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September 20, 2017

Daniel Morin
Offshore Petroleum Management Division
Natural Resources Canada
580 Booth St., 17th Floor, Room A2-1
Ottawa, ON K1A 0E4

Re: WWF-Canada Submission to Phase 3 of the Frontier and Offshore Regulatory Renewal Initiative (FORRI)

Dear Mr. Morin:

WWF-Canada has reviewed the Discussion Paper for Phase 3 of the Frontier and Offshore Regulatory Renewal Initiative (FORRI) and we appreciate the opportunity to submit our written comments to Natural Resources Canada as part of the stakeholder consultation process. WWF-Canada has been actively engaged in Phase 3 of FORRI, including participating in the consultation session in St. John's on July 25, 2017. Below you will find our general observations on the FORRI process and the proposed Phase 3 regulations.

World Wildlife Fund (WWF) is one of the largest independent conservation organizations in the world, with projects in more than 100 countries. WWF-Canada creates solutions to the environmental challenges that matter most for Canadians. We work in places that are unique and ecologically important, so that wildlife, nature and people thrive together.

Modernization of the offshore regulatory regime in Canada is long overdue. WWF-Canada supports the FORRI mandate "to modernize the regulatory framework governing oil and gas activities in Canada's frontier and offshore oil and gas areas." However, for reasons detailed below, we believe the FORRI process is fundamentally flawed and lacks the legitimacy to proceed as it is currently conceived. The consultations have suffered from an almost complete absence of participation and input from some key stakeholders over the last 18 months and we dispute the underlying premise of the FORRI process, which seems to assume that the move to a more performance-based approach will always yield better results for safety and environmental protection.

WWF-Canada is calling upon the government (a) to reset FORRI by launching a broader, more inclusive and better coordinated regulatory renewal process that will demonstrate the government's commitment to inclusiveness and transparency in modernizing outdated legislation; and (b) to address the concerns expressed below regarding the government's move toward a more performance-based regulatory approach.

Contents

I. FORRI Mandate

> *As it is currently structured, the FORRI review is too limited to achieve its mandate to "modernize the regulatory framework governing oil and gas activities in Canada's frontier and offshore oil and gas areas" and needs to take a broader, more coordinated and more inclusive approach that ensures the contemporary priorities of Canadians, and of the current government, are adequately reflected.*

Despite the FORRI mandate, the five COGOA regulations that are being updated are only one component of the offshore regulatory framework. In the Arctic, Canada's oil and gas regime consists of the Canada Oil and Gas Operations *Act* (COGOA), environmental rules (including liability), the licensing rules set out in the Canada Petroleum Resources *Act* (CPRA), relevant provisions of the National Energy Board (NEB) *Act*, the Arctic Waters Pollution Prevention *Act* and laws of general application such as the Canadian Environmental Assessment *Act* (CEAA). The government is currently carrying out a review of CEAA and a NEB Modernization Review, yet it is not clear how the FORRI process is connected, if at all, to these other reviews. WWF-Canada would like to see clarification from the government on this point.

FORRI, in its current form, will not fulfil its stated mandate and needs to be restructured to take a broader, more coordinated and more inclusive approach, one that considers all relevant legislation and governance issues, and ensures that the contemporary priorities of Canadians, and of the current government, are adequately reflected. For example, in 2016, the governments of Canada and the United States resolved to lead the world in the development of low-carbon economies "including through science-based steps to protect the Arctic and its peoples."[1] Yet the FORRI process is not considering whether the proposed regulatory changes under COGOA will support or undermine this goal.

Modernization of the offshore regulatory regime should not be seen in isolation from other important policy objectives. There is no justification for pre-emptively assuming oil and gas exploration in the Arctic should trump all other possible outcomes. Absent consideration of concerns relating to climate change, Indigenous consent, environmental protection, and other social and economic issues, the narrowly-focused FORRI review process will be of limited value. As currently conceived, FORRI will give the government no indication of whether the proposed changes conflict with other important policy

[1] http://pm.gc.ca/eng/news/2016/03/10/us-canada-joint-statement-climate-energy-and-arctic-leadership

objectives. Addressing broader, contemporary concerns will be absolutely critical if oil and gas resources in the Arctic are ever to be developed responsibly and sustainably, and with the required social license.

