired for compliance against a state RPS obligation?** In other words: if a state with an RPS has Federal Compliance Certificates above what it needs for compliance with the national RPS, but below what it requires for the state RPS, should it be allowed to sell those Federal Compliance Certificates to another state?⁴

- Option #1 (our recommendation)⁵
 - Require that entities obliged under the national RPS retire a number of Federal Compliance Certificates equal to their federal obligation, or their state obligation, *whichever is greater*
 - Causes a more rapid growth of renewable energy markets
 - Higher cost to compliance
- Option #2⁶
 - Allow covered entities to sell any Federal Compliance Certificates beyond what they need for compliance against the national RPS
 - Postpones the growth of renewable energy markets
 - Lowers cost of compliance

#4 This is by far one of the most important aspects of a national RPS, the implications of which are the most difficult to understand. For the purpose of explaining, imagine that there are only two states in the country, State A and State B. Imagine that State A has a state RPS that requires 20 RECs (in a given year). Assume that State A has enough renewables to fill this obligation. Imagine that the national RPS requires only 5 Federal Compliance Certificates in that year. Now imagine that State B has no state RPS and no renewables. Under Option #1, State A or State B must build new renewables to generate 5 Federal Compliance Certificates. The Goal (new renewables) is achieved. Under Option #2, State B purchases Federal Compliance Certificates from State A with neither state having built any new renewables. The Goal (new renewables) is postponed until such year that the national RPS obligation exceeds State A’s state RPS requirements.

#5 We recommend option 1 because it will reduce the supply of Federal Compliance Certificates and therefore drive us closer to the Goal: building new renewables.

#6 Option 2 will cause a slower drive towards the Goal. However, it would ease the cost of compliance by increasing the supply of Certificates.

- **Compliance**

- Compliance should be as simple as possible⁷
- Should build on existing data collection and reporting requirements
 - FERC Form 1
 - Same sources as relied upon by EIA
- FERC should oversee the program
 - Since compliance is only linked to the quantity of electricity sales by a load-serving entity (LSE), FERC is the best authority to oversee compliance
 - To the greatest extent possible, FERC should use the existing tracking systems (WREGIS, M-RETS, GATS, GIS, etc). These tracking systems are reliable, reputable and familiar to market participants

#7 Some state RPSs require lengthy reports and planning statements to prove current year and future year compliance. These reports are at best time-consuming and costly, and at worst, completely unnecessary. The market and tracking systems are excellent mechanisms to bring down the cost of compliance. Use them to bring about the highest efficiency in this policy.

- **Voluntary Markets**

- A robust and important voluntary market has emerged for both green power and RECs – nothing in the national RPS should have the intentional or unintentional effect of inhibiting the functioning or growth of voluntary markets
- The Federal Compliance Certificate market regulator should support voluntary markets by ensuring that the accounting system for Federal Compliance Certificates allows for the acknowledgement of retirement of Certificates for voluntary purposes

- **Covered Entities**

- The cost of the National RPS obligation can be mitigated by incrementally decreasing the minimum level energy sales that triggers coverage by the obligation over time. This will increase the overall demand for renewables and will more fairly distribute the cost of new renewables. This will also allow renewable energy markets to organize to meet well-understood National RPS obligations
- Federal power authorities should be covered entities. For these entities, obligation coverage should be triggered by wholesale sales of electricity

- **Set the obligation based on electric energy sales at the retail level by a load serving entity**

- The obligation for each load serving entity should be set as a percentage of electric energy sales (not demand or capacity in MWs)
- **Do not** require that any minimum amount of renewables be built in that state, and
- **Do not** limit the amount of Federal Compliance Certificates an LSE can import to meet its compliance obligation⁸

#8 The use of Certificates as the basic compliance tool allows for transparency, liquidity and vastly lower transaction costs. Limiting their use increases bureaucratic burden and decreases efficiency, driving away from the Mission and the Goal.

- **New vs. Existing Date⁹**
 - Allow all renewables that were built after January 1, 1997 to generate Federal Compliance Certificates that comply with the RPS
 - Renewables that were built prior to January 1, 1997 are already part of the national portfolio but do not generate Federal Compliance Certificates¹⁰
- **Existing REC contracts**
 - Many existing REC contracts that transact RECs past the start date of the national RPS are silent on the ownership of the Federal Compliance Credit
 - Because the Federal Compliance Credit is defined as an attribute of a REC, we support the claim that ownership of the Federal Compliance Credits should flow to the buyer in the contract
- **Tradeable Federal Compliance Certificates**
 - To ensure a vibrant, liquid market, Federal Compliance Certificates should unconditionally be separable from RECs and energy
 - Federal Compliance Certificates should be fully tradeable
- **No Double Counting¹¹** - to ensure the integrity, credibility and viability of this market, regulators must ensure that no double counting or double sales of Federal Compliance Certificates occurs
 - It is the obligation of the seller to demonstrate clear title to the Federal Compliance Certificates
 - In the absence of clear contract terms to the contrary, an energy purchaser will have no claim to associated Federal Compliance Certificates
 - Federal Compliance Certificates sold on a voluntary basis must **not** be counted toward the RPS obligations of load serving entities. Voluntary purchases must be allowed to create benefits above and beyond those mandated by the RPS
 - Federal Compliance Certificates cannot include any environmental attributes or provide a basis to any claim other than the claim of national RPS compliance
- **Eligible Renewables** - The definition of eligible renewables should be consistent with the definition used by the EPA's Green Power Partnership. This definition is familiar to the majority of market participants, and is based on sound reasoning
 - For consistency and to enhance market liquidity, a national RPS should use the most universal definition of a REC, based on a unit of production, i.e. 1 MWh = 1 REC
- **Do not change the rules, requirements, or implementation of the program** - Load serving entities will make investment decisions (purchases of assets, long term purchases of Federal Compliance Certificates, or project development) with multi-year horizons if they believe the rules governing the program (and therefore Federal

