

## TALSTON HYDRO DEVELOPMENT | DAM SAFETY REVIEW

Northwest Territories Power Corporation



### Description of Services Provided:

On behalf of the Northwest Territories Power Corporation (NTPC), Meco completed a Dam Safety Review of four structures on the Taltson River; Twin Gorges Dam, North Valley Dam, South Valley Spillway and Noacho Control Dam. Meco's services included:

- Classification of dams in accordance with the CDA Guidelines
- A site inspection for physical deficiencies
- A comprehensive review and analysis of Design and Construction. NTPC's structures included :
  - Zoned Rock fill Dams
  - Concrete gravity dams and spillways
- A Potential Failure Modes Analysis of the structures for incorporation into risk based decision making.
- A review of OM&S, EPP and public safety Manuals and practices
- A review of compliance with previous reports
- Documentation and preparation of a formal report with findings and recommendations

All results are presented in a comprehensive DSR report with quantitative and qualitative risk based decision making.

**Responsibility on Project:** Providing PWGSC with a assessment of the condition of the structures and recommendations for replacements.

**Relevance of Project:** The project involved structural assessment of dam structures, recommendation for replacement and cost estimates of both replacement options, all of which are required services under the standing offer agreement.