

## MEMORANDUM

July 6, 2006

**TO: Mike McArthur**  
**FROM: RPS Discussion Group**

Dear Mike:

We are a group of consumer advocates, utilities, developers, and environmental groups that have been involved with state-level energy policy for many years. Our organizations are also members of the Renewable Energy Working Group (REWG) that you chair. Our intent with this document is to share with the REWG the result of ongoing discussions we have had over several months regarding the policies and mechanisms underlying an Oregon RPS. While our discussions have been productive, what follows is *not a consensus document* that answers all of the questions. Instead, this document assumes some sort of renewable energy standard (referred to here as an RPS) and attempts both to identify the issues that need to be addressed and to fill in some of the details. We attempt to note where we agree and where consensus was not found at this early stage in the larger discussion.

The ten numbered items below are topics and related issues we believe are critical to address in discussing and crafting an RPS. There are many additional RPS design details, but the ones presented here are those we believe are best addressed early on. Following the topics in bold print are italicized subsections titled “Additional Considerations.” These subsections provide further insight into our discussions and feature details that the group has not yet reached agreement on. We appreciate you submitting this document to the REWG and look forward to the opportunity to discuss this further.

### **1. Definitions**

(Below are several terms that need to be clearly defined.)

#### **a) Geographic Eligibility**

It is important to clearly define the geographic boundary from within which eligible renewable resources can be used to meet an Oregon RPS. Should eligible renewable resources come only from Oregon, only from the Pacific Northwest or from the entire Western Electric Coordinating Council<sup>1</sup> (WECC) region (i.e. roughly the entire western United States)?

#### **b) Load**

Refers to the amount of kilowatt-hours of electricity that a qualifying utility delivered to its Oregon retail customers in the most recently completed year.

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<sup>1</sup> Here is a link to a map of the WECC: [http://www.wecc.biz/documents/constant/nerc\\_int.pdf](http://www.wecc.biz/documents/constant/nerc_int.pdf)

Additional Consideration

*1) Should the definition of “load” include existing hydro or not?*

**c) Qualifying Utility**

A qualifying utility is any utility serving retail electric customers in Oregon, any electric service supplier serving direct access customers in Oregon, or any direct service industrial customer in Oregon.

Additional Consideration

*Should certain entities be excluded based on the size of their load?*

**d) Renewable Energy Credit (REC)**

A REC refers to a tradable, traceable and verifiable certificate of proof of at least one megawatt-hour of electricity generated from an eligible renewable resource. A REC includes all of the non-power attributes associated with that one megawatt-hour of electricity. (“Non-power attribute” refers to the environmentally related characteristics, exclusive of energy, capacity, reliability, and other electrical power service attributes, that are associated with the generation of electricity from a renewable resource. Such attributes include information about the facility's fuel type, geographic location, vintage, and avoided emissions of pollutants, carbon dioxide and other greenhouse gases.)

**e) Renewable Resource**

As a result of our discussions, there was general agreement that the following technologies count as renewable:

solar energy; wind energy; geothermal energy; wave, ocean, or tidal power; gas from sewage treatment facilities; landfill gas; anaerobic digesters; and fuel cells using only eligible renewable resources.

We have not reached agreement on issues involving eligible hydro and biomass technologies. Below are some issues that the group has raised and will continue to discuss.

Additional Considerations

**1) Hydro**

*a.) One thought is that hydro be allowed but limited in some way. For example, should only additional hydro capacity that results from efficiency improvements at existing facilities, and that does not result in new diversions or impoundments, count toward the standard? Under this approach, if a qualifying utility upgrades a hydro facility that it owns, they can count the power toward the RPS but can't sell the tags.*

*b.) Another approach is to count all existing hydro toward the standard. (This would increase the RPS percentages significantly. Oregon already gets approximately 44% of its electricity from existing hydro. The point of the 25% RPS is to tap new renewable*

*energy and diversify our power sources so to avoid heavy reliance on one or two resources. In order to both get 25% of Oregon's electricity from new renewables by 2025 and count existing hydro, the RPS target would have to be 69% by 2025.)*

*c.) Do upgrades at qualifying Canadian dams count?*

*d.) Should BPA hydro upgrades on behalf of customers should be eligible?*

## **2) Biomass**

*a.) Consider whether the RPS includes criteria that biomass come from sustainable harvest practices. Should there be restrictions on allowing woody biomass from roadless areas or other wilderness-quality areas? What about excluding wood from old growth forests?*

*b.) Should black liquor from pulp and paper processes count as an eligible resource or not?*

*c.) Should there be restrictions on burning wood pieces that have been treated with chemical preservatives?*

## **f) Start Date**

How far back is the line drawn to allow existing renewable resources to qualify for meeting the RPS? For example, using October 1, 1998 would count the region's first utility-scale wind farm, Vansycle.

## **2. Renewable Energy Targets**

There was collective agreement among the group that interim targets are useful in helping a qualifying utility reach the ultimate 2025 goal. Whether the interim targets are firm or flexible, the process should assure reasonable progress toward a utility's ultimate goal.

