Environmental Assessments for Onshore Wind Energy Projects

NOVEMBER 2026

REPORT OF THE AUDITOR GENERAL TO
THE NOVA SCOTIA HOUSE OF ASSEMBLY

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November 17, 2026

Honourable Danielle Barkhouse
Speaker
House of Assembly
Province of Nova Scotia

Dear Madam Speaker:

I have the honour to submit herewith my Report to the House of Assembly under Section 18(2) of the *Auditor General Act*, to be laid before the House in accordance with Section 18(4) of the *Auditor General Act*.

Respectfully,



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Department of Environment and Climate Change

Environmental Assessments for Onshore Wind Energy Projects



Why We Did This Audit

- Environmental impacts should be known before a project begins, and approved projects should be monitored to protect the environment
- Fourteen onshore wind energy projects received environmental assessment approval during our audit period (January 2023 to August 2025)
- The Province is relying on onshore wind energy to achieve the 2030 renewable energy targets
- We last audited this topic in 2017

Key Audit Results

- We found Nova Scotia's environmental assessment process is generally consistent with that of other Canadian jurisdictions.
- However, our testing of onshore wind energy projects identified weaknesses in how the Department of Environment and Climate Change administers environmental assessments:
  - Information relevant to the Minister's decision was not found in briefing materials and decision options.
  - Government reviewer comments were not reflected in project approval terms and conditions.
  - Project approval terms and conditions lack measurable criteria, deadlines, and submission requirements.
  - No formal policy guides application reviews, resulting in inconsistent application processes.
- Once projects are approved, the Department does not appropriately monitor compliance with project terms and conditions intended to manage environmental risks, due to lack of:
  - Review and verification of compliance with terms and conditions.
  - Verification by required subject matter experts.
  - Evaluation of the effectiveness of terms and conditions in reducing environmental impacts.
- Ministerial project approval decisions were outside the scope of this audit.

This report makes

13

Recommendations

to strengthen environmental assessment administration and compliance monitoring for onshore wind energy projects in Nova Scotia

Reference Guide – Key Findings and Observations

Paragraph	Key Findings and Observations
Background	
7	*Onshore wind energy projects are subject to a Class I environmental assessment approval*
12	*Terms and conditions are the primary control used by the Department to manage environmental risk*
14	*Department requires compliance monitoring on all environmental assessment approvals*
15	*The Province is relying on onshore wind energy to achieve the 2030 renewable energy targets*
18	*2025 changes to regulations have little effect on onshore wind energy projects*
20	*November 2017 audit highlighted Auditor General concerns with the environmental assessment monitoring process*
23	*Audit work included detailed testing and independent expert support*
Environmental Assessment Approval Processes Lack Consistency and Transparency	
32	*Environmental assessment application screening reviews are clerical and lack formal policy*
36	*The six environmental assessment applications tested contained the minimum information required by regulations*
40	*Department does not verify qualifications of project consultants preparing environmental assessment applications*
44	*Government-led consultation with the Mi'kmaq of Nova Scotia met minimum government requirements*
48	*Public engagement comments and concerns are summarized and provided to the Minister*
51	*Independent evaluation found information provided by project owners supported decision-making*
57	*Risks identified by government reviewers not addressed in terms and conditions*
63	*Survey of government reviewers highlights weaknesses in the environmental assessment review process*
73	*Environmental assessment terms and conditions not reviewed with experts who know risks*
76	*Staff assigned responsibility for compliance have little input on terms and conditions*
79	*Standard terms and conditions are reused across projects*
81	*Project approval terms and conditions lack measurable criteria, deadlines, and submission requirements*
88	*Information relevant to the Minister's decision was not found in briefing materials and decision options*
94	*Testing shows 50-day legislated timeline being met*
96	*Province's environmental assessment process is similar to other jurisdictions*
99	*Nova Scotia has one of the shortest environmental assessment timelines in Canada*

Compliance Monitoring Processes Lack Verification and Expertise Needed to Reduce Environmental Risks	
103	*Compliance monitoring meetings with project owners often delayed or not occurring as required by policy*
108	*Compliance monitoring does not include review and verification*
116	*Terms and conditions not satisfied but still assessed as complete by Department*
120	*Most terms and conditions are reviewed by staff who lack specialized expertise*
124	*Required expert reviews not completed*
130	*Only 33 per cent of terms and conditions examined were subject to compliance monitoring*
140	*On one occasion, 20 months passed before staff were assigned responsibility for compliance*
145	*Department cannot determine whether terms and conditions are effective at reducing impacts on the environment*

Recommendations and Responses

Recommendation	Department Response
Recommendation 1 We recommend the Department of Environment and Climate Change establish and implement guidance for the environmental assessment application screening process. Guidance should define the scope and expectations of the process, including the use of standardized checklists and documentation standards. *See paragraph 43*	Department Agrees **Target Date for Implementation**: December 2027 **Department Response to Recommendation 1** The Department will establish guidance for the environmental assessment application screening process.
Recommendation 2 We recommend the Department of Environment and Climate Change confirm the qualifications of external consultants involved in environmental assessment project applications. *See paragraph 43*	Department Agrees **Target Date for Implementation**: December 2027 **Department Response to Recommendation 2** The Department will determine an approach for confirming that qualified persons involved in environmental assessment applications have the expected qualifications.
Recommendation 3 We recommend the Department of Environment and Climate Change implement a policy for the use of government reviewers in environmental assessment applications. Policy should define reviewer selection criteria and responsibilities, and establish how reviewer comments are evaluated, considered, and incorporated into decision-making. *See paragraph 72*	Department Agrees **Target Date for Implementation**: December 2027 **Department Response to Recommendation 3** The Department will implement a policy for the use of government reviewers.
Recommendation 4 We recommend the Department of Environment and Climate Change require staff to record a rationale for decisions not to incorporate reviewer input into environmental assessment terms and conditions, including how associated risks will be addressed. *See paragraph 72*	Department Agrees **Target Date for Implementation**: December 2027 **Department Response to Recommendation 4** The Department will document how significant risks identified by reviewers were addressed in the recommended terms and conditions, while respecting the discretionary decision-making role of the Minister as outlined in legislation.

Recommendation 5 We recommend the Department of Environment and Climate Change provide draft environmental assessment terms and conditions to provincial departments assigned monitoring responsibilities for review prior to project approval. *See paragraph 75*	Department Agrees **Target Date for Implementation**: June 2027 **Department Response to Recommendation 5** The Department will determine an approach for providing draft environmental assessment terms and conditions to provincial departments assigned monitoring responsibilities.
Recommendation 6 We recommend the Department of Environment and Climate Change adhere to the Roles and Responsibilities Policy and develop environmental assessment terms and conditions in consultation with the Inspection, Compliance and Enforcement Division responsible for compliance monitoring. *See paragraph 78*	Department Agrees **Target Date for Implementation**: June 2027 **Department Response to Recommendation 6** The Department will work with its Compliance Division regarding the development of terms and conditions.
Recommendation 7 We recommend the Department of Environment and Climate Change strengthen environmental assessment terms and conditions by including measurable criteria and clearly defined submission timelines. *See paragraph 87*	Department Agrees **Target Date for Implementation**: June 2027 **Department Response to Recommendation 7** The Department will, where appropriate, include terms and conditions with measurable criteria and clearly defined submission timelines.
Recommendation 8 We recommend the Department of Environment and Climate Change include all required factors listed in the Environmental Assessment Regulations in briefing materials and decision options provided to the Minister. *See paragraph 93*	Department Agrees **Target Date for Implementation**: June 2027 **Department Response to Recommendation 8** The Department will include all required factors in ministerial briefing materials.

Recommendation 9 We recommend the Department of Environment and Climate Change establish a timeline following environmental assessment approval for the Environmental Assessment Branch and the Inspection, Compliance and Enforcement Division to engage project owners to discuss terms and conditions and the expectations for monitoring. Meetings should be recorded as prescribed by the Roles and Responsibilities Policy. *See paragraph 107*	Department Agrees **Target Date for Implementation**: June 2027 **Department Response to Recommendation 9** The Department will establish a timeframe following environmental assessment approval to engage project owners on terms and conditions and monitoring expectations.
Recommendation 10 We recommend the Department of Environment and Climate Change revise the Roles and Responsibilities Policy to require review and verification that project owners have satisfied environmental assessment terms and conditions before compliance is concluded. *See paragraph 119*	Department Agrees **Target Date for Implementation**: December 2027 **Department Response to Recommendation 10** The Department will update policy to assess that proponents have addressed terms and conditions before compliance is concluded.
Recommendation 11 We recommend the Department of Environment and Climate Change follow the Roles and Responsibilities Policy for arranging and completing expert reviews when environmental assessment terms and conditions require subject matter experts to assess compliance. *See paragraph 129*	Department Agrees **Target Date for Implementation**: December 2027 **Department Response to Recommendation 11** The Department will update policy to determine how subject-matter expert reviews are arranged and completed.
Recommendation 12 We recommend the Department of Environment and Climate Change enter all environmental assessment terms and conditions included in project approvals into the AMANDA computer system upon Minister approval. *See paragraph 139*	Department Agrees **Target Date for Implementation**: December 2027 **Department Response to Recommendation 12** The Department will update policy so that appropriate environmental assessment terms and conditions are entered into AMANDA.

Recommendation 13 We recommend the Department of Environment and Climate Change complete evaluations of the effectiveness of environmental assessment terms and conditions. *See paragraph 148*	Department Agrees **Target Date for Implementation**: October 2028 **Department Response to Recommendation 13** The Department will establish an approach to evaluating the effectiveness of environmental assessment terms and conditions.

Background

1. The Department of Environment and Climate Change (the Department) is responsible for administering the environmental assessment process for onshore wind energy projects in Nova Scotia. Under the *Environment Act*, project owners must obtain an environmental assessment approval before proceeding with a project.

2. Environmental assessments predict, evaluate, and mitigate the potential harmful environmental impacts of proposed projects before they begin. Additional authorizations, approvals, licenses, and permits may be required under municipal by-laws or provincial or federal legislation.

3. There are two types of environmental assessments: Class I and Class II. The Class I process applies to projects such as mines, waste facilities, and onshore wind energy. Under the Environmental Assessment Regulations, decisions on Class I environmental assessments are made within 50 days of a project owner's application. The Class II process applies to large-scale projects like solid waste incinerators and pulp plants and can take over two years.



Province of Nova Scotia photo (and all photos to follow)

4. The focus of this audit is the Class I process for onshore wind energy projects. Prospective offshore wind projects are governed by the Canada-Nova Scotia Offshore Energy Regulator, and thus subject to an alternative environmental assessment pathway.

5. The environmental assessment process is coordinated by the Environmental Assessment Branch (EA Branch) of the Department. Between April 2020 and March 2026, the Department approved 73 environmental assessment applications, of which 16 were onshore wind energy projects.

6. Project owners are charged approximately $11,000 to submit their environmental assessment application. During the 2025-26 fiscal year, the Department's program cost was $654,531 and its registration fees generated $139,193 for all projects combined.

Environmental Assessment Program Financial Details

Fiscal Year	Environmental assessments approved	Environmental assessment program expenses*	Environmental assessment program recoveries**
2020-21	6	$521,129	$46,372
2021-22	11	$529,522	$121,941
2022-23	15	$727,284	$138,930
2023-24	13	$614,433	$129,642
2024-25	14	$657,480	$162,136
2025-26	14	$654,531	$139,193
Total	73	$3,704,379	$738,214

Source: Department of Environment and Climate Change; unaudited
** Program expenses consist of salaries and benefits; staffing levels have varied*
*** Program recoveries consist of fees collected from project owners for the submission and registration of an environmental assessment; approval may not occur in the same fiscal year in which the fees are collected, and fees vary depending on project category*

Onshore wind energy projects are subject to a Class I environmental assessment approval

7. Project owners submit environmental assessment applications to the Department, which reviews them for potential environmental impacts under the Environmental Assessment Regulations. Factors considered during the review include impacts on wildlife habitats and watercourses, and plans for future site remediation.

