

Swift No. 2 Hydroelectric Facility

Cowlitz County, Washington

Owner: Cowlitz County PUD

Description: INCA Engineers, Inc., A Tetra Tech Company (INCA) performed design computations, finite element stress analyses, and detail design for Swift No. 2 surge arresting pipeline and structures. The effort comprised:

- ▶ One 15'10" square to round intake transition
- ▶ Two 15'10" diameter bends
- ▶ One 15'10" diameter pipeline (penstock) on a 19 degree slope
- ▶ One 15'10" x 11'4" bifurcation
- ▶ Two 11'4" diameter pipelines each with a bend and a 11'4" x 6'0" reducer

The design and analyses included the design of all site handling, supports and erection devices, internal temporary stalling rings to resist concrete embedment loads, as well as hold down ties/ supports for concreting.

