Canadian Nuclear Laboratories | Laboratoires Nucléaires Canadiens

Invitation for Clean Energy Projects

Part 2: Evaluation Question Set

Revision 2

UNRESTRICTED

Table of Contents

1. INTRODUCTION

This document outlines the criteria against which responses to the Invitation for Clean Energy Projects will be evaluated. Proponent responses are evaluated against either a pass/fail criterion where the information is provided as requested or is missing from the response, or against a scored and weighted criterion where the information provided is evaluated against a described assessment benchmark. Instructions for responding to the Invitation are provided in Part 1 – Instructions to Proponents. Responses shall be submitted in the template provided in Part 3 – Response Template.

1.1 DISCLAIMER

It is important that Proponents understand that this evaluation is part of an Invitation in respect of which neither CNL nor AECL has any legal obligation or liability, including without limitation, with respect to how, whether or to what extent it reviews a response or recommends a Proponent or continues with a recommended Clean Energy Project. For clarity, this Invitation is not a procurement process, but rather, a process to help CNL advance its Clean Energy program.

CNL is a contractor of AECL and is not acting as AECL's agent in issuing this Invitation. CNL may, in its sole discretion, and at any time:

- suspend, revoke, or terminate this Invitation, including CNL's review of any response to this Invitation, as well as its recommendation of any Clean Energy Project.
- alter, amend or modify the content and requirements of this Invitation and CNL's consideration/review of any responses received to this Invitation, including revising (a) the schedule(s) associated with the Invitation and review of responses, (b) the requirements and criteria used by CNL in connection therewith, and (c) its recommendation of any Clean Energy Project; and
- decide not to recommend the establishment of any Clean Energy Project(s) whatsoever or decide to recommend the establishment of one or more Clean Energy Project(s) on the basis of criteria or information that is in some or all respects different from, or inconsistent with, those set out in this Invitation.

By submitting a response, Proponents acknowledge and agree to the foregoing and that these conditions form an integral part of the Instructions to Proponents. To the extent that there is any conflict between the content of the Instructions to Proponents and this paragraph, this paragraph shall supersede and govern.

2. EVALUATION CRITERIA

The decision criteria CNL will use for the responses received under the Invitation are set out below with their respective weightings. This table provides an overview of the criteria and the requirements to meet those criteria. Details regarding the response requirements and the assessment basis required for the Entry Stage follow in Section 3. The Overall Cohesiveness Team will make the pass/fail recommendation. Under certain circumstances, CNL may elect to put on hold the review and evaluation of one or more Clean Energy Projects submitted. The

selection of which Clean Energy Projects to put on hold will be made based on the scores received through the evaluation process and the overall interests of CNL and AECL.

For projects where a particular criterion may not be applicable, the scoring shall be adjusted appropriately.

Section/Question	Entry Stage	Question Weight	Max Score Available	Section Weight
Part 1 - General Proponent Information				**N/A**
G1 - Proponent Entity Details	Mandatory requirement	N/A	Pass	
G2 - Key Project Partners, Shareholders and Suppliers	Mandatory requirement	N/A	Pass	
G3 - Clean Energy Project Description Summary	Summary	N/A	Pass	
Part 2 - Integrity and Security Requirements				**N/A**
IS1 - National Security Review	Mandatory requirement	N/A	Pass	
IS2 - Integrity Screening	Mandatory requirement	N/A	Pass	
Part 3 – Safety, ESG, and Benefits to Canada				**20%**
SEB1 - HSS&E	The Proponent should address the responses as fully as they are able. CNL may request further information as required to fully assess the Proponent in the Entry Stage.	N/A	Pass	
SEB2 - ESG		35	5	
SEB3 - Benefits to Canada and CNL		30	5	
SEB4 - First Nations Participation or Support		35	5	
Section Total		***100%***	***15***	
Part 4 – Commercial Feasibility and Deployment Strategy				**35%**
CFDS1 - Financial Information - Successive Assurances and Financial Guarantees	Preliminary financial information of Proponent, including potential funding gaps and requirements. Establishment of increasing financial assurances and financial security.	N/A	Pass	
CFDS2 - Conflicts of Interest	Mandatory requirement	N/A	Pass	
CFDS3 - Insurance	Required insurance program identified.	N/A	Pass	

Section/Question	Entry Stage	Question Weight	Max Score Available	Section Weight
CFDS4 - Business Case and Deployment Plan	Feasibility of the proposed Clean Energy Project demonstration plan, including a detailed deployment strategy and schedule that takes the entire lifecycle into consideration.	40	5	
CFDS5 - Proponent Endorsement	The Proponent should address the responses as fully as they are able. CNL may request further information as required to fully assess the Proponent in the Entry Stage.	20	5	
CFDS6 - Irradiated Fuel Management: Financial	Statement of intent regarding management of irradiated fuel and associated cost strategy. Preliminary cost estimate and funding approach.	15	5	
CFDS7 - Radioactive Waste Management: Financial	Statement of intent regarding management radioactive wastes and irradiated fuel associated cost strategy. Preliminary cost estimate and funding approach.	15	5	
CFDS8 - Decommissioning: Financial	Statement of intent regarding decommissioning and decommissioning cost strategy Preliminary cost estimate and funding approach.	10	5	
Section Total		***100%***	***25***	
Part 5 - Technical Requirements				**35%**
T1 - Licensing Approach, Experience and Risks	The Proponent should address the responses as fully as they are able. CNL may request further information as required to fully assess the Proponent in the Entry Stage.	20	5	
T2 - Technology Readiness and Feasibility		20	5	
T3 - Credible Path to Obtain Fuel		N/A	Pass	
T4 - Credible Path to Manufacturing and Construction, Construction and Commissioning		N/A	Pass	
T5 - Management of Irradiated Fuel: Technical		20	5	
T6 - Management of Wastes: Technical		20	5	

Section/Question	Entry Stage	Question Weight	Max Score Available	Section Weight
T7 - Decommissioning: Technical		20	5	
T8 - Access to All Relevant Intellectual Property		N/A	Pass	
Section Total		***100%***	***25***	
Part 6 - Overall Cohesiveness of the Clean Energy Project				**10%**
O1 - Overall Cohesiveness of the Clean Energy Project		100%	5	
Overall Score			**70**	**100%**

3. EVALUATION QUESTION SET

The criteria below will be used for the Entry Stage evaluation. Proponents are required to respond to all criteria that apply to their Clean Energy Project. Greater detail, firmer plans and increasingly detailed cost estimates will be expected as CNL and the Proponent progress beyond the Entry Stage.

For any criteria that are not applicable to the Proponent's Clean Energy project, please indicate that it is not applicable in the Response Template.

3.1 GENERAL PROPONENT INFORMATION

Part 1 comprises of mandatory information to be provided. Clean Energy Projects will not be permitted to move to the next stage if the information is not provided or if the Proponent is unable or unwilling to provide the information. Where a response is incomplete, CNL may provide feedback and seek further information from the Proponent or may reject the response outright.

All Clean Energy Project Proponents are requested to complete questions G1 to G3. **Note that a maximum page limit of five (5) pages is specified for criterion G3.**

Where a consortium, joint venture, alliance, or similar approach is proposed, each consortium member must include General Proponent Information and copies of financial statements as applicable as part of the response package.

It is very important to include the scale of the Clean Energy project and a summary of the activities in the G3 response.

Response Requirement	Weighting	Score	Assessment Benchmark
G1 - Proponent Entity Details			
Please provide the following information about the Proponent: • Name • Address • Town / City • Postal Code • Country • Website (if available); and • Key Contact for the Clean Energy Project (i.e., name, position & contact information).	N/A	PASS	In the opinion of the evaluator(s), the information provided sufficiently describes the Proponent Entity.
		FAIL	In the opinion of the evaluator(s), the information provided does not sufficiently describe the Proponent Entity.

Response Requirement	Weighting	Score	Assessment Benchmark
Legal Structure of Entity			
Set out the legal structure of the Proponent: • Private or Public limited corporation, partnership, joint venture, or other special purpose vehicle. • Provide the following information: o Date and place of formation. o Date of registration and registration number (provide certificates of registration, if applicable). o Registered office address. o Provide all extra-jurisdictional registrations. o Where the Proponent is a member of a consortium, joint venture, or other arrangement, provide details of relationship between the parties including, i) leading entity, ii) direct, indirect holdings / shareholding between the parties. o Intention of Proponent for changes to structure for Clean Energy Project, i.e. creation of special purpose vehicle, etc.	N/A	PASS	In the opinion of the evaluator(s), the information provided is sufficient to describe the legal structure and or proposed relationships of the Parties making the application.
		FAIL	In the opinion of the evaluator(s), the Proponent has not provided sufficient relevant information to describe the legal structure and/or proposed relationships of the Parties making the application.
Organizational Structure			
Provide a diagram and statement illustrating the ownership and high-level management structure of the Proponent and its key project partners, affiliated and associated entities, and shareholders that have a controlling interest, including: • Name, nationality and residential address of board of directors / senior management and all major (>20%) shareholders or stakeholders. • Information describing any parent, guarantors, subsidiaries, or affiliated entities.	N/A	PASS	In the opinion of the evaluator(s), the information provided is sufficient.
		FAIL	In the opinion of the evaluator(s), the response does not provide sufficient information to describe the organizational structure of the Entity.