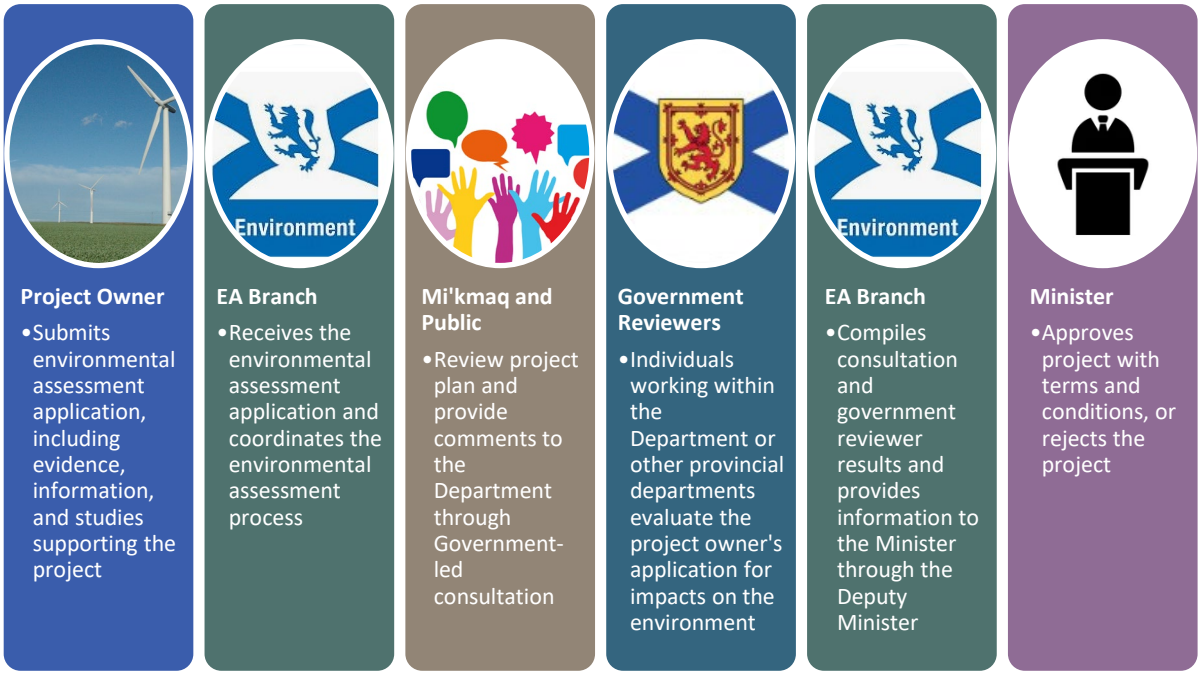
8. As part of the process, project owners provide science and evidence supporting the project; identify risks and create mitigation plans; engage with the Mi'kmaq of Nova Scotia and impacted communities whose health, environment, culture, or socio-economic conditions are directly or indirectly affected by a proposed project; and submit the results to the Department.

9. Government reviewers from the Department, along with other provincial departments depending on the scale, location, and potential impacts, conduct a technical review of the application. Reviewers have expertise in fields of study such as air and water quality, wildlife and species at risk, and energy science. They consider the project's potential environmental impacts, and the proposed measures to mitigate any environmental impacts. As subject matter experts, their feedback is a key step in the environmental assessment process and helps to inform project approval decisions.

10. The Department notifies the public of the environmental assessment application through its website, public notices and viewing locations, and by inviting comments via an online consultation form. Depending on the project and its potential to adversely impact asserted or established treaty rights, the Province may have a legal and constitutional duty to consult with the Mi'kmaq of Nova Scotia. The Mi'kmaq of Nova Scotia and the public are given 30 days to review the project owner's submission and comment directly to the Department.

11. The results of the review and all feedback are compiled by the Department and provided to the Minister of Environment and Climate Change (the Minister). The Minister ultimately determines whether a project will be approved.

Class I Environmental Assessment Approval Process



Source: Office of the Auditor General of Nova Scotia

Terms and conditions are the primary control used by the Department to manage environmental risk

12. When a project is approved, the Department sets terms and conditions to mitigate environmental impacts, and project owners are required to comply with them. These terms and conditions are the primary control used by the Department to manage environmental risks identified during the environmental assessment process (see Appendix IV – Sample Terms and Conditions: Onshore Wind Energy Project).

13. Typical onshore wind energy approvals include more than 50 terms and conditions addressing risk to areas such as water resources, plant and animal habitats, and noise and visual impacts. For example, additional monitoring studies may be required for projects affecting surface water, groundwater, and wildlife populations. Some terms and conditions must be met before construction begins, others before the project becomes operational, and others prior to the project's end of life.

Department requires compliance monitoring on all environmental assessment approvals

14. The Inspection, Compliance and Enforcement Division (ICE Division) of the Department is responsible for ensuring project owners comply with terms and conditions. The compliance monitoring process is guided by the Department's Roles and Responsibilities Policy (the Policy) and is applied consistently across all Class I projects, including onshore wind energy projects, mines, and waste facilities.

Environmental Assessment Compliance Monitoring Process



Source: Office of the Auditor General of Nova Scotia

The Province is relying on onshore wind energy to achieve the 2030 renewable energy targets

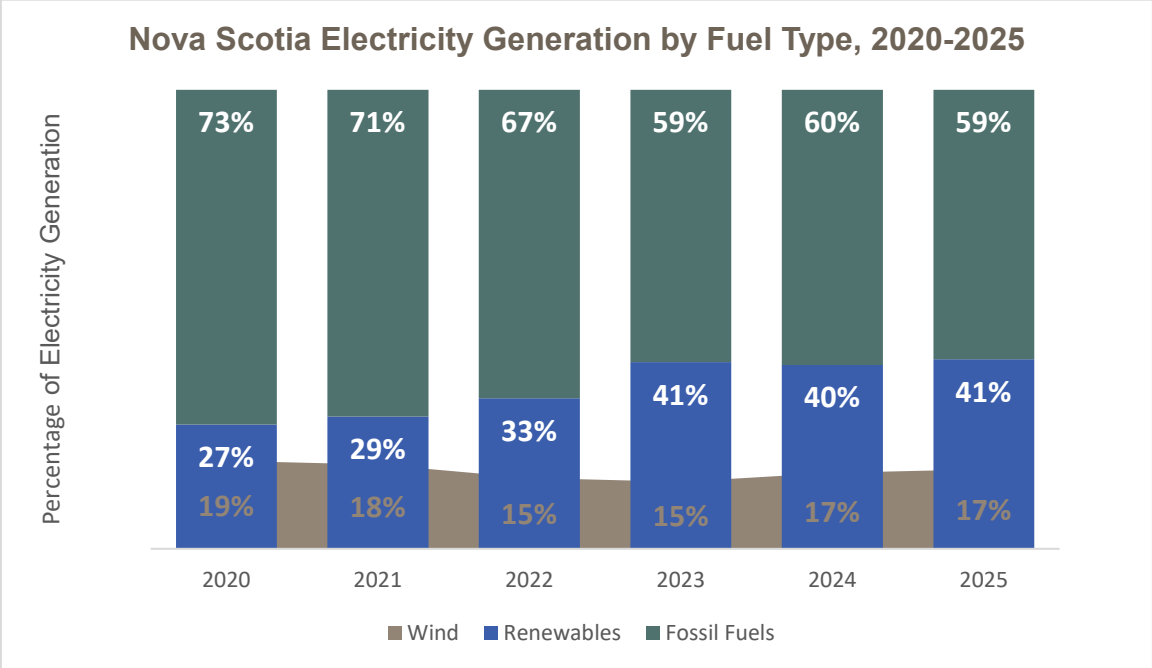
15. The *Environmental Goals and Climate Change Reduction Act* was passed by the House of Assembly in 2021. Under the Act, the Province is required to source 80 per cent of Nova Scotia's electricity from renewable energy by 2030.

Wind Energy Power Locations in Nova Scotia



Source: Nova Scotia Power

16. There are more than 300 commercial wind turbines operating in Nova Scotia. As of 2025, these wind turbines generate approximately 17 per cent of Nova Scotia's total electricity production and are owned by multiple parties including Nova Scotia Power, independent power producers (IPPs), and community organizations.



Source: Department of Energy; unaudited

17. Beginning in 2022, the Province launched a series of renewable energy procurements to support a cost effective and reliable transition to renewable energy. Onshore wind energy is expected to play a central role in achieving the legislative goal of generating 80 per cent

of electricity from renewable sources by 2030. Our audit included several of these projects approved by the Province during this timeframe.

2025 changes to regulations have little effect on onshore wind energy projects

18. Under the *Environmental Goals and Climate Change Reduction Act* of 2021, the Government committed to modernize the environmental assessment process by the end of 2024. The subsequent amendments to the Environmental Assessment Regulations came into effect in May 2025.



19. Our audit examined the regulatory framework in place prior to the May 2025 amendments. While the resulting policy updates did not explicitly target or address onshore wind energy projects, they included one substantive change affecting these projects. The Class I environmental assessment process now provides an additional 10 days for public and Mi'kmaq of Nova Scotia consultation (40 days instead of 30), while maintaining the 50-day timeline for the Minister's decision.

November 2017 audit highlighted Auditor General concerns with the environmental assessment monitoring process

20. We last audited the environmental assessment process in our November 2017 Report on Environmental Assessments (see Appendix II – Results of the November 2017 Report of the Auditor General and Follow-up). At the time, we concluded the Department was not adequately overseeing projects. Specifically, we found terms and conditions on project approvals were not monitored and the Department hadn't assessed if terms and conditions reduced environmental risks.

21. We made seven recommendations, all of which were accepted by the Department. Our May 2020 Follow-up Report concluded the Department had implemented all seven recommendations from the November 2017 audit. However, our work over the course of this audit revealed the Department has backtracked on its progress and is no longer complying with five of those seven recommendations. We also identified implementation gaps and therefore highlight areas for improvement regarding the other two recommendations.