Nothing short of a comprehensive and public review of the entire regulatory regime governing oil and gas development in Canada's frontier and offshore areas is required, as implied by the FORRI mandate. Before any regulatory changes are finalized, the federal government must ensure that all stakeholders are properly consulted, international best practices for safety, accountability and environmental protection are in place and that areas of biological and cultural importance are not threatened. At a time of heightened public awareness and deep concern about issues such as land claims rights, benefits sharing and climate change, it is precisely the "regulatory framework governing oil and gas activities in Canada's frontier and offshore oil and gas areas" that requires a thorough review, not one piece of the regulatory puzzle.

II. Stakeholder Consultations

Due to the lack of sufficient stakeholder consultations to date, the FORRI process is fundamentally flawed and lacks the legitimacy to proceed in its current form.

When considering fundamental changes to the rules governing offshore oil and gas activities in Canada, the government has a duty to adequately consult with all relevant stakeholders. The government has repeatedly affirmed its commitment to meaningful and inclusive consultations and to developing a renewed relationship with Canada's Indigenous peoples. The FORRI process to date has suffered from the absence of non-industry stakeholder participation, particularly Indigenous organizations, throughout the consultation process.

FORRI commenced in March 2016 and is now in its final (third) phase of consultations. Over the first two phases, only one organization outside of industry and government, the Inuvialuit Regional Corporation, has formally submitted comments. Almost every civil society and Indigenous organization that WWF-Canada has contacted in recent weeks was either unaware of FORRI or did not understand what it was. None has provided input except for the IRC.

During these first three consultation phases, or even prior to them, critical discussions amongst all stakeholders should have taken place about the overall objectives of FORRI. For example, we understand that the ALARP principle of risk reduction ("as low as reasonably practicable", discussed further in section III below) does not appear in the five COGOA regulations that are being updated through FORRI. The use of ALARP was, however, suggested as a guiding principle by the Canadian Association of Petroleum Producers (CAPP) in their Phase 1 FORRI submission dated May 2, 2016, in which they stated that ALARP reflected "the balance of risks and benefits."[2] The ALARP concept appears to have been adopted by the government as it is used repeatedly in the Phase 3 draft regulations even though there has been no substantive debate from a public interest perspective on whether it is appropriate to use ALARP in certain environments, such as the Canadian Arctic. Particularly for high

[2] http://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/pdf/CAPP_Comments_on_FORRI_Phase1.pdf

consequence activities, such as uncontrolled well blowouts, the policy literature and international practices reflect a tendency to favour more prescriptive regulations.[3] [4]

Related to ALARP, we also have concerns about the underlying premise of the FORRI process, which seems to assume that the move to a more performance-based approach will yield better results for safety and environmental protection. In its submission to Phase 1, CAPP expresses its support for performance-based regulation as a mechanism to achieve "a more competitive frontier and offshore sector" and "higher levels of environmental and safety performance."

WWF-Canada recognizes that performance-based goals are appropriate in some contexts. There are nevertheless good reasons to question the merits of performance-based vs. prescriptive regulations (see section II below). For example, following the Deepwater Horizon disaster in the Gulf of Mexico, the U.S. government consulted widely with environmental groups, academia, equipment manufacturers, federal agencies and industry groups before proposing new regulations that included stringent design requirements and operational procedures for critical well control equipment. To our knowledge, there has been no fulsome discussion amongst all FORRI stakeholders about the appropriateness of performance-based rules in various contexts.

