

## **CASE STUDY**

Improvement Program to 900 MW Generation Station to an effective MOL/CSA Z460

Lockout Compliant Construction Site



PTAG provides leading firms in the Power, Oil & Gas, Petrochemical, Mining, and Capital Infrastructure markets with qualified People, efficient Business Processes, and Information Management Systems that ensure consistently successful delivery and efficient operation of major capital projects.

### Overview

#### Company

Energy company

#### Goal

As part of a Commissioning Recovery Plan on an active construction site implemented Lockout Program to meet MOL/ CSA Z460 compliance

#### Industry

**Electrical Generation** 

#### Obstacles

Large Construction Site, Numerous Contractors, up to 1800 employee's, need to develop, implement, and administer revised program before Commissioning starts and while construction continues.

#### Category

Construction

#### Solution

PTAG Subject Matter Experts assessed and developed compliant processes, procedures, and implemented supporting software. Additional staff assigned for administration and transition into commissioning support.

#### Project Budget

\$1.2B

#### Results

Seamless transition to an effective MOL/CSA Z460 compliant program. All work programs completed with no orders to comply and no lost time.

## **GOALS**

# Transition to an effective MOL/CSA Z460 Compliant Program

To maintain a safe workplace and to ensure continued operation without work stoppage or orders to comply, the 900 MW Generating Station site needed to transition from it's non-compliant lockout/tagout program to a Ministry of Labour (MOL) and Canadian Safety Association (CSA) Z460 compliant program.

Successfully transitioning to the program required revision to existing Client processes and procedures. Tailored to the specific requirements of the work site, the solution once implemented was able to effectively manage all aspects of the sites commissioning needs while ensuring the safety of over 1800 staff.

# **OBSTACLES**

Management of Change to Achieve Compliance

Challenges to meeting the goals of the project:

- Large construction site, with complex work processes, multiple contractors
- Commissioning was starting while the plant was still under construction
- Revised processes and procedures required to achieve compliance would require a culture change across the site
- Workers at site required training and ongoing awareness of the program requirements
- The LOTO program was monitored and actively to ensure adherence



# SOLUTION

PTAG's Team of On-Site Subject Matter Experts Delivered and Implemented the Program

PTAG's Team was engaged on the project in May 2017 to provide a complete assessment of the existing program to determine gaps and the steps that would need to be taken to achieve a compliant program, and developed a plan for how to make it work on the specific site.

The Team developed and implemented the processes and procedure changes required to ensure compliance with Z460 standards, and worked with on-site client and construction contractor personnel to ensure training, adoption and ongoing adherence to the program.

The needs assessment determined that one key to success would be implementing a tailored software system to automate and manage the Master Equipment List (MEL) with a consistent, standardized nomenclature, printed Danger Tags and supporting Lockout Clearance forms so that the workers could ensure Equipment lock-out accuracy and status was effectively tracked during work execution.

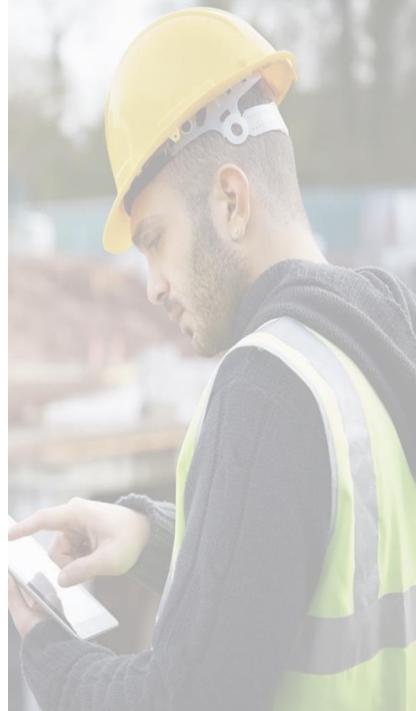
A monitoring and reporting system on level of compliance was implemented to ensure seamless transition to Operations post-project.



# **PTAG PROCESS**

SMEs Delivered, Implemented, Administered And Monitored the Program

- Review and Assess
- 2 Report Results
- 3 Develop Program and Training
- 4 Implement and Administer
- 5 Monitor for Results
- 6 Transition for Ongoing Support

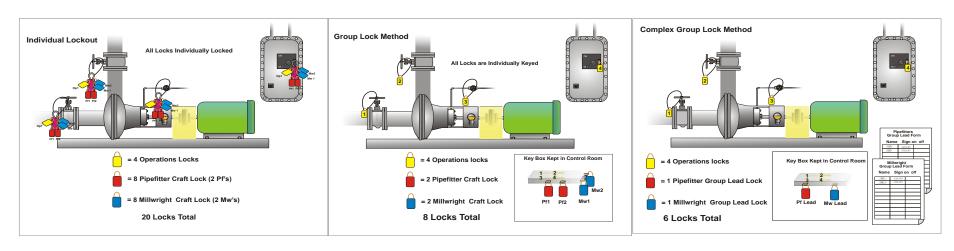




## PROCESS RESULT

#### **SMEs Delivered and Implemented the Program**

PTAG's TEAM of seven SMEs delivered the expertise and the process models and implemented a compliant program designed to meet the needs of the MOL/CSA-Z460-13 Standard. The Program was tailored to work within site constraints and implemented successfully with the personnel on site.



Individual Lockout

Group Lockout

Complex Group Lockout



# RESULT SUCCESS

- Seamless transition to an effective MOL/CSA Z460 Compliant Program
- No Lost Time Accidents
- No Orders to Comply a huge achievement for Hazardous Energy LOTO programs
- Software system turned over to Operations at project completion will ensure long-term adherence and success

"Any chance we can get you to go to some other sites?"

"MOL INSPECTORS COMMENT WHEN ON SITE"

