

Evaluating Alberta's Energy Regulator

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Executive Summary

Government regulation plays a very prominent role in developed economies, especially in the area of environmental regulation. The importance of Alberta's oil and gas sector to both the provincial and national economies makes the activities of the Alberta Energy Regulator (AER) particularly relevant to policymakers, Albertans, and other Canadians.

The AER has the overall mandate to ensure the safe, efficient, orderly, and environmentally responsible development of hydrocarbon resources in the province. It fulfills its mandate by reviewing and making decisions on proposed energy developments, making sure that all regulatory requirements are met, and taking enforcement actions when requirements are not met. The AER has recently come in for critical attention by the newly elected provincial government with the announcement of Premier Kenney in July 2019 that the government was going to evaluate the AER in light of major concerns expressed about the regulator's governance and operations.

This essay reviews and evaluates the broad model of regulatory excellence that the AER implemented pursuant to a major review it initiated several years ago. Specifically, we assess the stated goals and features of the AER's model of regulatory excellence against recommendations identified in the extensive literature on regulatory reform. We also evaluate whether the activities of the AER are generally consistent with its model of regulatory excellence.

Our general conclusion is that the model of regulatory excellence adopted by the AER is broadly consistent with the recommendations put forward in the normative literature on regulatory reform. However, the implementation of the model has been criticized, particularly by oil and gas companies, for imposing uncertainty and delays with regard to approving development projects. This criticism receives support from surveys reporting that regulatory uncertainty is a greater barrier to investment in Alberta's oil and gas sector than it is in other major oil and gas producing regions in North America. Surveys of oil and gas producers also show that applications for the licensing of wells takes considerably longer in Alberta than it does in British Columbia, Saskatchewan, and jurisdictions in the US, at least for non-routine well licensing applications. Given new consul-

tative procedures implemented by the AER, non-routine applications are likely to increase in relative, if not absolute, importance in the future.

Reducing uncertainty and lengthy approval timelines, along with the associated compliance costs and other adverse economic effects, might be addressed by the regulator in several ways that should not compromise its obligation to manage social and environmental risks associated with oil and gas production and distribution in the province. One possible initiative is to incorporate the objectives to reduce uncertainty and shorten approval timelines explicitly into its model of regulatory reform. A second is to reduce the cumulative effects of existing regulations by implementing a program of pruning regulatory red tape under the auspices of a government department or agency charged with that mandate. The latter initiative should include eliminating many, if not most, regulations that are enforced by other regulatory jurisdictions, especially those within the province.

A third recommendation is that the AER should seek to ensure that the criteria it uses to evaluate proposals for new energy developments are explicit and clear and that contemplated changes to the criteria and decision process it uses are made known in advance to stakeholders, including industry members. As well, the regulator should be expected to evaluate how its criteria and decision-making process for evaluating proposed projects has affected oil and gas development activities in the province and issue reports detailing its evaluation on a regular basis.

Introduction

Government regulation plays a very prominent role in developed economies across the world. A number of private sector activities are subject to regulation, ranging from environmental practices to engaging in different occupations. Although there are well-known theoretical arguments for government regulation, the costs of regulation have also been amply documented, where the latter include reduced rates of new firm start-ups and capital investment and, more generally, inefficient allocation of resources and slower rates of productivity growth.¹ The high costs of regulation have prompted regulatory agencies and independent research institutions to propose reforms meant to streamline the volume and scope of regulation, as well as make the regulatory process itself more efficient.²

The Alberta Energy Regulator (AER) is a very prominent regulator in the energy sector, particularly given the predominant position Alberta holds as a producer of oil and gas in Canada.³ The AER was created to act as a single regulatory body for upstream oil and gas, oil sands, and coal development. The single regulatory agency consolidated the regulatory activities of several separate agencies governing different sectors and activities of the province's energy industry and began operations in June 2013. The AER administers a variety of pieces of legislation. Its overall mandate is to ensure the safe, efficient, orderly, and environmentally responsible development of hydrocarbon resources over their entire lifecycle.⁴ In carrying out its mandate, the AER reviews and makes decisions on proposed energy developments, inspects energy activities to ensure that all appropriate requirements are met, and takes enforcement actions when those requirements are not met. The AER's mission is to develop and enforce

1 See Hahn and Hird (1991) for a broad discussion of the costs and benefits of regulation. Crews (2018) provides an extensive discussion of how regulation can affect start-up rates for new businesses, while Blind, Petersen and Riillo (2017) discuss linkages between regulation and innovation.

2 See, for example, OECD (2012), Jones (2015), and McLaughlin (2018).

3 In 2017, Alberta accounted for about 81 percent of crude oil production in Canada. See Natural Resources Canada (2018).

4 See Alberta Energy Regulator (2016).

regulations to protect the public and the environment, and to ensure that industry does not waste resources and that the government receives any entitled royalties (EY, 2015).

In the description of its regulatory model, the AER discusses its project launched in November 2014 to identify the key attributes of an “excellent” regulator and how those attributes can be adopted.⁵ To ensure that its evolution towards being an excellent regulator was done properly, the AER enlisted the services of experts at the Penn Program on Regulation (PPR) at the University of Pennsylvania. The AER adopted the framework outlined in the PPR report released in fall 2015, providing the basis for a model of regulatory excellence that the AER claims to be following. However, the recently elected premier of Alberta, Jason Kenney, announced in July 2019 that the government was going to evaluate the AER in light of major concerns expressed about the regulator’s governance and operations.⁶ The concerns include reports that the AER paid for flights of some executives who live outside Alberta and gross mismanagement of the use of public funds more generally. They also include the length of time it takes to get major projects through the review process.

The purpose of this paper is to evaluate the broad regulatory model the AER has implemented pursuant to the adoption of the framework recommended by the University of Pennsylvania and in the context of the extensive literature that has emerged on regulatory reform. As such, we do not address the issues of how the regulator’s management and board have handled their fiduciary responsibilities, nor the board’s selection of senior executives. Nor do we evaluate specific regulations or propose detailed changes to the AER’s operational model. Such detail is beyond the scope of this overview essay. Rather, our evaluation of the AER focuses on two broad issues. One is the degree to which the AER’s model of regulatory excellence concords with other normative models of regulatory reform. Much has been written over the past two decades about how to improve regulatory practices. Therefore, it seems relevant to examine the degree to which the AER’s model of regulatory excellence reflects, in principle, other broad approaches to regulatory reform. In particular, are there prominent normative principles for “best-practice” regulation that have not apparently been incorporated in the model that the AER says it is trying to implement? A second issue is how successfully the AER has implemented its model of regulatory excellence and how it might improve its performance as a regulator. This latter issue is particularly challenging, since much of the interaction between the AER and its “stakeholders” takes place outside

⁵ In a later section, we describe a major initiative of the AER to improve its efficiency.

⁶ See Varcoe (2019, July 15).

of formal regulatory or court proceedings.⁷ The essay therefore, admittedly, takes a “high-level” approach to the second issue and does not get into details about specific regulatory rules and procedures.⁸ Consequently, the emphasis of this essay is on the first issue.

The essay proceeds as follows. It begins by setting out the AER’s stated model of regulatory excellence. It then assesses the AER’s model against the normative framework of regulatory reform as set out in the relevant literature. The next section follows with an evaluation of the AER’s actual performance against the background of models of regulatory excellence, which is followed by a section that discusses initiatives that the AER has put in place to improve its performance. The penultimate section offers general prescriptions for improving the AER’s performance. Concluding comments are provided in the final section.

