



# Snake River Alliance

IDAHO'S NUCLEAR WATCHDOG & CLEAN ENERGY ADVOCATE

December 21, 2012

To: Members of the Leadership in Nuclear Energy Commission

From: Snake River Alliance

**Re: "Progress Report: Subcommittee Recommendations," December 3, 2012**

The Snake River Alliance has served as Idaho's grassroots nuclear watchdog and clean energy advocate since 1979. We submit the following comments and questions on behalf of our dues-paying members. In addition, we submit the names of more than 1500 petitioners who oppose commercial nuclear waste coming to Idaho and affirm, instead, that nuclear waste should be stored as safely as possible as close to its point of generation as possible.

The Snake River Alliance commends the members of the Leadership in Nuclear Energy Commission and the members of the Commission's subcommittees for their public service. Your charge was to forward recommendations to Idaho Governor Butch Otter on "policies and actions the state of Idaho can take to support and enhance the long-term viability and mission of the INL and the broader nuclear industry in the state." Yours was not an easy task.

It is understandable that the State of Idaho is committed to supporting and enhancing the "viability and mission of the INL," but at the end of the day, the Idaho National Laboratory is a federal facility operated with federal monies appropriated by the US Congress. It must have a national purpose and meet national needs.

By the same token, it must be recognized that the "nuclear industry in the state" is privately held and is part of a broader industry whose prospects have long been uncertain. Actions by the State will not affect Idaho's nuclear industry nearly as much as market forces will.

The Snake River Alliance's broadest response to the Commission's Progress Report and draft recommendations is rooted in our understanding of the history of INL's relationship with the State of Idaho and its people and the national nuclear waste narrative. The only permanent approach to nuclear waste proposed in the US has been cancelled. A "blue ribbon commission" has made a series of recommendations to the President. The executive branch has yet to respond to those recommendations. A new legal framework will need to be crafted by Congress and regulations supporting that framework developed. The Snake River Alliance is just one of the entities in Idaho that have expressed opposition to our state providing the nuclear industry with a new opportunity to dump its waste "out of sight." We repeat that opposition knowing that the LINE Commission has heard it from all corners of the state. The LINE Commission must not recommend to the Governor any move on the State's part that indicates willingness to shoulder a burden the weight of which we have no way of knowing. There is no path forward for spent nuclear fuel, among the most radioactive substances on earth. A fair number of people who have watched this country try to "solve" the nuclear waste problem for decades are convinced that, if spent nuclear fuel moves at

all, it will move just once. A consent-based interim storage facility might become a lifelong dump, invitation or not. The LINE Commission must not encourage the risk.

In the comments that follow we will detail our primary areas of concern and respond based on the content of the draft Progress Report. For each subcommittee report section we have listed our questions, concerns and suggestions.

### ***Transparency***

The LINE Commission itself has characterized its work as the beginning of a “conversation.” As such, the contributions of *all* Idahoans – Commission members and not – must be open, and public input *must* be accessible to the public. Any “conversation” depends on all of us knowing what our neighbors are thinking. Furthermore, the upcoming deliberations of the Commission, which will refine the final recommendations, must be open. It is unfortunate we don’t know how the subcommittees reached their conclusions. It would doom the LINE Commission’s work to failure if we did not know how the final recommendations to the governor were crafted.

Furthermore, the LINE Commission’s characterization of its efforts as the *beginning* of a new conversation is not helpful. The conversation about the Site – particularly its economic impacts and the environmental damage from its activities – has been going on for decades. That history – which we are in the midst of – must be understood if discussions about the future are to be meaningful.

The LINE Commission’s “Progress Report” is a challenging document. At the heart of the report are more than 60 preliminary and very broad-ranging recommendations from the Commission’s five subcommittees. The subcommittee meetings were neither noticed nor open to the public; minutes have not been posted. The Commission acknowledges that some of the preliminary recommendations are repetitive and/or contradictory and states its intention to refine them based on public input and full Commission deliberations. It’s not apparent why some information is included and some is not. It is hard to tell if a subcommittee is recommending a research project or a production facility or simply describing a nuclear idea its members find interesting. There is a tension between assertions of the value of the Site and admissions that it is fully dependent on government money. Many recommendations depend on a far more robust future for nuclear power than seems likely.

