1.0 EXECUTIVE SUMMARY

Burns & McDonnell has been retained to assess the cost of two particulate control options located between the reheat system and the stack to meet the proposed Mercury and Air Toxics Standards (MATS) Rule. The current system is compliant with the existing filter particulate limit of 0.030 lb/MMBtu. The proposed MATS rule would reduce this emission rate to between 0.006 and 0.010 lb/MMBtu. These rates cannot be achieved with the existing control technology or with modifications to the existing control technology. The primary objective of this evaluation is to provide an Association for the Advancement of Cost Engineering (AACE) Class 4 capital cost estimate, and an Operations and Maintenance (O&M) estimate incorporating site specific factors such as considering the power source for the new control system.

Burns & McDonnell evaluated the application of an Electrostatic Precipitator (ESP), or a fabric filter installed after the reheat system but prior to the stack. These options and placement in the flue gas path were selected in the previous Burns & McDonnell evaluation comparing various control technologies and installation locations. The previous study was an AACE Class 5 estimate that is primarily used for comparing relative options. This evaluation has included Colstrip site specific factors to help separate the two leading control options.

1.1 CAPITAL COST ANALYSIS

Burns & McDonnell requested vendor budgetary cost estimates for the ESP and fabric filter. Burns & McDonnell also requested a budgetary cost estimate for the ash handling system. The remaining equipment was estimated either using recent pricing from other projects or internal estimating tools. The vendor estimate for the ESP and fabric filter are supply and install estimates. The remaining equipment was estimated using manhours estimated internally and Union labor rates from RS Means for Montana.

Using this information capital, and O&M costs were then developed for both control technologies. The Total Project Cost is based on the assumption the project will be executed on a multiple contract, lump sum construction bid approach. The total costs do not include Owner's costs such as taxes, allowance for funds during construction, fees, permitting and Owner's contingency. Table 1-1 provides a summary of the two unit total capital costs.