⁷ The AER (2016) considers a stakeholder any individual, group of individuals, or organization with an interest in the outcome of a decision by the AER.

⁸ Examples of specific procedures and rules that might be the focus of future research include the AER’s intervention process and the appropriate information that the AER should use to evaluate proposed developments.

The AER Model of Regulatory Excellence

To develop its model of regulatory excellence, the AER enlisted the assistance of experts at the Penn Program on Regulation at the University of Pennsylvania. The resulting expert report (Coglianese, 2015) provided a general model that the AER then adapted to reflect its “unique” circumstances (AER, 2016a). In fact, the model of regulation that the AER identifies as having adopted follows relatively closely the model suggested by the PPR report. The correspondence is illustrated by information summarized in figures 1a-c and figure 2. Specifically, figures 1a to 1c summarize the main elements of the AER’s model of regulatory excellence as reported in Alberta Energy Regulator (2016a). Figure 2 summarizes the main elements of regulatory excellence set out in Coglianese (2015).

Figure 1a: The AER’s Model of Regulatory Excellence

Utmost Integrity

1. *Accountability*: Ensure that energy development is safe, environmentally responsible, and provides economic benefits to Albertans. We must regularly report on the results of our work. Admit when the regulator makes mistakes.
2. *Adhering to government policy*: Our mandate is to ensure the safe, efficient, orderly, and environmentally responsible development of hydrocarbon resources over their entire life cycle. Our work is guided by legislation and government policy. Government sets the direction by establishing policy. Our job is to ensure that these policies are upheld through our regulatory work.
3. *Identifying policy gaps*: Fill gaps in policy when we can and raise them with the government of Alberta when gaps fall outside of our jurisdiction.
4. *Evidence-based decisions*: While we are guided by legislation and regulatory requirements, our decisions must take into account all factors associated with energy development. This includes specific regional, geological, and environmental conditions; operator performance and the values, concerns, and knowledge of Albertans, Indigenous people, and stakeholders.

Source: Alberta Energy Regulator, 2016a.

Figure 1b: The AER's Model of Regulatory Excellence

Stellar Competence

1. *Required expertise:* Our employees must have the skills, knowledge, motivation, and training to carry out their responsibilities. We must recognize when we can benefit from obtaining outside expertise.
2. *Tools:* Our employees must have effective tools from training to IT systems.
3. *Adaptability and flexibility:* We will respond to changes in technology, adapt to new challenges in energy development, address concerns as they arise, and update our requirements as needed.
4. *Measurement and reporting:* We will provide regular reports on how we're performing on meeting our outcomes. We will use evidence to demonstrate our success and explain where we have failed.

Source: Alberta Energy Regulator, 2016a.

To underscore the correspondence, it is useful to expand upon the elements reported in figures 1a to 1c in relation to the elements reported in figure 2. We start with figure 1a. Accountability has several features within the AER's framework. First, the AER undertakes to ensure that energy development is safe, environmentally responsible, and provides benefits to Albertans. Second, it undertakes to share information and data with interested parties and to admit when it makes mistakes. These seem to coincide with two of the PPR's suggested elements. Specifically, the accountability commitments seem consistent with acting in the public interest and responsiveness outlined in figure 2.⁹

Further addressing figure 1a, in adhering to government policy, the AER commits to ensuring that its regulatory work is guided by legislation and government policy. This clearly overlaps with the Penn Programs direction for fidelity to law. The commitment to identifying policy gaps listed in figure 1a overlaps with the Penn Program's recommendation that an excellent regulator contributes to productive public dialogue on issues relevant to the regulator's mission. In this regard, the AER's role is primarily to point out policy deficiencies to government and recommend policy changes that the AER thinks are warranted. Finally, evidence-based decision-making corresponds to the element in figure 2 identified as analytical

⁹ The Penn Program identifies "responsiveness" in part as providing access to information, explaining decisions fully, and giving reasons for action.

Figure 1c: The AER's Model of Regulatory Excellence

Empathetic Engagement

1. *Respectful engagement:* Listen to truly understand values and concerns and share information about our work, not just when there is a particular project or decision to consider, but on a regular basis.
2. *Decisions are understood:* We will demonstrate how all factors were considered in our decision-making and ensure that the decisions and processes we followed are understood.
3. *Transparent:* We will be open and transparent in our communications, finding new ways to provide information to Albertans that is clear, timely, and easy to understand.

Source: Alberta Energy Regulator, 2016a.

capability. The Penn Program equates analytical capability with using the best available evidence to reduce and manage risks smartly.

Turning to figure 1b, the mandates of required expertise and tools encompass having skilled, knowledgeable, and trained employees, as well as using outside expertise when it is beneficial to do so. It also involves ensuring that employees have effective tools at their disposal, including IT systems. The need for expertise and tools is presumptively to enhance the AER's analytical and decision-making capabilities, although the AER might make enhancing its capabilities to analyze and make decisions explicit in its regulatory model. These mandates reflect the Penn Program's recommendations in figure 2 that the excellent regulator possess analytical capability and instrumental capacity. For the PPR, instrumental capacity equates to the use of the best tools and technologies available.

The AER identifies the attributes of adaptability and flexibility listed in figure 1b as responding to changes in technology and adapting to new challenges in energy development. There is no obvious direct linkage between these attributes and the elements listed in figure 2. The item in figure 1b identified as measurement and reporting encompasses the regulator measuring progress in meeting its objectives and providing regular reports on its progress. It is not clear from Alberta Energy Regulator (2016) to whom regular reports should be submitted, nor whether funding of the regulator should be tied to the regulator's measured progress.¹⁰

¹⁰ The AER identifies a very broad set of stakeholders, i.e., essentially any individual with an interest in the outcome of its decisions. It is unclear specifically whether and how this very broad set of stakeholders will be kept abreast of the AER's progress in meeting its objectives.

Figure 2: University of Pennsylvania Tenets of Regulatory Excellence

1. *Fidelity to law*: A regulator seeks to comply faithfully with all legitimate laws;
2. *Respect for democracy*: Yield to clear and proper commands by elected officials. Initiate or contribute to productive public dialogue on issues relevant to the regulator's mission.
3. *Commitment to public interest*: Strive to serve the public interest first and foremost.
4. *Even-handedness*: Engage fairly with all affected parties. This may require affirmative outreach.
5. *Listening*: Hear what everyone who has values or interests at stake in the regulator's decisions has to say.
6. *Responsiveness*: Respond to concerns and explain decisions fully and sincerely. Be transparent by providing access to information and by giving reasons for actions.
7. *Analytical capability*: Seek out data and conduct analysis using the best available evidence.
8. *Instrumental capacity*: With a sufficiently funded and highly trained staff, use the best tools and technologies available to solve problems.
9. *High performance*: Consistently deliver positive public value.

Source: Coglianese, 2015.

The item from the list in figure 2 that would seem to be the closest match to measurement and reporting is responsiveness. However, the Penn Program identifies responsiveness as responding to concerns and explaining decisions fully, which does not seem to be the same activity as reporting on progress. However, as shall be discussed shortly, responsiveness as identified by the Penn Program overlaps closely with the AER's goal of transparency identified in figure 1c.

Turning to figure 1c, respectful engagement, as far as the AER is concerned, involves listening in order to understand the values and concerns of stakeholders, as well as sharing information about its work on a regular basis and not just when there is a particular project or decision to consider. This appears to correspond quite closely with the Penn Programs' recommendation (Listening in figure 2) that the regulator hears what everyone who has values or interests at stake in its decisions has to say. It also overlaps with the item identified as Even-handedness in figure 2, which is equated to hearing what all stakeholders have to say.