Additionally, the LINE Commission seems caught in a fundamental disconnect among research at INL, new projects, the recommendation that Idaho host a pilot radioactive waste storage facility, and that nothing is possible unless we change the 1995 Settlement Agreement. These fundamental disconnects muddle the report. It seems less grounded in reality and more driven by an effort to back Battelle’s desire to lift Idaho’s ban on commercial radioactive waste. This desire was made clear in the 2010 PowerPoint, distributed by the director of Battelle at the LINE Commission’s April meeting, which suggested the need to change the 1995 Settlement Agreement. That need remains an unsubstantiated assertion deeply unpopular among many in Idaho. The 1995 Agreement is not Battelle’s to change.

### ***The 1995 Settlement Agreement in Context***

The Progress Report and discussions at LINE Commission meetings have attempted to bolster a narrative that “everything has changed” since the 1995 Settlement Agreement. Claimed “game changers” include the designation of INL as the lead nuclear energy and spent fuel national lab. Another seems to be when Battelle was named the contractor for the INL laboratory and CWI was named cleanup contractor in 2005. Yet another was the Obama administration’s decision to end development of a high level waste repository at Yucca Mountain, Nevada. All these milestones are most certainly important, but they do not mean that everything has changed, nor that the environmental challenges at INL have disappeared.

The Idaho National Laboratory has been the lead national laboratory for nuclear power since it was established in 1949 as the National Reactor Testing Station. The efforts to clean up the Site did not begin in 2005. They have been going forward since 1989, when INL was added to the Superfund list of the most contaminated places in the country. The Department of Energy stopped burying plutonium-contaminated waste, which is far more than “gloves, tools, clothing” (p 7), long before the Settlement Agreement was signed. It stopped injecting hazardous and radioactive liquid into the Snake River Aquifer in the mid-1980s. It stopped burying low-level waste (except for the most radioactive!) in 2008. Contrary to the Progress Report’s estimates (p. 6: 10 years, \$4 billion), the FY 2013 DOE budget request estimates the INL cleanup project might not finish until 2044 and its cost might top \$15 billion. Though much of the program has achieved its goals, the difficulties encountered should serve as a cautionary tale in the nuclear debate, as should the substantial contamination that will continue to threaten Idaho’s water for millennia after the cleanup efforts have ended. It’s not time to start over.

The LINE Commission’s concern that there will be no final repository in 2035 is legitimate. That concern was legitimate in 1995 when the State, Department of Energy, and Department of the Navy signed the Settlement Agreement. What is not legitimate – or even logical – is to respond to the potential repository delay by removing or weakening Idaho’s protections and recourse by renegotiating the Settlement Agreement. There seems to be more than a bit of preemptive surrender in the LINE Commission’s thinking. Heading in this direction flies in the face of what Idahoans overwhelmingly approved and supported in 1996. The Commission may have been led to underestimate the deeply held conviction amongst Idahoans that the Settlement Agreement protects Idaho from commercial radioactive waste and holds the federal government accountable for cleanup above our aquifer. Non-consent was made clear in the agreement and that fact should be respected.

Potential budget challenges on the federal level are of course a concern, both on the laboratory side and for the cleanup program. The LINE Commission should be aware that DOE personnel freely acknowledge that the Settlement Agreement has been a linchpin ensuring ongoing, adequate funding for the cleanup program. At a time when federal funding across the board may be in jeopardy, it would be foolish to modify the Agreement.

The “nuclear renaissance,” one of the key justifications for the “new mission” nuclear work at INL, had stalled even before Fukushima. Battelle seems now to have seized on spent fuel storage as the justification for expanding work at INL. But is the LINE Commission able to demonstrate an unequivocal link between accepting more nuclear waste and maintaining INL’s nuclear research work? Please provide to the public that demonstrated link.

INL cleanup funding may be in jeopardy because of federal budget constraints. Nuclear research dollars currently coming to INL may also be at risk because of the current fiscal climate and because some of that work may no longer appear to be in the national interest. The nuclear waste world is unsettled. In the face of all this, the LINE Commission states: “DOE’s success in meeting Settlement Agreement milestones has made it possible for DOE to continue shipments of spent nuclear fuel to Idaho for storage, and has created an environment in which **the State of Idaho has concluded it is in the state’s best interest to exercise some of the flexibility built into the agreement as it pertains to commercial nuclear waste shipments**” (p. 22, emphasis added).

