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APPROVED FOR INTERNAL USE

STAFF REVIEW PROCEDURES:

Application for Licence to Prepare Site For a New Nuclear Power Plant

SRP-2.01-SP-11NNNN-001

Rev. 000

General Applicant Information

Directorate of Regulatory Improvement and Major Projects Management New Major Facilities Licensing Division





Preface

Staff Review Procedures have been developed by the CNSC staff, as internal working documents, to be used by CNSC staff to assist them in the conduct of regulatory reviews of a potential licensee's (proponent) application for a Licence to Prepare Site (LTPS) for a new nuclear power plant in Canada. They are not regulatory documents, although their respective topics of assessment and criteria are based on regulations under the Nuclear Safety and Control Act, General Nuclear Security and Control Regulations, Class I Nuclear Facilities Regulations and/or Nuclear Security Regulations.

The initiative to develop Staff Review Procedures was undertaken in order to ensure a consistent application of the internal processes for the review of licence applications for new nuclear power plants, and to improve the efficiency and effectiveness of such reviews.

Staff Review Procedures are considered by CNSC staff to be "living documents", which will evolve based on the experience gained from licensing reviews.

Context

An application for a *Licence to Prepare Site* for a new nuclear power plant is submitted by a proponent pursuant to Section 24(2) of the *Nuclear Safety and Control Act* (NSCA), in order to initiate the licensing process for the preparation of a site for the future construction and operation of a facility regulated under the NSCA.

The application for a *Licence to Prepare Site*, in concert with the submission of a Project Description, triggers an environmental determination (as per Section 5 of the *Canadian Environmental Assessment Act*), which in turn triggers the Environmental Assessment (EA) process.

As part of CNSC's licensing process, an application for a *Licence to Prepare Site* will be reviewed against the "Application for *Licence to Prepare Site*" Staff Review Procedures. The Procedures represent CNSC expectations and guidance supporting the assessment of each application by CNSC staff, and are intended to augment and support licensing recommendations by staff to the Commission tribunal.

Effective Date	Rev.	Description of Revisions Made to Document	
		Section	Changes Made
2008-09-25	000	All	New Document – Issued under Document Change Package (DCP) 3296867

This Staff Review Procedures contains CNSC staff review criteria for the following areas of review:

Part	Area of Review ¹	Applicable Regulation under the Nuclear Safety and Control Act			
A	Name and Address	GNSCR ²	3(1)(a)	the applicant's name and business address	
В	Activity to Be Licensed and Purpose	GNSCR	3(1)(b)	the activity to be licensed and its purpose	
C	Representatives of the applicant in dealings with Commission	GNSCR	15(a)(b) (c)	Every applicant for a licence and every licensee shall notify the Commission of (a) the persons who have authority to act for them in their dealings with the Commission; (b) the names and position titles of the persons who are responsible for the management and control of the licensed activity and the nuclear substance, nuclear facility, prescribed equipment or prescribed information encompassed by the licence; and (c) any change in the information referred to in paragraphs (a) and (b), within 15 days after the change occurs.	
D	Evidence of site ownership or authority from owner to conduct activities on the site.	Class I ³	3(c)	evidence that the applicant is the owner of the site or has authority from the owner of the site to carry on the activity to be licensed	

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¹ Topics are defined, for both Environmental Assessment and *Licence to Prepare Site* in E-DOCS# 3217469.

² General Nuclear Safety and Control Regulations

³ Class I Facilities Regulations

PART A

Name and Address - Licence to Prepare Site

	Applicable Regulation under the Nuclear Safety and Control Act
GNSCR ⁴ 3(1)(a)	the applicant's name and business address

1. Topic of Review

This review focuses on the adequacy of the descriptions of the full legal name of the organization applying for the licence and the applicant's business address.

2. Criteria and Objectives

The objective of this review is to verify, from a legal perspective, whether the applicant is a credible business entity. The applicant will be the organization accountable for compliance with the *Nuclear Safety and Control Act* and associated regulations under the conditions of the *Licence to Prepare Site*.

The applicant's name is the full legal name of the applicant's business entity. Legal documentation has been supplied that demonstrates the validity of the business entity.

The applicant's business address is a civic address located in Canada and documentation has been supplied demonstrating the applicant's address is *bona fide*. Examples of such evidence contains the applicant's full legal name and include but are not limited to:

- Municipal tax statement,
- Copy of any licence used at the address,
- Articles of incorporation.