Those communities that bear the greatest risk from increased offshore oil and gas activities must be an integral part of the consultation process when regulatory rule changes are being considered. With respect to Aboriginal consultation, Section 35 of the 1982 Constitution Act affirmed and recognized existing Aboriginal and treaty rights and the Supreme Court of Canada has made the government's legal duty to consult and accommodate clear in several decisions since 1982. The Supreme Court has also provided guidance on what constitutes adequate consultation and what does not, most recently in the Clyde River v. Petroleum Geo-Services Inc. decision regarding the inadequacy of consultations related to an offshore seismic blasting program.[5] It is not sufficient to send out an email to Indigenous organizations when proposing changes that have the potential to impact Indigenous rights and interests. If no response is received to the initial outreach, the government must follow up. In our view, this is not limited to consultations related to specific projects but also includes proposed regulatory changes, as has been the case with proposed changes to wildlife regulations in the North. Several major Inuit organizations have confirmed to WWF-Canada that they have not engaged in FORRI despite their interest in doing so.

While we recognize that there will be one additional opportunity for input in the spring of 2018, the FORRI web site states that, "The development of the policy intent and the subsequent consultation periods will occur in *three phases*."[6] In other words, virtually no stakeholders from outside of industry and government have participated in discussions when much of the policy intent was being developed. We commend the government for its efforts to open discussions to stakeholders early in the regulatory renewal process. Upon doing so, however, it was imperative that the government receive input from all relevant stakeholders, not just industry representatives and governments, from the outset.

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[3] http://www.nrcan.gc.ca/mining-materials/publications/11732#a0
[4] https://www.bsee.gov/sites/bsee_prod.opengov.ibmcloud.com/files/aa11-bsee-well-control-ria.pdf
[5] https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/16743/index.do
[6] http://www.nrcan.gc.ca/energy/crude-petroleum/17729

The absence of participation of non-industry voices from the earlier phases of this review has also resulted in a failure to address other legitimate purposes, for example, the need to balance the rights of other economic uses aside from petroleum exploration. The lack of non-industry participation has led to a narrower, industry-focused review where a broader review that takes into account all legitimate interests is needed.

III. Performance-based Regulations

Performance-based rules are not appropriate in all contexts. Not all jurisdictions have adopted performance-based rules and not all stakeholders in the FORRI process have weighed in on the relative merits and drawbacks of this approach.

Underlying the FORRI consultation process there appears to be an assumption that a performance-based approach will necessarily lead to more flexibility for operators in adopting new technological innovations and better outcomes for safety and environmental protection. To our knowledge, this assertion of the superiority of performance goals has not been substantively questioned or discussed at any stage of the FORRI consultations. This is despite the fact that other Arctic nations continue to use prescriptive rules to regulate their offshore oil and gas operators.

As noted, performance-based regulations are common in some industries and can sometimes have the general advantage of allowing for the adoption of new technologies. However, they are not appropriate in certain circumstances, including high risk, high consequence environments like the Arctic, where the risks of an accident are higher, the consequences are potentially catastrophic, and our ability to respond is extremely limited. Even Natural Resources Canada (NRCan), concluded in a 2013 report that "when the risk or consequences associated with an activity are high...outcome-based regulations may not be appropriate; particularly if a suitable technology already exists."[7]

The United States and Russia have retained or even strengthened their prescriptive rules in the offshore petroleum industry in recent years. For instance, in 2016, the United States government introduced a set of prescriptive rules aimed at preventing the kind of equipment failures that led to the disastrous 2010 Deepwater Horizon oil spill in the Gulf of Mexico.[8] An investigation into the blowout revealed that the oil industry had insisted upon the safety of its operations and the reliability of its blowout preventers, and that the responsible U.S. regulator had declined to act on advice from its own experts on how it could minimize the risk of a well control failure.[9] In response to the accident, the government added stricter requirements to the design of undersea wells and tightened rules on blowout preventers (BOP), with no opt-out provision, such that the use of double shear rams is now required to provide backup in the event of equipment failure.[10]

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[7] http://www.nrcan.gc.ca/mining-materials/publications/11732#a0
[8] https://www.gpo.gov/fdsys/pkg/FR-2016-04-29/pdf/2016-08921.pdf
[9] http://www.nytimes.com/2010/06/21/us/21blowout.html
[10] https://www.bsee.gov/sites/bsee.gov/files/fact-sheet/bsee/fact-sheet-proposed-well-control-rule.pdf

