

Carbon Dioxide Footprint of the Northwest Power System
Comments submitted by Grant County Public Utility District
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The Grant County Public Utility District submits and respectfully asks for the Northwest Power and Conservation Council to consider the following comments on its paper: Carbon Dioxide Footprint of the Northwest Power System, dated September 13, 2007. The Grant County Public Utility District (the "District") commends the Northwest Power and Conservation Council (the "Council") on its production of this analysis. Overall, the District believes that the Council has done a very thorough job of assessing the current and future carbon dioxide footprints of the Northwest Power System. The staff is to be commended for an excellent piece of analytical work and should be encouraged to continue in their efforts. The District sees this timely analysis as providing a solid foundation that will enlighten state, regional and national discussions around setting and achieving reduced emissions targets. That being said, the District would like to call to the Council's attention a number of specific points that should be discussed further and highlighted within the report. In addition, the District would like to see the following additional studies pursued. These are presented below.

- First and foremost, the analysis shows the comparatively low CO₂ intensity of the Northwest Power System (the "NW System") and mentions the probable difficulties associated with achieving the long term reduced emissions targets affecting only new generating resources. The District feels that this point should be strengthened. Moreover, increased emphasis on the risks on the unintended effects of narrowly defined policy choices should be provided. The District strongly believes that the Council should call for a "holistic" approach to emissions reduction that fully includes all sectors of the economy that contribute to the overall emissions level.
- Second, the paper raises important issues regarding the challenges of establishing a baseline for measurement and compliance. The District would like to see increased emphasis on this going forward. The concern here is twofold. First, the highly variable year to year water supply greatly complicates the year to year comparison of actual emissions. Use of average water for analysis purposes is acceptable but the District would like to see further investigation of alternative standards such as the emissions associated with firm hydropower. The District believes that this would put the region on a more comparable basis to other parts of the WECC and the nation (firm resource to firm resource). Also, the District is concerned that the choice of boundary for the Northwest region and the binning of thermal resources could be significant to the CO₂ footprint estimated. The District would like to see alternative definitions of the Northwest analyzed and the opportunity for regional input into the definition of what constitutes the NW Power System.
- The District would like to see an expansion of the context that the NW System is considered against. In addition to the inwardly focused analysis of the system and comparison with the WECC overall, the District would like to see the NW System compared against the entire US power system. It is important to highlight the extremely low CO₂ footprint of the Northwest when compared to all other regions in the US because it increases the challenges the region faces in meeting possible Western or national emissions standards. The Council should be aggressive in pointing out the fact that the NW System's low CO₂ intensity is not only due to our heavy reliance on hydropower but also our aggressive long term investment in conservation and renewables.
- The paper adequately addresses the potential futures under the various northwest state renewable portfolio standards as they currently exist. In future work, the District would hope to see more focus on evaluating the NW System against the proposed Western Climate Initiative and/or possible National standards.
- The District would like to see increased attention to issues such as transmission expansion, reliability and ancillary services. The paper correctly calls out the important contributions to the current low CO₂ intensity that is the direct result of conservation and renewable investments made

by NW parties. The paper indicates the increased challenge of meeting the 1990 CO2 levels into the future if the Fifth Power Plan renewable and conservation targets are not met. It is well known that significant barriers to adding low CO2 emitting projects to the NW System exist due to congestion and expansion policies on the NW Grid. Beyond this, adding large quantities of “clean” but intermittent resources poses significant economic, reliability and technical challenges to individual parties and the region. Other arenas such as the Regional Wind Integration forum are actively working to better understand these challenges. More consideration by the Council as to the feasibility of the types NW System changes required to meet potential CO2 standards in terms of transmission availability, implications to reliability and ancillary service demand is requested.

- The District believes that the Council should be strongly highlighting the importance of supporting research and development into clean resources and emissions abatement technologies. This support should not focus only on renewables and conservation. There should also be discussion of incremental hydro-power, clean fossil fueled technologies and nuclear power. The District would like to see the effects on NW System CO2 footprint resulting from the improved capacity factor of Columbia Generating Station evaluated.

In conclusion, the District wants to reiterate its support for the paper. We believe it provides a strong foundation to build upon and strongly encourage the Council to continue work in this area. The District appreciates the opportunity to provide comment. The District looks forward to working with the Council on the issues we have raised. The District would also like to take this opportunity to strongly endorse the comments provided to the Council from Northwest River Partners on this paper.