22. We detail the status of the 2017 recommendations throughout this chapter.

Status of Recommendations from the November 2017 Audit

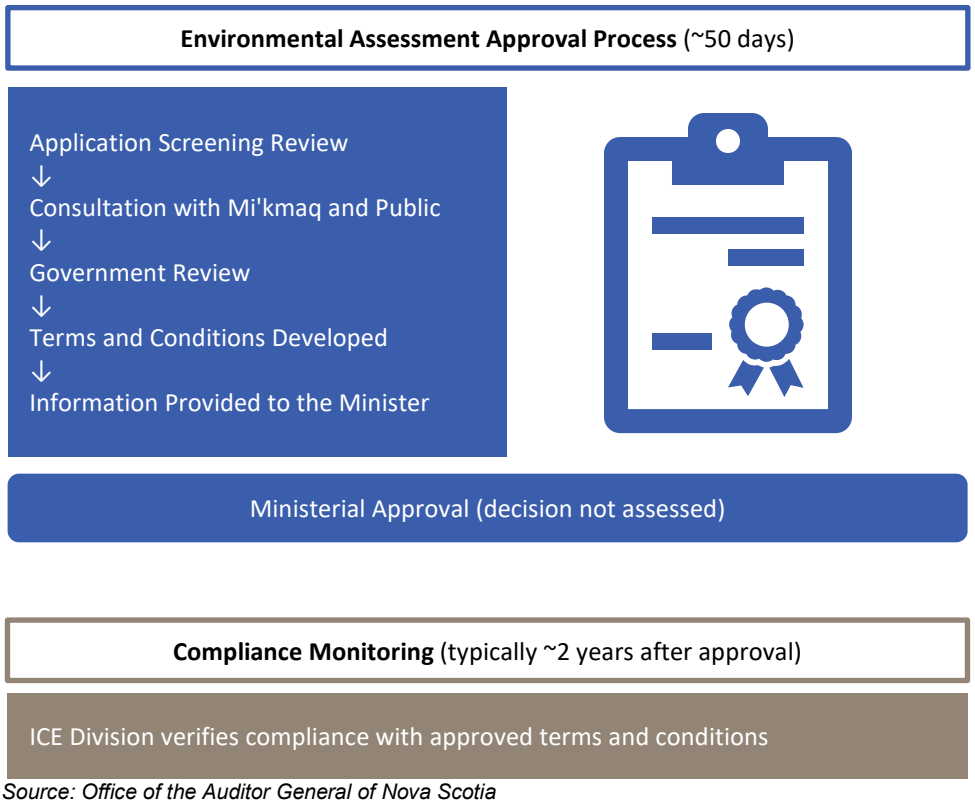


Source: Office of the Auditor General of Nova Scotia

Audit work included detailed testing and independent expert support

23. This audit report is divided into two sections. We examined the environmental assessment approval process, including application screening reviews, government reviews, consultation with the Mi'kmaq of Nova Scotia and the public, the development of terms and conditions, and information provided to the Minister to inform approval decisions. We also examined compliance monitoring, conducted by the ICE Division, including how the Department tracks and verifies whether project owners comply with environmental assessment terms and conditions.

Areas Examined During the Audit



Source: Office of the Auditor General of Nova Scotia

24. For the environmental assessment approval process, we tested six onshore wind energy projects. For compliance monitoring, we tested 55 terms and conditions attached to nine approved projects.

25. To support our work, we contracted an independent environmental sciences expert to assess whether environmental assessment approval and compliance activities contained sufficient information to identify, avoid, or mitigate environmental impacts.

26. Our audit work did not include an assessment of the merits of individual project approval decisions. Accordingly, we make no conclusion on whether the projects reviewed should or should not have received Ministerial approval. The *Environment Act* gives the Minister authority to approve or reject any project.

27. We did make note of a 2024 Nova Scotia Supreme Court decision (Folly Lake-Wentworth Valley v. NS Minister of Environment, 2024 NSSC 27). The decision focused on one specific project and on the Minister's approval decision of the project.

28. In contrast, this audit did not assess the reasonableness of the Minister's decisions. Rather, we assessed whether the Department is appropriately conducting environmental assessments for onshore wind energy projects and monitoring approved projects for compliance with terms and conditions.

29. Our conclusions are based on whether the Department complied with the accepted audit criteria (see Appendix I – Reasonable Assurance Engagement Description and Conclusions).

Environmental Assessment Approval Processes Lack Consistency and Transparency

30. There were 14 onshore wind energy projects approved during our audit period of January 2023 through August 2025. We selected a sample of six projects to assess whether the environmental assessment approval process was administered in accordance with the Environmental Assessment Regulations.

31. An overview of the results for each project in our sample is outlined in the table below. These results are discussed in more detail in the paragraphs that follow.

Results of Auditor General Testing of Environmental Assessment Approvals

Criteria evaluated	Project 1	Project 2	Project 3	Project 4	Project 5	Project 6
Applications screened for minimum requirements	✓	✓	✓	✓	✓	✓
Government consultation – Mi'kmaq of Nova Scotia	✓	✓	✓	✓	✓	✓
Government consultation – Public	✓	✓	✓	✓	✓	✓
Government technical review completed	✓	✓	✓	✓	✓	✓
Reviewer input reflected in approval conditions	✗	✗	✗	✗	✗	✗
Information provided to Minister included minimum considerations	✗	✗	✗	✗	✗	✗
50-day timeline met *	✓	✓	✓	✓	✓	⚠

Source: Office of the Auditor General of Nova Scotia
** Project 6 approved on day 51*

Environmental assessment application screening reviews are clerical and lack formal policy

32. The Environmental Assessment Regulations set out minimum requirements for project owners to include in an environmental assessment application.

33. When an application is received, the EA Branch confirms whether project owners have provided the minimum information required by the regulations.

Minimum Requirements for Environmental Assessment Application

Minimum Requirements	
	(i) Name of the project
	(ii) Location of the project
	(iii) Project Owner
	(iv) Contact person
	(v) Project CEO
	(vi) Project area details
	(vii) Project purpose and need
	(viii) Project schedule
	(ix) Project description
	(x) Environment baseline information
	(xi) List of licences, certificates, permits, approvals, and other authorizations
	(xii) Sources of public funding
	(xiii) Steps taken to identify concerns (public and Mi'kmaq of Nova Scotia)
	(xiv) Concerns expressed (public and Mi'kmaq of Nova Scotia)
	(xv) Steps taken to address concerns (public and Mi'kmaq of Nova Scotia)

Source: Section 9(1A)(b) of the Environmental Assessment Regulations made under Section 49 of the Environment Act, effective December 19, 2022

34. We met with the EA Branch and learned that no formal policy or process document guides the application screening process. Instead, the review is clerical in nature and is limited to the verification that the required information is included.

35. The current process followed by the EA Branch only checks for completeness, not quality, and lacks formal guidance.

The six environmental assessment applications tested contained the minimum information required by regulations

36. All six projects tested for compliance with the Environmental Assessment Regulations contained the minimum requirements.

37. However, in one application, information related to consultation with the Mi'kmaq of Nova Scotia was not easily identified. While the application demonstrated that consultation with the Mi'kmaq of Nova Scotia had occurred and identified concerns raised during

consultation, how the project owner proposed to address those concerns was not clearly presented.

38. While the Department subsequently identified information from multiple parts of the application which it indicated addressed these requirements, the relationship between the concerns raised and the proposed response from the project owner was not readily apparent.

39. When information required by the regulations is missing, incomplete, or must be pieced together from multiple sources, it may be more difficult for decision-makers and other stakeholders to determine whether they have all information needed to adequately assess a project.

Department does not verify qualifications of project consultants preparing environmental assessment applications

40. Environmental assessment applications are commonly prepared by external consultants retained by project owners. Consultants provide environmental expertise and regulatory knowledge to support project approvals.

41. As part of the environmental assessment application process, there is no requirement for Department staff to assess consultant qualifications. As a result, the Department relies on information and technical analyses prepared by consultants without verifying the qualifications of those who prepared them.

42. The EA Branch did not have a consensus on who, if anyone, should review consultant qualifications.

43. Without verifying the qualifications of external consultants, the Department lacks assurance that environmental assessment applications are prepared by reliable, qualified consultants with appropriate environmental assessment expertise and experience.



Recommendation 1

We recommend the Department of Environment and Climate Change establish and implement guidance for the environmental assessment application screening process. Guidance should define the scope and expectations of the process, including the use of standardized checklists and documentation standards.

Department Response to Recommendation 1

Department agrees

Target Date for Implementation:

December 2027

The Department will establish guidance for the environmental assessment application screening process.

Recommendation 2

We recommend the Department of Environment and Climate Change confirm the qualifications of external consultants involved in environmental assessment project applications.

Department Response to Recommendation 2

Department agrees

Target Date for Implementation:

December 2027

The Department will determine an approach for confirming that qualified persons involved in environmental assessment applications have the expected qualifications.

Government-led consultation with the Mi'kmaq of Nova Scotia met minimum government requirements

44. Government has a legal duty to consult with the Mi'kmaq of Nova Scotia when decisions may adversely affect asserted or established treaty rights arising from the Canadian Constitution. The Government of Nova Scotia Policy and Guidelines outline the requirement for consultation with the Mi'kmaq of Nova Scotia and set out the process for engaging with the Mi'kmaq of Nova Scotia.

45. The duty to consult is triggered when a proposed government action may cause a new or additional adverse impact on asserted or established treaty rights. The depth of consultation varies according to the strength of the claim of asserted or established rights,

and the potential impact a proposed project would have on those rights. This means consultation is not one size fits all.

46. When the duty to consult is triggered, provincial departments work with Nova Scotia's Office of L'nu Affairs to conduct a consultation screening and contact the Mi'kmaq of Nova Scotia.

47. We tested consultation efforts for six projects by reviewing consultation screening documentation and correspondence with Mi'kmaq communities. We found the Department contacted the appropriate Mi'kmaq communities, therefore meeting the minimum requirements prescribed by government.



Public engagement comments and concerns are summarized and provided to the Minister

48. When deciding to approve a project, the Minister is required to consider all public input about the proposed project. The Department leads public consultation efforts, and onshore wind energy projects are subject to a 30-day public comment period.

49. For all six projects tested, public comments and concerns were summarized and provided to the Minister for consideration in the approval decision.

50. Common public concerns include noise levels, shadow flicker, visual effects, wildlife (such as migratory birds and mainland moose), wetlands, groundwater, property values, local land use, and recreation and tourism (see Appendix III – Glossary of Environmental Assessment Terms).

Independent evaluation found information provided by project owners supported decision-making

51. To augment our audit, we contracted an independent environmental sciences consultant with expertise in environmental assessment, impact assessment, and compliance services.

52. We ensured the consultant had relevant experience in regulatory compliance and clean energy, possessed appropriate professional qualifications, and was independent of the six projects under review.

53. Together we completed an evaluation of six environmental assessment applications submitted by project owners.

54. Our evaluation assessed the science, evidence, and analysis provided by the project owners. We considered how each project owner addressed environmental impacts and mitigation measures and assessed whether the methods used complied with regulatory requirements.



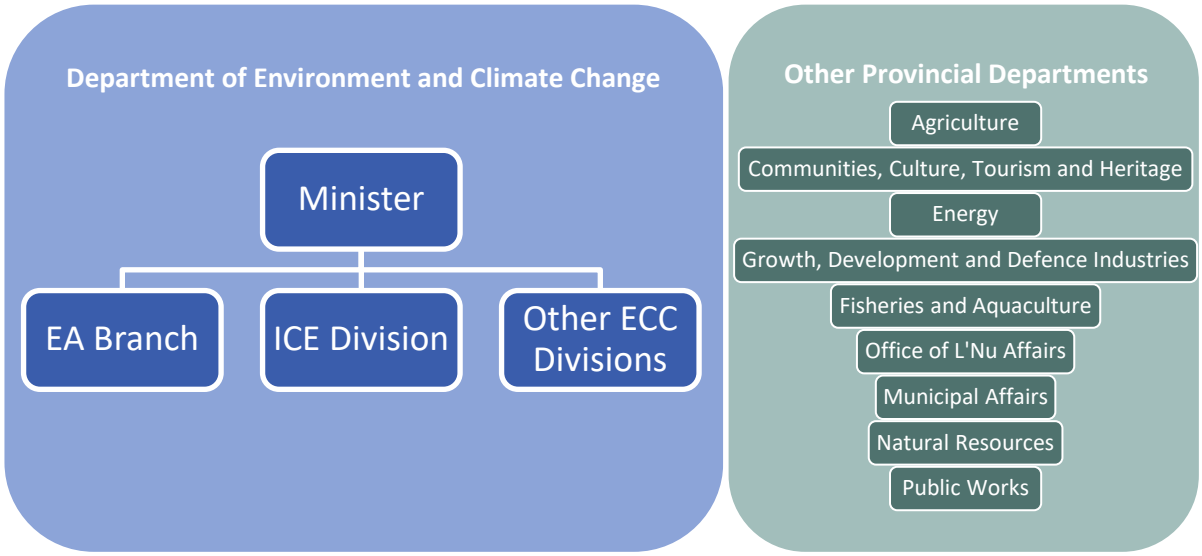
55. Our evaluation focused on whether each project owner provided sufficient information to support environmental assessment decision-making. It is important to note that this was not an effort to determine whether a project should, or should not be, approved by the Minister.