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⁴ General Nuclear Safety and Control Regulations

3. Review Procedure

The Review Lead, as identified in the project-specific Assessment Plan, verifies that the information criteria listed in Section 2 has been satisfied and is credible.

The review, documentation of assessment results and report approval will be conducted in accordance with the project-specific Assessment Plan. Results of the review will be presented in a Review Report template that is included in the project-specific Assessment Plan. The report is to be approved by the appropriate signing authorities. The approved report will be assigned an E-DOCS number under File 2.01 for the appropriate facility.

CNSC Legal Counsel to perform a legal confirmation of the applicant's name and business address.

Note: All applicant evidence / supporting information received are to be treated as Protected A information.

4. Evaluation Conclusions and Recommendations

The Review Report shall contain a staff statement of whether the information submitted by the applicant has met the requirements of Section 3(1)(a) of the *General Nuclear Safety and Control Regulations*. If the requirement has not been met, the review report shall contain recommendations for how the applicant can resolve the gap in information. The review report will contribute to the basis for licensing recommendations to the Commission.

5. References

None.

PART B

Activity to Be Licensed and Purpose - Licence to Prepare Site

Applicable Regulation under the Nuclear Safety and Control Act		
GNSCR	3(1)(b)	the activity to be licensed and its purpose

1. Topic of Review

This review focuses on the adequacy of the description of the activity to be licensed and its purpose.

2. Criteria and Objectives

The activity to be licensed is "Site Preparation" and the ultimate purpose of the activity is the long term operation of a Nuclear Power Plant⁵, followed by eventual decommissioning and abandonment of the site.

The application clearly itemizes all of the high level activities proposed to be conducted under the *Licence to Prepare Site* and this list of activities agrees with the list of activities described in the Project Description.

It should be noted that activities to be encompassed by the *Licence to Prepare Site* will be considered under the provision that:

- the activities agree with the scope of work defined in the Environmental Impact Statement Guidelines published for the project;
- where warranted, sufficient NPP design information has been supplied to support the proposed site preparation activity;
- the activities do not cause significant adverse environmental impacts (confirmed in the Environmental Assessment);
- the Financial Guarantee under the *Licence to Prepare Site* adequately addresses restoration of the site required as a result of the proposed activities should the project be abandoned⁶;
- a compliance program is in place during execution of activities to ensure compliance with the NSCA and Regulations⁷.

⁵ As defined in RD-346: Any fission reactor installation constructed to generate electricity on a commercial scale. A nuclear power plant is a Class IA nuclear facility, as defined in the Class I Nuclear Facilities Regulations.

⁶ Covered in SRG-2.01-SP-11NNN-31 Site Preparation Decommissioning and Financial Guarantees.

⁷ Covered in various Staff Review Procedures for each area regulated under the NSCA.

Within conditions to be set in the *License to Prepare Site*⁸, site preparation may consist of:

- continuing tasks associated with site characterization;
- establishing a construction project infrastructure on a site;
- establishing permanent site support infrastructure;
- subsurface preparation for future construction of NPP Structures, Systems and Components (SSCs).

The following physical activities are considered by CNSC staff to be site preparation activities:

- construction and implementation of ongoing environmental monitoring to ensure adequate mitigation of environmental damage during site preparation and eventual construction activities;
- all activities related to the establishment of temporary and permanent access roads;
- erection of security fencing to establish early physical security barriers (includes site perimeter and construction island fences);
- demolition of existing man-made structures;
- all activities related to the installation of temporary and permanent site support services to support site preparation, construction and long term operational activities, such as:
 - o construction support buildings (e.g., construction offices, warehouses, equipment staging areas, fuel depot),
 - o permanent site support buildings that will be outside the NPP protected area. (e.g., training buildings, technical support buildings, security buildings, site emergency response facilities, laundry facilities), and
 - o electrical power, water supplies, sewage treatment facilities, parking and communications for the aforementioned buildings.
- NPP construction island subsurface preparation, including:
 - o removal of vegetation,
 - o land-clearing / re-contouring,
 - o land reclamation,
 - o coffer dams (for flood protection of the construction island),
 - o blasting and excavation of subsurface rock, and
 - o clearing of site transmission right-of-ways.