Response Requirement	Weighting	Score	Assessment Benchmark
Proponent Information, Formation and History			
Provide a brief history of the Proponent and/or any key consortium members, as well as information of all associated / affiliated entities that have a controlling interest, including: • Identification and details of board of directors / senior management. • Identification and details of major (>20%) shareholders or stakeholders. • Description (name, address and controlling shareholder(s) if a guarantor is not individual) respecting guarantors (if any). • Any changes of ownership over the last 5 years. • Prospective take-over bids, buy-outs. • In respect of Proponent, board of directors / senior management, address any major litigation, material agreements, bankruptcies or pending closures. • A description of the relevant experience and competences of the Proponent.	N/A	PASS	In the opinion of the evaluator(s), the information provided is sufficient.
		FAIL	In the opinion of the evaluator(s), the response does not provide sufficient information, such that it fundamentally undermines confidence in the ability of the Proponent to deliver the Clean Energy Project.
G2 - Key Project Partners, Shareholders and Suppliers			
Provide information about key project partners and any other organizations that provide the following support/input to the Clean Energy Project: • Applicant of any regulatory licences at any stage of the Clean Energy Project. • Lead and/or key developers of the reactor technology.	N/A	PASS	In the opinion of the evaluator(s), the information provided is sufficient to demonstrate an appropriate structure and credibility of key partners, shareholders and suppliers with sufficient relevant experience and capability to deliver the totality of the Clean Energy Project.

Response Requirement	Weighting	Score	Assessment Benchmark
• Project manager. a) For each key project partner please provide: • The role and rationale for inclusion of the key project partner. • A description of the relevant experience and competences of the key project partner. • The information shall be consistent with the Proponents Organizational Structure in Response Requirement G1. Proponents should note that experience provided within this question G2 is to be consistent with other questions and criteria as follows: • Operator and licensing experience: criterion T4 - Licensing Approach, Experience and Risks. • Design and development: criterion T7- Technology Readiness and Feasibility. • Project management: criterion T9 - Credible Path to Manufacturing, Construction and Commissioning. • Management of irradiated fuel and radioactive and non-radioactive waste and decommissioning, T10, T11, and T12 respectfully. b) Canadian partnerships: • Please provide a list of current or anticipated Canadian partners (include location and number of employees). • Letters of support from the key project partners including information and timescales associated with setting out formal binding agreements. • Does the proposed structure of the Entity and or its key partners include any relationships with Indigenous communities or organizations, either business, employment or training focused? If so, please provide details (scope, value and conditions). If not, what measures would you undertake to establish such partnerships?		FAIL	In the opinion of the evaluator(s), the response does not provide sufficient information to demonstrate an appropriate structure and credibility of key partners, shareholders and suppliers with sufficient relevant experience and capability to deliver the totality of the Clean Energy Project.

Response Requirement	Weighting	Score	Assessment Benchmark
G3 – Clean Energy Project Description Summary			
Provide a summary of the Clean Energy Project **(maximum 5 pages)** that includes: • A description of the Proponents' strategic objectives, drivers and outcomes envisaged for the Clean Energy Project. • A description of the project technology, including an overview of the design, including coolant (as applicable), fuel type and enrichment (as applicable), safety systems, waste streams, temperatures, physical size, and thermal and electrical power output (as applicable). • A description of the overall facility, including the balance of plant and any other buildings or facilities that would be sited. • An overview of the business case, including the target market, opportunities and risks. • A high-level schedule of the Clean Energy Project. • A high-level overview of costs and financing strategy. • Why the Proponent considers their proposed solution represents a credible technology and approach to a successful Clean Energy project. CNL may request an interview and/or presentation from the Proponent and/or any key project partners.	N/A	PASS	In the opinion of the evaluator(s), the information provided demonstrates a credible and deployable Clean Energy technology with associated outline business case.
		FAIL	In the opinion of the evaluator(s), the response does not provide information that demonstrates a credible and deployable Clean Energy technology with associated outline business case, which fundamentally undermines confidence in the ability of the Proponent to deliver the Clean Energy Project.

3.2 INTEGRITY AND SECURITY REQUIREMENTS

Part 2 comprises of mandatory information to be provided. Clean Energy Projects will not be permitted to move to the next stage if the information is not provided or if the Proponent is unable or unwilling to provide the information. Where a response is incomplete, CNL may provide feedback and seek further information from the Proponent or may reject the response outright.

Clean Energy projects that involve proscribed nuclear material or proscribed information are required to complete IS1. All Clean Energy projects are required to complete IS2.

Response Requirement	Weighting	Score	Assessment Benchmark
IS1 - National Security Review			
The Proponent and any person that may at any point in the Clean Energy Project assume a controlling interest in the Proponent, will be subject to national security review. This review requires that the Proponent must be an entity that is incorporated, registered in and have offices in: a) A Canadian jurisdiction, or b) A jurisdiction in a country that has: i. entered into a nuclear cooperation agreement with Canada; and ii. has a bilateral security instrument with the Government of Canada and (the "Permitted Countries") such that security requirements respecting the Proponent and Key Personnel can be verified. Countries having a bilateral security instrument with the Government of Canada can be found at the following link: (https://www.tpsgc-pwgsc.gc.ca/esc-src/international-eng.html?wbdisable=true#s9). For the purpose of this review, everyone (organizations, bodies corporate, firms, partnerships, associations of persons, parent companies) controls the Proponent if they: (a) Own, directly or indirectly, 50% or more of the voting shares of the Proponent; or	N/A	PASS	The Proponent and its parents and key project partners meet the national security requirements.
		FAIL	The Proponent and/or its parents and/or its key project partners do not meet the national security requirements.

Response Requirement	Weighting	Score	Assessment Benchmark
(b) Have a right or option that is exercisable to own 50% or more of the voting shares of the Proponent, (each a "Key Person" and together "Key Persons"). Screening requirements also include, for all directors, officers and individual controlling shareholders, (a) a clear criminal records check, and (b) review of a minimum of five (5) year employment, family and known association history. A factor for this review will be the availability of evidence of nationality or a minimum of five (5) years permanent residence for each such individual in one of the Permitted Countries. Information must be provided as required by CNL to assess security requirements for: a) The Proponent; and b) Senior management and board of directors as well as any person or affiliated persons who, directly or indirectly, hold a controlling interest in the Proponent. CNL requires completion of a security screening form for each individual who is, a director/officer, member of senior management or, directly or indirectly, a controlling shareholder. This form contains permission to perform a criminal record check. This form is not attached as part of this package and must be obtained by Proponents by emailing cep@cnl.ca. Notwithstanding the above, all Proponents and Key Persons will be subject to review pursuant to Canada's nuclear safety, non-proliferation and security considerations. CNL will, in its sole and absolute discretion, consider and determine whether each Respondent meets the national security requirements and is eligible to continue to participate in the process.			

Response Requirement	Weighting	Score	Assessment Benchmark
The Proponent, by submitting a Response, acknowledges its acceptance of the National Security Requirements assessment process and that Canada's determination resulting from that process is final.			
IS2 – Integrity Screening			
As this process relates to lands owned by AECL, an integrity screening will be undertaken. CNL shall screen Proponents for integrity starting in the Entry Stage. Proponents will be required to continue to meet the integrity requirements throughout the process. This screening involves review of each director/officer and member of senior management, and each individual who is, directly or indirectly, a controlling shareholder of the Proponent, for criminal convictions that have not been pardoned respecting charges and convictions of offences in respect of fraud, bribery, corruption and bid rigging, including the following offences, or their equivalent in another country: a) paragraph 80(1)(d) (*False entry, certificate or return*), subsection 80(2) (*Fraud against Her Majesty*) or section 154.01 (*Fraud against Her Majesty*) of the *Financial Administration Act*, or b) section 121 (*Frauds on the government and Contractor subscribing to election fund*), section 124 (*Selling or Purchasing Office*), section 380 (*Fraud*) for fraud committed against Her Majesty or section 418 (*Selling defective stores to Her Majesty*) of the Criminal Code of Canada, or	N/A	PASS	The Proponent and its parents and key project partners meet the integrity requirements and the information provided demonstrates appropriate processes and practices for ethical business conduct.
		FAIL	Insufficient information has been provided and/or one or more of the Proponent, its parents and key project partners do not meet the integrity requirements, and the response does not include sufficient evidence of ethical business conduct processes and practices.

