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Talking Points for BRC Public Meetings on Radioactive Waste Policy

PURPOSE: To support participation in Public Meetings of the Blue Ribbon Commission on America's Nuclear Future (BRC) in September and October 2011. BRC's goal is to obtain comments on its draft policy recommendations to the U.S. Secretary of Energy.

BRC Meeting schedule + details posted here:
http://www.brc.gov/index.php?q=announcement/brc-announces-its-public-meetings-input-draft-report The BRC's draft report (192 pages) is linked off the same page. These initial "talking points" are to assist those making short oral comments; NIRS will post more complete comments in October. Written comments may be filed at any time at www.brc.gov .

The BRC says nothing about stopping the production of radioactive waste, but does refer to the need to protect the "prospects for maintaining a potentially important energy supply option for the future." Which inspires:

Zero Point: We support identification of responsible radioactive waste management plans for the waste that currently exists. However we know, unequivocally, that there is zero **guarantee** that the tens of thousands of tons of deadly material capable of disrupting health and normal reproduction (in some cases reproduction at all) will be contained and insolated from the biosphere for the hundreds of millennia that it will remain a hazard. Therefore it is only logical, based on the principle of **precaution,** that this report clearly reflect that **stopping the generation of any additional radioactive waste** will assist the implementation of any reasonable and responsible waste management plan. Every Curie counts.

The **Executive Summary** of the BRC draft report includes "seven key elements"
-- we offer "● *points*" after each numbered "element."

THE (BRC) RECOMMENDATIONS:

The strategy we recommend in this draft report has seven key elements:

- *The Commission fails to adopt "stop making waste" as its central theme, and so its "strategy" is really a plan to enable the production of more new waste. This is a failure since protection of public and environmental health and safety should be paramount for a publicly chartered Commission.*

1. A new, consent-based approach to siting future nuclear waste management facilities.

- *"Consent" must be defined -- and if it is to become the basis for federal policy or law, it must embody the rights conferred under the U.S. Constitution while not eclipsing the same for anyone else. We are already in a very difficult situation since this waste was generated without "consent".*
- *We disagree that waste management should involve new sites in the plural. We need to use the sites where waste is now for the "interim" management.*
- *Institute "HOSS" (hardened on-site storage) at the existing waste sites -- Principles for Safeguarding Nuclear Waste At Reactor Sites is appended to this document.*
- *Only move the waste once.*
- *A permanent program should be evaluated first as a single site, and only extended if there is empirical basis for reducing risk and increasing protection at multiple sites.*

2. A new organization dedicated solely to implementing the waste management program and empowered with the authority and resources to succeed.

- *We agree that the US Department of Energy has worn out its credibility, however we strongly oppose the privatization of radioactive waste management. It is appropriate that all aspects of radioactive waste management be subject to the requirements of the Sunshine laws including Federal Advisory Committee Act, the Freedom of Information Act and other forms of transparency and public access to participation and information.*
- *If the Federal Government sponsors privatization of this program, it would be appropriate for this decision to be subject to a Programmatic Environmental Impact Statement that would include all impacted communities.*
- *We do not support privatization of plutonium or any use of it in an "open market" setting. Any private entity taking title to this waste opens the door to this prospect.*

3. Access to the funds nuclear utility ratepayers are providing for the purpose of nuclear waste management.

- *We agree that the funds collected from nuclear energy customers for purposes of waste management should be available for that purpose.*
- *The dispute over "waste" versus "resource" must be resolved -- and waste fund money should only apply to managing waste, never plutonium ("resource") separation.*
- *Nuclear electricity rates should be raised to ensure that the true cost of waste management is covered. No other form of power generation should ever be taxed, or general tax dollars used to cover the ongoing costs of waste from nuclear power. The money currently in the Nuclear Waste Fund is insufficient to cover permanent storage, much less interim storage.*

4. Prompt efforts to develop one or more geologic disposal facilities.

- *We support scientifically based, federally regulated permanent isolation of this deadly waste from our environment for as long as it is a hazard.*
- *Start with containment, including how the waste is stored now and any step from this point forward. Each step is vital in delivering the containment and isolation goal.*
- *We support a credible scientific basis for the determination of how many permanent/long-term sites are needed. We reject the idea that the future generation of*

more waste should determine the number of sites as embodied in the current law. Stop making more!