1) One option is to use a firm tiered implementation schedule such as:

- (i) At least 5% of a utility's load from renewables by December 31, 2011,
- (ii) At least 10% of a utility's load from renewables by December 31, 2015,
- (iii) At least 17% of a utility's load from renewables by December 31, 2020,
- (iv) And at least 25% of a utility's load from renewables by December 31, 2025 and each year thereafter.

2) A second option would be to use a schedule that keeps the ultimate 25% target but is flexible on the interim targets. Some members of the group pointed out that since each utility is unique, the RPS might allow for customizing the interim targets to fit the need of each qualifying utility.

Additional Considerations

- 1) *Consider whether 25% by 2025 is the right target.*
- 2) *Do the interim targets provide an appropriate rate of increase?*
- 3) *Should targets be expressed in energy or capacity?*
  - *(The targets were intended to be energy. Using energy as the basis gets the most megawatts from renewable resources compared to capacity targets.)*
- 4) *Consider any reliability of service impacts that may be associated with meeting this standard.*

**3) Make Power and Renewable Energy Credits (RECs) Eligible for RPS**

- a) Allowing a qualifying utility to either use eligible renewable resources or to acquire equivalent renewable energy credits (RECs), or a combination of both, to meet the standard provides flexibility in meeting the targets. For example, for any given year the requirements could be met with RECs produced during that year, the preceding year, or the following year.
- b) Each renewable energy credit should be used only once to meet the requirements of this section. A qualifying utility should not be allowed resell renewable energy credits and count those sold credits against the utility's obligation to meet this standard. A utility must retire credits it counts toward its RPS compliance.
- c) Renewable energy sold to customers through a premium-priced renewable energy tariff cannot be counted toward the RPS target. There are legal issues associated with doing so.

Additional Considerations

- 1) *Allowing a combination of tags and power gives a utility flexibility, but in order to ensure that actual projects are built should there be a limit on the amount of RECs that can be used to reach the target?*
- 2) *Banking of RECs: Should RECs be banked over a longer period of time than just three years (the previous, the current and the following year)?*
- 3) *If the Pacific Northwest is defined as the area of geographic eligibility, unbundled RECs used for compliance must come from eligible renewable resources located in the Pacific Northwest. For electricity from eligible renewable resources outside of the Pacific Northwest, the qualifying utility must receive both power and RECs. This encourages the use of more renewable resources from within the region.*

- 4) *Allowing resources from other states.*
- a.) *Consider the balance between allowing utilities access to good renewable resources in neighboring states and making geographic eligibility too wide. If the desire is to develop renewable resources in the Northwest, then geographic eligibility should be limited.*
  - b.) *Keeping the definition of RECs close to those of neighboring states with RPS will allow Oregon utilities access to good renewable resources in those states.*
  - c.) *Requiring only in-state projects runs afoul of the interstate commerce clause. Plus, allowing utilities to tap good resources outside of Oregon is good for ratepayers because it allows a utility to capture cheap resources throughout the region.*
  - d.) *Consider California Assembly Bill 200 from 2005 regarding the treatment of utilities which operate in more than just one state. This option would allow such a utility to deliver power from renewable resources anywhere on their system.*
- 5) *Carbon issues: In the interest of meeting possible future carbon regulations, RECs used in Oregon should include carbon; do not allow it to be stripped out of the tags. Also, include language that synthesizes the RPS with the Oregon Climate Strategy.*

#### **4. Allowing Reasonable Flexibility and Maintaining Regulatory Oversight.**

There is agreement among this discussion group that (1) a qualifying utility should have some reasonable level of flexibility in meeting its renewable energy targets and (2) that the Oregon PUC should maintain regulatory oversight for implementing and enforcing an RPS. (Of course, what determines a “reasonable” level of flexibility must be discussed further.)

##### **a) Initial Compliance Plan Filing Followed by Annual Compliance Filings.**

One way to maintain regulatory oversight is to require a utility to file an RPS compliance plan and annual compliance filings (updates) with the Oregon PUC detailing their progress toward the targets. The IRP process could serve as the vehicle for the initial RPS compliance plan filing. This process would involve public participation and could be the venue in which a utility might request flexibility in meeting its RPS obligation.

##### **b) Allow PUC flexibility in certain circumstances.**

Similarly, from a timing standpoint, some group members expressed concern that an RPS would require a utility to acquire more resources than needed, to either achieve an interim target or in the long-term, thereby “stranding” existing, embedded resources. Looking at the IOUs most recent integrated resource plans, many of the larger utilities forecast that they will need more resources to meet growing demand in the future and therefore, will

have to acquire resources. While it is not certain that an RPS would “strand” existing assets, under certain circumstances an RPS could require a utility to acquire resources beyond its need. In such a case, it is reasonable to allow the OPUC, after certain findings, to alter the interim targets, but not the final targets, so that load and resources are aligned.

c) Account for zero or declining load growth.

The question here is, must a qualifying utility still meet its renewable energy targets when it has experienced zero or declining growth in the demand for power. One possibility is that if a utility’s weather-adjusted load for the previous three years on average did not increase, the utility is not required to meet the standard for that year.