56. Overall, we found each project owner provided sufficient information to support environmental assessment decision-making. Our evaluation relates only to the information contained in the project applications and does not address how that information was subsequently communicated to the Minister.

Risks identified by government reviewers not addressed in terms and conditions

57. Government reviewers conduct a technical review of an environmental assessment application. They comment on gaps or weaknesses in the application, verify claims where possible, and raise questions about the project impacts on the environment. Reviewers may work in the Department or other provincial departments.

Departments Participating in the Government Review Process



Source: Office of the Auditor General of Nova Scotia

58. Government reviewers were used for all six projects we tested. Each project was reviewed by numerous government reviewers from multiple provincial departments.

59. The EA Branch, which coordinates the environmental assessment process, reviews and synthesizes reviewer comments and is responsible for making final recommendations on terms and conditions to the Minister.

60. However, we were unable to reconcile certain risks identified by government reviewers to the terms and conditions later attached to the six projects.

61. For example, in one project, government reviewers identified risks to the endangered wood turtle and lichen habitats that were not addressed by the project owner. In another, reviewers raised concerns that the project owner had overlooked increased wildfire risk. We found no corresponding terms and conditions in the approval which would address these risks raised by the subject matter experts.

62. The absence of a clear link between government reviewer comments and the corresponding terms and conditions limits the transparency of the environmental assessment process. As a result, expert concerns may not be fully reflected or addressed in Minister decisions.

Survey of government reviewers highlights weaknesses in the environmental assessment review process

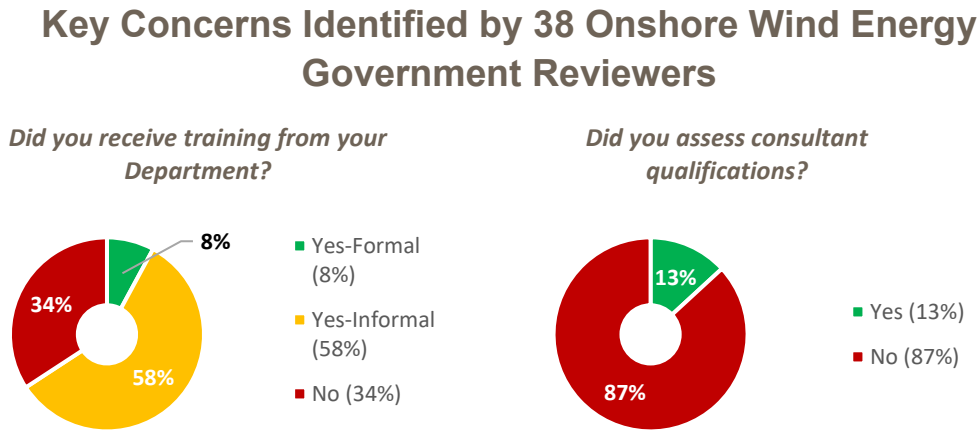
63. We conducted a voluntary survey of provincial government reviewers during our audit period. We developed the survey with the intent to understand the role of government reviewers in the environmental assessment process.

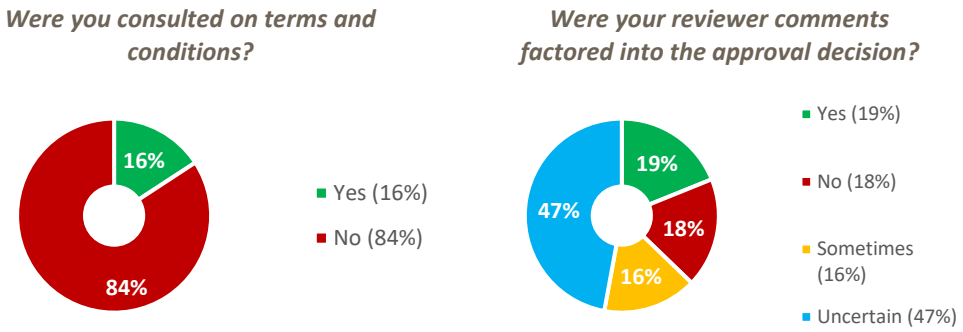
64. The survey was sent to 136 individuals identified through a government reviewer distribution list managed by the EA Branch. Not all individuals on the distribution list were involved in reviews of onshore wind energy projects.

65. However, of 136 survey requests sent, 38 responses were from individuals who had completed an onshore wind energy environmental assessment review since January 2023.

66. For context, the six projects we tested were sent to an average of 45 government reviewers for comment. The 38 responses we received reflect the perspectives of a substantial number of government reviewers who participated in onshore wind energy reviews during our audit period.

67. We asked government reviewers about their training, whether they assessed consultant qualifications, and the extent to which their input was reflected in project approval decisions.





Source: Office of the Auditor General of Nova Scotia

68. Our survey results identified concerns raised by government reviewers regarding the environmental assessment process. As subject matter experts, government reviewers provide technical expertise to inform the Minister's assessment of project risks and mitigation measures.

69. Additionally, we asked survey respondents to share any issues, concerns, or suggestions for improving the environmental assessment process. More than half of the 38 respondents who had reviewed an onshore wind energy project provided additional comments.

70. We paraphrased and grouped similar responses to protect respondent anonymity and summarize the key themes identified.

71. The main concerns raised by respondents were that government reviewer comments were not adequately reflected in project approval decisions and that terms and conditions were weak or vague. For example, individual respondents reported feeling "muzzled", being "directed" not to suggest terms and conditions, or being pressured to "alter or soften" their comments. Other comments related to unclear guidance and requirements and training gaps.

72. Survey results provided directly to our office by government reviewers through the anonymous survey were consistent with audit evidence obtained from other sources, including reviews of policies and processes, analysis of approval documents, and interviews with management and staff. These audit findings indicate weaknesses in how the Department administers the reviewer engagement portion of the process, consideration of technical expertise, and the development of project terms and conditions.

Recommendation 3

We recommend the Department of Environment and Climate Change implement a policy for the use of government reviewers in environmental assessment applications. Policy should define reviewer selection criteria and responsibilities, and establish how reviewer comments are evaluated, considered, and incorporated into decision-making.

Department Response to Recommendation 3

Department agrees

Target Date for Implementation:

December 2027

The Department will implement a policy for the use of government reviewers.

Recommendation 4

We recommend the Department of Environment and Climate Change require staff to record a rationale for decisions not to incorporate reviewer input into environmental assessment terms and conditions, including how associated risks will be addressed.

Department Response to Recommendation 4

Department agrees

Target Date for Implementation:

December 2027

The Department will document how significant risks identified by reviewers were addressed in the recommended terms and conditions, while respecting the discretionary decision-making role of the Minister as outlined in legislation.

Environmental assessment terms and conditions not reviewed with experts who know risks

73. Other provincial departments may be responsible for receiving information from project owners, and confirming whether environmental assessment terms and conditions have been satisfied.

74. For example, a term and condition may require the project owner to develop a moose monitoring program to the satisfaction of the Department of Natural Resources. However, if the Department of Natural Resources is not consulted on terms and conditions assigned to it for monitoring, it may not



understand the scope of its responsibilities.

75. This could result in terms and conditions not being properly monitored or compliance information not being provided to the Department of Environment and Climate Change.

Recommendation 5

We recommend the Department of Environment and Climate Change provide draft environmental assessment terms and conditions to provincial departments assigned monitoring responsibilities for review prior to project approval.

Department Response to Recommendation 5

Department agrees

Target Date for Implementation:

June 2027

The Department will determine an approach for providing draft environmental assessment terms and conditions to provincial departments assigned monitoring responsibilities.

Staff assigned responsibility for compliance have little input on terms and conditions

76. While the policy does not require input from other provincial departments, it does require draft terms and conditions to be circulated to the Inspection, Compliance and Enforcement Division for review prior to Ministerial approval.

77. We reviewed nine approved projects selected for compliance monitoring during the audit period. Compliance monitoring is discussed later in the report. In six of the nine projects, draft terms and conditions were not provided to the ICE staff responsible for compliance monitoring for review before approval.

78. Input from compliance monitoring ensures terms and conditions are clear, practical, and enforceable. Without input from ICE staff, terms and conditions may be difficult to monitor or enforce.

Recommendation 6

We recommend the Department of Environment and Climate Change adhere to the Roles and Responsibilities Policy and develop environmental assessment terms and conditions in consultation with the Inspection, Compliance and Enforcement Division responsible for compliance monitoring.

Department Response to Recommendation 6

Department agrees

Target Date for Implementation:

June 2027

The Department will work with its Compliance Division regarding the development of terms and conditions.

Standard terms and conditions are reused across projects

79. The EA Branch commonly sources terms and conditions from a standard listing maintained by the Department or reuses conditions from recently approved projects.

80. While reuse of terms and conditions can promote consistency across projects, standard terms and conditions should be reviewed and tailored to reflect project-specific risks and input from government reviewers, compliance staff, and other subject matter experts. Without this review and input, terms and conditions may not adequately address project-specific risks or support effective compliance monitoring.

Project approval terms and conditions lack measurable criteria, deadlines, and submission requirements

81. To ensure environmental assessment terms and conditions are objective, transparent, and defensible, they should adhere to a SMART framework: **S**pecific; **M**easurable; **A**chievable; **R**elevant; and **T**ime-bound. Applying the SMART principles promotes clarity, accountability, and effective compliance monitoring.

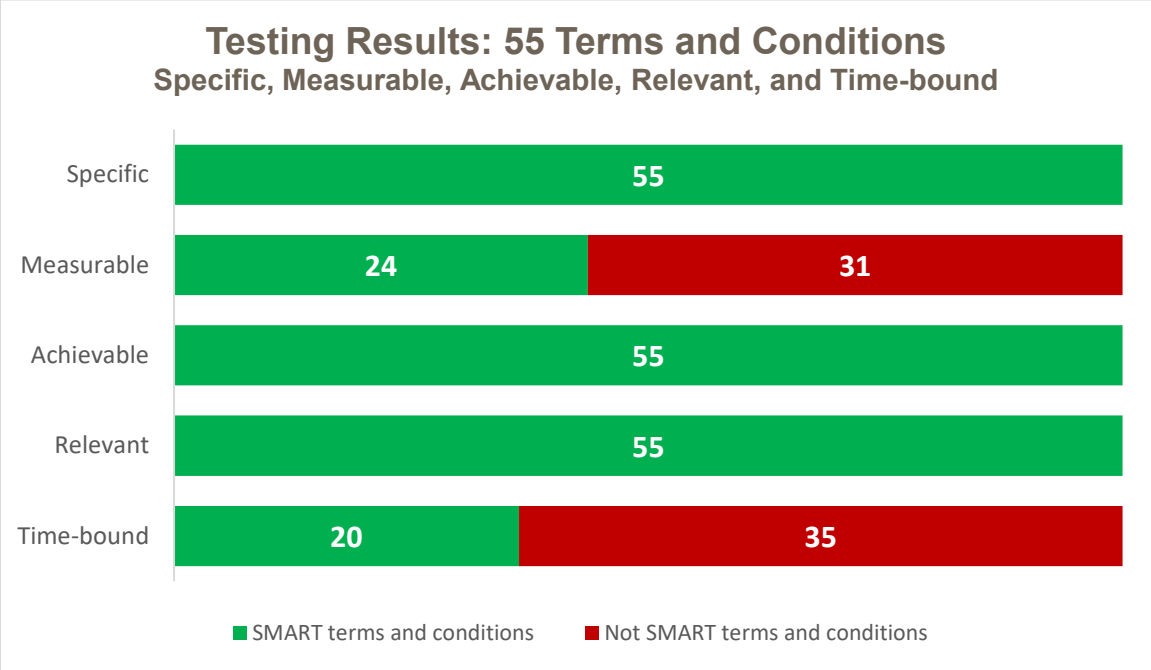
82. We tested 55 terms and conditions attached to nine project approvals against the SMART framework.



