Washington State Renewable Energy & Energy Conservation Initiative

January 17, 2007

Avista Utilities Questions of Clarification and Proposed Considerations for Commission Rulemaking

Resource Eligibility

- Section 3 (10) defines "eligible renewable resource" in a manner where generation outside the "Pacific Northwest" can only count against the renewable energy standard if the energy is "delivered into Washington on a real time basis without shaping, storage, or integration services". This provision effectively excludes the development of very-significant wind resources in eastern Montana, from qualifying under the initiative, until such time that adequate transmission capacity is developed. There is roughly ten times the wind-resource potential of Idaho, Oregon, and Washington combined in the State of Montana, not to mention the value of adding substantially greater wind-basin diversity to the Pacific Northwest portfolio. To help overcome this limitation, could the term "real time" be interpreted as same day delivery?

- Section 3, subsection 13, defines some of the "environmentally related characteristics" or "nonpower attributes" of eligible renewable resources. Is it possible to develop a complete listing of the environmentally-related characteristics of these resources?

- Section 4, subsection 2(b), accords additional value for distributive generation against the renewable energy standard. How will the output value from distributive generation be determined, monitored, and verified?

- Section 4, subsection 2(g) acknowledges certain "co-fired generation" as meeting the renewable energy standard, but this determination is based on a heat-value determination. How will that determination be made, monitored, and verified?

- Can existing power sites that have been idled, due to traditional power market or PURPA economics, be re-fired or re-powered after March 31, 1999, under new renewable resource market conventions, and included as eligible resources under the statute?

- Section 3(18) excludes biomass generation as a renewable resource where the fuel includes wood from old growth forests. It seems possible that an "approved" hog fuel source could include some fugitive pieces of wood from old growth trees. Is

there a need to define the certification process for biomass fuels, to include some provision or coverage for the possible, incidental contamination of the fuel supply with materials from old-growth forests?

Renewable Energy Credits

- It appears a means of tracking renewable energy credits will have to be developed to ensure the integrity of the portfolio of non-power attributes associated with qualifying resources. This tracking system will also have to include the temporal element of REC eligibility (plus or minus one year).

Definition of Load

- Section 2 (12) defines "Load" as the amount of kilowatt-hours of electricity delivered in the most recently-completed calendar year by a qualifying utility to its Washington retail customers. In Section 4 (2)(d)(i), "load" is referred to as the utility's "weather adjusted load." We would advocate for one clear and consistent definition of load in the rulemaking, and for the purposes of this statute, that it be weather adjusted or normalized. Furthermore, each qualifying utility has its own standard normalization methodology approved by the Commission for its rate case proceedings. We suggest that each utility's approved normalization method be deemed the approach to be used for that utility in the application of this statute, unless ordered otherwise by the Commission.

- Load information for "the most recently completed year" will not be available for use in determining compliance with the statute for up to several months following the close of the year. Some compliance accounting for this delay, or the use of load information from a different time period (e.g. prior reporting year) may be required to accurately assess a utility's initial and annual compliance.

Incremental Resource Costs

- In some instances a utility may propose to be in compliance with its annual energy target by meeting the percent-of-revenue-requirement spending on eligible renewable resources. In that event, the calculation of incremental cost for conventional and renewable resources should be based on substantially similar energy products in terms of firmness, heavy and light-load-hour characteristics, and seasonality. A more complete accounting of these costs might include the following, among others:
    - Capital (including financing) and operating costs.
    - Fuel costs.
    - Quantifiable environmental externalities.
    - Royalty or land right payments.
    - Incentives or other payments from state or federal governments.

- Transmission integration – costs associated with substation and feeder lines required to physically connect the output of the generating resource into the high-voltage transmission system, transmission losses, and upgrades and expansions to the bulk, long-distance transmission system required to transfer the energy to loads.
- Regulation – costs to follow moment-to-moment changes in system balance. This is usually provided by power plants on Automatic Generation Control.
- Load following – costs associated with balancing loads and resources over longer time periods, beyond the moment-to-moment changes associated with regulation.
- Forecast Error – costs associated with balancing the difference between a forecast timeframe (e.g. hour ahead) forecast of energy delivery and the actual delivery of energy from the resource over the hour.
- Capacity cost – If new resources are predominantly wind, additional dispatchable, capacity-type resources will ultimately be required to meet system reliability standards.
- Portfolio costs – utilities often perform a portfolio or system analysis that includes their current power supply system and the prospective new resources. This portfolio analysis approach estimates the total system cost associated with building and operating the new resource as well as the costs of the existing system. Comparing the system cost of a renewable resource scenario with the system cost of an alternate resource provides a comprehensive estimate of the total incremental cost of the renewable.