This raises the following questions:

- 1) How did the “State of Idaho” reach that conclusion? When?
- 2) Please give explicit examples of the “flexibility built into the agreement as it pertains to commercial nuclear waste shipments.”
- 3) “Best interest” is a fairly broad term. Please describe in detail the State’s “best interest” in this context.

4) Are there other parts of the agreement that the State is reconsidering?

### ***Subcommittee Final Reports and Recommendations***

#### *Safety and Environment*

- It is not necessary for the State to create a focal point for information on the Idaho National Laboratory writ large. The DOE and its contractors all have active public information offices. More important, the State of Idaho's INL Oversight Program has more than two decades of experience at the Site and provides valuable information to the people of Idaho. If the State's voice is strengthened, it should be through the Oversight Program rather than the Governor's Office of Energy Resources, which has little if any funds or staff to perform this function.
- Many of the recommendations of this and other subcommittees seem to assume that the State of Idaho has the financial wherewithal to underwrite INL. Examples here include funding for coordination of nuclear materials transportation and for an international conference on nuclear safety (which the subcommittee thinks somehow would increase tourism [p. 7]).
- The subcommittee recommends the State of Idaho form a "Science Advisory Group to focus on nuclear energy facility siting issues" (p. 8). What facilities? Where? At INL? There are numerous advisory groups, councils, research centers, etc., recommended in the Progress Report. But there is no mention of how they would be constituted or funded.
- A science advisor for the Governor of Idaho donated by Battelle or the Department of Energy would be a disservice to all concerned. The interests of the State and its citizens are discernably separate from Battelle's and the DOE's. Furthermore, as outlined here, the position sounds less like a "science" advisor and more like a "nuclear" advisor.
- It is inaccurate to claim that "with respect to any potential modification of the Settlement Agreement, the State has the ability in its sole discretion, to make changes to its terms, conditions and obligations" (p. 11). Modifications would have to be agreed to by all parties to the agreement and approved by the U.S. District Court in Idaho.
- How did the Safety and Environment subcommittee reach the conclusion that a high burn up fuel storage demonstration project "can be conducted in a safe and protective manner" (p. 11)? For some reason, a copy of the presentation on high burn up fuel storage was not left with the full Commission at the end of the October 2012 meeting in Twin Falls and is not posted on the LINE Commission web site. The Alliance asks that the Safety and Environmental subcommittee make the presentation public.

#### *Technology: Current and Future*

- Members of the Snake River Alliance have long observed a tendency in the DOE to describe uncertain or even very speculative initiatives as if they were already occurring. Examples of what we call the "DOE Hopeful verb tense" are statements such as "Yucca Mountain *is* a deep geologic repository" and "The Integral Fast Reactor *has closed* the fuel cycle." There is, of course, nothing wrong with active advocacy or unbridled enthusiasm unless they block realistic evaluation. Much of the Technology subcommittee's final report is little more than a shopping list of proposals, mostly nuclear, that have little or no chance of going forward. The list is rife with steady suggestions that the State of Idaho provide "necessary and appropriate enablers" and "at least startup investment/expedited permitting," pursue "designation and funding" and "increased collaboration and funding," and "seek the resources." If there is little chance of the federal

government or private industry providing financial backing for these proposals, there is *no* chance of state funding. Peter simply has no money to pay Paul.

- The subcommittee seems to recognize what a long shot federal or private industry funding is, particularly with a limited market. As a result it recommends that the State of Idaho help Battelle “pursue collaboration and funding for R&D from foreign governments and overseas commercial businesses...regardless of the lack of nuclear expansion in the U.S.,” in part to “provide further diversification of INL funding sources.”
- The Snake River Alliance, too, is anxious that the Integrated Waste Treatment Unit successfully remove the high-level liquid waste from tanks and dry it into a more stable form. Most certainly, the state must actively engage in the follow-on activities at the Radioactive Waste Management Complex and all the other “cleanup” sites at INL where contamination has been left behind. Ongoing monitoring and further action if necessary are legally required under the Superfund law.