83. We found terms and conditions were not consistently measurable or time-bound, and some lacked submission requirements needed to verify compliance.

84. Of the 55 terms and conditions tested, all were specific, achievable, and relevant. However, 31 were not measurable because they lacked clear

standards or compliance criteria, and 35 were not time-bound because they lacked defined deadlines for required actions or submissions.



Source: Office of the Auditor General of Nova Scotia with data obtained from the Department of Environment and Climate Change

85. Many terms and conditions assessed compliance solely by the submission of a record, without specifying the standard or criteria required to demonstrate compliance.

Example of a Term and Condition That is Not Measurable:

Prior to road construction and/or upgrades, the Project Owner shall submit an updated shadow flicker assessment, noise modelling, and the final turbine placement to the Department of Environment and Climate Change. The updated modelling must demonstrate compliance.

No standard or criteria set to demonstrate compliance

86. Most terms and conditions are tied to project activities rather than dates. While potentially enforceable, they did not establish clear submission deadlines, review requirements, or require onsite inspection.

Example of a Term and Condition That is Not Time-Bound:

Prior to road construction and/or upgrades, or any associated ground disturbance activities the Project Owner shall complete the Archaeological Resource Impact Assessment. The report shall be made available to the Department of Communities, Culture, Tourism and Heritage, and the Department of Environment and Climate Change.

Condition requires compliance prior to an event rather than by an enforceable date

87. Six of the 55 terms and conditions tested did not require project owners to submit information to the Department. Without supporting documentation demonstrating compliance, the Department's ability to verify that requirements have been met is limited.

Example of a Term and Condition Not Requiring a Compliance Submission:

Prior to the time turbine(s) become operational, the Project Owner must complete an additional year of field bird studies to inform future monitoring and mitigation planning.

No requirement to submit evidence of compliance

Recommendation 7

We recommend the Department of Environment and Climate Change strengthen environmental assessment terms and conditions by including measurable criteria and clearly defined submission timelines.

Department Response to Recommendation 7

Department agrees

Target Date for Implementation:

June 2027

The Department will, where appropriate, include terms and conditions with measurable criteria and clearly defined submission timelines.

Information relevant to the Minister's decision was not found in briefing materials and decision options

88. The Environmental Assessment Regulations prescribe the information the Minister shall consider when making a decision to approve or reject a project.

Factors Relevant to the Minister's Decision

Minister's Considerations	(i) Location of the project
	(ii) Size, scope, and complexity of the project
	(iii) Concerns expressed (public and Mi'kmaq of Nova Scotia)
	(iv) Steps taken to address concerns (public and Mi'kmaq of Nova Scotia)
	(v) Sufficient environmental baseline information
	(vi) Potential and known environmental impacts
	(vii) Project schedule
	(viii) Planned or existing land use
	(ix) Other projects in the area
	(x) Impact of licences, certificates, permits, approvals, and other authorizations
	(xi) Other information as the Minister may require

Source: Section 12 of the Environmental Assessment Regulations made under Section 49 of the Environment Act, effective December 19, 2022

89. The EA Branch compiles all project information collected from the project application, consultation, and government reviews, and provides briefing materials and decision options to the Minister before project decisions are made. We reviewed these materials and options for six projects and assessed whether they included factors the Minister is required to consider under the Environmental Assessment Regulations.

90. All six projects were missing one or more considerations in the briefing materials and decision options provided to the Minister. Across the projects we tested, missing considerations included:
    - The location of other wind energy projects in the area.
    - The steps taken by project owners to address environmental concerns raised by the public and the Mi'kmaq of Nova Scotia.
    - Whether environmental baseline information was sufficient to predict environmental impacts.
    - Whether compliance with licenses, certifications, permits, approvals, or other authorizations required by law would adequately mitigate environmental impacts.

91. The Department indicated the missing information was considered through a combination of written and verbal briefings.

92. However, the Department could not provide evidence that all considerations were presented to the Minister.

93. As a result, the Department cannot demonstrate that the Minister had all factors required by the Environmental Assessment Regulations available for consideration when making project decisions. This reduces transparency and increases the risk that project decisions may be made without full consideration of environmental impacts.

Recommendation 8

We recommend the Department of Environment and Climate Change include all required factors listed in the Environmental Assessment Regulations in briefing materials and decision options provided to the Minister.

Department Response to Recommendation 8

Department agrees

Target Date for Implementation:

June 2027

The Department will include all required factors in ministerial briefing materials.

Testing shows 50-day legislated timeline being met

94. As noted above, there is a 50-day legislated timeline for the Department to execute the environmental assessment process and for the Minister to reach a decision on approval.

95. Five of the six projects we tested were approved on day 50, while the other was approved on day 51. The Department explained an exception to the 50-day timeline is made if decision day falls on a weekend or holiday, and the decision is later released on the next business day.

Province's environmental assessment process is similar to other jurisdictions

96. Environmental assessment requirements for onshore wind energy projects in Canada are broadly consistent across jurisdictions. Nova Scotia's requirements are generally aligned with those used elsewhere in Canada.

97. A review across all Canadian provinces and the federal government found no material differences in core objectives, though variations exist in assessment triggers, review processes, consultation requirements, and supporting guidance resources.

98. Indigenous consultation is required for all onshore wind energy projects across Canada, but the timing and approach vary by jurisdiction. Public participation requirements also differ, ranging from standard comment periods to formal public hearings. In most jurisdictions, final approval authority rests with the provincial Minister of Environment or Cabinet.



Nova Scotia has one of the shortest environmental assessment timelines in Canada

99. Approval timelines vary considerably across jurisdictions and are influenced by factors such as project size and scope, environmental sensitivity, Indigenous interests, regulatory requirements, and project-specific circumstances.

100. At 50 days, Nova Scotia has one of the shortest environmental assessment timelines in Canada. The table below summarizes the typical approval timelines for wind energy projects across Canadian jurisdictions.

Onshore Wind Energy Environmental Assessments Across Jurisdictions

Province	Trigger / Threshold*	Typical Timeline**
New Brunswick	≥ 3 MW	30 days
Newfoundland and Labrador	> 1 MW	45 days
Nova Scotia	≥ 2 MW	50 days
Prince Edward Island	≥ 1 MW	56 to 70 days
Ontario	No threshold	84 days
Alberta	No threshold	6 to 12 months
Manitoba	≥ 10 MW	6 to 24 months
Canada	≥ 10 turbines (offshore)	10 to 20 months
Saskatchewan	No threshold	12 to 18 months
Quebec	≥ 10 MW	12 to 24 months
British Columbia	No threshold	Timelines currently under development

Source: Office of the Auditor General of Nova Scotia
** Trigger / Threshold: the generating capacity of a onshore wind energy project at which an environmental assessment is required; expressed in megawatts (MW); a single modern commercial wind turbine is often capable of producing 4-7 MW*
*** Typical Timeline: based on publicly available information and may vary depending on project characteristics, location, environmental sensitivity, Indigenous interests, ministerial discretion, regulatory amendments, or project-specific circumstances; this information is intended as general guidance and should be considered alongside applicable regulatory requirements*

Compliance Monitoring Processes Lack Verification and Expertise Needed to Reduce Environmental Risks

101. There were 105 terms and conditions subject to compliance monitoring by the ICE Division for onshore wind energy projects during our audit period. We selected a sample of 55 terms and conditions from nine project approvals to provide geographical representation across the province. Our objective was to assess whether the compliance monitoring process was applied consistently and in accordance with policy.

102. An overview of the results for each project in our sample is outlined in the table below. These results are discussed in more detail in the paragraphs that follow.

Results of Auditor General Testing of Compliance Monitoring

Criteria evaluated	Project 1	Project 2	Project 3	Project 4	Project 5	Project 6	Project 7	Project 8	Project 9
Department met with project owner to discuss compliance	✗	✓	✓	✓	✗	✓	✗	✓	✗
Verification of compliance with terms and conditions	✗	✗	✗	✗	✗	✗	✗	✗	✗
Requirements of selected terms and conditions met *	N/A	N/A	✓	✗	✗	N/A	✗	✓	✓
Required expert monitoring of terms and conditions completed	✓	N/A	N/A	✗	✗	N/A	✗	✗	N/A
All terms and conditions recorded in tracking system	✗	✗	✗	✗	✗	✗	✗	✗	✗
Compliance monitoring assigned to inspector **	✓	✓	✓	⚠	✓	✓	✓	✓	✓

Source: Office of the Auditor General of Nova Scotia
** We selected a sample of six terms and conditions across nine projects to assess whether project owner submissions met the requirements of the approved terms and conditions*
*** Project 4 received environmental assessment approval in December 2023; however, responsibility for compliance monitoring was not assigned to an inspector until August 2025*

Compliance monitoring meetings with project owners often delayed or not occurring as required by policy

103. Meetings between the EA Branch, ICE Division, and project owners help clarify project requirements and compliance expectations.

104. For example, meetings provide an opportunity to discuss periods during the year when required habitat surveys should be completed or explain how to conduct consultation with the Mi'kmaq of Nova Scotia. Policy requires the EA Branch to participate in and document these meetings.

105. Meeting records were missing for four of the nine projects reviewed. Without documented meeting minutes, the Department cannot demonstrate meetings occurred, appropriate personnel attended, or expectations were clearly communicated.

106. Timely communication is also essential to effective project management. The Department's policy does not specify when these meetings should occur. For the nine projects reviewed, meetings occurred an average of 25 days after project approval.

107. The absence of timelines for meetings may delay guidance, resulting in project owners proceeding without a full understanding of expectations.

Recommendation 9

We recommend the Department of Environment and Climate Change establish a timeline following environmental assessment approval for the Environmental Assessment Branch and the Inspection, Compliance and Enforcement Division to engage project owners to discuss terms and conditions and the expectations for monitoring. Meetings should be recorded as prescribed by the Roles and Responsibilities Policy.

Department Response to Recommendation 9

Department agrees

Target Date for Implementation:

June 2027

The Department will establish a timeframe following environmental assessment approval to engage project owners on terms and conditions and monitoring expectations.

Compliance monitoring does not include review and verification

108. Compliance monitoring should provide evidence that project owners have met the terms and conditions attached to environmental assessment approvals.

109. For the 55 terms and conditions tested, we assessed whether the Department had sufficient evidence to support its conclusion that project owners were complying with those requirements.

110. We reviewed inspection reports for all 55 terms and conditions tested and found that ICE staff concluded that project owners were in compliance with all 55.

111. During our testing, we learned ICE staff are not required to visit project sites before concluding whether project owners have complied with terms and conditions.

112. Rather than conducting site visits or other verification procedures, ICE staff rely on information submitted by project owners and record that required submissions have been received. The process does not require review and verification that the information submitted demonstrates compliance with the applicable terms and conditions.



113. Per policy, onsite inspections are only required when the project becomes operational.

114. ICE staff's role was primarily clerical, involving completion of inspection reports and documenting that required information had been received from project owners. The process did not require verification of the accuracy of information provided or determination of whether the terms and conditions had been satisfied.

115. When terms and conditions are imposed to mitigate environmental risk, we would expect compliance monitoring to include review and verification that requirements have been met. The current process relies largely on self-reported information provided by project owners, and as a result, offers limited assurance of compliance.