## **5. Cost Recovery for Utilities**

A qualifying utility should be allowed to recover in rates all prudently incurred costs associated with meeting the RPS goals. A qualifying utility should also be allowed to recover its reasonable interconnection and transmission costs associated with delivering renewable energy to retail electric customers in Oregon.

### Additional Considerations

- 1) *Request for recovery must pass a prudence review of the OR PUC including choice and timing of asset acquisition*
- 2) *Language in RPS should be in harmony with IRP processes. IRP should investigate cost effective resources, strategies and timing to meet RPS goals.*
- 3) *Must be careful to define “above market.”*
- 4) *Need reliable projections for rates and costs.*

## **6. Cost Cap<sup>2</sup>**

The purpose of a cost cap is to provide protection from unexpected price increases. There is agreement among our RPS discussion group that it’s critical to have a cost cap that is meaningful and not subject to manipulation. Most of our discussion on this issue focused on using a utility’s revenue requirement to determine the amount of the cost cap.

### Additional Considerations

- 1) *An X% cost cap can be tied to utility’s revenue requirement.*
  - *This means that in any given year a utility is only required to invest up to X% of that year's revenue requirement on the incremental, or “above market,” cost of renewables. To determine the incremental cost, a utility compares the levelized and delivered cost of a renewable resource to the levelized and delivered cost of an available alternate resource. Only any above market cost associated with acquiring renewable resources should count toward the cost cap.*

*It is critical to note that the 4% in the Washington example does not compound so, for example, the cap is not 4% one year and 8% the next.*

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<sup>2</sup> For discussion purposes the group used the 4% cost cap tied to revenue requirement as featured in the Washington RPS initiative.

*While the total revenue requirement may fluctuate (depending on how much the utility spends to serve its customers), the utility will not be required to spend more than 4% of any single year's revenue to meet the RPS.*

*2) An independent third party should determine the cost cap for consumer-owned utilities.*

*3) Some members of the group expressed concern over how the cost of integration and firming intermittent resources will be evaluated. Others point out that investor-owned utilities do this already as part of their resource planning and procurement process.*

*4) Is the revenue requirement the appropriate mechanism and is 4% the right number?*

## **7. Penalty for Non-Compliance**

A meaningful penalty that does not flow back to ratepayers is a critical RPS design feature that can ensure compliance with the standard. Non-compliance penalties would be assessed for each MWh a qualifying utility falls short of its goal for a given year. (The group considered a range of penalties from \$10.00 per MWh to \$50.00 per MWh.)

## **8. Force Majeure**

This provision addresses rare and extraordinary events beyond a utility's control that may prevent it from meeting the goals of the standard. It is meant to briefly free a qualifying utility from its RPS obligations in the event of, for example, weather-related damage, mechanical failure, strikes or lockouts.

## **9. Role of Distributed Generation ("small" or "community" resources)**

1) Our group discussed the reliability, diversity, economic and environmental issues associated with a renewable market that includes technologies of all shapes and sizes.

a) Through our discussions, one school of thought emerged that an RPS should not simply be a utility-scale wind requirement, but should enable and encourage other kinds of renewable technologies.

b) A second school of thought is that the RPS should simply establish the renewable targets and then let the market determine which technologies succeed.

2) In our discussions, there emerged a general feeling about which mechanisms might be used if the RPS is to support small, or community, renewable technologies.

a.) Carve-outs are discouraged as being too political in nature with little regard for cost effectiveness and little understanding of the resulting dynamic. The cost of a carve out is unknown and it can make a utility quickly hit the cost cap. Carve-outs may pick certain technologies without sufficient analysis.

b) Multipliers are similar to carve-outs in that certain technologies are picked in advance with little regard to cost or appropriateness. Multipliers may not be high enough to make a difference.

c) A feed-in tariff, absent an overarching regulatory framework, as seen in Europe, may not work well here. A feed-in tariff with limited funds ends up picking resources on a first come first served basis, or requires a new regulatory body to make choices. Feed-in tariffs seem to work best in a regime with no cost cap. This group believes that having no cost cap for an Oregon RPS is politically untenable.

d) The Energy Trust of Oregon. If an RPS is to encourage the development of both large and small renewable technologies, one proposal would be to (1) let the utilities make decisions on the utility scale resources under the cost cap and (2) to allocate the renewable funding in the 3% that the Energy Trust currently administers to small resources. The Energy Trust already has programs for smaller renewables and an Energy Trust role in acquiring small renewables in the future works with the existing structure. After 2012, the Energy Trust could use the existing block of renewable funding for technologies under a certain size. Of course this assumes the extension of the 3% through 2025. Developers of smaller technologies would have certainty of funding over the period and small renewables would not have to compete with utility-scale renewables.

e) Our group also discussed issues associated with changing the 3% public purpose charge and how this might impact the development of distributed generation.

## **10. Transmission – how to address transmission constraints in the RPS**

1) Given the complexity of transmission issues, an RPS bill might not be the best place to address these. The REWG may wish to submit a separate document on transmission.

2) BPA, whom the State or Oregon has no jurisdiction over, owns 75% of the regional transmission system. Although the state's role in transmission may be limited, Oregon could allow for rate recovery on transmission built into areas with renewable resources.