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⁸ The *Licence to Prepare Site* incorporates the outcome of the Environmental Assessment process. Therefore, environmental protection requirements may be captured in licence conditions.

⁹ Subsurface preparation does not include installation of pilings or other structures meant to support or add strength to future NPP foundational structures. Drainage trenches and cable tunnels may be permitted with the provision that additional reviews will be required for the *Licence to Construct* stage if the structures will be credited in NPP safety analyses.

The following activities are considered by CNSC staff to be part of construction of NPP SSCs:

- On-site delivery and storage of any nuclear plant components¹⁰ to be used in the physical construction of NPP SSCs;
- Construction of NPP SSCs including but not limited to:
 - o NPP foundation structures (including support pilings);
 - o Plant intake and outlet channels and structures (including cooling ponds and related connections to the Ultimate Heat Sink);
 - o Cooling tower(s) and related connections;
 - o Turbine Building and related conventional side SSCs;
 - O NPP-related electrical distribution and grounding systems 'upstream' of the main grid switchyard ('upstream' is defined as everything from and including the main grid switchyard to and including the NPP itself);
 - o Emergency power supply buildings and systems related to the future NPP;
 - o NPP Water Treatment Plant;
 - o NPP or site ancillary services facilities (e.g., D₂O upgrading facilities, radwaste storage and processing facilities).

3. Review Procedure

The Review Lead, as identified in the project-specific Assessment Plan, verifies that the information criteria listed in Section 2 has been satisfied and is credible.

The review, documentation of assessment results and report approval will be conducted in accordance with the project-specific Assessment Plan. Results of the review will be presented in a Review Report template that is included in the project-specific Assessment Plan. The report is to be approved by the appropriate signing authorities. The approved report will be assigned an E-DOCS number under File 2.01 for the appropriate facility.

The Review Lead is to review the applicant's submission and comment on adequacy of the description of the activity to be licensed and its purpose. Where specific activities may be called into question, the Project Officer shall request assistance from appropriate Staff technical specialists to understand the ramifications of the proposed activity at the *Licence to Prepare Site* and future licensing stages. The review shall take into account:

- Potential risks that may cause delays to the overall project licensing timeline;
- Site Preparation decommissioning scope if the project stopped during site preparation, is the activity reversible with the goal of achieving restoration of the site?

The Review Lead is to confirm the site preparation activities agree with those described in the Environmental Impact Statement Guidelines.

¹⁰ For example: Structural Steel, piping, rebar, system components such as steam generators. Excluded from the restriction are raw materials such as those required to produce concrete.

4. Evaluation Conclusions and Recommendations

The review report shall contain a Staff statement of whether the information submitted by the applicant has met the requirements of Section 3(1)(b) of the *General Nuclear Safety and Control Regulations*. If the requirement has not been met, the review report shall contain recommendations for how the applicant can resolve the gap in information. The review report will contribute to the basis for licensing recommendations to the Commission.

5. References

None

PART C

Representatives of the Applicant in Dealings with Commission - Licence to Prepare Site

Applicable Regulation under the			
	Nuclear Safety and Control Act		
GNSCR	15(a)(b)	Every applicant for a licence and every licensee	
		shall notify the Commission of	
		(a) the persons who have authority to act for them in their dealings with	
		the Commission;	
		(b) the names and position titles of the persons who are responsible for	
		the management and control of the licensed activity and the nuclear	
		substance, nuclear facility, prescribed equipment or prescribed	
		information encompassed by the licence.	

1. Topic of Review

This review focuses on:

- The adequacy of the descriptions of the persons who have authority to act for them in their dealings with the Commission;
- The adequacy of the descriptions of the names and position titles of the persons who are responsible for the management and control of the licensed activity and the nuclear substance, nuclear facility, prescribed equipment or prescribed information encompassed by the licence.

2. Criteria and Objectives

The application lists, by name and position, all persons who have authority to act for the applicant in their dealings with the Commission. For each person listed, the scope of authority is clearly described. This list of persons is generally limited to senior level management. The application should contain sufficient details about these key individuals ¹¹ to support their ability of said individual to satisfy Section 24(4) of the NSCA. In order to further ascertain the capability of specific individuals, staff may conduct further investigations such as interviews.

