

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: October 28, 2013

REGULAR X CONSENT _____ EFFECTIVE DATE October 28, 2013

DATE: October 22, 2013

TO: Public Utility Commission

FROM: Adam Bless *AB*

THROUGH: Jason Eisdorfer *J E*, Maury Galbraith *MG*, and Aster Adams *AA*

SUBJECT: PACIFICORP: (Docket No. UM 1538) Request to waive the conversion factor applied to nameplate capacity of solar photovoltaic (SPV) systems pursuant to OAR 860-084-0040(2).

STAFF RECOMMENDATION:

Staff recommends the Commission grant the request by PacifiCorp to waive, for the Stone House Solar Project, the requirement at OAR 860-084-0040(2) to apply an 85 percent conversion factor to the nameplate capacity of SPV systems used to comply with Oregon's solar capacity standard.

DISCUSSION:

ORS 757.370 requires that "On or before January 1, 2020, the total solar photovoltaic generating nameplate capacity, from qualifying systems generating at least 500 kilowatts, of all electric companies in this state must be at least 20 megawatts of alternating current with no single project greater than five megawatts of alternating current." To partially meet this requirement, PacifiCorp issued a Request for Proposal for solar capacity and signed a power purchase agreement to acquire the output of the 7.0 megawatt (MW) Stone House Solar Project (Project) in Christmas Valley.

In its implementing rules at OAR 860-084-0040(2), the Commission specified an 85 percent factor for converting project capacity from direct current (DC) to alternating current (AC). Using this conversion factor, the maximum allowed nameplate capacity of the project, measured at the DC side, would be 5.88 MW. Stone House proposes to install 7.0 MW DC of solar panels (equivalent to 5.95 MW AC using a conversion factor of 85 percent) and use inverters that limit the output to a maximum of 5.0 MW AC. This would enable the Project to comply with the 5.0 MW limit on sunny days and maintain this output on cloudier days. Under OAR 860-084-0000(3), the Commission may waive

any of the Division 084 rules “for good cause shown.” Pursuant to this rule, PacifiCorp requests a waiver of OAR 860-084-0040(2) for the Stone House project.

Staff believes that waiving the rule to allow for the specific project design meets the intent of the rule and the statute. The statutory requirement implicit in the rule was the 5.0 MW AC limit. The 85 percent conversion factor was intended to ensure compliance with the statutory limit while allowing for inverter losses. Although inverter efficiencies vary, the Commission selected a uniform 85 percent factor to simplify compliance.

PacifiCorp states that waiving the rule to allow for the specific project design will enable it to meet the solar content standard at lower cost, because it will enable the Project to produce its full 5 MW AC capacity a greater percentage of the time. The waiver allows the Project to increase its annual energy output, providing more renewable energy credits. Finally, PacifiCorp points out that installing 7.0 MW of solar panels and using a limiting inverter assures the full 5 MW AC output in the future as panels degrade.

Staff believes PacifiCorp’s request meets the criterion of “good cause shown” stated at OAR 860-084-0000(3). Staff recommends granting the waiver as requested.

PROPOSED COMMISSION MOTION:

The request by PacifiCorp to waive the requirement at OAR 860-084-0040(2) to apply an 85 percent conversion factor to the nameplate capacity of SPV systems used to comply with Oregon’s solar capacity standard is granted for the Stone House Solar Project.