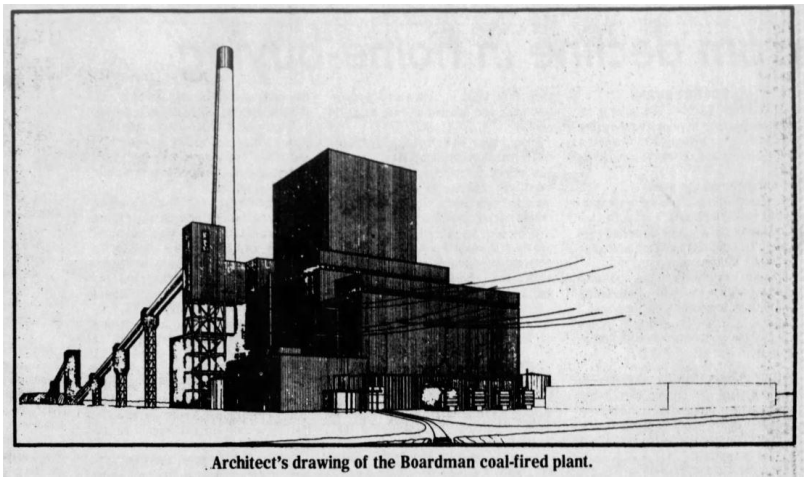
Portland General Electric
BOARDMAN POWER PROJECT 1976-2020


Architect's drawing of the Boardman coal-fired plant.

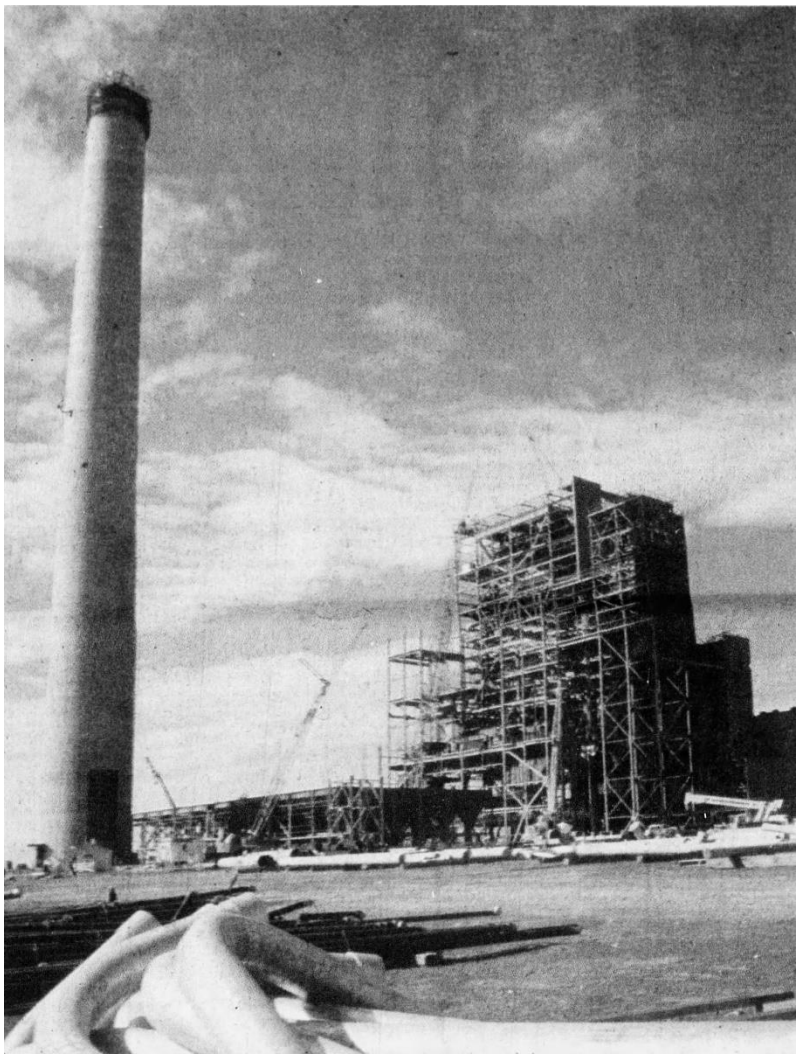
The Boardman Power Project, located in Morrow County, was part of the Portland General Electric Company's (PGE) mid-1970s effort to expand its generation capacity and supplement hydropower in the Pacific Northwest to meet anticipated demand. The 1600-acre Boardman site was intended as the location for two nuclear plants but its proximity to a US Naval Weapons Training Facility made that impractical and the nuclear plants were shifted to Pebble Springs, near Arlington. Boardman instead became the focus of Oregon's first, purpose-built coal-fired generating plant. Construction began in February 1976.

