

A Review of the Project Scope and Environmental Assessment Scope for Energy and Mining Projects Across Canada

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Abstract

The authors conducted a study of scoping practices in environmental assessment (EA) for large energy and mining projects in Canada for an inter-jurisdictional committee of energy and mining ministries. The paper discloses the emerging reality that, although scoping is a critical stage in focusing EA that is entrenched in legislation, there is a multitude of issues associated with achieving “Good Scoping”. Good Scoping requires technical expertise, competency and resources, and involves substantive effort early in the EA process. The study identified 24 issues that influence Good Scoping and 42 best management practices aimed at improving the performance of decision-making authorities (DMAs) during scoping aimed at improving efficiency and effectiveness of EA. Central for the improvement of EA efficiency will be building competency and expertise in scoping, a greater appreciation of the best management practices for achieving Good Scoping, and the attendant improved efficiency and timeliness. A key recommendation relates to the need for training and awareness of the importance and role of scoping.

Introduction

Process certainty and predictability in EA continues to be a major concern for governments, proponents and other stakeholders in Canada. This uncertainty often presents a level of business and project risk for project proponents that can be an impediment to investment. This paper (Jacques Whitford Stantec 2009) reports on a study of scoping practices in EA for large energy and mining projects in Canada for a committee (Regulatory Process Improvement Working Group) comprising federal, provincial, and territorial, energy and mining ministries. The objective of the study was to identify the issues and causes, and then suggest mechanisms or actions that may improve process certainty and predictability, and result in improvements in the efficiency and effectiveness of EA.

Scoping

In Canada, scoping is a set of activities at the front-end of EA that involve discretionary determinations by DMAs regarding:

- definition of the regulatory process (*i.e.*, which laws and processes apply and who will participate)—“Process Determination”;
- the scope of the project to be assessed (*i.e.*, what is the project that will be assessed)—the “Scope of Project”; and
- the factors, including the scope of the factors, to be considered in the assessment (*i.e.*, what needs to be studied, how will the considered factors be assessed and to what extent)—referred to as the “Scope of Assessment”.

Scoping is an important initial stage in EA, arguably the most important stage (Weston 2000), that involves a great degree of regulatory discretion to define the process, what needs to be assessed, and how. While scoping

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involves the input of many stakeholders and the public, ultimately, the decisions of DMAs govern the EA. Most EAs of large energy and mining projects are multi-jurisdictional and/or involve more than one DMA⁴.

DMAs, for a variety of reasons, can find the effective and efficient scoping challenging. Often, proponents do not provide the information needed to support scoping decision-making, and concerns of the public or other policy and political issues around the proposed project can make scoping decisions a complicated balancing of interests. Recognizing this, in some circumstances, poor scoping decisions are a consequence of a lack of resources and capacity to do the job. Capacity issues and other internal and external influences can cause DMAs to be unclear or non-specific, or ask for more information than may be reasonable or necessary (referred to as "Broad Scoping"). In some situations, regulatory authorities may be hesitant for a variety of reasons to defend anything but a broadly scoped EA. Further, issues related to policy, guidance and process management often result in inefficiencies. Lastly, scoping decisions can introduce issues of legal defensibility for DMAs with adverse consequences for all parties at interest. This includes those interveners who find dissatisfaction with scoping decisions and find themselves compelled to take legal action.

Good and Less-Than Good Scoping

What constitutes "Good Scoping?" Good Scoping is intended to achieve effective and efficient EA and must consider and balance the objectives of EA. EA is generally applied to include consideration of the environment in planning decisions and the promotion of sustainable development. The purpose of scoping is to identify the appropriate EA process and define what needs consideration in the EA. To this end, effective scoping is that which focuses the EA on environmental issues and concerns that are relevant to a proposed project. Efficient scoping defines the scope of the EA early in the process.

The need for scoping in EA has been recognized since the early 1980s (Kennedy and Ross 1992). Beanlands and Duinker (1983) contributed greatly to the widely understood notion that Good Scoping was about focusing EA on key issues and interactions of the Project on the Environment. A focused EA can more effectively communicate the potential environmental effects and can aid in early identification of mitigation measures during the planning stages of a project (Kennedy and Ross 1992). A good EA should not waste resources considering information that does not support an understanding of the potential environmental effects of the project, identifies required mitigation, and recommends effective follow-up to verify impact predictions and the effectiveness of mitigation. One should not and cannot study everything in an EA.

While the work of Beanlands and Duinker (1983) and others led to the entrenchment of scoping in EA process, the responsibility for most scoping decisions rest with DMAs and/or their ministers. At the heart of inefficiency in EA are scoping practices of DMAs that have the tendency to avoid taking responsibility for mandated scoping decisions. These include Broad Scoping and other management approaches that divert the responsibility of scoping to proponents. This deferral of decision-making and responsibility not only adversely affects proponents, but also any interested stakeholder or the public. Unclear EA requirements create frustration and inefficiency during the review through debate and iteration of EA documentation. Broad scoping results in wasted time and resources to assess minor issues (Weston 2000). The unbounded requirement to consider cumulative environmental effects (particularly under CEAA) has a tendency to exacerbate the ability to conduct EA to the satisfaction of all parties at interest, and in a manner that is both efficient and defensible. Overall, such consequences are "Less-Than Good Scoping."

The job of scoping is not an easy one. DMAs balance the interests of all parties at interest and must conduct themselves in a transparent and considered way that reflects a high degree of integrity. Good Scoping must reflect these interests while achieving efficiency and effectiveness. Scoping has been identified as a common weakness in the EA processes of many countries (Abaza *et al.* 2004).