In justifying the new BOP rule, the U.S. Bureau for Safety and Environmental Enforcement (BSEE) wrote in 2016 that, despite the additional cost to operators, the prescriptive rule was "necessary to reduce the likelihood and/or severity of any oil or gas blowout, which can lead to the loss of life, serious injuries, and harm to the environment. As evidenced by the Deepwater Horizon incident… blowouts can result in catastrophic consequences… Despite new regulations (prior to 2016) and improvements in industry standards and practices since the Deepwater Horizon incident, *loss of well control (LWC) incidents are happening at about the same rate five years after that incident as they were before" (italics added).*[11]

Operators in the U.S. offshore are also required to demonstrate that they have immediate access to surface and subsea containment resources that would be adequate to promptly respond to a blowout or other loss of well control. Other prescriptive rules in Alaskan waters include the requirement that, in the event of a blowout, operators are able to drill a relief well during the same season and that a capping stack be onsite within 24 hours.[12]

Finally, the U.S. Outer Continental Shelf Lands Act (OCSLA) explicitly requires the use of "Best available and safest technologies" (BAST) on all new drilling and production operations, with only the Secretary having the authority to determine whether the incremental benefits are "clearly insufficient" to justify the incremental costs of utilizing BAST.[13]

In Canada, the proposed new COGOA rules include no requirements to use the best available technologies or best environmental practices and do not appear to include minimum safety standards. There is common use of undefined language with no guidance to the Boards on how it should be interpreted. For example, Annex I of the Phase 3 regulations (Well Containment and Control) requires operators in the Canadian offshore to demonstrate "*as soon as the circumstances permit*, measures to stop the flow from an uncontrolled well *and to minimize spill duration and environmental effects.*" They must also "demonstrate the adequacy of those measures", yet no specific technologies such as blowout preventers are prescribed, contrary to the U.S. approach.

The proposed regulations do maintain the COGOA requirement that at least two independent and well tested barriers be in place during all well operations. However, a well barrier can take different forms and does not necessarily mean that a blowout preventer must be used. The operator is required to describe the type of subsea containment equipment to be utilized in the event of a loss of well control, but there is no blind shear ram requirement, as in the U.S.

The amended FORRI regulations state that "all subsea production systems are designed, built, installed, commissioned, tested, operated, inspected, monitored and maintained to reduce risks to safety and to the environment to *as low as reasonably practicable* (ALARP) under all foreseeable environmental and operating conditions, for all modes of operation." NRCan officials have confirmed that the test of reasonability with respect to risk reduction and the effectiveness of the proposed measures will be determined by the regulator. Yet it is recognized in the regulatory policy literature that the general and

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[11] https://www.bsee.gov/sites/bsee_prod.opengov.ibmcloud.com/files/aa11-bsee-well-control-ria.pdf

[12] https://www.federalregister.gov/documents/2016/07/15/2016-15699/oil-and-gas-and-sulfur-operations-on-the-outer-continental-shelf-requirements-for-exploratory

[13] https://www.gpo.gov/fdsys/pkg/USCODE-2015-title43/html/USCODE-2015-title43-chap29-subchapIII-sec1347.htm

sometimes vague language of performance-based regulations allows for considerable room for interpretation. There is already concern across a broad section of the scientific community and the broader public with respect to the current responsibilities of the offshore Boards for regulating the environmental performance of oil and gas development industries.[14] These concerns provide a context that is extremely relevant to the impacts of the performance-based direction of the proposed changes in FORRI, with respect to the relationship between the Boards and the industries they regulate, for it will be entirely up to the Boards to interpret the new rules and determine if the operators' plans satisfy the policy intent of FORRI.

This concern about the vague language of performance-based rules is shared by others. In its submission to phase 2 of FORRI, the International Association of Geophysical Contractors wrote that "individual Boards' interpretation of (the) regulations may not align with the policy intent of FORRI, especially where the initiative's intent is not specific, but ambiguous."[15] Finally, it is not at all clear in the proposed regulations how the Boards will differentiate between vastly different sub- and supra-60 degree contexts, nor does any guidance appear to be given in this regard.

