

3.16 Energy Requirements and Conservation Potential

Energy for the proposed Rusk Permit Area would be supplied primarily by electricity and diesel fuel. Electricity would be used to power the draglines and ancillary facilities, pump water during operation, and provide lighting for mining activities. The annual electrical load would be approximately 28,000 MW in the first 12 years of operation and 56,000 MW in the subsequent 18 years. Diesel fuel would be used to power mobile equipment; annual use would be approximately 2.3 million gallons in the first 12 years of operation and approximately 4.6 million gallons in the remaining 18 years of the life of the mine (Sabine 2010b). Life-of-project energy consumption is estimated below (Sabine 2010a):

- Electrical Load (MW) – 1,343,852 MW-hours
- Diesel fuel – 110.4 million gallons

Lignite mining is an energy-intensive industry. Sabine continually evaluates options for energy conservation in the mining process in order to reduce the amount of energy required.