

5.0 IMPACTS OF COMMERCIAL OPERATION

Following the completion of a 6 month demonstration period, two commercial operating scenarios would be reasonably foreseeable outcomes: (1) a successful demonstration followed immediately by commercial operation of the power plant at approximately the same power level or (2) an unsuccessful demonstration followed by modification of the plant equipment, possibly including additional post-combustion emission controls, to improve operational performance and economics. Under either scenario, the expected operating life of the power plant would be 35 years. Impacts associated with the second scenario would be nearly identical to those in the first scenario, with the exception that the power plant would not operate for a period of time during which construction and installation of the new equipment would result in minor impacts. Because both scenarios would eventually result in a power plant that would be permitted to operate in an environmentally acceptable manner, the long-term impacts would be similar and the remainder of this discussion focuses on commercial operation of the power plant, assuming a successful demonstration.

The proposed power plant would be a baseload electric generating station that operates 24 hours per day; therefore, the level of short-term impacts during commercial operation would not change from those described for the demonstration in Section 4.0. For long-term effects, the types and levels of impacts would be expected to be identical to those discussed in Section 4.0, except for impacts that accumulate with time.

During commercial operation, the proposed power plant would burn about 350,000 tons of coal per year from the Turriss Mine, which would require about a 17% increase from the current production rate of the mine. Existing reserves owned by Turriss Coal Company are available for over 30 years of mining at the current production rate; additional reserves are available to Turriss Coal Company for supporting the ability of the mine to supply coal to the power plant for the anticipated 35 years of commercial operation.

Coal combustion by-products from commercial operation of the power plant, if not marketable, would be transported for disposal at a permitted location either on Turriss Mine property or on CBEC property. Disposal at a CBEC site would result in additional traffic to transport waste materials to the permitted disposal location. Disposal on Turriss Mine property could be accomplished for the expected 35 year life of the proposed power plant using permitted combustion waste disposal facilities.

Commercial operation of the power plant would increase the potential for groundwater withdrawals to occur during an extended drought. Consequently, the potential for the power plant to adversely affect the municipal water supply or water quality for the village of Elkhart would increase. The measures identified in Table 4.16.1 and discussed in Section 4.3.2 would be used to avoid or minimize adverse effects on local water supplies or quality.