

PPL Montana



PPL Montana

- 500 employees dedicated to Montana and its communities
- Safe, reliable energy from two coal-fired plants and 11 hydroelectric plants
- Combined generating capacity of more than 1,200 megawatts
- Offices in Billings, Butte, Great Falls and Helena
- Energy marketing operation in Butte

Rainbow Dam, Great Falls

- Operations began in 1910
- Dam is 1,055 feet long and 29 feet high.
- Reservoir is 4 miles long; storage capacity of 1,050 acre-feet.



Rainbow Dam

- Dam is classified as a “run-of-river” project.
- It can generate electricity using the water that flows down the river, without the need to store additional supplies.
- Immediately downstream from Rainbow Dam is Rainbow Falls, which has a drop of 47 feet.



Rainbow Redevelopment Project

- Approximate cost, \$230 million, paid by PPL.
- Single 62-megawatt unit will replace aging units, installed between 1909 and 1930, which have a combined capacity of 37 megawatts.
- New unit will be big enough to power about 45,000 homes.



Rainbow Redevelopment Project (cont'd)

- The large single hydro turbine runner will offer wider flow passages and fewer rotating surfaces, making it easier for fish to pass through unharmed.
- Lower rotating speed will reduce turbulence, decreasing fish mortality by more than 95 percent



Rainbow Redevelopment Project

- A concrete paneled structure, about 160 feet long and 80 feet wide, will be about 200 feet downstream of the old powerhouse.
- Project will result in a peak work force of 200 jobs, paying prevailing wage, for local contractors.
- Completion expected in 2012.
- General contractor, Walsh Construction Co., Chicago

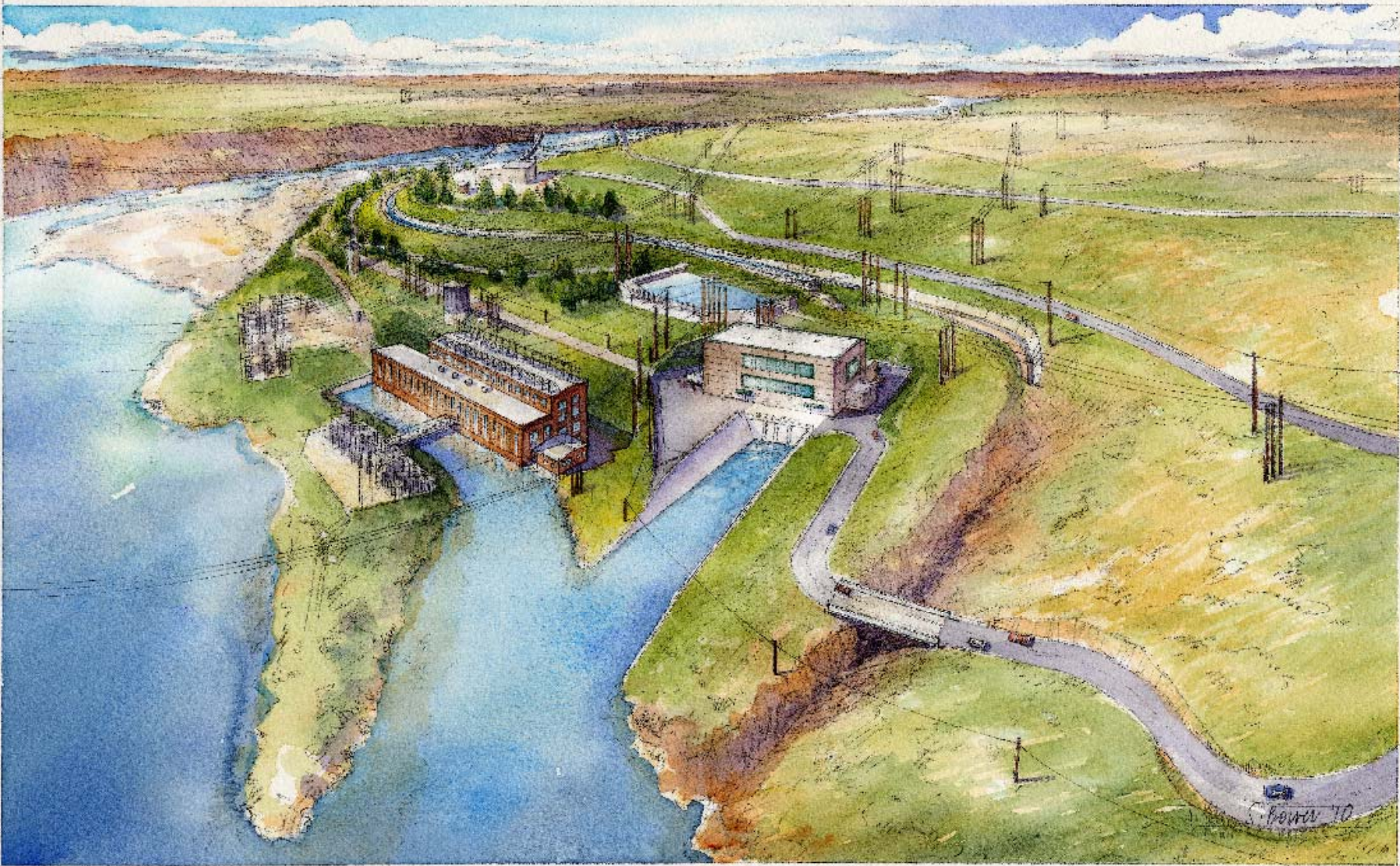
Other Rainbow construction/project facts

- More than a half million tons of earth and rock will be moved during the project.
- More than 50,000 cubic yards of concrete will be poured.
- More than seven million pounds of rebar will be used.

Related 100kV Project

- Budgeted \$55 million (additional to Rainbow project)
- Replace 23 miles of powerlines and substations at all 5 area dams
- New generation control center at Rainbow
- New Crooked Falls substation
- Completion expected mid-2012

Rainbow Powerhouse Artist Rendering



Stephanie Bower, Architectural Illustration







06/18/2010







06/25/2010



07/01/2010



07/01/2010





07/12/2010



07/12/2010



07/14/2010



07/16/2010