Response Requirement	Weighting	Score	Assessment Benchmark
c) section 119 (Bribery of judicial officers, etc.), section 120 (Bribery of officers), section 346 (Extortion), sections 366 to 368 (Forgery and other offences resembling forgery), section 382 (Fraudulent manipulation of stock exchange transactions), section 382.1 (Prohibited insider trading), section 397 (Falsification of books and documents), section 422 (Criminal breach of contract), section 426 (Secret commissions), section 462.31 (*Laundering proceeds of crime*) or sections 467.11 to 467.13 (*Participation in activities of criminal organization*) of the Criminal Code of Canada, or d) section 45 (*Conspiracies, agreements or arrangements between competitors*), 46 (*Foreign directives*) 47 (*Bid rigging*), 49 (*Agreements or arrangements of federal financial institutions*), 52 (*False or misleading representation*), 53 (*Deceptive notice of winning a prize*) under the *Competition Act*, or e) section 239 (*False or deceptive statements*) of the Income Tax Act, or f) section 327 (*False or deceptive statements*) of the Excise Tax Act, or g) section 3 (*Bribing a foreign public official*), section 4 (Accounting) or section 5 (Offence Committed Outside Canada) of the Corruption of Foreign Public Officials Act, or h) section 5 (*Trafficking in substance*), section 6 (*Importing and exporting*), or section 7 (*Production of substance*) of the Controlled Drugs and Substances Act. The Proponent certifies that, within 10 years before the date it submits its Response, neither the Proponent nor any of its directors, officers or controlling shareholders have been convicted of an offence or have received a conditional or an			

Response Requirement	Weighting	Score	Assessment Benchmark
absolute discharge in Canada for the offences enumerated above, or under any foreign offence that Canada deems to be of similar constitutive elements to the offences enumerated above. The Proponent shall identify any relevant documentation that covers its ethical business practices including: • Codes of Conduct • Anti-corruption/bribery policies The response shall: • Summarize how it complies, monitors, reports on such matters, and shall include a copy of such relevant documents as a reference document. Such references shall not be included within the page count. • Confirm how such arrangements are commutated and embedded within its supply chain practices; and • How it provides awareness and training within its organization including matters such as 'whistle blowing' policy. Note CNL confirms that there is no specified format for the certification. A statement and the signature of the CEO would suffice.			

3.3 SAFETY, ESG, AND BENEFITS TO CANADA REQUIREMENTS

Part 3 comprises mandatory information, which at the Entry Stage may include preliminary arrangements or strategies that are yet to be fully realized. Where the information is preliminary or untested, this should be highlighted. CNL will work with Proponents to assess their readiness and capabilities as part of its due diligence for the Entry Stage. Proponents should also identify areas that would benefit from a collaborative approach in the Acceleration Stage.

Please provide the information requested in SEB1 to SEB4. Gaps should be discussed, including potential solutions and timelines.

Response Requirement	Weighting	Score	Assessment Benchmark
The CNL Clean Energy program is focused on advancing Canada's sustainability goals, while maintaining rigorous safety standards and benefiting the Canadian economy. Working and living sustainably means meeting our needs; without compromising the needs of the future or compromising worker safety.			
SEB1 – Health, Safety, Security & Environment (HSS&E)			
Proponents, or the key project partner that will be the licence applicant or system operator, will be required to satisfy the Nuclear Safety and Control Act (NCSA), any other applicable federal and provincial acts and regulations as part of any licence applications or operations within a nuclear site. This criterion provides early information to CNL regarding the Proponent's, or the key project partner that will be the licence applicant's, approach to satisfy those laws and regulations.			
The response should include: • The Proponent's safety policy, the safety record and current safety statistics of the Proponent and any key partners that will be licence applicants. • The plans for how the Proponent, or the key project partner that will be the licence applicant, intends to address: the Nuclear Safety and Control Act (NCSA), any other applicable federal and provincial acts and regulations, including the identification of the persons responsible, through the lenses of: o Management System Framework o Human Performance Management o Environmental Protection o Radiation Protection o Emergency Management and Fire Protection o Security (including cyber security and security by design)	N/A	PASS	In the opinion of the evaluator(s), the information provided presents sound and detailed plans for the execution of the health, safety, security, environment and quality aspects of the Clean Energy Project.
		FAIL	In the opinion of the evaluator(s), the response does not include sufficient information, such that it fundamentally undermines confidence in the ability of the Proponent to deliver the Clean Energy Project and/or the information provided does not present a sound strategy for the execution of the health, safety, security, environment, and quality aspects of the Clean Energy Project.

Response Requirement	Weighting	Score	Assessment Benchmark
○ Safeguards and non-proliferation including proliferation resistance features. ○ Conventional Health and Safety ○ Packaging and Transport • The plans to ensure quality, including obtaining certification of various aspects of their quality programs. The scope of the quality program should ensure that all other activities meet the appropriate quality assurance. For example, design, construction and procurement will meet appropriate quality assurance for all aspects of the Clean Energy Project, e.g. construction, commissioning, and operation. Evaluation of this criterion may include safety records of any key project partners that are available to CNL through international safety organizations.			
SEB2 – ESG			
A clear Environmental, Sustainability and Governance (ESG) program, including surrounding communities, local governments, businesses, and civil society bodies is of critical importance to CNL, and to the success of the Clean Energy Project.			
The response should include the vision and or program in support of their ESG undertakings including a description of how the Proponent, or the relevant key project partner, will address the protection and/or enhancement of the natural and socio-economic environment in which they operate in a sustainable manner (i.e. a sustainability/ESG Program that demonstrates alignment with federal and global sustainable development priorities) The response shall clearly set out relevant responsible business policies and practices in support of these requirements as well as evidence of its prior experience in a similar and relevant context. The response shall also describe the outcomes of its approach to ESG including any lessons learned and how these may be applied to the Clean Energy Project	35	5	In the opinion of the evaluator(s), the response provides an ESG program description that provides a clear and strong vision and/or program in support of sustainable activities, including a description of how the Proponent, or the relevant key project partner, will address the protection and/or enhancement of the natural and socio-economic environment.
		3	In the opinion of the evaluator(s), the response provides an ESG program description with a rough vision and/or program in support of sustainability including a description of how the Proponent, or the relevant key project partner, will address the protection and/or enhancement of the natural and socio-economic environment.
		1	In the opinion of the evaluator(s), the ESG program description does not outline a vision and/or program in support of ESG in alignment with federal goals and/or no description of how the Proponent, or the relevant key project partner, will address the

Response Requirement	Weighting	Score	Assessment Benchmark
			protection and/or enhancement of the natural and socio-economic environment.
SEB3 – Benefits to Canada and CNL			
As the Clean Energy is to be sited on Crown land, the Clean Energy Project must have substantial benefit to Canada and to Canadians.			
a) The response shall set out an initial benefit realization plan and any relevant benefits that the Clean Energy technology is envisioned to provide to Canada and Canadians. The response may refer to the Clean Energy demonstration project and/or the commercial deployment phase, and should also describe: • Estimates of the value the Clean Energy Project will have in Canada vs. internationally expressed as a percentage. • What potential end user(s) in Canada been identified? If so, explain how they are engaged in the Clean Energy Project to ensure market preparedness? If not, please provide further details on any near-term activities to engage end users. • How will this Clean Energy Project will contribute to the development of the Canadian supply chain? (both for the demonstration unit itself and in the broader business operations including international opportunities). The response shall consider the full extent of the supply chain including small, medium, and local businesses. • Projections for economic benefits to Canada including: o Anticipated number of jobs to be created. o Anticipated capital investments. o Research and development expenditures. o Socio economic contribution to local communities including direct and indirect benefits.	30	5	a) In the opinion of the evaluator(s), the response provides information that displays a thorough plan that could provide significant benefits to Canada from both an economic and social perspective and a comprehensive understanding of the environment in which they will be operating. b) In the opinion of the evaluator(s), the response provides information that displays comprehensive and credible benefits to CNL.
		3	a) In the opinion of the evaluator(s), the response provides information that demonstrates an understanding and willingness to undertake measures to provide enhanced benefits to Canada from both a social and economic perspective including a generally good understanding of the environment in which they would be operating. b) In the opinion of the evaluator(s), the response provides information that displays benefit to CNL.
		1	a) In the opinion of the evaluator(s), the response provides limited information of the benefits to Canada, or a clear understanding of the environment in which they would be operating. b) In the opinion of the evaluator(s), the response provides limited information to demonstrate benefits to CNL.