Terms and conditions not satisfied but still assessed as complete by Department

116. Once we learned that the Department relied on information submitted by project owners without requiring review and verification that terms and conditions had been satisfied, we engaged our independent environmental sciences expert to assess whether the process was applied appropriately.

117. We selected six of the 55 terms and conditions for detailed testing to determine whether project owner submissions met the requirements of the terms and conditions.

118. Together with our expert, we found three of six samples were either incomplete or did not meet the requirements of the term or condition, despite being accepted and marked as complete by the Department.
- One project required submission of a sediment and erosion control plan, but the project owner addressed only one of the three required standards.

- Another project required a surface water management plan; however, the project owner submitted an environmental protection plan instead. The plan did not identify construction-related effects on surface water or the mitigation measures for wetlands and watercourses, as required.
- A third project required noise modeling and a shadow flicker assessment; however, only the shadow flicker assessment was provided.

119. When incomplete or inadequate submissions are accepted as complete, environmental risks may not be properly managed, reducing the effectiveness of terms and conditions.

Recommendation 10

We recommend the Department of Environment and Climate Change revise the Roles and Responsibilities Policy to require review and verification that project owners have satisfied environmental assessment terms and conditions before compliance is concluded.

Department Response to Recommendation 10

Department agrees

Target Date for Implementation:

December 2027

The Department will update policy to assess that proponents have addressed terms and conditions before compliance is concluded.

Most terms and conditions are reviewed by staff who lack specialized expertise

120. The ICE Division is responsible for compliance monitoring and administering approximately 30 regulations under the *Environment Act*, including the Environmental Assessment Regulations.



121. ICE staff specialize in environmental work across a range of natural systems, including surface water, groundwater, air quality, soil, wetlands, and watercourses.

122. Management indicated ICE staff are not expected to be technical experts in all areas of the *Environment Act* and may lack specialized expertise related to onshore wind energy projects.

123. Without appropriate technical expertise or effective use of in-house experts, the Department's compliance monitoring activities may not accurately identify non-compliance, increasing the risk that environmental impacts are not identified or addressed.

Required expert reviews not completed

124. Of the 55 terms and conditions we tested, 11 (20 per cent) required further submission to subject matter experts working in other provincial departments.

125. We found responsibility for coordinating required expert reviews was not clearly understood.

126. The ICE Division and the EA Branch each believed the other was responsible, although policy assigns responsibility to the EA Branch.

127. The required coordination did not occur in any of the 11 cases. Eight of the 11 required expert reviews did not occur because responsibility for the reviews was unclear and no one carried them through to completion.

Example of a Term and Condition Requiring Expert Review:

The Project Owner shall complete baseline field surveys for turtles in Spring 2024. Mitigation measures shall be employed to protect turtle habitat. The Project Owner shall provide details of mitigation measures, methods and results of surveys to the Department of Natural Resources.

Condition requires review by the Department of Natural Resources

128. The remaining three expert reviews occurred because project owners submitted information directly to the relevant expert.

129. The lack of clear accountability and coordination increases the risk that required expert reviews do not occur and environmental impacts are not identified or addressed.

Recommendation 11

We recommend the Department of Environment and Climate Change follow the Roles and Responsibilities Policy for arranging and completing expert reviews when environmental assessment terms and conditions require subject matter experts to assess compliance.

Department Response to Recommendation 11

Department agrees

Target Date for Implementation:

December 2027

The Department will update policy to determine how subject-matter expert reviews are arranged and completed.

Only 33 per cent of terms and conditions examined were subject to compliance monitoring

130. The EA Branch is required by Policy to enter terms and conditions (and associated due dates) into its Permitting, Compliance & Licensing software tool (known as the AMANDA computer system) and assign monitoring to the appropriate individual in the ICE Division.

131. This process is an important oversight control that assigns responsibility for compliance monitoring and notifies ICE staff of their compliance monitoring responsibilities.

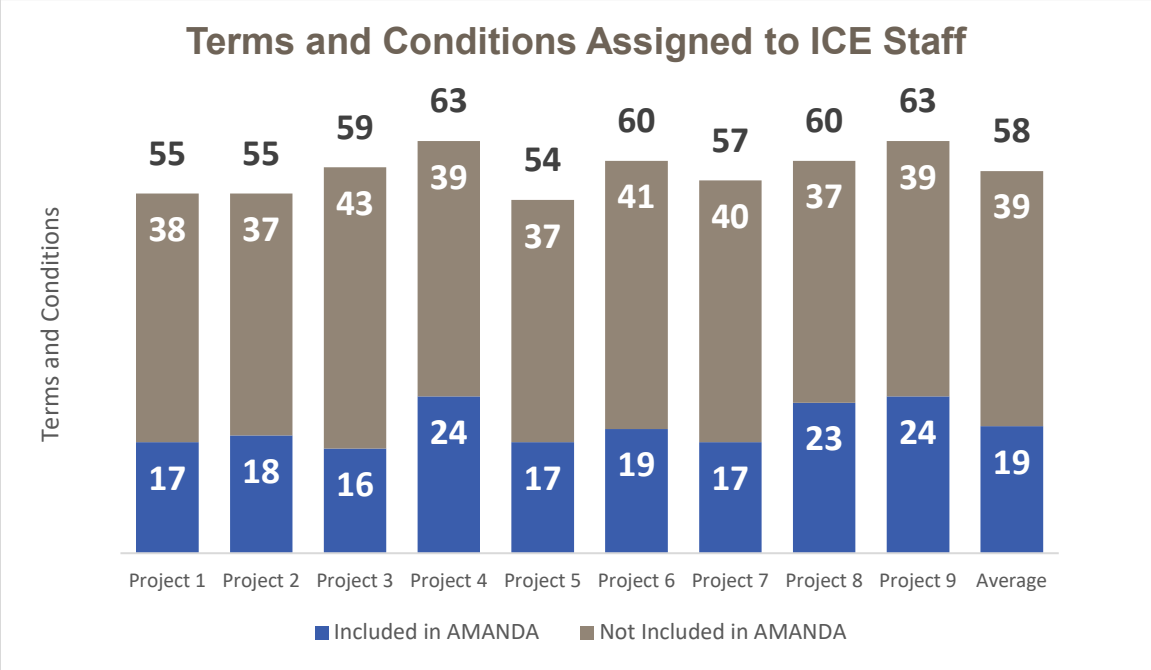
132. Compliance timelines are typically set for two years following project approval, with progress tracking beginning either when a project owner submits a record, or when the two-year period has expired.

133. However, we learned not all terms and conditions are entered into the AMANDA computer system.

134. Only terms and conditions the Department considers actionable, generally those with defined due dates, are entered and assigned for compliance monitoring.

135. Management indicated terms and conditions often work together to meet the full requirements of approval. We therefore expected all terms and conditions to be subject to compliance monitoring.

136. Within our compliance sample, we examined nine project approvals containing between 54 and 63 terms and conditions apiece. On average, approximately 33 per cent of terms and conditions were entered into the AMANDA computer system and assigned for compliance monitoring.



Source: Office of the Auditor General of Nova Scotia with data obtained from the Department of Environment and Climate Change

137. Some examples of the terms and conditions omitted from the AMANDA computer system include:
- conditions restricting project activities within 30 metres of a watercourse or wetland;
- conditions requiring notification to the Department of any sulphide or uranium discoveries;
- conditions ensuring noise emissions meet sound level guidelines specified by the Department;
- conditions requiring a shadow flicker assessment under varying seasonal conditions; and
- conditions requiring the project owner to conduct ongoing engagement with the diverse communities in the project's area.

138. As noted above, on-site inspections are rarely completed, and inspections are only required when the project becomes operational.

139. When only a portion (33 per cent) of the terms and conditions are assigned for compliance monitoring, the Department must rely on project owners to self-report compliance. This weakens oversight and increases the risk non-compliance goes undetected.

Recommendation 12

We recommend the Department of Environment and Climate Change enter all environmental assessment terms and conditions included in project approvals into the AMANDA computer system upon Minister approval.

Department Response to Recommendation 12

Department agrees

Target Date for Implementation:

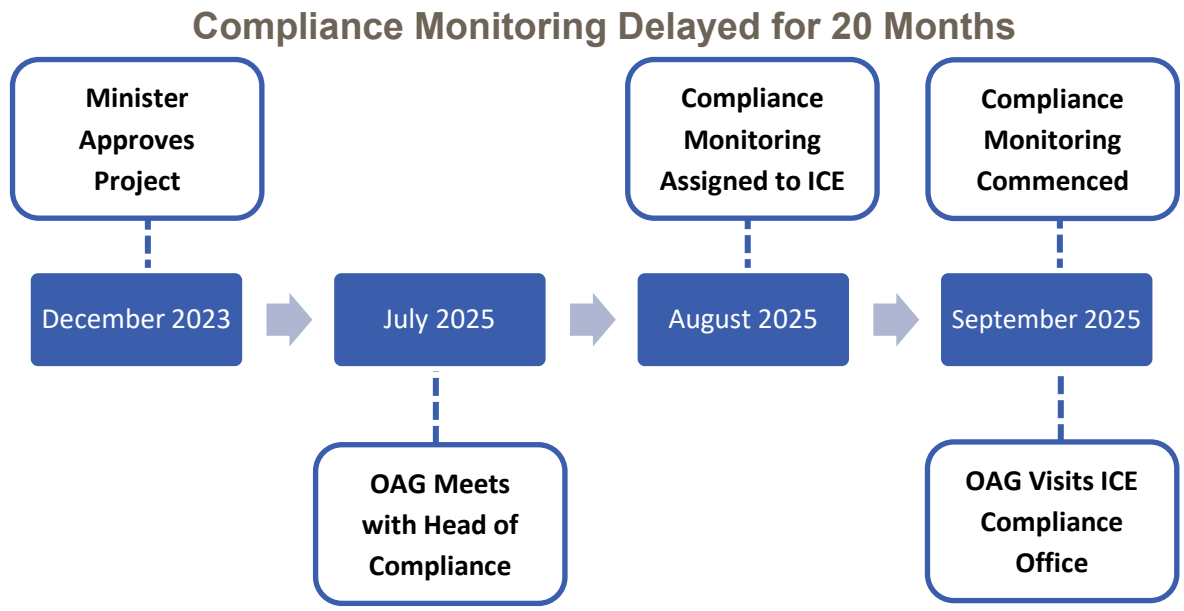
December 2027

The Department will update policy so that appropriate environmental assessment terms and conditions are entered into AMANDA.

On one occasion, 20 months passed before staff were assigned responsibility for compliance

140. One project we examined received environmental assessment approval from the Minister in December 2023.

141. However, our testing revealed that terms and conditions were only assigned to ICE staff in the AMANDA computer system in August 2025, 20 months later.



Source: Office of the Auditor General of Nova Scotia

142. We determined a file review was completed in anticipation of our audit. In an email obtained from the Department, the EA Branch identified a former employee had not assigned the terms and conditions as required by the policy. The email also stated several of the inspection due dates are overdue.

143. We visited the ICE Office responsible for the project and learned that compliance monitoring began in September 2025, less than one week before our arrival.



144. Delaying or postponing the assignment of compliance monitoring increases the risk that a project's required terms and conditions are not implemented in a timely manner and that non-compliance may go undetected.

Department cannot determine whether terms and conditions are effective at reducing impacts on the environment

145. As noted above, standard terms and conditions are commonly used in project approvals, and the listing is managed by the EA Branch.

146. The EA Branch added terms and conditions to the standard listing in May 2023 and March 2024. However, the Department could not explain why terms and conditions were added to the listing, how additions were determined, or provide evidence that existing terms and conditions were assessed for effectiveness.