The AER's commitments to being understandable and transparent are quite similar to the Penn Program's recommendation for regulators to be responsive. The AER equates being understandable with demonstrating how all factors were considered in its decisions and ensuring that its decisions and the processes it followed are understood. Transparency involves

being open in its communications and finding new ways to provide information to Albertans that is clear, timely, and easy to understand. Responsiveness in figure 2 obliges the regulator to give reasons for its actions and to provide access to information used by the regulator.

In summary, the AER's stated model of regulatory excellence adheres quite closely to the recommendations of the Penn Program. However, the AER's commitment to ensure that energy development is safe and environmentally responsible, while providing economic benefits to Albertans is vague in that it does not clearly identify how the regulator will balance potentially competing objectives. For example, there is no explicit protocol or formal guidelines that set out how the AER will balance safe and environmentally responsible energy development against the economic benefits of energy developments, including benefits to producers. The Penn Program's requirement that a regulator's commitment is to the "public interest" also invites a criticism that the public interest is not uniform, and that criteria are required to make the tradeoffs that are usually present when specific stakeholders are affected differently by regulatory decisions.

The standard decision-making criterion in public policy is cost-benefit analysis in which the estimated stream of discounted social benefits is compared to the estimated stream of discounted social costs associated with any proposed energy project. In cost-benefit methodology, a dollar of expected benefits exactly offsets a dollar of expected costs. If specific expected costs (or dollar-equivalent risks) are "more important" to the regulator than the associated benefits, even though their dollar values might be the same, explicit weights for those specific costs and the associated benefits need to be articulated to implement standard cost-benefit analysis.¹¹ For example, if a proposed project has expected environmental costs of \$100 and expected economic benefits of \$101, and these were the only two criterion in the regulator's objective function, a strict benefit-cost analysis would lead to approving the project. However, if an environmentally risk averse regulator did not equate expected environmental costs to expected economic benefits on a dollar-for-dollar basis, it should, in principle, articulate its preferences. Hence, if the regulator's subjective tradeoff is that one dollar of expected environmental damage must be compensated for by at least two dollars of expected economic benefits, the regulator is implicitly attaching twice the weight to a dollar of potential environmental damage as it does to a potential dollar of economic bene-

¹¹ Two reviewers expressed skepticism about whether regulators can or should commit to explicit weighting of competing criteria in their decision analysis. We discuss below the advantages and disadvantages of the regulator articulating the formal guidelines it uses to make tradeoffs across competing regulatory objectives.

fits. The issue addressed later in this essay is whether the regulator can and should make explicit any such subjective weightings.¹²

In fact, the PPR report, which is ostensibly an important basis of the AER's regulatory model, underscores the importance of the regulator clearly articulating the normative principles it uses in combination with risk analysis to make decisions (Coglianese, 2015). As noted above, maximizing net social benefits using cost-benefit analysis is the standard "best practice" normative framework for making regulatory decisions. The use of cost-benefit analysis certainly allows the regulator to make recommendations that would increase the net social benefits of a proposed development. Hence, the AER's use or non-use of cost-benefit analysis is an important issue when evaluating its activities.

In a later section of this essay, we note that the AER requires proponents of energy developments to provide estimates of the benefits of proposed developments, as well as initiatives that will be undertaken to mitigate social and environmental costs. These impact assessments are evaluated by the AER when making regulatory decisions. For instance, Directive 061 mandates that all new coal project applications should include an Environmental Impact Assessment (EIA) and an Economic Assessment, including a cost-benefit analysis for Alberta and Canada. Directive 023 outlines requirements for economic information (including a cost-benefit analysis), environmental impact assessments, environmental protection plans, and social impact assessments for the recovery of oil sands, crude bitumen, or products derived from there. However, there is no protocol or mechanism the regulator uses to assign explicit weights (or valuations) to the various criteria it employs in pursuit of its broad mission. Incremental compliance costs may arise by making companies produce repetitive information as economic, social, and environmental assessments are all factored in traditional cost-benefit analyses.

There is another broad issue relevant to an evaluation of the regulator that is raised by the AER's articulation of its model of excellence. Specifically, the Penn Program report, as well as other contributions to the literature on regulatory reform recommend that the regulator consistently determine if new regulations are needed or whether non-regulatory solutions would be as or more effective before adopting new rules and

¹² The issue of whether or not the regulator should make explicit the criteria it uses in its decision analysis is conceptually distinct from whether the weighting attached to a dollar gained or lost with regard to each specific criterion should be made explicit. Since the AER has articulated three broad criteria (environmental impact, social impact, and economic benefit) for evaluating proposed energy projects, our later discussion focuses on the issue of whether differences in the regulator's weighting of the expected dollar values of each of these criteria should be made explicit.

directives. Globerman (2018) elaborates upon this point in his review of the literature on regulatory reform. Specifically, the literature advises that regulations addressing legitimate economic or social problems should not be implemented or continue to be used when those problems can be addressed in a less costly manner, including, for example, strengthening the role of the market by clearly defining and enforcing property rights.

Before evaluating features of the AER's regulatory process in more detail, we briefly review the broader literature on efficient regulation to address whether the model of regulatory excellence adopted by the AER satisfies the conceptual criteria for efficient regulation as set out by experts other than those at the Penn Program.

Prescriptions for Regulatory Reform

There is a substantial literature on regulatory reform.¹³ Some of the literature deals primarily with matters of strategy, particularly the normative responsibilities of regulators, as well as desirable features and outcomes of the regulatory process. Some of the literature deals with matters of structure and process including formal linkages between the government and the regulator, staffing of the regulatory agency, the frequency and content of the communication between the regulator and its stakeholders, and so forth. Hence, some prescriptive lists of regulatory excellence look different than the list set out in figure 2. As an example, figure 3 offers a set of criteria that is suggested in a recent evaluation of the AER.¹⁴ The evaluation focuses on pipeline regulation specifically. Nevertheless, most of the criteria cited are generic and ostensibly apply to energy regulation more generally.

Clearly, several of the main criteria identified in figure 3 are similar to criteria cited in earlier figures. In particular, transparency and clarity of regulatory requirements and the regulatory process are examples in this regard. Adapting regulations to acknowledge changes in technology is also a feature of regulatory excellence that is explicitly identified by the AER. Attention to regulations elsewhere in Canada is acknowledged to be of relevance to the AER, although there is no explicit mention of specific measures to minimize regulatory overlap.¹⁵ Attention to the impact that regulation has on the costs of developing and operating projects does not appear to be explicitly mentioned by the AER as a criterion of regulatory excellence. However, as we shall discuss in a later section, the AER intro-

¹³ Much of the discussion in this section draws on Globerman (2018). For a seminal overview of this literature, see Competition Bureau (2016), OECD (2012), United Kingdom (2003), and Ladegaard (2001).

¹⁴ See EY (2019).

¹⁵ The AER does participate in a forum of provincial regulators that is meant to address regulatory overlap. This forum will be discussed later in this study.

Figure 3: EY Criteria for Evaluating the Overall Effect of Regulation

1. *Regulatory certainty*: How often are new regulations introduced? How often are changes to regulatory processes and requirements introduced?
2. *Regulatory overlap*: Is there regulatory overlap across different borders and jurisdictions?
3. *Transparency and clarity*: How clear are the requirements of the regulator? How often is clarification sought from regulators? Is that clarification easily obtained?
4. *Predictability of process and outcomes*: Is the regulatory process consistent? If the process is followed, are the expected outcomes consistent and predictable?
5. *Flexibility*: Is regulation prescriptive or outcome-based? Does regulation allow for improvements through technology and innovation?
6. *Timeliness*: Are timelines predictable and consistent for project approvals? Are project timelines increasing or decreasing?
7. *Cost*: What impact does regulation have on the cost of developing and operating a project? Is there cost certainty?