Response Requirement	Weighting	Score	Assessment Benchmark
○ A brief explanation of how such benefits have been derived. • Describe any plans relating to a Canadian export strategy? Include estimates for the size of the export market and any relevant research undertaken that supports your strategy. • How will this Clean Energy Project enhance Canada's international competitiveness? • How will this technology advance Canadian scientific capabilities? • What is the potential for development of intellectual property to the benefit of Canada? • Describe how this Clean Energy Project supports Canada's climate change and sustainability objectives? • Describe any other benefits to Canada. • Identify any particular benefits envisaged with Indigenous communities consistent with the current or anticipated Canadian partners, and partnerships with Indigenous communities or other organizations provided in response to criterion G2. The benefits plan may include both qualitative and quantitative benefits and shall identify not only the benefit, but also a brief explanation of how such benefits will be derived and any key enabling activities to support realizing such benefits. a) The response should describe the benefits that the Clean Energy Project is envisioned to provide to CNL, including: • How the Clean Energy Project will contribute to CNL's vision: *Canadian Nuclear Laboratories is a world-class, sustainable national nuclear laboratory delivering science and technology structured to meet current, and adapt to changing, Canadian federal, global commercial, and public priorities in four program areas: Energy, Health, Environment, and Safety & Security.*			

Response Requirement	Weighting	Score	Assessment Benchmark

• Any contracts that are anticipated to be placed with CNL, for example, for:
  ○ Research and development (R&D).
  ○ Use of support services.
  ○ Any other potential revenue streams.
• Potential for new S&T facilities / capabilities at CNL such as:
  ○ Fuel fabrication.
  ○ Training facilities.
  ○ Ancillary S&T facilities that use Clean Energy outputs (e.g. heat).
Any other financial or non-financial benefits that you anticipate your Clean Energy Project will bring			

SEB4 – First Nations Participation or Support			
Engagement of Indigenous communities is of critical importance to CNL, and to the success of the Clean Energy Project.			
The response should provide the proposed strategy on how the Proponent, or the key project partner, will engage with Indigenous communities. The engagement strategy should: • Identify any Indigenous partners or equity inclusion opportunities for Indigenous groups. • Consider any Policy or Process documentation to be used by the Proponent including clear goals and expectations for Indigenous Engagement. • Provide transparency and clear communications. • Recognize the importance of engagement with Indigenous peoples. • Engage Indigenous communities in a manner that will be supportive of CNL's brand and respectful of CNL's long established relationships.	35	5	In the opinion of the evaluator(s), the response provides: • A proposed strategy that demonstrates a thorough and comprehensive understanding of the environment in which the Proponent, or the key project partner, will be working. • The strategy and proposed approach are consistent with good industry practices for effective engagement and management.
		3	In the opinion of the evaluator(s), the response provides: • A proposed strategy that demonstrates an appropriate understanding with limited gaps in the understanding of the environment in which the Proponent, or the key project partner, will be working. • The strategy and proposed approach are broadly consistent with good industry practices for effective engagement and management.

Response Requirement	Weighting	Score	Assessment Benchmark
• Align communications activities with CNL to ensure consistency in messaging and maintain the integrity and respect CNL has established. • Conduct public interactions in a manner that supports CNL's broader operations and objectives, both socially and economically. • Demonstrate the ability to balance opposing interests and agenda of different groups. In support of the credibility of the strategy, the response shall provide supporting evidence of prior experience in Indigenous Engagement in a similar and relevant context. The response shall also describe the outcomes of such engagement including any lessons learned and how these are applied to the Clean Energy Project.		1	In the opinion of the evaluator(s), the response provides: • A proposed strategy that does not recognize or demonstrate a clear understanding of the environment in which the Proponent, or the key project partner, will be working. • The strategy and proposed approach are not aligned with good industry practices for effective engagement and management and/or contains omissions or inconsistencies in the proponent's approach.

3.4 COMMERCIAL FEASIBILITY AND DEPLOYMENT STRATEGY

Part 4 comprises mandatory information, which at the Entry Stage may include preliminary arrangements or strategies that are yet to be fully realized. Where the information is preliminary or untested, this should be highlighted. CNL will work with Proponents to assess their readiness and fiscal and technical capabilities as part of its due diligence for the Entry Stage. Proponents should also identify areas that would benefit from a collaborative approach in the acceleration stage.

Please provide the information requested in CDFS1 to CDFS6. Gaps should be discussed, including potential solutions and timelines.

Where a consortium, joint venture, alliance or similar approach is proposed, each consortium member must include copies of financial statements as applicable as part of the response package.

Response Requirement	Weighting	Score	Assessment Benchmark
CFDS1 - Financial Information - Successive Assurances and Financial Guarantees			
Clean Energy Project Costs			
Clean Energy Project costs, financial arrangements, gaps and challenges. a) Provide a comprehensive financial summary that demonstrates sufficient knowledge of the entire life cycle costs of the Clean Energy Project, as well as: • Identification of the intended financing model. • An acknowledgement that the project financing must be sufficient to return the site to an agreed original state at any point in the Clean Energy Project should the Clean Energy Project be abandoned; and • Identification of any key project partners, shareholders (>20%), investors and stakeholders in the Clean Energy Project and an overview of the arrangements with those investors, if available. • Any key assumption or risks associated with financing of the Clean Energy Project.	N/A	PASS	In the opinion of the evaluator(s), the information provided gives confidence that the life cycle costs are understood, and that there is a strategy in place with reasonable likelihood of achieving funding without risk or liability to CNL. Furthermore, the Proponent has demonstrated it can achieve sufficient financial stability required to deliver the scope of the Clean Energy Project according to the proposed Clean Energy Project schedule.
		FAIL	In the opinion of the evaluator(s), the response does not provide sufficient information, such that it undermines confidence in the ability of the Proponent to deliver the Clean Energy Project and/or demonstrates that the Proponent does not understand the life cycle costs, and/or the Proponent does not demonstrate sufficient financial stability.

Response Requirement	Weighting	Score	Assessment Benchmark
b) Financial Gaps and Challenges: CNL encourages all Proponents, including those who require support, to respond. This is very important information for CNL. Information should be provided regarding funding gaps, and if additional outside funding sources or support are required. Possible areas of supports include policy; legislative; regulatory; liability; financial (e.g. power purchase agreement, support for licencing costs, support for first-of-a-kind costs, support to for waste management and decommissioning costs, etc.). Please consider the following questions in your response: • What level of additional funding would allow your Clean Energy Project to proceed? How much of this required funding do you estimate would be available from third parties. Would there still be a gap to be filled? • How would the availability of additional outside funding amend your business case, schedule, etc.? • Discuss any funding gaps that may exist with respect to waste management liabilities, decommissioning liabilities, and support through the regulatory process. • For the various types of support listed, identify those that are likely to enable you to secure further third party (i.e. non-Government) sources of funding/financing. • Identify access to capital that is not reflected in the financial statements or other information provided.			

Response Requirement	Weighting	Score	Assessment Benchmark

If this information is provided elsewhere in the response, for example, in response to T5, the response here may reference to that information.
 	
Financial health and stability
The response should provide:
• Audited financial statements for the last three (3) years, (where available); or where not available, financial statements for the last three (3) years,
  ○ Prepared by the Proponent's outside accounting firm; or
  ○ Prepared in-house (if no external statements have been prepared).
  ○ In all cases, the accounts shall include the balance sheet, the statement of retained earnings, the cash flow statement, the income statement and any notes to the statements.
• Certification from the Chief Financial Officer or an authorized signing officer of the Proponent that the financial information provided is complete and accurate, including disclosure of the following:
  ○ Any material existing or potential claims, litigation or proceedings against the Proponent. If there are material existing or potential claims, litigation, or proceedings, the Proponent is requested to describe how such potential damages will be supported.
  ○ Confirmation that there is no material adverse change that is not otherwise disclosed in the financial information.			

