



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Canada

CNSC CYBER SECURITY PROGRAM FOR NPPS: THE PRESENT AND THE FUTURE

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Canadian Nuclear Safety Commission (CNSC)

Canada's Nuclear Regulator



Regulates the use of nuclear energy and materials to:

- protect the health, safety and security of Canadians and the environment
- implements Canada's international commitments on the peaceful use of nuclear energy
- disseminates objective scientific, technical and regulatory information to the public

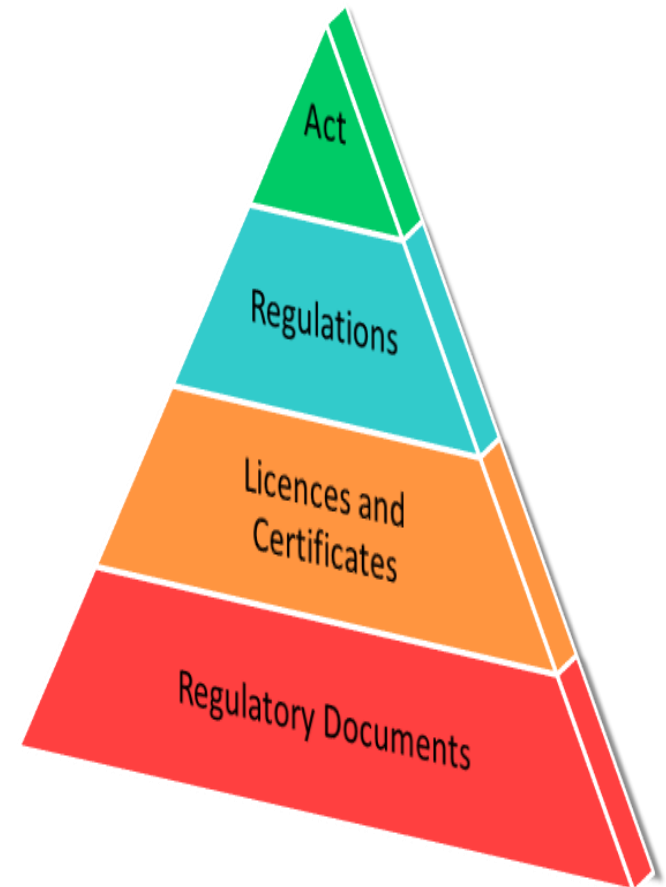


CNSC's Regulatory Framework



CNSC's regulatory framework consists of:

- laws passed by Parliament that govern the regulation of Canada's nuclear industry
- regulations
- licences/conditions
- regulatory documents used by the CNSC to regulate the nuclear industry



Cyber Security Regulatory Framework



- ***General Nuclear Safety and Control Regulations***
 - *“Every licensee shall take reasonable precautions to maintain the security of nuclear facilities”*
- ***Nuclear Security Regulations***
 - under revision to include cyber security requirements
- ***Regulatory documents (REGDOCs)***
 - REGDOC-2.5.2, Design of Reactor Facilities: NPP
- ***Licence Conditions Handbooks (LCHs)***
 - clarifies the regulatory requirements for each licence condition (LC)

Cyber Security Program at NPPs (Past)

➤ Requirements (past):

- site-specific cyber security programs are in place at all NPPs
- regulatory position statement: Letter to NPP licensees outlining CNSC expectations



Cyber Security Program at NPPs (Present)



➤ Requirements (present):

- CSA N290.7-14, "*Cyber Security for Nuclear Power Plants and Small Reactor Facilities*"
- cyber security controls are required in a graded approach based on cyber essential asset's classification

Cyber Security Program at NPPs (Future)

- **Requirements (future):**

- CSA N290.7 *is currently being updated*
- updated N290.7-20 is intended to be used as cyber security program requirements for future cyber security programs



Update Cyber Security Program Inspection Guide

Inspection Guide

Purpose is to:

- verify that the licensee's cyber security program is implemented and maintained in a manner that is consistent with CNSC regulatory requirements, licensee's governance, and that follows industry guidance and best practices
- guide and assist CNSC staff in the conduct of site inspections



Cyber Security Program Inspections at NPPs - Past and Current



- past cyber security programs were assessed through desktop reviews and site inspections from 2015 to 2018
- revealed that all NPP facilities were compliant with the past regulatory requirements
- updated programs will be assessed based on requirements of CSA N290.7-14
- compliance inspections to begin in 2020

Other Activities



- Nuclear security regulations update
- Design basis threat development support
- Research
- Bi-lateral/multi-lateral meetings

Conclusion



- cyber security programs have been implemented at all operating Canadian NPPs
- programs have been updated at most NPPs to comply with the requirements in CSA N290.7-14
- cyber security inspections have been performed at NPPs
- regulatory oversight through desktop reviews and site inspections conducted to-date have revealed that all NPP facilities are compliant with the required regulatory requirements



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Thank You! Questions?

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