Source: EY (2019).

duced a framework for regulation (play-based regulation) that is meant to economize on the costs that energy companies incur associated with gaining approval for and operating their projects.

Given a relatively large number of studies and reports drawing on both legal and economic principles, one can identify numerous other specific attributes that have been mentioned as prerequisites for regulatory excellence. While it is beyond the scope of this essay to identify and discuss the extensive list of recommendations that have emerged from the many available studies on reforming regulation, a case can be made that the model of regulatory excellence the AER sets out as its mandate includes many of the main recommendations proposed by scholars of regulation. In particular, being open and transparent in its communications with stakeholders, providing comprehensible information about its work and its decisions, listening to the concerns of stakeholders, employing required expertise and equipping employees with needed tools and technology, making evidence-based decisions using the best available information and data, being responsive to changes in energy development technology, and providing regular reports on results are all featured in the AER's model of regulatory excellence as noted earlier. They are also prominent recommendations of most prescriptive proposals for regulatory reform.

An important prescription of the regulatory reform literature that is not obviously part of the AER's model of regulatory excellence deals with

actively reducing the economic burden of regulation by making the elimination of non-functional regulations part of the model.¹⁶ In this context, not only should new regulations be evaluated with respect to their net social benefits, but existing regulations should be evaluated on a regular basis to see if they are in the public interest. The accumulation of regulations that can no longer be justified as being in the public interest results in a growing economic burden, and a number of studies recommend that efficient regulation obliges the regulator to put in place a process by which existing regulations are regularly evaluated with non-functional regulations being eliminated (McLaughlin, 2018; Stratos, 2017).¹⁷ Indeed, the Canadian federal government, as well as the US and UK federal governments, enacted legislation to mitigate the accumulation of regulations and the associated economic burden of regulatory red tape.¹⁸

A related prescription that is highlighted in the regulatory reform literature and that is not explicitly articulated in the AER's model of regulatory excellence is a commitment to restoring a stronger role for markets to address the economic and social goals of the regulator, including a structured process for modifying or eliminating regulations that have questionable net social benefits.

The United Kingdom's Better Regulation Task Force (2003) makes an argument for governments to consider a range of options aimed at achieving policy objectives rather than automatically assuming that prescriptive regulation is required. In particular, governments can remove bureaucratic or other roadblocks that prevent markets from working effectively or they can try to introduce markets where none exist or where their existence is tenuous owing to, for example, ill-defined property rights.¹⁹ The Better Regulation Task Force notes that, in many cases, the most appropriate response is to do nothing, as government action might be unnecessary, or worse, have costly unintended consequences. While the AER's model, in principle, includes responding to changes in technology, this commitment

¹⁶ A definition and discussion of non-functional regulations is provided later in this essay.

¹⁷ Gliberman (2018) discusses administrative procedures and incentives to facilitate the elimination of non-functional regulations.

¹⁸ Gliberman (2018) provides a discussion of the relevant legislation in those countries, as well as the deregulation initiative of the British Columbia government in the early 2000s.

¹⁹ Perhaps the most written-about examples of how governments can address externalities problems by creating marketable property rights is in the environmental area. See, for example, Anderson and Leal (2001). An alternative to the regulator identifying the potential for introducing market mechanisms is assigning the task to a government department or to a task force that meets regularly.

is not explicitly linked to assessing whether the changes make regulation less socially beneficial relative to employing market-based initiatives. Nor is it explicitly linked to an ongoing evaluation of whether and how new technology makes certain existing regulations obsolete or inefficient.

The next section of the report reviews some existing evaluations of the AER and pays attention to whether and how the AER is operating in accordance with broad prescriptions for best practice regulation. We also discuss some evidence bearing particularly on the timeliness and clarity of the AER's decision-making process.

Evaluations of the Alberta Energy Regulator

A number of reports evaluating the activities of the AER are available, although none provide a comprehensive assessment across the full set of criteria of regulatory excellence discussed in the preceding section of this essay. Perhaps the most detailed evaluations of the AER's actual regulatory practices are provided by industry responses to surveys, although these responses do not address specific regulations. The surveys are generally consistent in highlighting the relatively high costs of regulatory compliance including the implicit costs of lengthy timelines to address regulatory requirements. Concerns have also been expressed about a lack of clarity surrounding how to satisfy specific regulatory requirements, as well as regulatory overlap.

The Fraser Institute regularly reports a survey of petroleum companies' evaluations of the regulatory environments of different locations. In the most recent report, Green, Aliakbari and Stedman (2018) discuss findings from the 2017 *Global Petroleum Survey*, which identifies the attractiveness of different states and provinces for upstream oil and gas investment. They note that in Alberta, 70 percent of investors cited the high cost of regulatory compliance as a deterrent to investment compared to only 9 percent in Texas and 24 percent in North Dakota. Unfortunately, the report does not provide a detailed assessment of why regulatory compliance is so costly in Alberta compared to major oil producing locations in the US.

Green (2018) elaborates on aspects of the AER's performance that have been criticized by energy companies doing business in Alberta. Specifically, he notes that in 2013, regulatory uncertainty in Alberta was only considered a deterrent to investment by 11 percent of the respondents to the Fraser Institute's *Annual Survey of Mining Companies*. After peaking at 38 percent in 2016, the percentage expressing deterrence fell to 25 percent in 2017, still more than double the percentage from 2013. He also cites the cost of regulatory compliance as a deterrent to investment. In the oil and gas sector, 32 percent of respondents registered compliance cost as a

deterrent to investment in 2013, whereas 70 percent registered deterrence due to this factor in 2017. Furthermore, 35 percent of oil and gas company respondents expressed concern about deterrence due to regulatory duplication and inconsistency in 2013. By 2017, that had increased to 48 percent after a 2016 peak at 53 percent.

A recent industry report underscores the concerns raised by the survey results summarized above. Specifically, the Canadian Association of Petroleum Producers (2017) also identifies lengthy regulatory timelines for project approvals, as well as cumulative costs imposed on the industry by the combined impacts of existing and recent policies and regulations as prominent shortcomings of the regulatory process.²⁰ While the AER apparently does a good job of managing routine applications in an effective and efficient manner, oil and gas producers in Alberta report experiencing challenges in receiving timely decisions on non-standard applications with statements of concern and public involvement. This same report discusses a survey of producers in Alberta, British Columbia, Saskatchewan and the United States comparing well licensing regulatory processes in those locations. Specifically, it asked respondents to report the time required by the regulatory process to go through the following stages: 1) pre-application First Nations consultation; 2) surface tenure acquisition; and 3) well licensing. Survey results identified up to a 130-day advantage in BC; up to a 148-day advantage in Saskatchewan; and up to a 190-day advantage in some jurisdictions in the US compared to the full Alberta non-routine well licensing process, particularly when statements of concern are filed. Conversely, the current routine well licensing process in Alberta demonstrates application timelines that are comparable to BC and Saskatchewan. The report offers specific suggestions to reduce timelines for non-routine applications which will be discussed in a later section of this essay.

In an updated survey, the Canadian Association of Petroleum Producers (2018) again identified lengthy approval timelines and escalating costs of regulatory compliance as shortcomings of the AER's regulatory process. The major concern is with non-routine applications, as routine applications in Alberta are generally approved within what the industry deems relatively reasonable timeframes. Non-routine well licenses, for example, can take 10 times as long as routine well license applications.²¹ Satisfying

²⁰ This survey also does not articulate specific regulations that contribute to lengthy regulatory timelines.