147. The ICE Division does not provide the results of compliance monitoring back to the EA Branch, nor do they conduct reviews to assess the effectiveness of terms and conditions. For the 55 terms and conditions tested, the ICE Division did not communicate inspection results to the EA Branch.

148. Without evaluating whether standard terms and conditions achieve intended outcomes, the Department has limited assurance they reduce environmental risks.

Recommendation 13

We recommend the Department of Environment and Climate Change complete evaluations of the effectiveness of environmental assessment terms and conditions.

Department Response to Recommendation 13

Department agrees

Target Date for Implementation:

October 2028

The Department will establish an approach to evaluating the effectiveness of environmental assessment terms and conditions.

Appendix I

Reasonable Assurance Engagement Description and Conclusions

We completed an independent assurance report of Environmental Assessments for Onshore Wind Energy Projects at the Department of Environment and Climate Change. The purpose of this performance audit was to determine whether the Department of Environment and Climate Change is appropriately conducting environmental assessments for onshore wind energy projects and monitoring approved projects for compliance with terms and conditions.

It is our role to independently express a conclusion whether environmental assessments for onshore wind energy projects comply in all significant respects with the applicable criteria. Senior management at the Department of Environment and Climate Change have acknowledged their responsibility for environmental assessments for onshore wind energy projects.

This audit was performed to a reasonable level of assurance in accordance with the Canadian Standard on Assurance Engagements (CSAE) 3001 – Direct Engagements set out by the Chartered Professional Accountants of Canada (CPA Canada) in the CPA Canada Handbook – Assurance; and sections 18 and 21 of the *Auditor General Act.*

We apply the Canadian Standard on Quality Management 1 (CSQM 1), and we have complied with the independence and other ethical requirements of the Code of Professional Conduct of the Chartered Professional Accountants of Nova Scotia.

The objectives and criteria used in the audit are below:

Objective: To determine whether the Department of Environment and Climate Change is complying with legislation, regulations, and processes when conducting onshore wind energy environmental assessments, to avoid and mitigate adverse impacts and environmental effects.

Criteria:

1. Environmental assessment processes should comply with legislation and regulations.

2. Environmental assessments should be completed in accordance with processes.

Objective: To determine whether the Department of Environment and Climate Change is monitoring the compliance of terms and conditions for onshore wind energy environmental assessment approvals.

Criteria:

1. Environmental assessment approvals should be monitored for compliance with terms and conditions.

2. Appropriate action should be taken when terms and conditions are not met.

3. Monitoring activities should assess whether terms and conditions have decreased adverse impacts and environmental effects.

Objective: To determine whether the Department of Environment and Climate Change has adequate onshore wind energy environmental assessment processes in place to avoid or mitigate adverse impacts and environmental effects.

Criteria:

1. Onshore wind energy environmental assessment approvals should avoid or mitigate adverse impacts and environmental effects.

Generally accepted criteria consistent with the objectives of the audit did not exist. Audit criteria were developed specifically for this engagement. Criteria were accepted as appropriate by senior management at the Department of Environment and Climate Change.

Our audit approach included interviews with management and staff, and review of legislation, regulations, polices, and procedures. We completed detailed testing and examined environmental assessment applications and compliance monitoring records. We also contracted an independent environmental sciences expert to help us determine whether adequate onshore wind energy environmental assessment processes are in place to avoid or mitigate adverse impacts and environmental effects. Our audit period was from January 1, 2023 to August 31, 2025. We examined information outside of that period as necessary.

We believe the evidence we have obtained is sufficient and appropriate to provide the basis for our conclusions. Our report is dated November 12, 2026, in Halifax, Nova Scotia.

Based on the reasonable assurance procedures performed and evidence obtained we have formed the following conclusions:

- We found Nova Scotia's environmental assessment process is generally consistent with that of other Canadian jurisdictions.
- However, our testing of onshore wind energy projects identified weaknesses in how the Department of Environment and Climate Change administers environmental assessments:
    - Information relevant to the Minister's decision was not found in briefing materials and decision options.

- Government reviewer comments were not reflected in project approval terms and conditions.
- Project approval terms and conditions lack measurable criteria, deadlines, and submission requirements.
- No formal policy guides application reviews, resulting in inconsistent application processes.

- Once projects are approved, the Department does not appropriately monitor compliance with project terms and conditions intended to manage environmental risks, due to lack of:
  - Review and verification of compliance with terms and conditions.
  - Verification by required subject matter experts.
  - Evaluation of the effectiveness of terms and conditions in reducing environmental impacts.
- Ministerial project approval decisions were outside the scope of this audit.

Appendix II

Results of the November 2017 Report of the Auditor General and Follow-up

Nova Scotia Environment: Environmental Assessments

Recommendation	Department Response	OAG Assessment
Recommendation 4.1: Environment should develop and implement a process for entering approved projects and the associated terms and conditions into the Department's tracking system to help ensure regular monitoring is completed.	Agree. In February 2017, NSE implemented a System of Notification and Approval Processing (SNAP). Going forward, approvals will be captured in the system to enable terms and conditions to be tracked.	May 2020 Follow-up of 2015, 2016, and 2017 Performance Audit Recommendations: Complete
Recommendation 4.2: Environment should regularly review whether standard terms and conditions of approved projects are effective at addressing identified risks.	Agree. We have committed to reviewing and updating the Internal Guide to EA Follow-up Procedures. This guide will establish procedures for reviewing Environmental Assessment terms and conditions to ensure enforceability leading to better compliance.	May 2020 Follow-up of 2015, 2016, and 2017 Performance Audit Recommendations: Complete
Recommendation 4.3: Environment should develop terms and conditions for approved projects in consultation with the inspectors responsible for ensuring they are met. Terms and conditions should include clear timeframes for completion and requirements to provide documentation to confirm terms and conditions have been satisfied.	Agree. NSE is undertaking a larger project to review terms and conditions of its approvals including EA authorizations. The project is intended to update/review existing terms and conditions to ensure requirements are relevant, clear, consistent and enforceable.	May 2020 Follow-up of 2015, 2016, and 2017 Performance Audit Recommendations: Complete
Recommendation 4.4: Environment should provide relevant draft terms and conditions of approved projects that involve other departments to the respective departments for review and confirmation of their responsibility under the terms and conditions.	Agree. The review and update of the EA Checklists will ensure a record of communication with other departments is clear and a record is maintained.	May 2020 Follow-up of 2015, 2016, and 2017 Performance Audit Recommendations: Complete
Recommendation 4.5: Environment should meet with project owners to discuss the terms and conditions once projects are approved. There should also be regular meetings between Nova Scotia Environment and project owners to discuss the status of terms and conditions of approved projects.	Agree. The Internal Guide to EA Follow-up Procedures will be updated to ensure the initial meeting with the approval holder is completed. Subsequent meetings with the approval holder to review terms and conditions will be captured during an audit or inspection process.	May 2020 Follow-up of 2015, 2016, and 2017 Performance Audit Recommendations: Complete
Recommendation 4.6: Environment should document and implement a process for using government reviewers on environmental assessment applications. The process should include how reviewers are selected, the Department's expectations of reviewers and a follow-up process if responses are not provided by the deadline.	Agree. The review and update of the EA Checklists will ensure interactions with reviewers are identified, carried out and documented.	May 2020 Follow-up of 2015, 2016, and 2017 Performance Audit Recommendations: Complete
Recommendation 4.7: Environment should complete and document a review of information sent to the Minister of Environment for deciding on whether to approve or reject a project.	Agree. A routing sheet will be instituted to ensure a review of information is in place before it is sent to the Minister.	May 2020 Follow-up of 2015, 2016, and 2017 Performance Audit Recommendations: Complete

Appendix III

Glossary of Environmental Assessment Terms

Archaeological Resource Impact Assessment (ARIA): A heritage and environmental study conducted to identify, evaluate, and mitigate potential impacts on pre-contact, historic, or cultural resources before ground-disturbing activities occur.

Baseline Field Studies: Field investigations conducted prior to project approval or construction to establish existing environmental conditions and provide information for assessing potential impacts.

Bird Field Studies: Surveys conducted to identify and document the presence, abundance, distribution, movement patterns, habitat use, and seasonal activity of bird species to assess potential impacts.

Bird Migration: Movement of birds, usually in large numbers, with the purpose of reaching areas used for breeding.

Environmental Assessment: The process by which the environmental impacts of an undertaking are predicted and evaluated, and a subsequent decision is made on the acceptability of an undertaking.

Environmental Impact: (i) Any change, whether positive or negative, that the undertaking may cause in the environment, including any effect on socio-economic conditions, on environmental health, physical and cultural heritage or any structure, site or thing including those of historical, archaeological, paleontological, or architectural significance and (ii) any change to the undertaking that may be caused by the environment.

Groundwater: All water naturally occurring under the surface.

Habitat: The environment in which the life needs of a plant or animal are supplied.

Local Land Use: Impacts on the existing and planned land uses, such as property values, land use conflicts, and architecture.

Mainland Moose: The native Eastern Moose population found on mainland Nova Scotia and listed as endangered under the Nova Scotia *Endangered Species Act.*

Noise Levels: Sound generated by wind turbines and measured using specialized sound level meters to gauge the effects on nearby receptors.

Project Owner: Any person who carries out or proposes to carry out an undertaking, or is the owner or person having care, management, or control of an undertaking.

Recreation and Tourism: Activities such as fishing, hiking, hunting; and facilities such as parks in nearby areas.

Shadow Flicker: Occurs when the sun is low on the horizon and the turbine blades pass between the sun and an observer, creating a flickering.

Species at Risk: A species that is determined to be endangered, threatened, vulnerable, or of special concern by the Committee on the Status of Endangered Wildlife in Canada, Nova Scotia *Endangered Species Act*, or the federal *Species at Risk Act*.

Surface Water: Water on the ground or in a stream, river, lake, sea, or ocean.

Undertaking: An enterprise, activity, project, structure, work, or proposal.

Visual Effects: Impact on the locality, considering community perspective, modification of landscapes, proximity to conservation areas, parks, and wilderness areas.

Watercourse: The bed and shore of every river, stream, lake, creek, pond, spring, lagoon, or other natural water body, and the water therein, whether it contains water or not, and all groundwater.

Wetland: Land commonly referred to as marshes, swamps, fens, bogs, salt marshes, and shallow water areas that are saturated with water long enough to promote wetland or aquatic processes.

Wind Energy Project: Wind turbines connected to a common utility system through a system of transformers, distribution lines, and substations.

Source: Office of the Auditor General of Nova Scotia with information obtained from the Department of Environment and Climate Change

Appendix IV

Sample Terms and Conditions: Onshore Wind Energy Project

Terms and Conditions for Environmental Assessment Approval

1. Definitions and 2. Scope

Conditions in Definitions and Scope are standard to all approvals and include:

a) Definitions for Act, Department, Minister, Commencement, EA, surface watercourse and Registration Documentation.

b) Scope of the Approval and location of the project.

c) Responsibility of the Approval Holder to ensure the Project is carried out in accordance with Approval and the Registration Documentation.

3. General

3.1. The Approval Holder shall conduct the Project in accordance with the Act, as amended from time to time.

3.2. The Approval Holder shall, within two years of the date of issuance of this Approval, commence work on the Project unless granted a written extension by the Minister.

3.3. The Approval Holder shall provide written notification to the Department of the commencement date of the Project, at a minimum 30 days prior to the commencement.

3.4. The Approval Holder shall provide to the Department a concordance table detailing the status of the EA terms and conditions on or before January 31 of each year until released in writing by the Department.

3.5. Prior to any proposed expansion, modification, or relocation of any aspect of the Project from that proposed in the Registration Documentation, the Approval Holder must submit the proposal to the EA Branch for review and may require an EA or amendment.