Performance-based rules may be appropriate in some circumstances but some prescriptive rules are still needed, as the U.S. example demonstrates. At a minimum, the government should consider using equivalency language that sets a minimum standard of safety while allowing the operator the flexibility to propose other alternatives. The National Energy Board (NEB) adopted this approach in 2011 with respect to its Same Season Relief Well (SSRW) requirement. Acknowledging the continual evolution of technology, the NEB allowed operators to depart from its SSRW requirement if they could demonstrate how they would meet or exceed the intended outcome of the rule. Although controversial, this language at the very least ensured a minimum safety threshold against which operators' proposals could be evaluated. Likewise, the BSEE in the U.S. justified its new, more prescriptive rules in the wake of the Deepwater Horizon disaster by stating that the strict requirement for operators to have immediate access to relief rigs "sets forth the minimum level of prescription necessary to achieve the (regulatory outcome), leaving many performance-based options available for operators to pursue."[16]

The government has not provided a sufficient explanation as to why it is unnecessary for Canada to adopt the stricter, more prescriptive rules that the U.S. has put in place. Not all jurisdictions have adopted performance-based rules and not all stakeholders in the FORRI process have weighed in on the relative merits and drawbacks of this approach. There is a need for rigorous discussion and debate amongst all stakeholders on the appropriateness of performance-based regulations in the Canadian offshore environment and how such rules would be interpreted and applied by the three offshore Boards. Thus far, this has not happened through the FORRI process.

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[14] See for example numerous submissions to the Government of Canada's meta-review process: 'Discussion Paper', www.discussionpaper.ca

[15] http://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/pdf/IAGCCAGCFORRIPhase2Comments.pdf

[16] https://www.federalregister.gov/documents/2016/07/15/2016-15699/oil-and-gas-and-sulfur-operations-on-the-outer-continental-shelf-requirements-for-exploratory

IV. ALARP

The government has repeatedly used the ALARP risk reduction principle in the Phase 3 draft regulations even though ALARP is not appropriate in high risk, high consequence environments. There has been no substantive debate on whether Canada should adopt this principle.

The phase 3 draft regulations contain widespread use of the ALARP (As Low As Reasonably Practicable) concept when referring to risk reduction, which is not defined in the regulations. Although ALARP does not appear in the five COGOA regulations that are being updated through FORRI, its inclusion in the draft regulations was suggested as a guiding principle by the Canadian Association of Petroleum Producers (CAPP) in their Phase 1 FORRI submission dated May 2, 2016. The government has adopted ALARP repeatedly in the Phase 3 draft regulations even though there has been no substantive debate on whether it is appropriate.

ALARP should not be used in high-consequence environments, such as the Canadian Arctic, where a major oil spill could not be cleaned up.[17] [18] ALARP is a risk-management principle used to allocate risk reduction effort and expense, which can be applied when the risks of failure are considered tolerable. Government officials have insisted through the FORRI process that the concept is established in jurisprudence and that there is strong legal precedent to help the Boards understand what ALARP means. However, the government has yet to make a convincing case that the use of ALARP will encourage companies to make their operations safer by fostering innovation. In fact, one could argue that the opposite may be the case. ALARP requires an operator to reduce risk only to a point that they can convince a regulator is "reasonably practicable". Reducing risk beyond this point would require the operator to absorb additional costs and there appears to be nothing in the proposed regulations that puts pressure on the operator to innovate in order to reduce risk beyond what the regulator deems "reasonable".