²¹ An application can be non-routine under the Alberta Energy Regulator's Directive 056 for various reasons including: 1) all participant involvement requirements have not been met; 2) the applicant chooses to apply for a regulatory relaxation; 3) outstanding concerns or objections exist; 4) implementation of new technology; 5) designation of application as nonroutine (a new category C or D plant, any

participant engagement requirements appears to be a major contributing factor to the growth in non-routine applications. For example, the proportion of well and facility applications with participant engagement nearly doubled between 2014 and 2018, according to Canadian Association of Petroleum Producers. Besides the time-cost of money and associated expenses associated with lengthy timelines for non-routine applications, oil and gas producers in Alberta highlight requirements for multiple approvals, licenses, and permits to enable a project to proceed—more than 560 are required for in situ developments.

High costs of regulatory compliance have also been identified in surveys of Canadian pipeline operators, including those subject to regulation by the AER. In a survey discussed in EY (2019), overlapping regulations of the federal and provincial government regulators contribute to increased compliance costs, especially when the regulations have different compliance requirements. EY (2019) documents a substantial overlap between the AER's regulations as they apply to pipelines and the regulations of other provincial jurisdictions, but especially the National Energy Board. Regulatory "layering," referring to the duplication of regulations across various jurisdictions, is contributing to increased timelines and compliance costs as reported by pipeline operators. The latter also highlight Bill-69 which they argue has the potential to increase costs associated with expanded participant involvement and the associated increased burden to produce information.

Other broad surveys of regulators in Canada provide a more equivocal assessment of the AER. For example, while a number of provinces in Canada are identified by the Canadian Federation of Independent Business (CFIB) (2018) as having made substantial progress in reducing the economic burdens imposed on business by regulatory "red tape," Alberta stands out as a major outlier in this regard. Specifically, it received a grade of F from the CFIB with respect to its 2018 regulatory environment, which was matched only by the Northwest Territories. Furthermore, Alberta never scored higher than a grade of D over the entire period from 2011 to 2018. Conversely, an earlier survey by MMK Consulting (2012) examined 10 aspects of overall business regulation comparing Alberta to BC, Saskatchewan, and Ontario. On an overall basis, Alberta came out slightly ahead of the other provinces.

It should be explicitly noted that the CFIB and the MMK surveys effectively encompassed the activities of other regulators in Alberta beside the AER. As well, the MMK Consulting report covers a period before the AER's existence. Beyond these considerations, it is important to stress

category E application). See Alberta Energy Regulator (2018c), Directive 056, Energy Development Applications and Schedules.

that the AER's model calls for an absolute level of excellence and not just a comparable or better performance than that of other energy regulators. In this regard, and perhaps reflecting criticism of prior regulatory policies and practices, the Alberta Energy Regulator announced intentions to substantially change the way the oil and gas industry in Alberta is regulated including processes, the way the regulator makes decisions, and the way it communicates with its stakeholders.²²

Stratos (2017) offers a cross-sectional review of energy regulators within Canada and internationally. One of its main conclusions is that most of the regulators, including the AER, have policy guidelines and substantive practices that reflect a set of reasonable factors for effective and legitimate political engagement in regulatory processes. However, the Stratos report cautions that for regulators with multi-faceted mandates, such as the AER, the question of how the regulator assesses, weighs, and makes decisions across these factors becomes germane. In these cases, regulators have to make tradeoffs between the benefits and costs of energy developments and activities across multiple factors and stakeholders. Typically, there are tradeoffs between environmental, social, and economic criteria with individual stakeholders assigning different weights to the expected (or imputed) monetary value of individual criteria.²³ If the regulator, in this case the AER, does not explicitly state, *ex post*, how it assessed the relative importance of various criteria, it is impossible for industry participants to identify confidently when a proposed development or project offers expected net benefits to Albertans and, therefore, should be treated routinely and be relatively quickly approved by the regulator. A resulting consequence might be that companies forego initiating or moving specific project proposals forward for approval given that they will incur upfront costs and face significant uncertainty about how the proposals will be assessed by the regulator.

Stratos (2017) does not provide any evidence on comparative timelines and compliance costs across the various regulators that it evaluates. It does highlight AER initiatives to enhance stakeholder participation in the regulatory process. For example, the AER's Alternative Dispute Resolution program was developed in response to the wish of regulatory stakeholders to be more directly involved and have more control in resolving energy-related disputes. The goal is to help stakeholders and interested parties explore and understand each other's interests and develop accept-

²² See E&Y (2015).

²³ In the absence of using some common metric, e.g., expected dollar values, it is not possible to aggregate a project's performance criteria into an overall net benefit (or cost) estimate within the framework of cost-benefit analysis.

able solutions. To the extent that the program obviates the need for formal adjudication of disputes or reduces the number of post-decision appeals, it could reduce compliance costs. On the other hand, to the extent that it invites rent-seeking or frivolous interventions by specific interest groups, it is more likely to increase timelines and compliance costs for energy projects. Stratos (2017) also notes that the AER put in place multi-interest advisory or technical committees comprising indigenous, municipal, and environmental interests, among others. Their purpose is to inform the development of regulations and/or address area-based issues. While this initiative seems to promote an objective of “listening” to stakeholders, it almost certainly leads to increased regulatory compliance costs, as the bias is to develop new regulations rather than reduce regulatory red tape. It also almost certainly extends the timelines for the regulator’s decisions.

The AER reports on its own social research designed to help measure its progress in increasing awareness of and confidence in its activities. It does so through annual public opinion research combined with media analysis and research data. The broad objectives of the exercise are to help the AER create baseline measures, track progress, identify concerns, solicit feedback, and share information with audiences. In a recent report, the AER summarizes the results of its own interviews of 294 stakeholders and online surveys of 1000 Albertans carried out between January 4 and February 21, 2018 (AER, 2018). The survey results provide a generally positive assessment of the AER including industry’s assessment. For example, confidence in the AER’s ability to deliver on its mandate remained stable in 2018 from the previous year at 81 percent for Albertans and 72 percent among stakeholders. Overall perceptions of the AER vary, with 81 percent of Albertans and 77 percent of stakeholders holding positive views.

Interestingly, the AER reports that 84 percent of industry respondents held a favourable view of the regulator, which was about the same percentage in 2017. Given the substantial concerns expressed by industry respondents in other surveys about lengthy timelines and substantial compliance costs, this preponderance of favourable opinion identified in the AER’s survey is surprising.²⁴ Furthermore, among stakeholders, industry reported the highest confidence in the regulator (86 percent) followed by municipalities (84 percent). Ensuring public safety is the most important AER function for Albertans at 94 percent. When asked to choose the single most important AER function, ensuring public safety was identified by 20 percent of Albertans, while 12 percent of Albertans identified protecting the environment, and another 12 percent identified reducing the costs of regulation. The latter option was a new question in

²⁴ It is possible that the differences in the findings reflect differences in the identities of the respondents.

the 2018 survey, which suggests that the AER has only recently acknowledged regulatory compliance costs as an important part of its mandate.

Other information from the AER's most recent survey suggests that reporting and communication is not seen by stakeholders as a regulatory shortcoming. In general, stakeholders report being satisfied with their interaction with AER staff, citing professionalism, responsiveness, and transparent communication as key reasons for their satisfaction. Although 64 percent of stakeholders surveyed expressed a desire for more information about the AER, only 4 percent reported that they actually attempted to access more information. Among those expressing dissatisfaction with their interaction, long response times was a prominent reason cited. A lack of sensitivity towards indigenous concerns was a second reason cited.