Response Requirement	Weighting	Score	Assessment Benchmark
○ Confirmation of no material off-balance sheet financing arrangements not reflected in information already provided. • Profit and loss projections and cash flow forecasts over the years of the Clean Energy Project, including all assumptions behind these projection statements. A greater level of detail should be provided for the cash flow projections for the first two years of the Clean Energy Project. • For entities debt-rated by a credit rating agency, a copy of the most recent credit rating report (including credit warnings produced since the publication of said report) from each agency that rates the Proponent's debt, or confirmation that no such ratings exist. All of the documents provided in support of responses to *financial health and stability* are excluded from the page limit.			
CFDS2 - Conflicts of Interest			
CNL recognizes that its agreements with AECL and management arrangement through Canadian National Energy Alliance (hereinafter "CNEA"), which is comprised of Jacobs Engineering Group Inc., Fluor Government Group – Canada, Inc., and AtkinsRealis., could potentially cause conflicts of interest. CNL does not consider this to represent a factor that would disqualify a Proponent but does require assurance of robust arrangements in place to manage such conflicts. A full list of affiliated companies can be found at this link. CNL-Affiliate-Company-List.pdf			
a) Identify any key shareholders, partners, contractors, vendors or suppliers that include CNEA affiliates; and b) Identify any key personnel of the Proponent that currently or within five (5) years have held positions with a CNL or CNEA affiliate. If any potential conflict of interest is identified, please provide detailed arrangements of how such conflict would be managed to maintain the integrity of the application process and any subsequent agreements.	N/A	PASS	There are no conflicts of interest, or in the opinion of the evaluator(s), the information provided represents a robust proposal for maintaining information barriers and gives confidence in managing any potential conflicts of interest.
		FAIL	In the opinion of the evaluator(s), sufficient information has not been provided or the information provided does not demonstrate a robust proposal for maintaining sufficient internal partitions and/or give confidence in managing any potential conflicts of interest.

Response Requirement	Weighting	Score	Assessment Benchmark
CFDS3 – Insurance			
Provide details of any proposed or existing insurance program for each stage of the Clean Energy Project development including: a) Type of insurances. b) Level of coverage. c) Proposed insurer, brokers or underwriters; and d) A brief rationale for the insurances provided under the program.	N/A	PASS	In the opinion of the evaluator(s), the information provided presents a sound strategy for the intended insurance program.
		FAIL	In the opinion of the evaluator(s), the response does not provide sufficient information, such that it fundamentally undermines confidence in the ability of the Proponent to put in place appropriate insurance coverage.
CFDS4 – Business Case and Deployment Plan			
CNL requires confidence that the Clean Energy Project has the potential for a strong business case and that the technology has a strong potential for success when deployed commercially, both nationally and internationally. In this context, CNL is looking for this information for the overall business case of the Proponent and for the Clean Energy Demonstration Project in particular. Understanding that development of a strong business case may be part of the Acceleration Stage, Proponents should submit all available business case information.			
The response should include preliminary business case information setting out the strategic, economic, commercial, affordability and achievability cases for the Clean Energy project, which includes: a) A description of business opportunities. b) A market analysis showing the potential for commercial deployment of this technology, both in Canada and in potential export markets. c) A clear deployment roadmap and expected timeline for subsequent application(S) of the Clean Energy project in the industry. d) A high-level cost estimate for the Clean Energy Project including where available: i. Costs for fuel, refuelling ii. The capital cost to build all facilities. iii. Expected operation program and costs, expected staffing level.	40	5	In the opinion of the evaluator(s), the response contains sufficient information for CNL to understand the Clean Energy Project deployment plan, project costs, schedule and associated risks and the response provides sufficient information to determine that there is a very strong chance of successful deployment.
		3	In the opinion of the evaluator(s), the response contains information for on the Clean Energy Project deployment plan, project costs, schedule and associated risks and is sufficient to determine that there is a good chance of successful deployment.
		1	In the opinion of the evaluator(s), the response provides information that is insufficient for CNL to understand the Clean Energy Project deployment plan, project costs, schedule and associated risks to and is insufficient to determine the likelihood of successful deployment.

Response Requirement	Weighting	Score	Assessment Benchmark
e) Any proposals, or future plans, to restructure, partner or enter into arrangements with third parties in order to execute commercialization of the Clean Energy technology. f) A schedule overview with milestones for the life cycle of the Clean Energy. This schedule should include: ○ The timing of the submission of the any required licensing packages. (First submissions for a multi submission project.) ○ Major project phases such as: R&D, design, site preparation, construction, cold and hot commissioning, operation, decommissioning and abandonment. ○ High-level activities and milestones for the completion of any R&D activities. ○ High-level activities and milestones for the completion of design activities. ○ High-level activities and milestones for the completion of licensing submissions g) Deployment risk identification and mitigation strategy (demonstrate how this Project will de-risk the technology for commercial deployment) h) Projected revenue streams, if applicable. i) Any initial evaluation of return on investment and payback periods. The response should include the status of any negotiations with any potential customers of products from the Clean Energy demonstration project.			

CFDS5 – Proponent Endorsement			
CNL requires confidence that there is support from relevant industry sponsors (off takers) and financial entities that confirms Project alignment with one or multiple industry-specific needs and requirements.			
The response should include proponent endorsement information such as: a) The level of committed contribution (cash or in kind) from relevant stakeholders to ensure project success. b) The alignment of the Clean Energy project to the intended off taker's activities.	20	5	In the opinion of the evaluator(s), the response provides information which demonstrates significant proponent endorsement.
		3	In the opinion of the evaluator(s), the response provides information which demonstrates some project endorsement.
		1	In the opinion of the evaluator(s), the response provides insufficient proponent endorsement information.
CFDS6 – Irradiated Fuel Management: Financial			
The intention of this criterion is to understand the costs and financing of the costs associated with irradiated fuel management. The strategies/plans to store and dispose of that irradiated fuel shall be addressed in criterion T10. The response should include: • The strategy in which the Proponent intends to cover the costs of management and disposal of irradiated fuel, that includes how will those funds be managed, and how the funds will be governed to ensure that they are available when needed. • A statement confirming the intent to take full responsibility for all irradiated fuel costs associated with the Clean Energy Project from a complete life cycle point of view. • Preliminary cost estimates for irradiated fuel management and disposal throughout the life cycle of the Clean Energy Project.	15	5	In the opinion of the evaluator(s), the response provides information which: • Demonstrates that the Proponent has reasonable and well justified cost estimates for irradiated fuel management and disposal throughout the life cycle of the Clean Energy Project; including any evidence of where it has managed such previous similar liabilities and cost (if available); and • Demonstrates that the Proponent has a sound plan for addressing the costs of irradiated fuel management and disposal; and commensurate with the stage of Clean Energy Project development; and • The statement of intent is provided, and it states the Proponent intends to cover all costs.
		3	In the opinion of the evaluator(s), the response provides information which: • Demonstrates that the Proponent understands irradiated fuel management costs and a basic and reasonable strategy to address those costs; and • Includes a cost estimate for irradiated fuel management and disposal throughout the life cycle of the Clean Energy Project, but these cost estimates may be partial, insufficiently justified or have some gaps at this time; and

			• The statement of intent is provided with recognized gaps in covering costs.
		1	In the opinion of the evaluator(s), the response provides information which: • Demonstrates that the Proponent either has no cost estimates for irradiated fuel management and disposal, or cost estimates are materially incomplete, not credible or reasonably justified; and/or • Demonstrates that the Proponent has either no plan or an insufficient plan for addressing the costs of irradiated fuel management and disposal; and • The statement of intent cannot be provided at the time of the application.

CFDS7 – Radioactive Waste Management: Financial			
The intention of this criterion is to understand the costs and financing of the costs associated with radioactive waste. The Proponent's strategies/plans to store and dispose of that waste shall be addressed in criterion T11. This criterion considers all radioactive wastes solids and liquids, (excluding irradiated fuel), i.e. low-, intermediate- and high-level wastes. The response should include: • The strategy by which the Proponent intends to cover the costs of management and disposal of radioactive wastes, how will those funds be managed, and how will those funds be governed to ensure that they are available when needed. • A statement confirming the intent to take full responsibility for the costs of all radioactive waste management associated with the Clean Energy Project from a complete life cycle point of view.	15	5	In the opinion of the evaluator(s), the response provides information which: • Demonstrates that the Proponent has reasonable and well justified cost estimates has and a sound plan for addressing the costs of management and disposal of radioactive wastes commensurate with the stage of Clean Energy Project development; and • The statement of intent is provided, and it states the Proponent intends to cover all costs.
		3	The response provides information which: • Demonstrates that the Proponent understands the costs associated with the of management and disposal of radioactive wastes and has a basic and reasonable strategy to address those costs throughout the life cycle of the Clean Energy Project, but these cost estimates may be partial, insufficiently justified or have some gaps; and • The statement of intent is provided with recognized gaps in covering costs.

