

What is a penstock?

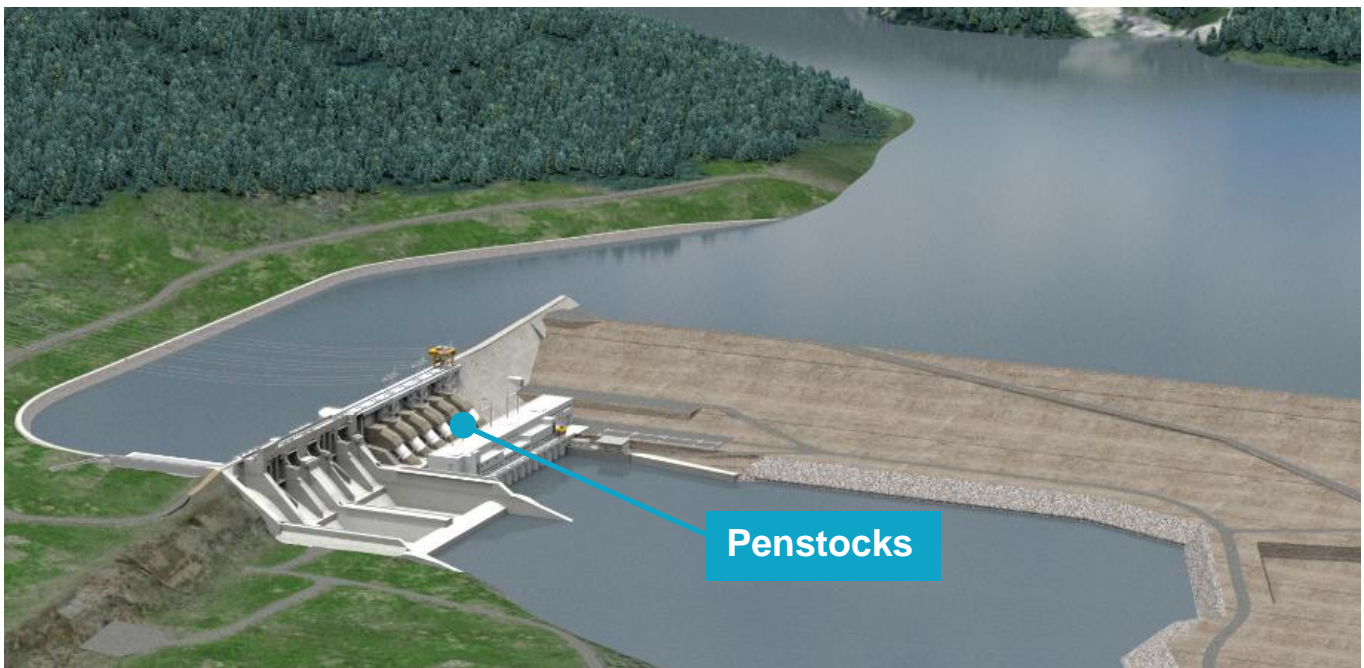
- A penstock is a large steel pipe in a hydroelectric generating station that brings water from the reservoir to a turbine.
- The Site C generating station will have six penstocks to direct water into its six turbine-and-generator units. The penstock pipes are 80 metres long and 10 metres wide and also include transition pieces that are 7.5 metres wide.
- Each penstock will be made of 14 segments, welded together at the dam site. They will be installed using a very large specialized tower crane – one of only four in the world.

Penstocks are made locally

- The penstock segments for Site C are made at a fabrication shop in Fort St. John, using Canadian steel.
- In total, the shop in Fort St. John will be making 84 penstock sections over the next two years.
- Each penstock section takes about 65 days to create. When the section is finished, it is delivered to the dam site using an oversized truck.

Penstock delivery

- Delivery of penstocks and some smaller parts from the fabrication shop to the dam will begin in April 2019. To minimize impacts, large deliveries will occur overnight. They will result in detours, partial road closures and minor traffic delays. Follow [@sitecproject](https://twitter.com/sitecproject) on Twitter or visit sitecproject.com to get the latest information.



How is electricity made? We make electricity by channeling rushing water through the penstocks into the turbines. The water pushes the blades in the turbines, making them spin. The spinning turbines cause the generators to turn. Inside the generators, magnets spin past coils of copper wire, causing electrons to move and creating electrical energy.