Specific AER practices are additional evidence of the regulator's focus on "listening" and transparency as part of its commitment to empathetic engagement. However, the practices also have the effect of increasing industry compliance costs. For example, the AER requires companies to design and implement a Public Involvement Plan before submitting a project application. Companies are obliged to distribute a project information package, respond to questions and concerns about the project, and discuss alternatives and mitigation measures. After the submission of an application, the AER issues a Public Notice of Application informing all Albertans of the project. Interested parties can then submit a Statement of Concern (SOC) expressing why and how the proposed project is going to affect their interests.²⁵ If the regulator conducts a hearing on an application, a party who may be affected by the application is entitled to be heard at the hearing. Furthermore, the AER uses multi-interest advisory or technical committees to inform the development of regulations (directives) and to address area-based issues. It has also developed an Alternative Dispute Resolution program to enable stakeholders to be more directly involved and have more input into resolving energy-related disputes. The goal is to help parties explore and understand each other's interests and (hopefully) develop acceptable solutions, thereby reducing the likelihood of future confrontation between the parties and (hopefully) regulatory costs associated with addressing confrontation (Stratos, 2017).

The AER also provides the public with regular reports on its decisions and its progress in meeting its goals. These include the regulator's annual report and its social research report. The AER also regularly publishes its hearings schedule and a summary of its decisions on its web-

²⁵ Participant involvement does not end with the AER's approval and issuance of a license but continues throughout the life cycle of a project. The AER is also developing enhanced participant involvement requirements that will expand the scope for public participation in the regulator's activities.

site. While the AER is not an agent of the Crown, it is a public agency as defined under the relevant legislation. Among other things, this makes the regulator subject to the Financial Administration Act and the Fiscal Management Act. The AER receives its funding through administration fees levied on the industry subject to the Treasury Board authorizing the regulator's spending limit and the approving its budget. The AER must submit its annual financial reporting and budget to the Department of Energy and the Department of Environment and Parks for review and input before it is sent to Treasury Board (Alberta Energy Regulator, 2017). The inference one might draw is that there is substantial transparency surrounding the regulator's finances, as well as government input into its priorities and operations.

While it is not possible to evaluate the AER's performance on all of the main criteria advanced in the literature on regulatory reform and that are broadly reflected in the AER's model of regulatory excellence, there are grounds for concern surrounding the timeliness of its decision-making and the costs of compliance it imposes on oil and gas companies.²⁶ There is also reason for concern about regulatory layering or overlap with other regulatory jurisdictions. The next section discusses initiatives that the AER is taking to address concerns raised about its processes and procedures.²⁷ We follow up by suggesting several initiatives that might be implemented to improve the performance of the agency while not compromising either its basic mission, or any specific elements of its model of regulatory excellence.

²⁶ While it is beyond the scope of this essay to opine on specific process requirements that might be streamlined, we suggest that this issue be an active and ongoing concern of the regulator.

²⁷ The initiatives underscore the AER's interest in improving its regulatory process.

Some AER Initiatives

As noted earlier, it was only in 2018 that the AER included a question about regulatory costs in its social research survey. The AER is currently implementing its Integrated Decision Approach (IDA), an initiative that will streamline project applications into one single application, one review, and one decision through an online digital platform called “One-Stop.” The broad rubric for the changes to the AER’s processes and procedures were tested in the “play-based regulation” (PBR) and “area-based regulation” (ABR) pilot projects. The expectation was that PBR would support a more efficient, safe, and orderly development of energy resources while minimizing the environmental footprint of such development (EY, 2015).

The main feature of PBR is an integrated application procedure that covers multiple activities related to the development of an energy project. As the AER notes, oil and gas production development no longer means single wells scattered throughout the province. Rather, it now more typically takes the form of multiwell pads with several wells placed in a small area and with pipelines lined up in corridors. In the past, individual wells and pipelines were regulated one at a time as individual applications were submitted. Under the PBR’s integrated application process, instead of submitting several separate applications for each project activity, companies will submit one integrated application that covers the activities over the life of a project. The AER will review all aspects of a proposed development at the same time and make one decision.²⁸

A pilot project of PBR was launched on September 1, 2014, in the Duvernay area of the province. Participation by the 50 or so companies that operate in that area was voluntary and only six fully participated in the pilot project (Harvie, 2016). One of the main objectives of the pilot project was to minimize the cumulative effects in the pilot area and to have industry collaborate on surface development plans. In its evaluation, the AER concluded that cumulative effects were reduced but not minimized. It also concluded that better collaboration among operators on

²⁸ The integrated decision approach is discussed at <https://www.aer.ca/regulating-development/project-application/integrated-decision-approach>.

surface infrastructure would further reduce cumulative effects.²⁹ However, some industry participants, particularly large oil and gas companies, have expressed concerns that they will need to implement major process changes to comply with PBR requirements, including setting up regulatory teams to work on coordinating consolidated application requirements with other players in the area, which would increase their planning costs. Concerns have also been expressed about the competitive implications to individual companies resulting from moving toward an area-based, multi-stakeholder regulatory process (EY, 2015).

Notwithstanding these initial concerns, the industry has identified some benefits from the program in the form of increased efficiency of the regulatory process.³⁰ Energy companies acknowledged that PBR, because of the nature of its integrated approach, would promote efficiency by consolidating overlapping information requirements, reducing the environmental impact of energy development through the sharing of resources, increasing administrative benefits through constant communication with stakeholders, and by allowing long-term planning (EY, 2015). In 2016, the PBR pilot project was replaced with Area-Based Regulation (ABR). ABR was tested in the Municipal District of Greenview in northwestern Alberta in 2016. This approach considered the environmental, energy resource, and community conditions in a development area by setting up a multi-stakeholder panel with industry representatives, local and provincial authorities, landowners, and environmental organizations (AER, 2017). Said panel provided a document with 23 recommendations on enhancing water use and promoting collaborative use of this resource. Although stakeholder feedback was generally positive, some challenges were identified. For instance, the process was resource intensive and implementation was more complicated than expected.

The PBR and ABR were two major inputs to the AER's regulatory overhaul.³¹ The regulator has also set an objective to make more consistent use of risk information when making decisions. To do so, it has developed risk-assessment rules to ensure that higher-risk projects receive greater scrutiny. Specifically, the AER's one-stop automated system evaluates each project based on built-in risk assessment rules to determine if additional review is needed. If an activity is not "standard" or introduces

²⁹ The AER also concluded that participating companies in the pilot project found general information about the project to be insufficient.

³⁰ Unfortunately, we could find no published estimates of efficiency changes associated with new regulatory processes.

³¹ The AER anticipates that all applications covered by its regulatory jurisdiction will have moved to this new integrated approach by 2022.

uncertainty or higher risks, the regulator's technical experts will perform an additional (manual) review of the application.³² An additional review can be required for several reasons including government of Alberta policies, statements of concern or complaints by other stakeholders, operator's plans to use an innovative approach to energy development, and an operator's request to deviate from standard rules and requirements. The risk-assessment rules will be periodically reviewed to ensure that they appropriately reflect provincial government policy, information gathered from stakeholders and indigenous peoples, changes to energy development, and changes to the population and other features of the province.