⁴ Under CEAA, the complex process of Federal Coordination and inter-jurisdictional process arrangements involves a complexity of decisions and negotiations that for mining and energy project typically take between 6 and 18 months. The process involves determining which authorities will conduct the EA, the scope of the project and the scope of the assessment, which can vary between jurisdictions.

Results

Through a review of project and EA scoping practices, the study identified 24 issues that influence Good Scoping and 42 best management practices aimed at improving the performance of DMAs during scoping and ultimately contributing to improvement in efficiency and effectiveness of EA. We classified issues that influence Good Scoping in the following categories:

- Scoping Practices – practices directly associated with identifying and documenting the scope of the project to be assessed and the scope of the EA;
- Process Management – practices associated with managing the scoping and review processes;
- Relationship Management – practices associated with managing communications and relationships among DMAs, reviewers and proponents;
- Documentation – practices associated with the preparation of Scoping Documents;
- Policy Management – practices associated with managing policy-related issues; and
- Guidance – practices associated with provision of guidance on scoping.

We identified 24 issues organized into the five categories of issues. Figure 1 shows issues and categories of issues that influence Good Scoping. Each issue is systematically defined and discussed in the study, including its consequences in respect of efficient and timely EA, with examples of Good and Less-Than Good practice, where applicable, and best management practices.



Figure 1 Issues Influencing Good Scoping

Example of Issue and Best Management Practices

As an example from the study, we present the “Scope Management Issue” of “Cumulative Environmental Effects Scoping:” reasonable limits are not set on the scope of the assessment of cumulative environmental effects.

Assessment of cumulative environmental effects (*i.e.*, those environmental effects arising from the project in combination with other projects and activities), is a challenging issue in EA. Where not established during scoping, the assessment of cumulative environmental effects may require information that is not available to the proponent or may not be within the capacity of a single project proponent to complete. The nature of some cumulative environmental effects is, in some cases, unknowable and recognition of these limitations at scoping is necessary so as not to unreasonably burden the EA. *CEAA* requires unbounded consideration of cumulative environmental effects; however, *CEAA* also affords DMAs the discretion to limit the scope of the assessment under Section 16(3). Loosely stated requirements regarding the assessment of cumulative environmental effects can result in unclear or unbounded expectation for analysis.

A good example of best practice is in relation to the issue of climate change. Under *CEAA*, the requirement for consideration of overlapping environmental effects due to greenhouse gas emissions is onerous. The Federal-Provincial-Territorial Committee on Climate Change and Environmental Assessment (FPTCCCEA 2003) released very helpful guidance for practitioners, including proponents and DMAs. The document includes some astute observations and provides a framework for considering this global cumulative environmental effect in the context of project EA in a reasonable and considered way:

EA is an effective means to incorporate climate change consideration in project planning, yet challenges remain. The EA process cannot consider the bulk of GHG [greenhouse gas] emitted from already existing developments. Furthermore, unlike most project-related environmental effects, the contribution of an individual project to climate change cannot be measured.

Like other aspects of scoping, the discretion to focus the assessment of cumulative environmental effects rests with the DMAs. When not exercised, the assessment is unbounded and the proponent must by necessity, make some decisions/assumptions on what to include within the cumulative effects assessment; it is not generally possible to assess all environmental effects and all cumulative environmental effects. This can leave the assessment open to a greater degree of criticism and potentially Court challenges. By defining the scope of the cumulative environmental effects assessment, the proponent can focus resources on assessing the relevant regional issues.

The scope of the cumulative effects assessment should follow a similar process to identifying issues for the scope of the project assessment:

- What is the nature of the project and the project activities?
- What is the environmental setting of the project?
- How is the project likely to change the environment?
- Is there a reasonable potential for the project to cause a significant environmental change?
- Are there standard, codified mitigation measures that will apply to the project that will effectively avoid potential significant environmental effects from the project?

Several additional questions are relevant in determining the scope of the cumulative effects assessment:

- What are the regional issues, valued environmental components (VECs) or key indicators of concern?
- What other projects and activities should be included in the cumulative effects assessment?
- Is there a reasonable potential for the project to contribute to environmental change in the regional issues or VECs *in combination with* the other projects or activities?

The factors that contribute to Broad Scoping of cumulative environmental effects assessment are varied and best management practices for project-specific EA scoping also apply to Cumulative Environmental Effects Scoping. The following best management practice is primarily associated with Cumulative Environmental Effects Scoping.

- Set clear limits and criteria for assessment of cumulative environmental effects. Define limits for the assessment of cumulative environmental effects, including identifying the regional issues on which to focus the assessment. Identify other projects and activities for consideration, setting clearly defined and reasonable boundaries and limits on the assessment, and where possible, determining thresholds or management objectives (e.g., from a regional land use plan) against which to measure any cumulative environmental effects.

Review of Case Law

The study included a review of case law around matters pertaining to scoping. The review indicates that project-scoping decisions have demonstrated a high level of judicial deference to regulators (*i.e.*, the courts support discretionary scoping decisions that are well articulated). Judicial reviews regarding the scope of assessment, however, tend to be the subject of more litigation. Provincial and territorial EA processes are less vulnerable than the CEAA process to legal challenge in respect of scoping matters. Good Scoping is a key determinant in assuring legal defensibility and the avoidance of attendant delays and uncertainty. Good Scoping should include consideration of the lessons drawn from court decisions in respect of the law.

Conclusions and Recommendations

The study recognized the complexity and importance of scoping in relation to efficient and timely EA. A central conclusion was that the objective and consequences of Good Scoping is a goal that is difficult to achieve. Many issues influence the scoping process and result in less than Good Scoping. Central for the improvement of EA efficiency will be building competency and expertise in scoping, a greater appreciation of the 42 best management practices for achieving Good Scoping, and the attendant improved efficiency and timeliness. In that regard, a key recommendation relates to the need for training and awareness of the importance and role of scoping.

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