### *Education and Workforce*

- The aging of the INL workforce is notable and reflects a broad pattern throughout the nuclear industry. We appreciate the survey of hiring patterns at INL. Please explain whether the particular growth patterns at the Site reflect direction from the DOE or Battelle’s own corporate priorities.
- The subcommittee should also consider if the State can play a positive role in ensuring the safety of the workforce at INL.
- The state of Idaho has a strong role to play at the Idaho National Laboratory. As we have noted, much of its presence is through the Idaho Department of Environmental Quality and the State’s INL Oversight Program. It should be noted that despite Idaho’s active environmental presence, it has no regulatory authority whatsoever over radioactive material at INL. It does, though, regulate the substantial quantities of hazardous materials present at the Site through the Resource Conservation and Recovery Act. It is one of the three parties to the Federal Facility Agreement and Consent Order, the fundamental Superfund cleanup agreement for INL.

### *Infrastructure*

- DOE’s Office of Environmental Management already evaluates excess facilities at the Site to see if they should be transferred to DOE’s Office of Nuclear Energy.
- There are no credible estimates suggesting a 50 percent increase in power needs between 2012 and 2022. If we were looking at a 50 percent increase in the next 10 years, the electric grid would be at risk of failure – assuming the power was available. Idaho Power projects a load growth of less than 2 percent a year, as do the other Idaho utilities. Furthermore, the public has recently been advised through Idaho Power’s Integrated Resource Plan Advisory Committee process that Idaho Power has adequate energy resources for its reserve requirements and to provide power. Let’s worry about Areva’s power needs if and when the time comes.
- If INL’s power needs “could increase in a substantial way,” it should advise Idaho Power now, as it is an Idaho Power customer. Like all utilities and the Northwest Power and Conservation Council, the utility and the region must conduct “resource adequacy” reviews to ensure they can meet future demands.
- It is not Idaho’s responsibility to make sure the lights stay on at INL. It is Idaho Power’s job to deliver

power to the Site. It is the job of DOE and its contractors, working with Idaho Power, to judge whether its internal grid system is adequate.

- The subcommittee's sole recommendation on tax policy (p. 7) is for a *sweeping* "Idaho Energy Research Incentive Package" for the nuclear industry. This package is improper in that it is clearly focused on a single industry for very favorable treatment by the State.

### *National & Global Landscape*

- The subcommittee writes that "nuclear energy currently provides about 20 percent of the nation's electricity production with 104 operating nuclear reactors. Because of low maintenance and fuel costs and modest future capital investment, they can currently compete favorably with gas-generated electricity" (pt. 3). That assertion is not correct. Resource cost estimates do not place nuclear anywhere near natural gas, except perhaps in fuel costs. In fact, the relatively low price of gas plants compared to nuclear and coal plants and the low cost of the fuel are reasons no one is proposing to build nuclear or coal plants. If they were competitive, an Idaho electric utility would be thinking about building a plant, but none are.
- It is not correct that "U.S. baseload generating capability has fallen markedly over the past few years as coal-generating capacity has been retired" (pt. 6). U.S. baseload generating capability has not fallen. The bulk of the coal plants that have been or are expected to be retired are being replaced by natural gas plants, a baseload resource. There has been no decrease of baseload generating capacity due to coal plant retirements.
- The subcommittee writes: "The immediate opportunities from U.S. Department of Energy for nuclear research are centered on the fuel cycle in the development of advanced fuels, and in the disposal and storage of spent nuclear fuel and other high-level nuclear wastes. **States who are willing to engage in establishing or expanding storage facilities for spent fuel and high-level waste will hold a competitive advantage for receiving research funds directed at the back-end of the fuel cycle**" (pt. 12; emphasis added). That statement validates the concern of many that the LINE Commission was formed to open a new push for commercial nuclear waste shipments to Idaho. If it is anything other than a bald assertion, please provide details supporting its veracity.
- This subcommittee's second recommendation is puzzling. It seems to imply that INL's capabilities are not valued among US policy makers. That's not ever been admitted here in Idaho. Please describe in detail the "broader national interests" that would be served by consolidating nuclear energy research at INL. Please describe in detail how highlighting "the role Idaho has played in accepting, managing, and storing federal government owned used nuclear fuels"(rec. 2a) would help encourage nuclear research here. Has the LINE Commission abandoned support for other kinds of research at INL?
- The subcommittee recommends that the State host a "Western Regional Energy Summit – In conjunction with the INL, Idaho could host a regional summit to promote a strong political voice for a 'Western Energy Corridor' made up of Idaho, Montana, North Dakota, Utah, Wyoming, Alberta, and Saskatchewan to become energy providers for more populous states and province" (rec. 2d). This is duplicative of work done regularly by the Western Governors Association and the Pacific Northwest Economic Region, which includes most of these states and provinces and which has a strong energy component. See <http://gov.idaho.gov/mediacenter/execorders/eo2012.html> for the governor's 9/13/2012 Executive Order 20012-07 establishing the Idaho PNWER council.