As noted earlier, the AER's regulatory changes also include a participant involvement initiative. Before submitting a project application to the AER, companies must develop and implement a participant involvement plan that considers parties whose rights may be directly and adversely affected by a proposed application. As part of this plan, companies must 1) distribute a project information package and required AER publications; 2) respond to questions and concerns about the application; and 3) discuss options, alternatives, and mitigation measures. Participant involvement does not end with the AER's approval and issuance of a license but must continue throughout the lifecycle of an energy project. The AER is developing enhanced participant involvement requirements using feedback from public engagement sessions that began in January 2017.

These initiatives are consistent in principle with the AER's regulatory excellence model in specific ways. One is the use of new technology to improve the efficiency of the regulatory process, i.e., the online one-stop permit approval process. A second is the use of risk-assessment rules which are meant to streamline the review process to expedite the processing of low-risk project proposals and thereby improve efficiency. Given that the two initiatives, i.e., the risk assessment rules and the one-stop approval process, are still in their relatively early stages and that specific case studies of their impacts have not been done, to our knowledge, it is not possible to evaluate their effectiveness in improving regulatory efficiency. The latter might be crudely estimated by the ratio of the regulatory-related costs of energy developments to the capital expenditures on those developments.³³ In this regard, the AER set a target of saving stakeholders \$100 million in the form of a reduced regulatory burden for the fiscal year

³² The AER identifies applications that do not require additional review as standard (baseline) reviews. It anticipates that most low-risk activities will fall into this category.

³³ This ratio is obviously an incomplete measure of the net social costs of regulation, since it does not account for changes in environmental-related benefits, changes in operating efficiencies of energy suppliers and energy users, and so forth.

Table 1: AER Levies on Industry (\$ thousands)

Year	Administration levy	Orphan levy	Total administrative levies
2013-2104	166,426	15,000	181,426
2014-2015	243,278	15,000	258,278
2015-2016	240,168	30,167	270,335
2016-2017	238,774	30,448	269,222
2017-2018	244,915	15,000	259,915

Sources: AER, 2015; 2016b, 2017c; and 2018b.

2017-2018. Presumably, most if not all of this targeted saving was to take the form of reduced compliance costs for industry. The AER claims that it actually created industry-verified stakeholder savings of \$143 million (AER, 2018b). It would be beneficial to Albertans if, when addressing cost savings in the energy sector, the AER reported the details of how these estimates were produced for the sake of transparency and further analysis.

The reported stakeholder savings do not necessarily imply that the current regulatory process has become more efficient in recent years. In this regard, the direct levies on energy producers that are used to fund the activities of the AER were substantially higher in 2017-2018 than they were in 2013-2014, as table 1 reports.³⁴ While the direct levies are basically unchanged when comparing 2014-2015 to 2017-2018, this was a period of substantially contracting capital investment in Alberta's oil and gas sector.³⁵ The increase in the number of non-routine applications in recent years also suggests that the indirect costs imposed on oil and gas companies by the regulatory process have increased in recent years. Furthermore, the AER's participant involvement initiative is likely to generate future

³⁴ Recall that the AER began operation in 2013, which is why the comparison to 2013-2014 is relevant.

³⁵ See Globerman and Emes (2019) for a discussion of capital expenditures in Canada's upstream oil and gas sector. The number of decisions issued by the AER in 2014 was almost two-thirds lower than in 2018. While this does not directly relate to compliance costs, it suggests that oil and gas companies may have been dealing with more complex applications over time, and associated uncertainty, which arguably creates an indirect cost that might not be identified as a "compliance cost."

increases in non-routine applications. These considerations underscore the importance of the AER clearly explaining the basis for the industry-verified claims of compliance cost savings that it reports.

The single-stop initiative and the associated risk-assessment initiative are evidence that the AER is concerned about the consequences of its activities for Alberta's economic performance; however, the available evidence suggests that the regulator should seek to improve its performance on several of the dimensions identified in figure 2. In particular, it should seek to reduce compliance costs through shortening timelines for review and approval of projects, reducing the layering and overlap of regulations, and ensuring that regulations and procedures that are in place are consistent.³⁶ The next section offers some suggestions to reduce such regulatory red tape.

³⁶ It might be useful if these objectives were formally incorporated into the AER's adopted mandate for stellar competence.

A Broad Program for Reform

Canada's energy companies have made numerous specific suggestions to improve the AER's regulatory process. They include:

- setting defined timelines for all application processes
- benchmarking timelines against other jurisdictions, where possible
- reducing duplicated work by incorporating or relying on previous regulatory decisions, as well as information provided by proponents in earlier applications
- integrating and harmonizing the AER's Statement of Concern management process with the Aboriginal Consultation Office's test of adverse impact, and
- engaging with industry in advance of issuing updated policy implementation documents that convey new requirements.

Energy companies have also called for greater consistency in regulations across different levels of governments in areas such as land use planning, minimizing redundancies across regulatory requirements, particularly with respect to environmental monitoring, and harmonizing competing regulations, including cross-jurisdictional regulations as they affect pipeline construction and operations.³⁷

These specific recommendations all seem reasonable, although coordination across different levels of government, especially in the case of regulating large pipelines, seems beyond the achievable mandate of the AER, notwithstanding the AER's participation in the Western Regulator's Forum, which is meant to promote collaboration among oil and gas producers in Western Canada.³⁸ Moreover, achieving the broad goal of making the AER's regulatory process more economically efficient, which encompasses specific objectives such as eliminating duplicative or inconsistent regulations and processes, as well as those that serve no social purpose

³⁷ For a full discussion of these suggested remedies, see CAPP (2017) and EY (2019).

³⁸ EY (2019) expresses skepticism about the Forum's ability to make progress in reducing regulatory layering.

Figure 4: Criteria for Identifying Non-Functional Regulations

1. The regulation does not address a legitimate economic or social problem.
2. The regulation addresses a legitimate economic or social problem but does not effectively mitigate the problem.
3. The legitimate economic or social problem can be addressed in a less costly manner than the current regulation, including strengthening the role of the market.
4. The legitimate economic or social problem is addressed by another law or regulation at the same or different level of government.
5. The regulation contradicts another law or regulation which makes legal compliance with the regulation infeasible without violating some other rule.
6. The regulation cannot be applied in a predictable and consistent manner.

Source: Gliberman (2018).

or which objectives can be achieved through other less costly initiatives, might be best pursued as part of an institutionalized program of regulatory reform aimed at eliminating existing “non-functional” regulations and screening proposed new regulations against criteria relevant to identifying non-functional regulations. If the regulator does not have the appropriate incentives and/or does not have sufficient resources, this task should be conducted by an independent special commission, agency, or specialized department that would periodically evaluate all existing regulations, identify non-functional ones, and recommend less costly market-based alternatives when appropriate in order to mitigate cumulative regulatory costs.

In broad terms, non-functional regulations are rules that are *prima facie* likely to have net social costs. That is, the full social costs of those regulations are likely to exceed the full social benefits. Figure 4 lists the main characteristics of non-functional regulations. Most obvious, if a regulation fails to address a legitimate economic or social problem, it will impose costs with no corresponding benefits, and therefore it unambiguously reduces society’s welfare. In practice, it is unlikely that new development proposals will raise no objections from the regulator’s broad stakeholder community. Hence, this criterion might not be a robust rule for streamlining the regulatory process for new development proposals. However, a significant number of existing rules and regulations might satisfy this criterion, which would justify eliminating requirements imposed on the industry to comply with those rules and regulations. Existing rules and regulations that once may have addressed legitimate economic

or social problems may no longer do so because of technological or other changes that obviate the original problem.

