Initiative 937 Renewable Standard: Impact of Proposed Amendments

This document illustrates the potential individual and cumulative effects of some of the proposed amendments to the renewable standard in I-937. If adopted, these and similar amendments could significantly undermine the goals of the renewable standard to diversify our resource base, increase economic development and reduce greenhouse gas emissions.

Existing Law and Rules

15% by 2020 standard = 1230 aMW from Pacific Northwest resources that commenced operations after March 31, 1999.

Subtract eligible renewable resources acquired by qualifying utilities prior to the passage of the Initiative.

\[ 1230 - 300 = 930 \text{ aMW} \]

Subtract the additional hydropower allowed in rulemaking.ii

\[ 930 - 90 = 840 \text{ aMW} \]

Therefore, the 15% by 2020 standard = 840 aMW of primarily new renewable resources.

Potential Effect of Certain Proposed Amendmentsiii

Data are based solely on resources located in the Pacific Northwest. The effect of these amendments is magnified substantially if the geographic region is expanded to include the Western Electricity Coordinating Council region.

Include efficiency upgrades at federal hydropower facilities.iv

\[ 840 - 130 = 710 \text{ aMW} \]

Allow black liquor that commenced operations in the Pacific Northwest since 1999.v

\[ 840 - 38 = 802 \text{ aMW} \]

Allow biomass (wood-fired plants, biogas, and black liquor), regardless of the date it commenced operations.vi

\[ 840 - 579 = 261 \text{ aMW} \]

Allow existing small hydro up to 30 MW.vii

\[ 840 - 459 = 381 \text{ aMW} \]

Cumulative potential impact if all amendments are adopted:

\[ 840 - (130 + 38 + 541 + 459) = -328, \text{ or in other words, zero aMW of new renewables} \]
Data regarding the existing law come from the Union of Concerned Scientists’ economic analysis of I-937 (http://www.ucsusa.org/clean_energy/solutions/renewable_energy_solutions/the-washington-clean-energy.html). Data concerning existing renewable resources come from the NW Power and Conservation Council’s list of generation resources in the Northwest.

Rules adopted by CTED allow qualifying utilities to count operational improvements at hydropower facilities towards the RPS. Those rules also allow qualifying utilities to sell bundled hydropower efficiency improvements to other qualifying utilities to count towards the RPS. Neither of these provisions was envisioned when the Initiative was developed. Chelan County PUD alone estimates 100 aMW of qualifying incremental hydro resource beginning in 2012 (Chelan PUD IRP, 2008). Based upon the current base load forecast, the amount of renewable resources required for Chelan to meet the RPS will be approximately 6 aMW in 2012-2015 and approximately 18 aMW in 2016-2019. That may free up approximately 90 aMW of hydro efficiency upgrades for bundled sale to other qualifying utilities. Other qualifying utilities also are planning efficiency upgrades at their hydropower facilities that could be sold as bundled power to meet the RPS.

We recognize that many of the facilities included in these data will continue to be used to serve loads of non-qualifying utilities in Washington and other states. However, amending I-937 creates the potential for their use here. We also note that this is not a complete list of proposed amendments.

BPA estimates 276 aMW between 2002 to 2017 (BPA’s 2007 Pacific Northwest Loads and Resources Study, the White Book, p. 6). Of that, 108 aMW is due to turbine replacements and the remainder is due to operational efficiency improvements. Both of those qualify as incremental efficiency improvements within CTED’s I-937 rules. Approximately 47% of those upgrades accrue to I-937 qualifying utilities (http://www.bpa.gov/power/PL/RegionalDialogue/Implementation/Documents/2008/HighWaterMark/2008-09-23_FHWM.xls)

This estimate does not include facilities currently under construction, such as the Simpson Tacoma Kraft Company’s 55 MW biomass plant expected on line in August 2009. Approximately ½ will be powered by black liquor, and the other ½ by wood residuals.

Because I-937 already allows wood-fired plants and biogas that commenced operations after 1999, the 541 aMW figure here includes only black liquor, wood-fired plants, and biogas commencing operations prior to 1999 to avoid double-counting, as well as the 38 aMW of black liquor commencment operation after 1999. If the provision restricted to biomass solely in Washington, the pre-1999 figure is 258 aMW.

Total small hydro up to 30.0 MW in the Pacific Northwest is approximately 689 aMW. Of that, 75 aMW belongs to the federal government and 155 aMW is owned by independent entities; the remaining 459 aMW is utility-owned. To be conservative, we used only utility-owned projects in this calculation. In Washington, small hydro comprises 219 aMW; of that, utility-owned projects represent 146 aMW.

For this cumulative analysis, to avoid double-counting, this 541 aMW figure represents biomass commencing operations prior to 1999 and does not include black liquor built after 1999.

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