- The National and Global subcommittee concludes that it is “too early to make a recommendation regarding an expanded future role for Idaho in commercial spent nuclear fuel storage and management.” That is correct. As we outlined in the body of our comments, our country’s nuclear waste policy is in flux, and Idaho’s interests are best protected by leaving in place the 1995 Settlement Agreement’s ban on commercial spent fuel. And because of that ban, it is also too late to consider expanding Idaho’s role in commercial nuclear waste storage.
- The role of Idaho’s universities in INL activities is already quite substantial.
- Who would pay for the recommended “new processes for Research, Development, Demonstration and Deployment (RDD and D) and Public-Private Partnerships (PPP)”? Please provide more detail regarding the “potential for misuse” of nuclear energy technologies.
- The subcommittee’s final recommendation is that the Department of Commerce, working with small modular reactor developers, “explore the types of incentives that would make the state more attractive as the host of an SMR demonstration or an SMR manufacturing facility.” This is not a state function. Furthermore, as we noted in our comments on the Infrastructure subcommittee’s work, tax or other incentives are inappropriate if they single out a particular industry or business sector for favorable tax or other state financial assistance.

### ***Responses to Questions Posed In the Progress Report***

It is puzzling that the questions the LINE Commission poses to the citizens of the State of Idaho in its letter of conveyance are not the same as those it says (Progress Report, p. 29) the State of Idaho (presumably the governor) must consider. Brief answers to both sets of questions follow.

#### **1. What is the strategic role the INL and Idaho’s nuclear industry can play in the country’s energy future?**

As noted in the body of our comments, that will depend in large part on national priorities and market forces. Market forces indicate that large-scale new nuclear projects will not be a cornerstone of the nation’s energy policy. Continued and expanded focus on renewable energy and energy efficiency, as well as a concerted effort to manage and mitigate the environmental impacts of radioactive contamination at INL, should be a central focus.

#### **2. In light of reduced federal spending, what impacts might affect INL and what role can Idaho play to protect INL research and cleanup funding?**

The Snake River Alliance strongly supports all efforts to secure full funding for cleanup at INL. Rather than dispersing the State’s focus by listing a series of new projects that would require increased funding, we encourage the State to sharpen its focus on protecting funding for cleanup. As we noted in our comments, DOE-Idaho regards the 1995 Settlement Agreement as a very powerful tool to ensure full cleanup funding. The Agreement should not be tampered with.

#### **3. What broad environmental risks are posed by nuclear technologies and what mitigating steps are reasonable to protect public health and the environment regarding current and future applications of nuclear technology in Idaho?**

The legacy of radioactive contamination above the Snake River Aquifer as a result of nuclear technologies is evident. Cleanup must continue to be robust and focused. Liquid waste must be converted to a dry form. Any new projects that result in the production or presence of more radioactive waste pose risks.

#### **4. Where is nuclear technology going and what role and/or opportunities exist for INL and Idaho companies in those technology developments?**

The economic costs of developing “new nuclear technology” continue to stymie development in both the public and the private sectors.