It is also obvious that rules and regulations that fail to mitigate a legitimate economic or social problem serve no useful purpose and create costs with no corresponding benefits. The number of rules and regulations satisfying this criterion is likely to be small; however, there might be a significantly larger number that satisfy the third criterion. Namely, if there is a cheaper way to address a specific economic and social problem, it should be employed in place of regulations. An example is the use of private tort laws which provide a basis for suing for damages inflicted on third parties. The threat of legal action and resulting fines can sometimes be a less costly instrument to mitigate third part damages from, say, environmental harm, than are complex regulations that mandate specific corporate practices and proscribe other practices.³⁹

Clearly, duplicated rules and regulations add costs with no corresponding social benefits and should therefore be eliminated. This should raise no issues when the duplication exists at the level of an individual regulator such as the AER, or between the AER and another Alberta agency. However, implementation of this criterion might be more difficult when the regulatory overlap is across regulators in different political jurisdictions, since unilateral elimination of the specific rules and regulations in question involves a sacrifice of sovereignty, in this case on the part of the AER. Nevertheless, as in the case of unilateral tariff reductions, unilaterally eliminating duplicated rules and regulations would increase the economic welfare of Albertans by freeing corporate resources for use in more productive activities.⁴⁰

When there is regulatory layering across different regulatory jurisdictions, implementation of the fifth criterion (i.e., avoiding contradictory regulations) is potentially problematic. It is particularly so if it means that companies in Alberta cannot comply with specific AER rules and regulations without violating those imposed by the National Energy Board. The prevalence of this potential conflict is unclear from publicly available sources of information. However, when the conflict is created by contradictory regulations imposed by the individual regulator, considerations of natural justice oblige the regulator to eliminate the conflict, either by har-

³⁹ Private tort actions are obviously more feasible when the parties who are harmed are readily identifiable.

⁴⁰ For example, the provincial government could allow the AER to forebear from administering specific regulations that it believes are adequately administered by the federal regulator. The AER might explicitly incorporate the objective of reducing regulatory overlap in its model of regulatory excellence.

monizing the regulations in question or by eliminating those regulations that conflict with other regulations.

Contradictory regulations can be a source of inconsistency and unpredictability, which is the last criterion figure 4 identifies. More often, issues with consistency and predictability arise because the regulator modifies the (usually) implicit weights it puts on the criteria it uses in pursuing its mandate. For example, in specific cases, more weight might be given to statements of concern by specific stakeholders than in prior but similar energy development projects. It would be impractical and arguably inefficient to require the regulator to fix the weights it gives to specific criteria and then maintain those weights indefinitely, since social preferences change over time. For example, when the provincial economy is doing well, Albertans might place more importance on environmental protection and public safety than on economic growth with the opposite being the case when the province is experiencing poor economic conditions. When the regulator is using criteria that are qualitative rather than quantitative, the assignment (and identification) of explicit weights assigned to individual sources of costs and benefits is not a relevant issue.⁴¹ In this case, the concern would be the consistency of the qualitative criteria used by the regulator.

While some flexibility in the regulator's priorities seems unavoidable, indeed desirable, predictability would be promoted by the regulator being both explicit and timely about planned changes to the decision criteria it uses in pursuing its mandate. Doing so would enable oil and gas companies in the province to assess more reliably whether proposed energy projects will be approved by the regulator, as well as how the regulator might address challenges to existing projects raised by other stakeholders. Careful and detailed examinations of previous AER decisions should arguably help energy companies better understand how the AER balances tradeoffs and competing objectives in its multi-faceted mandate, as long as the regulator's decision rule is relatively consistent over time and across similar projects.⁴² Of course, pursuit of consistency should not necessarily tie the hands of the regulator in dealing with special cases. Nor should it inhibit the regulator from attaching specific conditions to its

⁴¹ This is equivalent to saying that if the benefits or costs associated with individual criteria used to evaluate a proposed project are not quantified in order to be aggregated into a net social benefit or cost estimate, the assignment of weights to the individual criteria is a moot point.

⁴² In this regard, it might be helpful if the AER undertook and published periodic studies that evaluated the consistency of its decision analysis process and identified factors that might alter that process in the future. This activity would be consistent with its regulatory mandate to share information about its work and to be transparent.

approval of proposed developments, particularly if the attached conditions promise to increase the net social benefits of a proposal.

Implementing a substantial reform of the AER's regulatory process as outlined above should address the major concerns that have been raised by oil and gas companies about problems with the actual implementation of the AER's model of regulatory excellence. Furthermore, it should not obviously undermine the AER's ability to pursue its defined regulatory mandate, nor oblige the regulator to compromise the principles it has adopted which, as discussed earlier, are broadly consistent with models of regulatory excellence described in the literature. Rather, by reducing regulatory red tape, the AER can use its internal resources to more effectively focus on initiatives, such as the one-stop online project application process, that promise to make the regulatory process more efficient and, thereby, of greater benefit for Albertans.

The proposal for regulatory reform outlined in this section is echoed in other studies of the AER. For example, Green (2018) strongly urges the Alberta government to institute regulatory reform projects like those implemented in other provinces in Canada including British Columbia and New Brunswick. National governments, including those of Canada, the US, and the UK have also mandated specific deregulation initiatives, and the evidence shows that the deregulation undertaken resulted in improved efficiency and resulting benefits for consumers.⁴³ Simply mandating the elimination of regulatory red tape is unlikely to produce desirable results. Rather, the provincial government needs to put a governance mechanism in place to ensure that any mandate to reduce red tape is consistently promoted and monitored by assigning clear responsibility to a specific minister, as well as to ensure that the regulator agency has the correct incentives to implement the mandate.⁴⁴

⁴³ For a discussion of the initiatives and their consequences, see Globerman (2018).

⁴⁴ It is beyond the scope of this essay to go into further detail about appropriate governance structures to facilitate deregulation. A discussion can be found in Globerman (2018).

Concluding Comments

Any evaluation of the AER, such as the one recently announced by the Alberta government, should focus on two broad issues. One is whether the underlying model adopted by the regulator seems sound. A second is whether specific policies and practices of the regulator are consistent with efficient and effective implementation of the underlying model. Our review of the model of regulatory excellence adopted by the AER is broadly consistent with models suggested by researchers and consultants to improve regulatory performance. While the precise criteria suggested for regulatory reform vary across studies, so that comparisons of the AER's model to those proposed in the literature are imperfect, in our view the AER's model incorporates most, if not all, of the suggestions that can be found in the broad literature on regulatory reform. However, oil and gas companies have raised strong concerns about how the AER is implementing its model of regulatory excellence.

In particular, concerns have been raised about duplication of rules and regulations, lengthy and varying timelines for project approvals, inconsistencies in how similar project proposals have been addressed by the regulator, and onerous compliance costs primarily generated by statements of concerns and public involvement from stakeholders. The latter issue promises to become even more pronounced with proposed changes to the AER's procedures for participant involvement.

The oil and gas industry has offered specific suggestions to address these concerns, and many have the potential to improve the efficiency of the AER's regulatory model without compromising its mandate or its criteria. An unidentified reviewer commented that the AER is aware of the industry's concerns and is doing what it can to mitigate concerns it believes are valid. If so, the initiatives, including those discussed earlier, should help make the implementation of the AER's regulatory model more efficient. Our main recommendation in this essay is to address the suggestions made to improve the functioning of the AER by embodying them in a comprehensive program focused on reducing regulatory red tape. Specifically, many of the suggestions made by critics of the AER's activities reflect generic issues that can be efficiently addressed by a focus on eliminating non-functional regulations and regulatory practices and using relevant criteria to streamline future rule-making activities.

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