• Preliminary cost estimates for waste management and disposal throughout the life cycle of the Clean Energy Project for all levels of non-fuel waste. • Information on how the costs of non-irradiated fuel management and disposal will be met, including an explanation of how irradiated fuel management and disposal will be funded.		1	In the opinion of the evaluator(s), the response provides information which: • Demonstrates that the Proponent either has no cost estimates for waste management and disposal of radioactive wastes or cost estimates that are materially incomplete, are not credible; not well justified and/or • Demonstrates that the Proponent either has no plan or an insufficient plan for addressing the costs of radioactive waste management and disposal of radioactive wastes; and/or • The statement of intent cannot be provided at the time of the application

CFDS8 - Decommissioning: Financial			
The intention of this criterion is to understand the costs and financing of the costs associated with decommissioning and site remediation. The strategies/plans to decommission the facility and remediate the site are addressed in criterion T12. The response should include: • The strategy by which the costs of decommissioning and site remediation are intended to be covered, how will those funds be managed, and how will those funds be governed to ensure that they are available when needed. • A statement confirming the intent to take full responsibility for all decommissioning, site remediation and disposal costs associated with the Clean Energy Project from a complete life cycle point of view. • A preliminary cost estimate decommissioning the reactor building and support facilities. • Information on how the costs of decommissioning and disposal will be met by the Clean Energy Project, including an explanation of how decommissioning and disposal of the reactor will be funded.	10	5	In the opinion of the evaluator(s), the response provides information which: • Demonstrates that the Proponent has reasonable and well justified cost estimates for decommissioning the Clean Energy project and support facilities; and • Demonstrates that the Proponent has a well-developed and sound strategy to address those costs including any evidence of where it has managed such previous similar costs (if available); and • The statement of intent is provided, and it states the Proponent intends to cover all costs.
		3	In the opinion of the evaluator(s), the response provides information which: • Demonstrates that the Proponent understands the costs associated with decommissioning the Clean Energy project and has a basic and reasonable strategy to address those costs; and, • Includes a cost estimate for decommissioning, but these cost estimates may be partial, insufficiently justified or have some gaps; and • The statement of intent is provided with recognized gaps in covering costs.
		1	In the opinion of the evaluator(s), the response provides information which: • Demonstrates that the Proponent either has no cost estimates for decommissioning or cost estimates that are materially incomplete, are not credible, or reasonably justified ; and/or • Demonstrates that the Proponent does not have an adequate strategy to address those costs; and/or • The statement of intent cannot be provided at the time of the application.

3.5 TECHNICAL REQUIREMENTS

Evaluation of technical requirements will demonstrate to CNL that the Proponent, along with key project partners, has the appropriate technology, experience, knowledge, capabilities, capacity, and appropriate arrangements to deliver the Clean Energy project.

Response Requirement	Weighting	Score	Assessment Benchmark
T1 – Licensing Approach, Experience and Risks			
It is important for CNL to secure confidence in a Proponent's, or the relevant key project partner's, ability to meet the requirements of the Nuclear Safety and Control Act and the associated regulations and that the Proponent, or relevant key project partner, will be able to attain the required licences throughout the complete Clean Energy Project life cycle.			
a) *Licensing Approach and Experience*: The response should provide: • Clear documentation on who will be the licence applicant at various stages of the Clean Energy Project life cycle. The roles and responsibilities for all parties that will obtain a licence should be clear and documented. • Documentation that clearly identifies the strategy and plans for conducting an Environmental Assessment, the Environmental Risk Assessment and the Site Selection Threat and Risk Assessment. • Evidence that the Proponent, or relevant key project partner, understands the regulatory regime in Canada. This may be experience of the Proponent or key project partners, or externally contracted subject matter experts. • Information, as applicable, regarding the experience of the Proponent, or relevant key project partner, in any other licensing regimes in which they have previously worked, e.g. US, UK, France, etc. • Information regarding whether the proposed operator currently holds a licence to operate a nuclear facility, and if so, what type of licence and where.	20	5	In the opinion of the evaluator(s), the response provides sufficient information for CNL to be confident that the Proponent, or relevant key project partner, understands the Canadian regulatory process and requirements, has a reasonable approach, has people with experience operating nuclear reactors, and understands and is managing risks associated with licensing. The following examples are provided to indicate what the evaluator(s) may take into consideration to award a score of 5: • The Clean Energy Project is employing experts that are familiar with Canadian Regulatory environment – senior team member(s) have >10 years of experience licensing nuclear facilities in Canada. • Licensing experience outside Canada – limited experience >5 years • The proposed operator currently holds or can demonstrate the ability to hold, a licence to operate a nuclear reactor facility in Canada. • Updates on pre-licensing engagements have been provided, if applicable.
		3	In the opinion of the evaluator(s), the response provides some information for CNL to have some level of confidence that the Proponent, or relevant key project partner, understands the Canadian regulatory process and requirements, has experience operating nuclear reactors, and understands and is managing risks associated with licensing.

Response Requirement	Weighting	Score	Assessment Benchmark
• Status and results, if available, of the Proponent's (or the key project partner that will be the licence applicant) pre-licensing engagements with the CNSC, as described in REGDOC-3.5.1, Licensing Process for Class I Nuclear Facilities and Uranium Mines and Mills, version 2. The experience of the Key Partner that is to be the facility operator, which was provided in response to criterion G2 b), will be included in the evaluation of this criterion. b) *Licensing Risks* The response should include a licensing risk matrix or equivalent that identifies the issues that have been identified and that pose a licensing risk and how these risks are being managed.			The following examples are provided to indicate what the evaluator(s) may take into consideration to award a score of 3: • The Clean Energy Project is employing experts that are familiar with Canadian Regulatory environment – senior team member(s) have 5-10 years of licensing for nuclear facilities. • There is some licensing experience outside of Canada (<3 years). • The proposed operator currently does not hold a licence to operate a nuclear reactor facility in Canada but does hold a licence outside of Canada.
		1	In the opinion of the evaluator(s), the response provides insufficient information for CNL to have confidence that the Proponent, or relevant key project partner, understands the Canadian regulatory process and requirements, and the proposed operator has very limited or no experience operating nuclear reactors. The response provides insufficient information for CNL to have any confidence that the risks associated with licensing are understood and/or being managed. The following examples are provided to indicate what the evaluator(s) may take into consideration to award a score of 1: • The Clean Energy Project is employing experts that are familiar with Canadian Regulatory environment – senior team member(s) have <5 years of licensing for nuclear facilities. • Licensing experience outside Canada – very limited experience <3 years.

T2 – Technology Readiness and Feasibility			
The following section is to demonstrate that the Clean Energy project design has progressed the conceptual design stage that provides confidence in support of subsequent stages. This section is also to enable CNL to secure a reasonable expectation that the Clean Energy project is technically feasible commensurate with the stage of Clean Energy Project development, and that the Proponent, or relevant key project partner, understands the design-related Safety and Control Areas.			
a) *Technology Readiness:* Clean Energy Projects should be at a moderate to advanced state of readiness, to ensure that the Clean Energy Projects will be able to proceed as licences are obtained. The response should indicate the state of technical readiness. The following excerpt from *GD-385: Pre-licensing Review of a Vendor's Reactor Design,* which will be used as guide to assess the level of technical readiness: *"At a minimum, made reasonable progress in the basic engineering phase of the design…this means that the basic architecture of systems important to safety has been laid out following the vendor's reactor design guides and design requirements. The following documents should be approaching a state of completion, such that the vendor is ready to proceed with the detailed design phase in preparation for a utility's submission of a construction licence application:* • *Design guides that contain design philosophies, safety philosophies and rules that designers must follow when performing their design work, including safety requirements such as applicable codes and standards.* • *Design requirements for systems important to safety that establish such aspects as:*	20	5	In the opinion of the evaluator(s), the response: • Contains sufficient information for CNL to understand the level of technical readiness, and the Clean Energy Project is at a level of technical readiness equivalent to or beyond that outlined opposite, and/or • Provides sufficient information to conclude that the Clean Energy Project is highly likely to be technically feasible commensurate with the stage of project development, and/or • Contains a strategy and/or planned approach to satisfy the regulatory requirements and guidance for the SCAs identified opposite and shows that thought has been applied to each of these areas.
		3	In the opinion of the evaluator(s), the response: • Contains some information for CNL to understand the level of readiness and the Clean Energy Project is at a level of readiness equivalent to that outlined opposite, and/or • Provides information that is sufficient to conclude that the Clean Energy Project is likely to be technically feasible commensurate with the stage of project development, and/or • Contains a strategy and/or planned approach to satisfy the regulatory requirements and guidance for the SCAs identified opposite, but limited information is presented on how these will be achieved.
		1	In the opinion of the evaluator(s), the response: • Contains insufficient information for CNL to understand the level of readiness and/or the Clean Energy Project has not reached an appropriate level of readiness, and/or

○ *Minimum performance requirements and reliability targets; and* ○ *Reflect significant progress made in any safety-related research and development.* • *The vendor's overall management system as it applies to the design of the proposed plant's (or small reactor's) structures, systems and components.* • *Design and safety analysis representative of a preliminary safety analysis report."* b) *Technology Feasibility* The response should include the following as applicable: • Conceptual design report. Basic Design documents may also be provided if available [1], or equivalent. • An investor's prospectus, if available. • A listing of previous projects of similar technology or design. • An indication of the volume and relevance of available operational experience (OPEX). • A description of major design changes with respect to previous reactors. • A description of the technical review process, including the identification of any technical advisors, which is being used to result in a technically sound reactor and plant design.			• Is insufficient to find that the Clean Energy Project is technically feasible commensurate with the stage of project development, and/or • Provides insufficient information for CNL to understand the strategy to satisfy the regulatory requirements and guidance for the SCAs listed opposite.

