

TO PUGET SOUND
THE
MILWAUKEE
AND ST. PAUL
RAILWAY
ELECTRIFIED

Electrified

THE
MILWAUKEE
ROAD

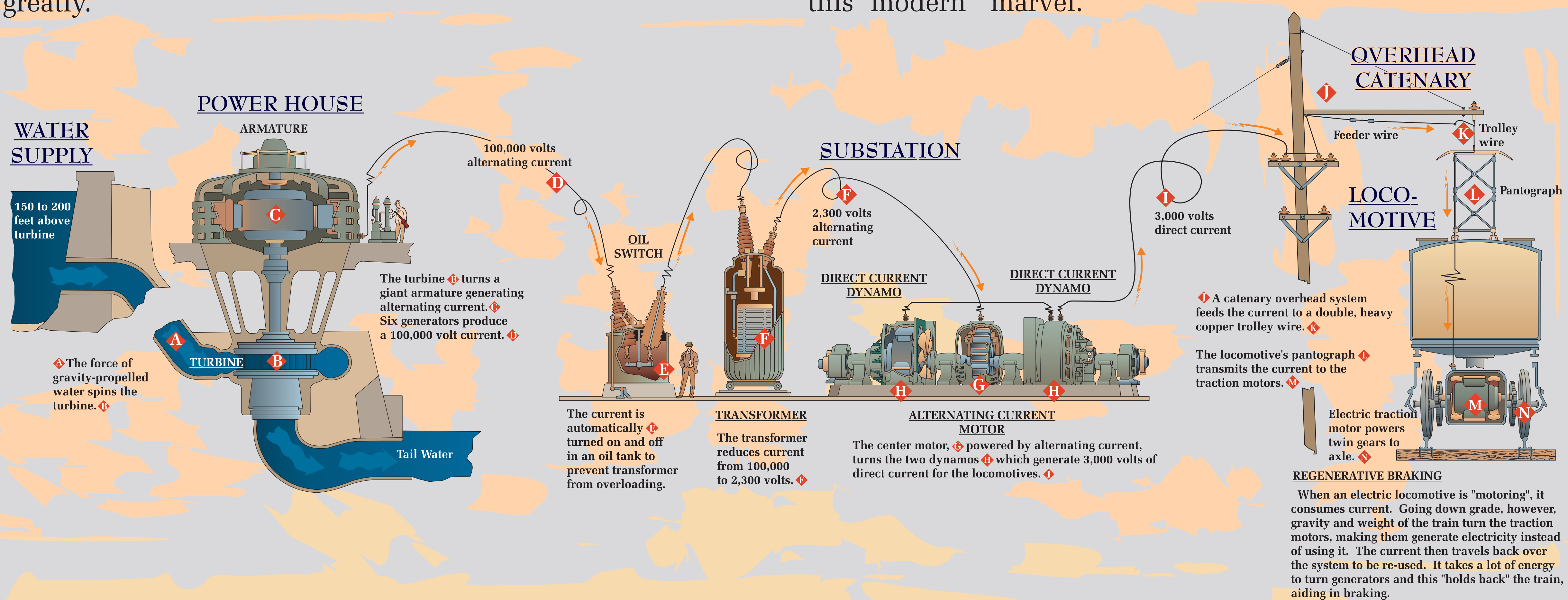
When Water Powered the Road

It made a great deal of sense to the Milwaukee Road's directors to electrify portions of the mainline when building the western extension.

They could reduce the high cost of oil-fired, steam powered locomotives. Electric motors were more efficient than steam engines in cold northwest winters. Dangerous smoke and gas from steam locomotives would be eliminated in tunnels. Not least, some powerful board members owning interest in copper and electrical power stood to benefit greatly.

In 1912, the company set the project in motion by signing power contracts to electrify the line from Harlowton, Montana to Avery, Idaho. When that section became operational in 1917, the results so impressed the board of directors that they launched the second phase from Othello to Tacoma, Washington.

When the second phase was done in 1920, the Milwaukee had the longest stretches of electrified mainline railway in the world, 647 miles. People came from all over the world to see this "modern" marvel.



The Electric Workhorse

The General Electric EF-1 two-unit locomotives were the tireless workhorses of the Milwaukee Road's electric fleet.

Called Pelicans, Black Cows and Mules, but better known as Box Cabs, forty-two were purchased in 1915 and 1916. General Electric delivered the first two-unit set, numbered 10200, in November, 1915 and the Milwaukee Road retired it in August, 1973. It is now on display at the Lake Superior Transportation Museum in Duluth, Minnesota.

The original EF-1 Box Cabs easily handled the typical freight trains of the teens. To pull the longer and heavier freights of the 1930s, the Milwaukee re-arranged the original two-unit locomotives into three-unit sets, EF-2s and EF-3s, that could haul 30 percent more tonnage.

In the 1950s the Milwaukee again upgraded the faithful Box Cabs into four-unit EF-5s which compared favorably to the new diesel locomotives.



Photo by Bruce Black

EF-2 set E45 in the early 1970s