For all activities to be encompassed by the *Licence to Prepare Site*, the application presents a description of the applicant site preparation organization down to the individual program, including the name and position title of the persons who are responsible for the management and control of each individual program.

¹¹ This information may be submitted as a separate submission and are subject to the provisions of the *Privacy Act*.

Where site preparation activities under a program will be executed by resources external to the applicant organization (i.e. contractors) the following should be documented in the application:

- a clear line of accountability to the applicant organization exists, and
- applicant oversight of said activity can be demonstrated.

3. Review Procedure

The Review Lead, as identified in the project-specific Assessment Plan, verifies that the information criteria listed in Section 2 has been satisfied, and is credible.

The review, documentation of assessment results and report approval will be conducted in accordance with the project-specific Assessment Plan. Results of the review will be presented in a Review Report template that is included in the project-specific Assessment Plan. The report is to be approved by the appropriate signing authorities. The approved report will be assigned an E-DOCS number under File 2.01 for the appropriate facility.

ADEQUACY OF THE DESCRIPTIONS OF THE PERSONS WHO HAVE AUTHORITY TO ACT FOR THEM IN THEIR DEALINGS WITH THE COMMISSION

The Review Lead is to utilize organizational specialists, CNSC Legal Counsel and site inspectors where possible to determine the credibility of persons listed in the application who will have authority to act for the applicant in their dealings with the Commission. Where further investigations such as interviews are deemed necessary for the purposes of the review, the Regulatory Program Director for the site and Director of New Major Facilities Licensing Division will be involved in structuring the depth of the investigation.

Legal advice to Staff is considered Client-Confidential and will not be released to the applicant or the general public.

ADEQUACY OF THE DESCRIPTIONS OF THE NAMES AND POSITION TITLES OF THE PERSONS WHO ARE RESPONSIBLE FOR THE MANAGEMENT AND CONTROL OF THE LICENSED ACTIVITY

The Review Lead is to request organizational specialists to conduct a review of the applicant proposed site preparation organization against the review criteria.

4. Evaluation Conclusions and Recommendations

The review report shall contain a statement of whether the information submitted by the applicant has met the requirements of Section 15(a),(b) of the *General Nuclear Safety and Control Regulations*. If the requirement has not been met, the review report shall contain recommendations for how the applicant can resolve the gap in information. The review report will contribute to the basis for licensing recommendations to the Commission.

5. References: None

PART D

Proof of Site Ownership or Authority from Owner to Conduct Activities on the Site - Licence to Prepare Site

Applicable Regulation under the Nuclear Safety and Control Act		
Class I ¹²	3(c)	evidence that the applicant is the owner of the site or has authority from the owner of the site to carry on the activity to be licensed

1. Topic of Review

This review focuses on the adequacy of the proof of site ownership or authority from owner to conduct activities on the site.

2. Criteria and Objectives

The following documents are considered acceptable:

If land is owned by the applicant:

Land Title or Registry Office documentation.

If land is not owned by the applicant:

- a letter of permission from the owner of the land for activities that will include site preparation and eventual construction and operation of the facilities described per 3(b) of Class I Nuclear Facilities Regulations in the application for *Licence to Prepare Site*;
- the land owner's Land Title or Registry Office documentation ¹³.

3. Review Procedure

The Review Lead, as identified in the project-specific Assessment Plan, verifies that the information criteria listed in Section 2 has been satisfied and is credible.

The review, documentation of assessment results and report approval will be conducted in accordance with the project-specific Assessment Plan. Results of the review will be presented in a Review Report template that is included in the project-specific Assessment Plan. The report is to be approved by the appropriate signing authorities. The approved report will be assigned an E-DOCS number under File 2.01 for the appropriate facility.

¹² Class I Facilities Regulations

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The Review Lead is to request CNSC Legal Counsel to review the applicant's submission to confirm the information satisfies the regulatory requirement.

Legal advice to staff is considered Client-Confidential and will not be released to the applicant or the general public.

4. Evaluation Conclusions and Recommendations

The review report shall contain a statement of whether the information submitted by the applicant has met the requirements of Section 3(c) of the *Class I Facilities Regulations*. If the requirement has not been met, the review report shall contain recommendations for how the applicant can resolve the gap in information. The review report will contribute to the basis for licensing recommendations to the Commission.

5. References

None