[1] Conceptual Design and Basic Design are as per the definition and descriptions in Appendix B of International Atomic Energy Agency, "Terms for Describing New, Advanced Nuclear Power Plants", IAEA-TECDOC-936, Vienna, Austria, April 1997.

• If the technology proposed in this Clean Energy Project has completed any phase of the CNSC's Vendor Design Review process, then the response should include, for each VDR phase that has been completed:
  ○ A description of the review conducted of the VDR output report by the CNSC.
  ○ Explanations of any key issues that were identified by the CNSC in the CNSC's report.
  ○ The plan to address and/or disposition all of the CNSC's findings identified through the VDR process.
• If the Proponent or relevant key project partner has not completed, entered, and/or does not intend to enter VDR, then the response should include an explanation of:
  ○ How the design meets the CNSC requirements.
  ○ The plan to address any outstanding design requirements.
  ○ The plans to have the design requirements verified by an independent knowledgeable individual/organization.
• Include, if available, results of any external independent assessment. This should include:
  ○ A description of the review conducted, and
  ○ Explanations of any key issues that were identified.
  ○ The plan to address and/or disposition all of the findings.
The conceptual design report and basic design documents or equivalent are excluded from the page limit. The investor's prospectus is excluded from the page limit.			

Additional documents such as Basic and Detailed Design reports shall be provided when they are available. Proponents are encouraged to provide the VDR reports authored by the CNSC, and these reports are excluded from the page limit. c) *Readiness of the Design to Meet Canadian Requirements:* CNL wants to understand where Proponents believe their Clean Energy Project is with respect to obtaining the required licences and how they intend to meet the requirements. The response should include: the strategy/planned approach for how the Proponent, or the key project partner that will be the licence applicant, intends to address: the Nuclear Safety and Control Act (NCSA), the applicable regulatory requirements and guidance, and any other applicable federal and provincial acts and regulations, through the lens of: • Operation performance • Safety analysis • Physical design • Fitness for service, including identification of the person(s) responsible. , CNL reserves the right to convene a panel of internal and/or external experts to review the Clean Energy design at any stage. The Proponent, and/or key project partners, will be required to participate in these panel reviews at their own expense.			

The Proponent, or the appropriate key project partner, is encouraged to complete Phase 1 and Phase 2 of the Canadian Nuclear Safety Commission's pre-licensing vendor design review (VDR) as appropriate.			
T3 - Credible Path to Obtain Fuel (If Applicable)			
CNL requires information regarding the path to obtain fuel.			
The response should include: • The plan whereby the fuel is intended to be sourced, including the following: o The source of the fuel. o The country of origin of the fuel, if the fuel is intended to be imported from a foreign country. o The state of readiness of fuel manufacture/fuel fabrication facilities. o how the fuel will be transported to site, addressing any gaps in transport, such as if new transport packages will be needed	N/A	PASS	In the opinion of the evaluator(s), the information provided presents a sound plan, supported by documentation, to obtain the fuel for the Clean Energy Project.
		FAIL	In the opinion of the evaluator(s), the information provided does not present a credible path to obtain the fuel, and/or insufficient information was provided.
T4 - Credible Path to Manufacturing, Construction and Commissioning			
It is important for CNL to understand the approaches and methodologies in respect of delivering the required services, and how the approach contributes to managing/mitigating risks and enhancing CNL performance objectives. Additionally, it is important to understand what services will need to be provided at the selected site.			
Many Clean Energy developers intend to use innovative approaches to the manufacturing, construction and commissioning of the units that are not currently employed by the nuclear industry. The experience of the key project partner that is to be the project manager, which was provided in response to criterion G2 b), will be included in the evaluation of this criterion. The response should include:	N/A	PASS	In the opinion of the evaluator(s), the information provided presents a sound plan to manufacture, construct and commission the Clean Energy Project.
		FAIL	In the opinion of the evaluator(s), the information provided does not present a sound plan to manufacture, construct and commission the Clean Energy Project, and/or insufficient information was provided to make that determination.

• The supply chain strategy and plan including key vendors and suppliers of major equipment and balance of plant key parts, for the procurement, manufacturing, construction and commissioning activities for the Clean Energy project. The strategy shall also describe the approach to engagement and selection of its supply chain.
• A copy of the supply chain policy (if available, excluded from page count).
• The key subcontractors for any part or parts of the Clean Energy Project (including use of associates or affiliates) and provide the following minimum information:
  o The name of key any subcontractors (if known).
  o The type of work that each key subcontractor will be responsible.
• A description of their approach to potentially manage and report on matters of supplier diversity to CNL including, small and medium sized enterprises, local businesses (in Renfrew and Pontiac Counties, and the Ottawa Valley), and Indigenous businesses in Canada.
• Estimates on to the level of readiness of the various facilities to be used in the manufacturing and construction of the Clean Energy project.
• Information on required services and utilities needed to support the Clean Energy project during construction, commissioning, operation and decommissioning phases of the Clean Energy Project.			

T5 – Management of Irradiated Fuel: Technical			
CNL requires confidence and confirmation of a credible plan that accounts for holistic management and disposal of all spent fuel generated during the life cycle of the reactor.			
The intention of this criterion is to understand the irradiated fuel that will be generated and the strategies/plans to store and dispose of the irradiated fuel. The costs and financing of the costs associated with irradiated fuel shall be addressed in criterion EF4. The response should include: • A clearly defined irradiated fuel plan that is capable of being undertaken in a way that is consistent with the requirements and expectations of the relevant safety, security and environmental regulators. The plan should outline how licensing requirements are intended to be met for management of irradiated fuel, including interim storage and disposal. The plan should include: o Pre-disposal storage, short-term and intermediate. o Ultimate disposal (and/or recycling, as applicable) of irradiated fuel. o A description of the irradiated fuel that is expected to be generated, e.g. characteristics and amounts. • Experience of the Proponent or relevant key project partner with respect to management and disposal of irradiated fuel. This response may reference the response to G2 as applicable.	20	5	In the opinion of the evaluator(s), the response provides information which: irradiated fuel • Contains a sound plan for the management and disposal of irradiated fuel that is realistic, clearly defined and achievable, and is capable of being undertaken in a way that is consistent with the requirements and expectations of the relevant safety, security and environmental regulators, including: o a sound plan for the interim storage of irradiated fuel and o a sound plan for disposition of the irradiated fuel.
		3	In the opinion of the evaluator(s), the response provides information which: • Contains a reasonable plan for the management and disposal of irradiated fuel that is realistic, clearly defined and achievable, and is capable of being undertaken in a way that is consistent with the requirements and expectations of the relevant safety, security and environmental regulators. Any technology or other gaps in the plans are identified and plans to remedy such gaps in a timely fashion are set out. In the opinion of the evaluator(s), the gaps are reasonable commensurate with the stage of development of the Clean Energy Project. The plan includes: o a reasonable plan for the interim storage of irradiated fuel. o a reasonable plan for disposition of the irradiated fuel.
		1	In the opinion of the evaluator(s), the response provides information in which:

			• Only a basic description of a generic irradiated fuel management approach is provided; and/or • The plan does not consider interim storage and/or final disposition; and/or • Plans for the management and disposal of irradiated fuel are unrealistic, ill-defined or unachievable, and are incapable of being undertaken in a way which is consistent with the requirements and expectations of the relevant safety, security and environmental regulators; and/or • The plans contain technology or other gaps that have not been adequately identified and /or do not have adequate plans to remedy such gaps in a timely fashion; and/or • The plan contains large gaps, that, in the opinion of the evaluator(s), are not commensurate with the stage of development of the Clean Energy Project, or gaps that are not identified as areas of future work.
T6 – Management of Waste: Technical			
CNL requires confidence and confirmation of a credible plan that accounts for holistic management of all generated wastes as a result of construction and operation of a Clean Energy.			
The intention of this criterion is to understand the wastes that will be generated and the strategies/plans to store and dispose of that waste. The costs and financing of the costs associated with wastes shall be addressed in criterion EF5. The response should include: • A plan that is clearly defined and achievable, and is capable of being undertaken in a way that is consistent with the requirements and expectations of the relevant safety, security and environmental regulators. This plan should outline: o The waste management approach.	20	5	In the opinion of the evaluator(s), the response provides information which: • Contains a sound plan for the management of all non-irradiated fuels that is realistic, clearly defined and achievable, and is capable of being undertaken in a way that is consistent with the requirements and expectations of the relevant safety, security and environmental regulators, including: o a sound plan for the short-term and interim storage of waste o a sound plan for disposition of the waste; and • Accounts for all types of non-irradiated fuel, including high-level waste, intermediate-level waste, low-level waste, industrial waste, and any other waste products that will be produced through the construction, operation and decommissioning of the reactor.