- A utility's total incremental spend on eligible renewable resources should also include research and demonstration costs associated with developing new renewable resources. These types of expenditures are often made in achieving commercialization of non-commercial renewable resources, or efficiency improvements to commercial renewable resources.

- In addition, a utility's incremental spend should also include the substantial portion of any "dry-hole" costs associated with meeting the renewables target. These dollars are expended toward development of a renewable-resource project that, due to economic changes, force majeure, or other circumstances beyond the control of the utility, results in project termination prior to commercial operation. The portion of dry hole costs included in the incremental spend calculation would be related to the additional risk of developing mandated renewable resources, compared with the least-cost approach of developing conventional generation.

- For existing, eligible renewable resources (commencing operations after March 31, 1999), how will the incremental costs of these resources be calculated for purposes of determining the utility's aggregate incremental spend?

Cost Cap Interpretation

- Section 5(1)(a) provides an alternative mechanism for a utility to comply with the its annual target, established in section 4(2), if the utility has invested 4% of its total annual retail revenue requirement on the incremental costs of eligible renewable resources, renewable energy credits, or a combination of both. There has been substantial debate in the utility community about whether the 4% of revenue requirement is spent in a cumulative manner over the time frame encompassed by the statute (i.e. year 2020), or if that amount must be spent on an annual basis. Proponents of the statute have described the 4% as a "cumulative" value, however, the language appears to be sufficiently vague as to warrant clarification.

- There also appears to be a need for development of the mechanics for how this calculation will be done, for both the term of the phase-in of the resource target through year 2020, and in perpetuity.

- Some additional areas of clarification include, how to amortize capital expenditures for renewable resources, and whether the 4% is a compounding value, since the spending on renewable resources, itself, raises the retail revenue requirement.

Prudence and Cost Recovery

- The resource development and load service requirements of the statute could be at odds with the Commission's least-cost planning approach to resource development. This represents a shift in the paradigm under which conventional prudence review has been developed. In this regard, it would be helpful for complying utilities to have the prudence review conducted at the time a decision is made to acquire eligible resources, including necessary transmission and integration services, and/or renewable energy credits.

- All costs determined to be prudent in this review would be recovered.

Factors Beyond the Utility's Reasonable Control

- The rulemaking should include the listing of a more expansive range of factors, beyond a utility's reasonable control, which if encountered, would deem the utility to be in compliance. Some additional areas of consideration, include:
    - Availability of integration services and tariffs required to integrate some renewable resources, including regulation, and load-following services.
    - Availability of transmission.
    - The latter-stage failure in permitting and siting of a planned-for and contracted eligible resource, given the considerable lead times for new resources development.

- The combinations of variations in weather, loads, hydro conditions, and wind-resource performance could prove to have catastrophic consequences for utility customers (either by over-building or penalties). To avoid these potentially unmanageable consequences, it might be prudent to normalize these and potentially other variables. These normalized values could be trued up over time.

Conservation Potential

- Definition of Conservation – an expanded and detailed list of all potential measures and actions that could be taken by a utility "to reduce electric power consumption" would help reduce uncertainty in future proceedings. An expanded list would encompass the range of measures, from all market transformation activities, to the traditional portfolio of DSM programs, to transmission and distribution system efficiencies.

- It might also make sense to evaluate the possibility of establishing a secondary market for DSM measures among qualifying utilities.

Conservation Targets

- Section 4, subsections 1(d) and (e) provide that the commission can determine if a "conservation program that is implemented by an investor-owned utility is cost-effective based on (its) policies and practices" and "may rely on its existing standard practice to review and approve conservation targets". Do such "existing" standards and practices need to be affirmed in rule, assuming they aren't presently?
- At present, the two common existing numbers for conservation availability come from each utility's IRP and from Northwest Power and Conservation Council. Neither of these is "approved by the Commission". It would be helpful to have a clear process for each utility to follow in identifying its conservation potential. This process could provide the Commission with an "I-937 target" for that utility, which could be "approved" as part of the Commission's IRP recognition process.

Conservation Compliance

- We anticipate each qualifying utility will report its conservation attainment, relative to its target, with the Commission. This report would presumably be reviewed by staff, in conjunction with an opportunity for review by the submitting utility, and submitted to the Commission for approval.
- We anticipate that local DSM measures would be recognized in the year a project completes.