

Integrated Resource Plan

NOVEMBER 2016



For existing thermal plants, PGE projects the following investments, as summarized in Table 3-5, for ongoing compliance with projected environmental standards.

TABLE 3-5: Major planned environmental investments, \$ millions

Facility	PGE Share	Projected PGE Cost (\$ Million)			Notes
		2017–2020	2021–2025	2026–2033	
Boardman	90%	\$0.4	\$0.0	\$0.0	CCR landfill monitoring O&M, well and stormwater structure; coal combustion to cease 2020
Colstrip 3 and 4	20%	\$1.8	\$0.0	\$0 to 40	Pond lining by 2020, potential SCR by 2027
Beaver	100%	\$3.4	\$0.0	\$0.0	Replace cooling tower fill, gas line corrosion protection, GT8 CEMS, recovered oil tank
Port Westward	100%	\$1.4	\$0.0	\$0.0	Replace CO, SCR catalysts
Carty	100%	\$0.0	\$0.0	\$0.0	New facility 2016
Coyote Springs	100%	\$2.5	\$0.0	\$0.0	New aux boiler, replace SCR catalyst
Total		\$9.5	\$0.0	\$0 to 40	

Natural Gas-fired Power Plants

As stated above, the Company’s natural-gas-fired plants have only small amounts of NO_x and SO_x emissions that are within air emissions requirements and not regulated by MATS rules.

Colstrip Unit 3 and Unit 4

PGE has a 20 percent ownership interest in Colstrip Units 3 and 4. The construction of these plants occurred approximately ten years after Colstrip Units 1 and 2 and five years after Boardman came into service. Units 3 and 4 use low-sulfur coal and scrubbers to reduce sulfur dioxide emissions. In recent years, PGE and the plant co-owners installed low-NO_x burners and mercury controls such that the units will remain in air emissions compliance until approximately mid-next decade. As mentioned above, SB 1547 governs the rate treatment of PGE’s interest in Colstrip Units 3 and 4, requiring depreciation by 2030 and removal from rates by 2035.

The “reasonable progress” improvement requirement under U.S. EPA Regional Haze Program could trigger the need for additional NO_x controls, such as a selective catalytic reduction (SCR) retrofit by 2027.⁴² However, to help with the State Regional Haze goals SmartBurn Technology will be installed by 2017.

⁴² No additional equipment or costs are required immediately for the mercury and air toxics rule or the EPA Regional Haze Federal Implementation Plan (FIP). However, the Reasonable Progress requirement of the Regional Haze Rule will likely require addition of selective catalytic reduction (SCR) systems for each unit by 2027.