

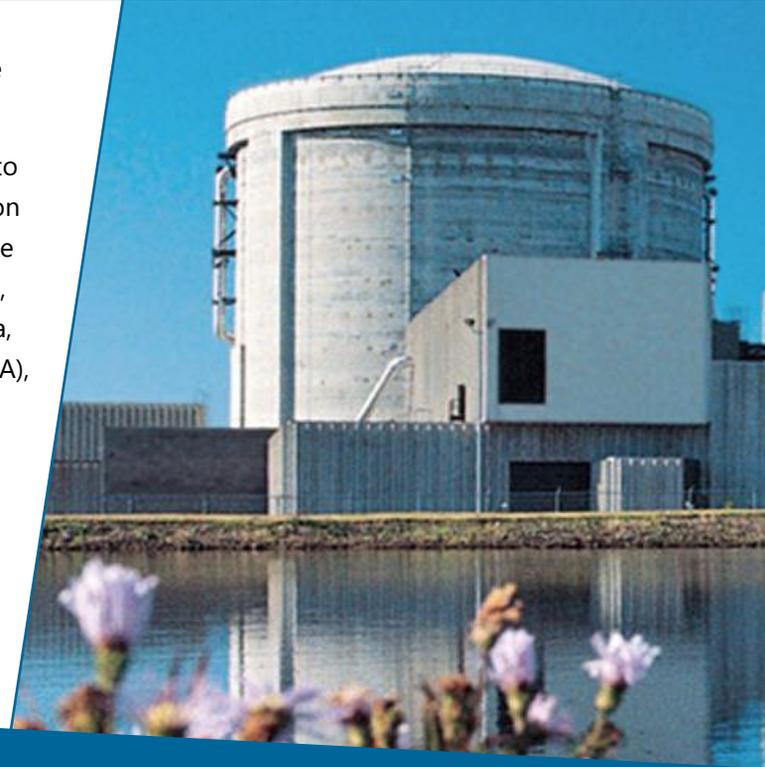
# Solutions for Nuclear Facilities

Nuclear facilities—including power plants, waste management locations, research labs, mines, and fuel processing facilities—are incredibly complex, and present unique fire safety challenges.

Consequently, many committees and organizations are working to ensure safe plant operation, including the Technical Committee on Fire Protection for Nuclear Power Plants (CAN/CSA-N293) and the Technical Committee on Fire Protection for Facilities that Process, Handle, or Store Nuclear Substances (CAN/CSA-N393), in Canada, and, internationally, the International Atomic Energy Agency (IAEA), the National Fire Protection Association (NFPA), and the US Nuclear Regulatory Commission.

## Nuclear Safety Demands Expertise

Only an organization with specific experience and expertise can understand and reliably apply fire safety standards to assist with the design and operation of a nuclear facility.



## Services for Nuclear Facilities

We offer a full range of fire and life safety services for nuclear facilities; descriptions are available in our **Services Guide**. If you don't see a particular service, then please reach out—we might still be able to help.

<b>Fire Hazard Assessments</b>	Applying technical methods to assist our clients' understanding of the impact of fire or explosion on their facilities
<b>Code Compliance Reviews</b>	Assist owners, architects, developers, and authorities to plan and implement designs that meet safety objectives, codes, and standards
<b>Commissioning Services</b>	Planning, documenting, scheduling, testing, verifying, and training to ensure fire and life safety systems operate as required
<b>Third-Party Reviews</b>	Independent reviews by professionals who understand specific industries, conditions of use, and the applicable safety standards
<b>Fire Alarm Systems Design</b>	A range of services, from developing system design criteria and producing detailed designs, to supervising construction and commissioning systems
<b>Sprinkler Systems Design</b>	Design, project management, and contract administration for cost-effective water-based fire protection systems that match hazards with appropriate protection
<b>Smoke Management Systems Design</b>	Design of effective smoke management systems that meet a range of design and life safety objectives
<b>Special Extinguishing Systems Design</b>	Design, project management, and contract administration for cost-effective special extinguishing systems that match hazards with appropriate protection
<b>Fire Protection Audits</b>	A range of audit services to assist clients in improving fire protection and overall life safety programs while satisfying regulatory commitments
<b>Emergency Management</b>	Needs assessment and hazards analysis to assist clients in defining the hazards present and to determine the most effective safety controls
<b>Loss Investigations</b>	Investigate fire and explosion events to determine cause, to identify contributing factors, and—ultimately—to prevent similar incidents

## About PLC

Since 1983, PLC Fire Safety Solutions has provided professional engineering services in fire and explosion prevention to clients across Canada and internationally.

PLC excels in the development of innovative, practical, and cost-effective solutions to meet the fire and life safety needs of a diverse range of clients across many sectors.

Our experienced engineers actively contribute to the profession and stay up-to-date with the latest advances through participation in organizations including the Society of Fire Protection Engineers (SFPE), the National Fire Protection Association (NFPA), and the Canadian Standards Association (CSA).

To promote continuous improvement in the quality of our services to our clients, we maintain a current ISO 9001:2015-registered quality management program.

### Mission

To provide quality fire safety engineering services to support our clients' loss control objectives and assist in their understanding of technical issues related to fire and explosions.

### Vision

To be a trusted leader in fire safety through the development of technical staff excellence, establishing a high level of ethical practice, and working with our clients to meet their safety objectives.

## Specialized Expertise

We have extensive experience applying codes and standards governing the stages of the nuclear life cycle in a full range of facility types, and we're very familiar with the unique challenges associated with each stage.

To serve nuclear clients, we developed specialized software (Performance-Based Fire Assessments for Nuclear Safety—PB Fans) and an innovative approach to maintaining Fire Protection Audits that allows for early schedule planning, reduced financial commitments, and optimal resource utilization.

Our technical staff includes active committee members of the Technical Committee on Fire Protection for Nuclear Power Plants (CAN/CSA-N293) and the Technical Committee on Fire Protection for Facilities that Process, Handle, or Store Nuclear Substances (CAN/CSA-N393). We are also well-versed with international fire safety nuclear standards.



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