Boardman was developed in response to a perceived energy shortage and the growing need for additional generation capacity. Construction delays at other facilities, including the five planned WPPSS plants in Washington and PGE's Pebble Springs No. 1 and No. 2, along with and unexpected shutdown at PGE's Trojan Nuclear Plant, created concern that the Pacific Northwest would face critical power shortages. Projections were so dire that the Bonneville Power Administration was forecast "...the average home would be powerless for 25 percent of the time..." (*Corvallis Gazette-Times*, 28-August-1975, 1:1-6). Boardman, relying on coal-fired technology already in use at more than 150 plants in the US could, unlike a nuclear plant, be built comparatively rapidly. It was expected to go into operation in January 1980, just as the region most needed its output (*Tri-City Herald*, 12-March-1978, 41:1-8).

Construction of the $530 million project continued through the late 1970s, hitting a peak in late 1979 when more than 1400 workers were on the site. Bechtel Power Corporation designed the Boardman project and served as the primary contractor. Swan-Wooster Engineering designed the huge coal-handling facilities (*Tri-City Herald*, 12-May-1978, 41:1-3). To accommodate the construction impact on the local area, PGE funded improvements to Boardman's sewer, water, and road systems and built a new medical-dental facility. PGE also erected a temporary housing project to accommodate 300 construction workers (Griesser, 1981:212).

Working around the clock, the Boardman project was 75-percent complete by February 1980. The first coal shipment from the AMAX Company's Bell Ayr Mine, in Gillette, Wyoming was transported in the 230 specially designed "hi-side bathtub gondola cars" that PGE had built for its use. "Upon arrival... an unloading device that clamps each car, turns it 170 degrees,

dumps the coal, and returns the car to an upright position in about 2-½ minutes" (PGE Energy Update, *Statesman-Journal*, 27-January-1980, 48:1).



"In January 1980, two 100-car trains began making the 1200-mile round trip journey from the mines, arriving at the plant every 2-½ days" (Griesser, 1981:212). After testing, the Boardman Power Project was placed into commercial operation, on-time and on-budget, on August 3, 1980. Its generation capacity was rated at 530 megawatts.

Despite the projections of a power shortage, as early as 1982 warmer weather and an economic downturn had left utility companies "....glutted with millions of watts of surplus power," forcing the closure of multiple plants. "PGE shut down its 530MW Boardman coal plant in Eastern Oregon in early October [1982] because of decreased demand and because cheap surplus hydroelectric power was available from other sources" (*The Olympian*, 4-February-1983, A2:1-3). Boardman was only operated for 75 days in 1982 and 46 days in 1983. Richard Dyer, PGE Manager of Power Supply, said the company never anticipated Boardman would be as idle as it has been. "It was built at a time when the state's population and economy were growing," he said (*Statesman-Journal*, 2-Febraury-1982, C1:1-4).

As the Boardman project grew into a regular component of PGE generation, public concerns over air-quality and ash were first raised during Boardman's construction grew. In 2010, PGE entered into a groundbreaking agreement with stakeholders, customer groups, and regulators to significantly reduce air emissions from power production by ending operations at Boardman a full twenty years ahead of schedule. "Portland General Electric shut down the 40-year old Boardman Generating Station for good at 11:56 a.m. on Thursday" (*Portland Business Journal*, 15-October-2020).