3.6. Nothing in this Approval relieves the Approval Holder of the responsibility for obtaining and paying for all other licenses, permits, approvals or authorizations necessary for carrying out the Project which may be required by municipal by-laws or provincial or federal legislation. The Minister does not warrant that such licenses, permits, approvals or authorizations will be issued.

3.7. No authority is granted by this Approval to enable the Approval Holder(s) to commence or continue the Project on lands which are not in the control or ownership of the Approval Holder(s). It is the responsibility of the Approval Holder(s) to ensure that such a contravention does not occur. Failure to retain said authorization may result in this Approval being cancelled or suspended.

3.8. The Approval Holder shall not transfer, sell, lease, assign or otherwise dispose of this Approval without the written consent of the Minister. The sale of a controlling interest of a business or a transfer of this Approval from a parent company to a subsidiary or an affiliate is deemed to be a transfer requiring consent.

3.9. Upon any changes to the Registry of Joint Stock Companies information related to the Approval Holder, the Approval Holder shall provide a copy to the Department within 5 days of the changes.

3.10. If there is a discrepancy between the Registration Documentation and the terms and conditions of this Approval, the terms and conditions of this Approval shall apply.

3.11. Where a timeline is associated with a condition(s) of the Approval, the Approval Holder shall fulfil the requirements of the condition(s) within the prescribed timeline, unless otherwise authorized in writing by the Department.

3.12. The Approval Holder shall immediately notify the Department of any incidents of non-compliance with this Approval in accordance with the Act and Regulations.

3.13. The Approval Holder shall bear all expenses incurred in carrying out the environmental management and monitoring required under the terms and conditions of this Approval, the Act or the Regulations.

3.14. Unless specified otherwise in this Approval, all samples required to be collected by this Approval, the Act or the Regulations shall be collected, preserved, and analysed, by qualified personnel, in accordance with recognized industry standards and procedures and in accordance with any Standard under the Act or Regulations.

3.15. The Approval Holder shall ensure that this Approval, or a copy, is present at the Project site while personnel are on site and that personnel directly involved in the Project are made fully aware of the terms and conditions which pertain to this Approval.

3.16. The Approval Holder shall update any of the plans, programs or other documents required in this Approval to reflect the progressive development of the Project, and these documents shall be made available to the Department upon request. The Approval Holder shall make any changes that the Department deems necessary.

3.17. Based on the results of the monitoring required in this Approval or otherwise completed for the Project, or at any time as determined by the Department, the Approval Holder shall make necessary modifications to mitigation plans and/or changes to Project operations to prevent unacceptable environmental effects, as required by the Department.

3.18. The Approval Holder shall provide to the Department a summary table detailing the results of the monitoring required in this Approval, or otherwise completed for the Project, on or before January 31 of each year until released in writing by the Department. The results shall clearly identify and summarize any exceedances.

3.19. Where a condition of this Approval requires the Approval Holder to consult a particular party or parties, the condition will be considered complete once the Approval Holder provides a written confirmation letter from the third party or parties that the consultation is complete. If there is a conflict between the Approval Holder and a party or parties regarding the consultation, the Department will determine if suitable consultation has been completed and/or if further action is required.

4. Project Design and Operation

4.1. Prior to commencement of the Project, the Approval Holder shall submit updated sound modelling, shadow flicker assessment, and any other information requested for the final

turbine selection/placement to the Department. The updated modelling must demonstrate compliance with this Approval.

4.2. The Approval Holder shall be responsible for the costs of any third-party review of plans, reports, or monitoring results deemed necessary by the Department over the life of the Project.

5. Water Resources

5.1. The Approval Holder shall not conduct any Project activities, construct a turbine (measured from the tip of the blade), or remove vegetation within 30 metres of a watercourse and/or a wetland unless otherwise authorized in writing by the Department.

5.2. The Approval Holder shall ensure that the following activities take place at a distance of a minimum of 30 metres from a watercourse or wetland in an area such that a release will not enter a surface watercourse or wetland:

- Fuel storage, refueling, and/or lubrication of equipment;
- Washing of machinery or equipment; and
- Storage of equipment, excavated material, and potential contaminants.

5.3. The Approval Holder shall submit additional information to the Department with the Wetland Alteration Approval Application under the Act, prior to any wetland impacts. The information shall be developed in consultation with the Department and include, but not be limited to, a monitoring plan, identification of wetlands of special significance, and evidence that wetlands have been avoided to the extent possible, impacts to wetlands of special significance have been avoided, and risks to indirect alteration of wetlands have been mitigated.

5.4. Prior to commencement, the Approval Holder shall submit a surface water management plan to the Department. This plan shall include discussion of local hydrology, identify potential effects from construction of roads or other Project components on local surface water drainage patterns, and identify avoidance or mitigation measures for the protection of wetlands and watercourses. This plan shall be developed by a qualified professional engineer, hydrogeologist or geoscientist licensed to practice in the Province of Nova Scotia.

5.5. Prior to commencement, the Approval Holder shall submit a detailed sediment and erosion control plan to the Department. The plan shall include all clearing, grubbing and stripping required for the Project and shall be designed by a professional engineer licensed to practice in Nova Scotia.

5.6. Prior to blasting, the Approval Holder shall submit a blasting plan to the Department. The plan shall include completed pre-blast surveys for structures within 800 m of the point of blast, including water quality analysis for water wells within the same area. A detailed blast monitoring plan and a blast damage response policy shall also be provided.

5.7. The Approval Holder, at their expense, shall replace any water supply which has been lost or damaged as a result of Project operations, as authorized and required by the Department.

5.8. The Approval Holder shall immediately contact the Department should sulphide bearing material be encountered on the Project site, and at the request of the Department develop and implement a plan to manage the sulphide bearing material.

6. Wildlife and Wildlife Habitat

6.1. The Approval Holder shall provide the Wildlife Division, Department of Natural Resources and Renewables (NRR) with digital way points and shape files revealing precise locations for wetlands, and species listed under the *Species at Risk Act* (SARA) and/*or Endangered Species Act* (ESA), as well as of Species of Conservation Concern (i.e. species assessed by the Committee on the Status of Endangered Wildlife in Canada as at risk, but not listed under SARA or ESA, and all S1, S2 and S3 listed species under the Atlantic Canada Conservation Data Centre) identified during field work within two months of collection. The data provided to NRR shall include, at minimum, the date of the field observances and habitat description.

6.2. Prior to commencement of the Project, the Approval Holder shall develop a Wildlife Management Plan in consultation with NRR and Environment and Climate Change Canada (ECCC).

6.3. Prior to the time turbine(s) become operational, the Approval Holder must develop a mortality monitoring program for birds and bats for not less than two years. The program shall be implemented from the time turbine(s) become operational. The monitoring program and associated reporting requirements shall be developed in consultation with NRR and ECCC.

6.4. Prior to the time turbine(s) become operational, the Approval Holder shall develop an Adaptive Management Plan for birds and bats in consultation with NRR and ECCC.

6.5. Prior to commencement of the Project, the Approval Holder must develop a monitoring program for Mainland Moose for not less than two years. The program shall be implemented from the time turbine(s) become operational. The monitoring program shall be developed in consultation with NRR and ECCC.

7. Air, Noise and Visual Impact

7.1. At the request of the Department, the Approval Holder shall develop and implement a plan to monitor air quality during construction of the Project. The plan shall include, but not be limited to, sampling locations, parameters, monitoring methods, protocols and frequency.

7.2. The Approval Holder shall ensure that air emissions at the property boundaries do not exceed Nova Scotia Ambient Air Quality Standards.

7.3. Prior to commencement of the Project, the Approval Holder shall submit updated sound modelling, shadow flicker assessment, and any other information requested for the final turbine selection/placement to the Department.

7.4. The Approval Holder shall ensure that noise levels at any receptor do not exceed 40 dBA. At the request of the Department, the Approval Holder shall develop and implement a plan to monitor noise levels under varying climatic conditions. The plan shall include, but not be limited to, sampling locations, parameters, monitoring methods, protocols and frequency.

7.5. The Approval Holder shall ensure that noise emissions at the property boundaries do not contribute to an exceedance of the maximum permissible sound levels limits specified in the Nova Scotia Environment and Labour "Guidelines for Environmental Noise Measurement and Assessment."

7.6. At the request of the Department, the Approval Holder shall develop and implement a plan to monitor shadow flicker under varying seasonal conditions. The plan shall include, but not be limited to, sampling locations, parameters, monitoring methods, protocols and frequency.

7.7. The Approval Holder shall ensure that shadow flicker at the property boundaries does not contribute to an exceedance of the maximum permissible shadow flicker limits of 30 minutes per day or 30 hours per year.

8. Archaeological and Cultural Resources

8.1. The Approval Holder shall cease work and contact the Special Places Coordinator, Nova Scotia Department of Communities, Culture, Tourism and Heritage (CCTH) immediately upon discovery of an archaeological, or paleontological site, artifact or fossil specimen unearthed during any phase of the Project. If the find is of certain or possible Mi'kmaq origin, the Approval Holder shall also contact the appropriate Mi'kmaq representatives as advised by CCTH.

9. Public Engagement

9.1. The Approval Holder shall develop and implement a comprehensive complaint resolution plan for receiving and responding to complaints related to the Project. The plan will include, but not be limited to, a reporting system which records all complaints received, sets out a timeline for responding to complaints and establishes a recording system that details all corrective measures taken to alleviate the cause and prevent its recurrence. The plan shall be made available to the Department upon request.

9.2. The Approval Holder shall appoint a contact person designated to deal with complaints and shall provide the contact information to the Department.

9.3. Prior to commencement of the Project, the Approval Holder shall develop and implement a plan for the formation and operation of a Community Liaison Committee (CLC) including terms of reference, which meet the Department's Guide for the Formation and Operation of a Community Liaison Committee, as amended from time to time. The Approval Holder shall operate the CLC for the duration of the Project or until released in writing by the Department.

10. Engagement with the Mi'kmaq of Nova Scotia

10.1. The Approval Holder shall develop and implement a Mi'kmaq Communication Plan, which will include but not be limited to a process for communicating Project details and seeking input from the Mi'kmaq of Nova Scotia on the development and implementation of Project mitigation and monitoring plans. The plan shall be updated regularly and be available to the Department and the Mi'kmaq of Nova Scotia upon request.

10.2. The Approval Holder shall complete the Mi'kmaq Ecological Knowledge Study (MEKS) for the Project, as described in the Registration Document. The study shall be made available to the Department and the Mi'kmaq of Nova Scotia upon request.

11. Contingency Plan

11.1. Prior to commencement of the Project, the Approval Holder shall submit a comprehensive contingency plan to the Department which meets the Department's Contingency Planning Guidelines. The plan shall provide preventative measures and address accidental occurrences including, but not limited to, spills of hydrocarbons or other hazardous materials, failure of erosion and sediment control measures, fires, and vehicular collisions. The Plan shall be implemented, maintained and updated over the life of the project.

11.2. The contingency plan shall be kept on the Project site at all times when personnel are on site and be made available to the Department upon request.

12. Site Reclamation

12.1. The Approval Holder shall submit a decommissioning and site reclamation plan to the Department, two years prior to the end date of the Power Purchase Agreement.

12.2. Project operations shall be completed and reclaimed to the satisfaction of the Department and other appropriate regulatory departments.

12.3. The Approval Holder shall decommission wind turbines to restore habitat. In the event any turbine ceases to be operational for a period of two years, the Approval Holder shall submit a report to the Department outlining a timeline for reparation to the unit(s) to either render it fully functional or provide similar details for removing the turbine from the site within two years from the date the report was received by the Department.

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