

SIMPSON TIMBER COMPANY GENERATION ASSESSMENT

EES Consulting was asked to review the options for a new boiler/turbine combination at Simpson's Longview mill. Specifically, EES Consulting was asked to estimate the market value of generation compared to the capital investment cost associated with varying boiler/turbine sizings from the perspective of a Public Utility District (PUD).

EES Consulting considered five different boiler/turbine combinations for this study. The market value of the annual generation for the five options was estimated using forecast Mid-Columbia (Mid-C) electric market prices for a 20 year period. Net income from market sales was calculated by subtracting annual debt service costs associated with



the purchase of the boilers/turbines from estimated Mid-C market revenues. The revenues earned from the sale of generation at the market were reduced by the cost of transmission to transport plant output to the market.

The results of the analysis were dependent upon key assumptions. In order to test the sensitivity of net income to key assumptions, results were calculated using different assumptions. Specifically, the sensitivity to increases in capital costs and variations in market prices and borrowing rates was estimated.

As part of due diligence, the capital costs associated with purchasing a boiler/turbine were compared to the costs of alternative resources. The five boiler/turbine combinations considered in the analysis were compared with four alternative resources on a unit cost basis. Investment in a boiler/turbine was compared to the following alternative resources: wind, gas fired combined cycle combustion turbine (CCCT), coal and the Mid-C market. The competitiveness of the recommended boiler/turbine investment to the alternative resources was assessed.