#9 The New vs. Existing date is crucial to the functioning of the market (and therefore to the Goal) because it will determine whether the supply in the market is restricted or abundant relative to demand. It is also an important way that the RPS defines or legitimizes supply and has a very strong effect on price of RECs/Federal Compliance Certificates (and therefore on new construction, and ultimately, on the Goal). The 1997 goal is appropriate because it marks the beginning the electricity deregulation in the U.S. These deregulation activities created opportunities for renewable energy generators to operate as merchant power plants and spawned the creation of a REC market. Those early market participants took significant financial risk and should be rewarded as early action participants.

#10 The intention of the RPS is to build *new* renewables, not creating profit windfalls for old (mostly government) facilities.

#11 The reason for these rules is to ensure that there is only one final consumer for each Certificates. For a commodity that is so intangible, Certificates integrity must be maintained through a set of rules under which claims to Certificates ownership are transparent and documented. Prohibition of double counting is essential to achieving the Goal of the RPS.

Compliance Certificate prices) will not change (or will only increase). The prospect of changing rules (and therefore prices) will shorten the investment horizon and cause covered entities (and project developers) to defer investments that provide anything other than immediate payback. Clear, stable, and consistent rules create relatively accurate forward pricing curves which allow project developers to properly plan and build their projects

- **Single source of information** - There should be *one single website*¹² that administers the national RPS and that disseminates information to market participants. A single website will facilitate information flow, greatly reduce administrative costs, and ultimately create a more efficient market.
- **Start the RPS with an obligation that makes sense** - The RPS should commence with a supply and demand curve that supports the sustained and orderly building of new renewables. The first year of the legislation should not exceed the existing available resources to meet the requirement, in order to allow the market for Federal Compliance Certificates to emerge in an orderly fashion. The incremental increase year-on-year should follow an upward sloping curve¹³, rather than a straight line in order to properly allow for the industry supply chain to build
- **Banking** – Federal Compliance Certificate banking can support RPS efficiency by mitigating impacts of weather, seasonal and construction cycles. The authors recommend as follows:
 - “One Year Back & One Year Forward” - Compliance may be achieved in any given year using Federal Compliance Certificates produced during that year, the preceding year, or the subsequent year. Each Federal Compliance Certificate may be used only once to meet the requirements of this section
 - Compliance may be closed out at the end of each year (and does not have to wait until the close of the following year) by beginning the following year with a negative account balance. This precludes regulators from having to wait until the end of the following year to close compliance for any party)
 - To mitigate risk of overuse of future Federal Compliance Certificates, compliance in any year using Federal Compliance Certificates from the following year may be limited to a certain percentage of the total volume
 - Option – Three year banking (not recommended)
 - A three year banking period will tend to encourage the hoarding of RECs, which makes it difficult to build new renewables in a sustained, orderly and long-term manner
 - Dilutes the supply of RECs, therefore dampening prices and making the Goal more difficult
 - Creates buyer complacency from the onset of the program

#12 Many state RPSs make the mistake of posting RPS rules and information on multiple websites; the state PUC, the state department of environment, the ISO, and others. Do not force national RPS market participants to search for information on websites that are designed for regulators, as they tend not to be user-friendly. Create one central website designed for market participants only, where everything relevant to market participants is posted.

#13 A curve is superior to a line because it facilitates the orderly expansion of an industry. Manufacturing and supply chain capacity of this industry will require time to build. A curving obligation increase allows for the obligation to best match the capacity for production.

- **Alternative Compliance Payment**
 - Ensure that the penalty for non-compliance is onerous enough that it properly encourages compliance
 - The penalty also acts as a de facto cap on Federal Compliance Certificates pricing, so ensure that it is set high enough to financially encourage the construction of new renewable energy facilities
 - We suggest a penalty of \$50/Federal Compliance Certificate
- **Climate Initiatives** - The goal of the national RPS should not be decoupled from the climate initiative
 - The administrator of the national RPS should account for CO₂ emissions benefits of the RPS
 - The administrator of the national carbon trading program should ensure that climate benefits created by the national RPS are accounted for
- **Technology Set-asides**
 - States can and should encourage solar, offshore wind or tidal/wave projects with a technology set-aside in order to encourage that state's resource diversity
- **Need for Transmission** - To the extent that transmission is required to serve renewable energy generation facilities, such fact shall be considered in favor of any regulatory determinations of need related to any required regulatory approvals (e.g. certificates of convenience and necessity), especially as regards any national interest transmission designations or state competitive renewable energy zone transmission projects