

# Investing in Renewable Energy

## Thompson Falls Dam Upgrade 2017-2018



NorthWestern Energy is upgrading the spillway gates that help control water at its dam at Thompson Falls. The project represents a significant addition to the existing gates, which were installed in the mid-1980s.

**Project details:** The project involves the addition of two new radial spillway gates to the main dam's two existing radial gates. The project will double the automated spill capacity of the dam, while not significantly altering the overall hydraulic capacity. This improvement will allow NorthWestern to respond more quickly to changing river conditions and maintain appropriate flows and reservoir levels. Existing spillway operations required a great deal of manual effort and safety risk, so this project will also greatly reduce the frequency and duration of those operations. Flow releases over the spillway at Thompson Falls typically occur between April and August of each year when river flows are higher than the hydraulic capacity of the seven generating units.

**Timeline:** Budgeting and design of the project began in late 2015. Construction work began on the project in October 2017. Completion is expected in the spring of 2018. The project is expected to cost about \$5.6 million. IMCO General Construction will do much of the work.

**Local impact:** Nearby residents may notice some construction traffic and noise. A large crane and construction activity at the dam will be visible from the other side of the river. Public access at the left (south) end of the dam is restricted for the safety of the public.

**Regulatory review:** NorthWestern operates the dam under a license issued by the Federal Energy Regulatory Commission (FERC). The plan to upgrade the gates was reviewed and approved by FERC. Because the overall dam facility includes a fish ladder, the U.S. Fish and Wildlife Service also reviewed and approved the project. Environmental permits were obtained by various other federal, state, and local agencies.

**Brief history of the Thompson Falls hydroelectric development:** The project consists of two arch-shaped concrete gravity dams, two powerhouses and two powerhouse forebay structures. One powerhouse has six generating units, while the newer powerhouse includes one generating unit. The nameplate generating capacity of the Thompson Falls facility is 94 megawatts.

Construction on the project was completed in 1916. The second powerhouse and generating unit was completed in 1993. The dams were built by the Montana Power Co. PPL Montana bought the dams from Montana Power in 1999. NorthWestern Energy bought the dams from PPL Montana late in 2014.

**For more information on this project, please contact:**

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