It is not difficult to imagine a scenario in which an operator, with the agreement of the regulator, might consider certain safety measures to be not "reasonably practicable" (i.e. too expensive), yet such measures may nevertheless be technically practicable/achievable and the best for safety purposes. The use of ALARP could open the door for an operator to try to downplay the potential risk of an accident (i.e. by claiming that a major blowout would be virtually impossible). To illustrate this concern, it is worth noting that a New York Times investigation into the Deepwater Horizon blowout highlighted the "chasm" between the oil industry's assertions about the reliability of its blowout preventers (thus seeking to minimize the perceived risk) and a more complex reality.[19] Depending on how ALARP is interpreted and applied by the Boards (which is not clear in the draft regulations), ALARP could become a tool to understate actual risks in order to avoid important safety measures for economic reasons. This was in fact the route taken by Shell Canada and the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) in its justification to the Government of Nova Scotia in defense of *not* having a capping stack

[17] http://www.nrcan.gc.ca/mining-materials/publications/11732#a0
[18] https://www.bsee.gov/sites/bsee_prod.opengov.ibmcloud.com/files/aa11-bsee-well-control-ria.pdf
[19] http://www.nytimes.com/2010/06/21/us/21blowout.html

on site for its exploratory drilling program on the Scotian Shelf, which is contrary to the approach adopted in the Alaskan offshore.[20]

It is worth repeating that, in the U.S., ALARP is not used in offshore drilling rules and operators are instead required to utilize the Best Available and Safest Technologies (BAST) under the OCSLA.[21] In Canada, there is no BAST requirement and the authority to determine what safety measures are "reasonably practicable" will be granted to the three offshore Boards, which, as previously noted, are already the subject of considerable concern across a broad section of the scientific community and the Canadian public.

In a performance-based approach to safety and environmental performance, companies are required to demonstrate that measures are taken to manage risk. However, what an operator may consider "reasonably practicable" measures to cope with risks may not be the same as what the public considers to be a *tolerable* risk. In other words, an operator's proposed measures to cope with perceived risks may not go far enough to suit those who will be adversely affected if the risk is realized. Risks that entail dire consequences that cannot be managed should be reduced to the greatest extent possible, not to a level that is deemed "as low as reasonably practicable" by industry and the regulator. The risk, however small, of a high-impact, major accident in the Arctic that could not be cleaned up is one such example. In such instances, any application of ALARP would be a dangerously misguided.

In these cases, it has been argued that acceptable risk levels for the Arctic should be well below industry's usual standard and should reflect an 'As Low As Possible' (ALAP) standard, regardless of cost.[22] Such an approach might not be welcome from a business perspective, but in society there may be an understanding for higher reasonable costs to lower the risk. In some cases, it may be in the public interest not to expose highly sensitive or important ecosystems to the risks associated with drilling for hydrocarbons.

The point is that ALARP is controversial, yet none of these issues has been discussed through FORRI. The ALARP concept seems to have been inserted without debate. Its use is not appropriate in a performance-based regulatory system in which there is an absolute limit on legal liability in the event of a major accident, as is the case in Canada. One solution might be for the operator to make the acceptance criteria and risk assessment explicit and available to the public through a formal engagement process before the operator can receive regulatory approval, or the government could make absolute liability levels unlimited for operators in the event of an accident, as is practiced in other jurisdictions such as Norway, Russia and Greenland.[23] Regrettably, these potential solutions, and the many other issues noted above, have not been considered in FORRI.

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[20] http://nslegislature.ca/index.php/committees/committee_hansard/C10/re2015nov05

[21] https://www.gpo.gov/fdsys/pkg/USCODE-2015-title43/html/USCODE-2015-title43-chap29-subchapIII-sec1347.htm

[22] Arctic Resource Development. FNI and DNV 2012.

[23] http://www.pembina.org/reports/comparing-offshore-oil-and-gas-regulations.pdf

For the reasons outlined, FORRI lacks the legitimacy to proceed as it is currently conceived. The consultations have not included the participation and input from many key stakeholders during the early critical phases of the consultation process and we dispute the underlying assumption that moving to a more performance-based approach will yield better results for safety and environmental protection, particularly in Canada's North.

WWF-Canada is calling upon the government to reset FORRI by launching a broader, more inclusive and better coordinated regulatory renewal process, and to address the concerns expressed above.

Sincerely,

Paul Crowley,
V.P. Arctic
WWF-Canada