**5. Given the Blue Ribbon Commission’s focus on consent-based siting and the suspension of the Yucca Mountain repository, in what way can Idaho’s 1995 Settlement Agreement protect the state’s interests to support and enhance research and development at INL and complete the cleanup mission?**

The Blue Ribbon Commission’s recommendations have not been accepted by the federal government. There is no legal or regulatory framework for them. Nonetheless, it is worth repeating that Idaho does not consent to accepting commercial radioactive waste, as is clearly stated in the 1995 Settlement Agreement. That prohibition must stand. Nuclear research at INL can be done on material that is already present there. Battelle might even want to consider growing its non-nuclear work. The 1995 Settlement Agreement remains instrumental in supporting the cleanup mission at the Site and should not be modified or changed.

**6. How can Idaho’s universities influence, support and participate in the future of nuclear energy, nuclear workforce development, and advancements in nuclear technologies?**

The Center for Advanced Energy Studies and STEM programs provide avenues for the participation of Idaho’s universities in nuclear energy. Idaho universities have key training programs for the nuclear workforce. Further effort should also focus on training and support for workforce development in clean energy sectors focused on renewable energy.

**7. Following the impacts of the Fukushima tsunami and the recent market impact of expanded natural gas supplies, what future role will nuclear energy play in the nation’s energy policies and what can Idaho do to prepare for that future?**

Even before the Fukushima nuclear crisis, the nuclear industry was sputtering in the face of the high capital costs of building new nuclear power plants. The industry has now stalled and there is little indication that it will be a central part of the nation’s future energy portfolio.

**Among the questions that must be considered by the State of Idaho are the following:**

**What does it mean to be the nation’s lead nuclear energy laboratory?**

It is not clear what it means to be the nation’s lead nuclear energy laboratory from the LINE Commission’s work thus far. INL’s current missions are overlooked in favor of purely speculative future work.

**Does the State of Idaho support that designation and want INL to maintain it?**

This question reads a bit like the opening of a ransom note.

**What kind of research will need to be done at the lead nuclear energy laboratory?**

Research at INL does not require lifting Idaho’s ban on commercial radioactive waste. It is irresponsible to pit the future of INL against the 1995 Settlement Agreement and to imply that Idahoans must accept radioactive waste to protect the Site’s future.

**The designation as the nation’s lead nuclear energy laboratory requires INL to conduct research on various nuclear materials, including small quantities of commercial spent fuel and materials associated with research into high burn-up fuels. In order to fulfill its mission as the lead nuclear energy laboratory, what types of nuclear materials will need to be brought to INL for research?**



The DOE has not proposed a project for research into high burn-up fuels. Idaho should be very cautious in the face of blandishments to change its policy to meet some other entities' uncertain goals.

**If bringing those research materials to Idaho requires changes to the 1995 Settlement Agreement, is Idaho willing to consider such changes?**

Research quantities of spent nuclear fuel are allowed into Idaho. The Settlement Agreement need not be changed.

**If Idaho is not willing to consider changes to the 1995 Settlement Agreement, is it instead willing to allow INL to lose its designation as the lead nuclear energy laboratory and see some or all of its research mission transferred to other DOE facilities?**

This is the second line of the ransom note. The LINE Commission has failed to provide any evidence that a change to the 1995 Settlement Agreement is needed. This hypothetical question is not based on fact.

### ***Conclusion***

Since the formation of the LINE Commission in February 2012, the Snake River Alliance has carefully monitored Commission proceedings and engaged fully with the Commission and Commission members to create an open dialogue meant to foster accurate information and serve as a pathway for the public to learn and respond to the Commission. The Progress Report released in early December certainly demonstrates that the Commission has grappled with myriad issues related to the nuclear industry and INL. Nevertheless, the many proposals discussed in the report are focused on helping industry in ways that industry may never pay for.

Fundamentally, our members join others throughout Idaho who are deeply concerned that the LINE Commission's work might lead to weakening the 1995 Settlement Agreement. This direction is not acceptable. There is zero evidence that the role of INL must be linked to lifting the ban on commercial radioactive waste. We trust the final recommendations sent to the governor will be grounded in the historical, economic, and future realities INL faces and not endorse any attempts to modify the 1995 Settlement Agreement. We reject the suggestion that Idaho should host a new nuclear waste dump, or as the report says, "A pilot US Regional Interim Storage Facility" (36).

Again, we thank the members of the LINE Commission and its subcommittees for your service and for your consideration of these comments. As always, we welcome your questions.

***-The Snake River Alliance, December 2012***