

Seven Sisters Generating Station Rehabilitation

STRUCTURE: Seven Sisters Generating Station
 LOCATION: Seven Sisters, Manitoba
 PROJECT DATE: 1981 – 1983
 JOB DURATION: 3 years
 CONTRACT AMOUNT: \$ 5,000,000
 CLIENT: Manitoba Hydro
 CONTRACTOR: Vector Construction Group



2003 ICRI Award

PROJECT DESCRIPTION:

A concern about the stability of the dam and the deterioration of the concrete caused Manitoba Hydro to undertake a project to rehabilitate the Seven Sisters Generating Station Sluiceway and Spillway Overflow Dam.

The project consisted of the removal and replacement of 15 spillway overflow piers, the repair of 3 sluiceway piers, the installation of an insulated overlay on the spillway overflow, the replacement of the sluiceway rollways, the repair of the powerhouse intake deck, the repair of the powerhouse tailrace crane beam, the installation of 60 ft long post-tensioned rock anchors, and the replacement of spillway and powerhouse deck expansion joints.

The types of repairs used on the project were tremie concrete, a caisson dewatering system, temporary deck support systems, unique concrete breaking, form and pour concrete placement, epoxy injection, expansion joints, innovative scaffolding, and post-tensioned rock anchors.

The project was done using an innovative cost plus fixed fee contract, where the contractor was paid a fixed fee to manage the project and the owner paid actual invoiced cost for labour, materials, and equipment.

The project was completed 1 year ahead of schedule and over one million dollars under budget. This project has received Longevity Category Award of Excellence in the [International Concrete Repair Institute \(ICRI\) 2003 Project of the Year Awards](#)



CORPORATE OFFICE

474 Dovercourt Drive
Winnipeg, Manitoba, R3Y 1G4
Ph. (204) 489-6300
Fax (204) 489-6033
Email: vector@vectorgroup.com

REGIONAL OFFICES

Manitoba	Winnipeg	(204) 489-6300
Ontario (North)	Thunder Bay	(807) 346-4405
Ontario (South)	Stoney Creek	(905) 662-4020
Saskatchewan	Saskatoon	(306) 934-3533
Alberta	Spruce Grove	(780) 962-6778

North Dakota	Fargo	(701) 280-9697
Nebraska	Sioux City	(402) 494-9305
Iowa	Cedar Rapids	(319) 364-5355