



U. S. Chemical Safety and Hazard Investigation Board RECOMMENDATIONS STATUS CHANGE SUMMARY

Report:	Xcel Energy Hydroelectric Plant Penstock Fire
Recommendation Number:	2008-01-I-CO-R9
Date Issued:	August 23, 2010
Recipient:	Xcel Energy, Inc.
New Status:	Closed – Acceptable Action
Date of Status Change:	March 1, 2017

Recommendation Text:

Revise your contractor safety policies to require a comprehensive review and evaluation of contractor safety policies and procedures such as the permit-required confined space program and safety performance of contractors working in confined spaces to ensure that any bidding contractor meets or exceeds Xcel Energy safety requirements.

Board Status Change Decision:

A. Rationale for Recommendation

On October 2, 2007, five contract workers were killed and three others were injured when a flash fire erupted inside a drained penstock at the Xcel Energy, Inc. Cabin Creek hydroelectric power plant in Georgetown, Colorado. The fire, which trapped the fatally injured workers deep underground, resulted from the ignition of methyl ethyl ketone; a flammable solvent being used by the workers to clean spraying equipment. The spraying equipment was unsuccessfully employed by the workers to apply a protective epoxy coating to the interior walls of the penstock. Attempts made by local volunteer firefighters to rescue the trapped workers were unsuccessful. RPI Coating was the contractor selected by Xcel to perform the coating work inside the penstock. RPI was selected for the job based on its low bid. RPI had a poor safety record, which included injuries, fatalities, and numerous OSHA violations on past jobs performed by the company.

As a part of its investigation, the CSB examined Xcel Energy's contractor procurement and safety oversight policies, incident investigation policies, and confined space entry program. The CSB concluded that Xcel Energy's corporate policies for solicitation and procurement of construction service contractors allowed contractors with poor safety records to compete for contracts. Moreover, Xcel provided insufficient oversight to ensure that the contractor followed safe work practices while conducting the hazardous recoating work within the penstock at the Cabin Creek facility. The CSB issued recommendations to remedy these deficiencies. This status change summary only addresses the recommendation pertaining to Xcel's review of its contractor safety policies and procedures (2008-01-I-CO-R9).

B. Response to the Recommendation

Xcel revised its Contractor Safety Program to require that potential safety and health hazards be identified for all work that will be performed by contractors at Xcel facilities before evaluation

and selection of the contractor. This is done using a survey form which is contained within the program; confined spaces are included among the safety and health hazards to be identified.

During the evaluation of the contractor proposals for selection, each contractor's written safety and health program and safety performance is evaluated, including a description of the contractor's programs to comply with all regulatory requirements for safety and health hazards that were identified in the survey.

C. Board Analysis and Decision

As the information and documentation submitted by Xcel Energy meets the intent of Recommendation No. 2008-01-I-CO-R9, the Board voted to change its status to: "**Closed—Acceptable Action.**"