○ How the licensing requirement for management of wastes are intended to be met. The plan should include all types of waste (excluding irradiated fuel), including high-level waste, intermediate-level waste, low-level waste, industrial waste, and any other waste products that will be produced through the construction, operation and decommissioning of the reactor. This plan should outline how licensing requirements are intended to be met for management of short-term, interim and final disposal of the waste as applicable. • Experience of the Proponent or relevant key project partner with respect to management and disposal of waste. This response may reference the response to G2 as applicable.		3	In the opinion of the evaluator(s), the response provides information which: • Contains a reasonable plan for the management of waste that is realistic, clearly defined and achievable, and is capable of being undertaken in a way that is consistent with the requirements and expectations of the relevant safety, security and environmental regulators. Any technology or other gaps in the plans are be identified and plans to remedy such gaps in a timely fashion have been set out. In the opinion of the evaluator(s), the gaps are reasonable and commensurate with the stage of development of the Clean Energy Project. The plan includes: ○ a reasonable plan for any required interim storage of the wastes, ○ a reasonable plan for disposition of the wastes; and • Outlines the approach for waste management that includes all types of waste produced throughout the life cycle of the reactor but contains some gaps and work that still needs to be addressed.
		1	In the opinion of the evaluator(s), the response provides information which: • Only a basic description of a generic waste management approach is provided; and/or • The plan does not consider any required interim storage and/or final disposition; and/or • The response contains plans for the management and disposal of wastes that are unrealistic, ill-defined or unachievable, and are incapable of being undertaken in a way that is consistent with the requirements and expectations of the relevant safety, security and environmental regulators. The plans contain technology or other gaps that have not been adequately identified and /or do not have adequate plans to remedy such gaps in a timely fashion; and/or

			• The response contains large gaps, that, in the opinion of the evaluator(s), are not commensurate with the stage of development of the Clean Energy Project, or gaps that are not identified as areas of future work.
T7 - Decommissioning: Technical			
CNL requires confidence and confirmation of a credible plan that accounts for the decommissioning of the Clean Energy project at the end of life.			
The intention of this criterion is to understand how the facility is intended to be decommissioned and the site remediated. The costs and financing of the costs associated with decommissioning and site remediation are addressed in criterion EF6. The response should include: • A plan that is clearly defined and achievable and is capable of being undertaken in a way that is consistent with the requirements and expectations of the relevant safety, security and environmental regulators. This plan should outline how licensing requirements are intended to be met for decommissioning the facility and remediating the site at end of life. • The plan of how the Clean Energy project will be decommissioned and the site will be remediated should support the cost estimates provided in EF9, including a schedule and supporting benchmarked data for estimates and schedule. • Evidence of how decommissioning has been incorporated into the design process of the Clean Energy project, e.g. any design changes that were made, or design features that were introduced to enable decommissioning. • Experience of the Proponent or relevant key project partner with respect to decommissioning	20	5	In the opinion of the evaluator(s), the response provides information that: • Demonstrates that the plans for the decommissioning and remediation of the site are realistic, clearly defined and achievable, and are capable of being undertaken in a way that is consistent with the requirements and expectations of the relevant safety, security and environmental regulators. • Includes a plan of how the Clean Energy project will be decommissioned and the site will be remediated that supports the cost estimates provided in EF9, including a schedule, and supporting benchmarked data for estimates and schedule; and • Demonstrates how decommissioning is being integrated into the design process and provides evidence of how it has been applied to impact design decisions.
		3	In the opinion of the evaluator(s), the response provides information which: • Demonstrates that the plans for the decommissioning of the site are realistic, clearly defined and achievable, and are capable of being undertaken in a way that is consistent with the requirements and expectations of the relevant safety, security and environmental regulators. Any technology or other gaps in the plans have been identified and plans to remedy such gaps in a timely fashion have been set out; and • Provides some evidence that decommissioning is integrated into the design process

and site remediation. This response may reference the response to G2 as applicable.		1	In the opinion of the evaluator(s), the response provides information which: • Only a basic description of a generic approach to decommissioning and site remediation is provided; and/or • Does not provide any description or evidence that decommissioning is being incorporated into the design process; and/or • Contains plans for the decommissioning and remediation of the site that are unrealistic, ill-defined or unachievable, and are incapable of being undertaken in a way that is consistent with the requirements and expectations of the relevant safety, security and environmental regulators. The plans contain technology or other gaps that have not been adequately identified and /or do not have adequate plans to remedy such gaps in a timely fashion; and/or • Contains large gaps, that, in the opinion of the evaluator(s), are not commensurate with the stage of development of the Clean Energy Project, or gaps that are not identified as areas of future work.
T8 - Access to all Relevant Intellectual Property			
Many Clean Energy designs currently under development are based on previous designs. CNL requires confidence that the Proponent has considered and adequately addressed all intellectual property aspects and has the rights to the intellectual property they will use during the Clean Energy Project. A key consideration should be demonstrating an ongoing mechanism/approach for confirming freedom to operate and addressing any risks associated with third party patent rights.			
If the Clean Energy Project uses any intellectual property of corporations that are not the property of the Proponent or key project partners, information should be provided listing what those elements are, and that the Clean Energy Project has the rights to use that intellectual property. As patent rights are published in an ongoing fashion, the Proponent should demonstrate a suitable mechanism for confirming freedom to operate i.e. that (new or evolving) 3rd party patent rights are not being infringed. Where rights have not yet been secured, the	N/A	PASS	The Clean Energy Project does not use any intellectual property that is not owned by the Proponent or key project partners, or, in the opinion of the evaluator(s), the information provided presents a sound strategy to secure the rights to any required the intellectual property. An ongoing mechanism for reviewing the Clean Energy Project's freedom to operate (in light of 3rd party patent rights) is identified.
		FAIL	In the opinion of the evaluator(s), the response does not include sufficient information to demonstrate that licences to all required intellectual property can be obtained.

strategy to obtain those rights , or address the risk associated with not securing them, should be provided.			

3.6 OVERALL COHESIVENESS

In addition to assessing the individual criteria in the above sections, CNL will also review the entire response as a whole for overall cohesiveness.

No additional information is required for this criterion.

Response Requirement	Weighting	Score	Assessment Benchmark
O1 – Overall Cohesiveness of the Clean Energy Project			
Taking the totality of the responses to all criteria into account, CNL will evaluate the overall cohesiveness and credibility of the Clean Energy Project.			
In addition to the evaluation of the individual criteria described above, CNL will perform an overview assessment that looks at the entire Clean Energy Project and the interactions and interfaces between the responses to the individual criteria to evaluate the overall cohesiveness and credibility of the Clean Energy Project. No information is to be provided with respect to this criterion. CNL will perform this evaluation using the information provided in response to the other criteria.	100	5	In the opinion of the evaluator(s), the proposed Clean Energy Project is cohesive and credible when judged as a whole, and all criteria responses adequately consider the impacts of the other criteria.
		3	In the opinion of the evaluator(s), the Clean Energy Project is generally credible and feasible, but in some instances, responses to some criteria do not align.
		1	In the opinion of the evaluator(s), there are large misalignments between responses to criteria.

Revision History Liste de révisions

UNRESTRICTED

Document No. / Numéro de document:				000
	Doc. Collection ID ID de la collection de doc.	SI Répertoire du sujet	Section	Serial No. Nº de série

Document Details / Détails sur le document

Title Titre	Total no. of pages Nbre total de pages
Invitation for Clean Energy Projects	46

For Release Information, refer to the Document Transmittal Sheet accompanying this document. / Pour des renseignements portant sur la diffusion, consultez la feuille de transmission de documents ci-jointe.

Revision History / Liste de révisions

Revision / Révision	Details of Rev. / Détails de la rév.	Prepared by Rédigé par	Reviewed by Examiné par	Approved by Approuvé par
0	Issued as “Approved for Use.”			
1	Issued as “Approved for Use.”			
2	Issued as “Approved for Use.”			