5. Prompt efforts to develop one or more consolidated interim storage facilities.

- *Interim storage should be at the point of generation. Reactor sites and nuclear weapons production sites already are interim storage sites.*
- *The exact same storage technology would be used at the new "interim" location, while incurring the additional risk of additional transport.*
- *An "interim site" is never the consolidation of waste unless and until the generation of new waste at all other sites stops. Until then, it is only one more site.*
- *Interim storage at existing sites must maximize security and safety for the local community (See Principles of Safeguarding Nuclear Waste at Reactor Sites below)*
- *We oppose centralized interim storage in all cases; this most hazardous of wastes should be moved only **once.***
- *Like Superfund, the responsibility for generation should extend to all corporations that contributed to and profited from the generation of the waste in perpetuity so that closed sites are never "orphaned".*
- *All interim storage sites should have waste handling/containerization capacity (pool).*

6. Support for continued U.S. innovation in nuclear energy technology and for workforce development.

- *The only nuclear energy generation we support is 93 million miles away.*

7. Active U.S. leadership in international efforts to address safety, waste management, nonproliferation, and security concerns.

- *Communicating and group problem solving = good. Dumping on others = bad.*

March 24, 2010

Principles for Safeguarding Nuclear Waste at Reactors

The following principles are based on the urgent need to protect the public from the threats posed by the current vulnerable storage of commercial irradiated fuel. The United States does not currently have a national policy for the permanent storage of high-level nuclear waste. The Obama administration has determined that the Yucca Mountain site, which has been mired in bad science and mismanagement, is not an option for geologic storage of nuclear waste. Unfortunately, reprocessing proponents have used this opportunity to promote reprocessing as the solution for managing our nuclear waste. Contrary to their claims, however, reprocessing is extremely expensive, highly polluting, and a proliferation threat, and will actually complicate the management of irradiated fuel. Nor will reprocessing obviate the need for, or "save space" in, a geologic repository.
The United States has a unique opportunity to re-evaluate our nuclear waste management plan. We can make wise decisions about safeguarding radioactive waste or go down the risky, costly, and proliferation prone path towards reprocessing.

The undersigned organizations' support for improving the protection of radioactive waste stored at reactor sites is a matter of security and is in no way an indication that we support nuclear power and the generation of more nuclear waste.

- **Require a low-density, open-frame layout for fuel pools:** Fuel pools were originally designed for temporary storage of a limited number of irradiated fuel assemblies in a low density, open frame configuration. As the amount of waste generated has increased beyond the designed capacity, the pools have been reorganized so that the concentration of fuel in the pools is nearly the same as that in operating reactor cores. If water is lost from a densely packed pool as the result of an attack or an accident, cooling by ambient air would likely be insufficient to prevent a fire, resulting in the release of large quantities of radioactivity to the environment. A low density, open-frame arrangement within fuel pools could allow enough air circulation to keep the fuel from catching fire. In order to achieve and maintain this arrangement within the pools, irradiated fuel must be transferred from the pools to dry storage within five years of being discharged from the reactor.

- **Establish hardened on-site storage (HOSS):** Irradiated fuel must be stored as safely as possible as close to the site of generation as possible. Waste moved from fuel pools must be safeguarded in hardened, on-site storage (HOSS) facilities. Transporting waste to interim away-from-reactor storage should not be done unless the reactor site is unsuitable for a HOSS facility and the move increases the safety and security of the waste. HOSS facilities must not be regarded as a permanent waste solution, and thus should not be constructed deep underground. The waste must be retrievable, and real-time radiation and heat monitoring at the HOSS facility must be implemented for early detection of radiation releases and overheating. The overall objective of HOSS should be that the amount of releases projected in even severe attacks should be low enough that the storage system would be unattractive as a terrorist target. Design criteria that would correspond to the overall objective must include: Resistance to severe attacks, such as a direct hit by high-explosive or deeply penetrating weapons and munitions or a direct hit by a large aircraft loaded with fuel or a small aircraft loaded with fuel and/or explosives, without major releases. Placement of individual canisters that makes detection difficult from outside the site boundary.

- **Protect fuel pools:** Irradiated fuel must be kept in pools for several years before it can be stored in a dry facility. The pools must be protected to withstand an attack by air, land, or water from a force at least equal in size and coordination to the 9/11 attacks. The security improvements must be approved by a panel of experts independent of the nuclear industry and the Nuclear Regulatory Commission.

- **Require periodic review of HOSS facilities and fuel pools:** An annual report consisting of the review of each HOSS facility and fuel pool should be prepared with meaningful participation from public stakeholders, regulators, and utility managers at each site. The report must be made publicly available and may include recommendations for actions to be taken.

- **Dedicate funding to local and state governments to independently monitor the sites:** Funding for monitoring the HOSS facilities at each site must be provided to affected local and state governments. The affected public must have the right to fully participate.

- **Prohibit reprocessing:** The reprocessing of irradiated fuel has not solved the nuclear waste problem in any country, and actually exacerbates it by creating numerous additional waste streams that must be managed. In addition to being expensive and polluting, reprocessing also increases nuclear weapons proliferation threats.