July 18, 2016

BATTING CLEAN UP: Radioactive Waste and California’s Future

*Trust is a fragile thing -- Easy to break, easy to lose, and one of the hardest things to ever get back.*

As more and more of the nation’s fleet of aging nuclear power plants is retired, the problem of “atomic energy” in the 21st Century becomes one of how to handle the vast volume of accumulated and hazardous high-level radioactive waste.

The news that PG&E plans to retire Diablo Canyon in San Luis Obispo no later than 2025 means that all California’s nuclear facilities will be shuttered and the Pacific Coast will become a de facto waste site for three of the four former plants. At that point, all California reactor communities, and the state as a whole, will be able to weigh in equally on this issue.

The Department of Energy (DOE) has begun outreach to states across the nation related to the beginning of its “consent-based” citing process for permanent storage of the nation’s highly radioactive waste. A goal of the program is to avoid the stalemate created when the Nuclear Waste Policy Act, nearly a quarter of a century ago, chose Yucca Mountain in Nevada as the only site to explore. Politically and scientifically, the gambit failed. To avoid a repeat, the DOE is now looking at models from other nations that have used the “consent-based” process to attract a community willing to host such a facility.

Three out of four nuclear plants in California have prematurely closed (and the closure of the fourth is underway). What is abundantly obvious is that the California coast and its reactor host communities would never pass muster as a site for the long-term storage of high-level radioactive waste.

It is clear from DOE representative James Hamilton’s statement at the “consent based” kick-off meeting that the “…the Atomic Energy Commission set some quite strict parameters for the location of facilities like this in a way that hinted at future points of contention limiting them, for example, to areas which were not prone to earthquakes.”1 [emphasis added]

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1 An Integrated Waste-Management System and Consent Based Kick-Off Meeting, Jan 20, 2016, page 2
What should be done?

The DOE should start by establishing a separate entity to deal specifically with the radioactive waste situation. The federal Blue Ribbon Commission on the future of radioactive waste (BRC) stated in its report to Energy Secretary Moniz in 2012: “...it will take time, commitment to action, and new authorizing legislation to implement our most important recommendations, particularly the recommendation to establish a new waste management organization.”

It seems fair to ask why a new agency, unburdened by a half-century of squandered time and resources and the degradation of trust that haunts the DOE’s legacy waste storage projects, has not yet been created. This new agency should include independent experts whose sole focus is the establishment of a technologically safe offsite waste repository.

Perhaps the problem is that the DOE has yet to shed its role as a proponent of nuclear energy. The Alliance remains skeptical that the DOE can both promote new reactors and solve the mounting waste problem pressing California, soon to be a site of nothing but inactive reactors and still deadly waste.

Evidence of the DOE’s current split personality, and thus unworkable process, is clear in Mr. Hamilton’s statement at their Kick-off meeting in Washington, D.C.:

“So our ability to meet climate goals will depend in no small part on ensuring the continued viability of America’s nuclear energy industry...But meeting long-term nuclear waste management needs is an absolutely essential component of ensuring that nuclear power continues to provide the nation with safe, sustainable and responsibly generated electricity.”

Here is where California is unique, and as it has done historically in so many arenas, takes a leadership role: With the announcement of the phase-out of Diablo Canyon and its replacement with renewable energy and efficiency, the utility and our state renders moot the DOE’s need to “keep nuclear power alive.” We are entering the “cleanup phase” in more than a metaphorical sense.

Both Senator Feinstein and Congressman Issa are calling on the federal government to move this waste off of our seismically active coast. Yet the DOE came to California to discuss “consent-based” siting in a state that could never

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2 The Blue Ribbon Commission on America’s Nuclear Future Report to the Secretary of Energy On Jan 12, 2012, page 13
possibly host such a facility. What the DOE, or better still, the new agency tasked to deal specifically with waste disposal *should be doing* is holding consent-based meetings in the locations that may have any chance of meeting the criteria and may be considering applying to become consent-based site.

A4NR believes that an inherent flaw in the DOE’s process is that rather than focusing on the decades-long problem of a permanent disposal site for highly radioactive waste, the Department is more interested in an interim solution as a panacea that could kick-start *the stillborn* nuclear renaissance. Solving waste storage is needed *now*; if remedying the faltering economics of a nuclear-powered future is the DOE’s goal, all the more reason for the creation of a new agency. The DOE’s plans for a nuclear renaissance will have no foothold in California, and its failings have already resulted in three California waste storage sites “prone to earthquakes.”

The Alliance does not advocate rushing hastily into another ill-considered site for the waste; nor do we wish to see it foisted on a community in a manner that creates an environmental injustice. Nevertheless, the seismic clock ticks onward, and the risks mount with each passing decade.

The DOE should be open and honest about the amount of transparency that is legal within the nuclear process. To blithely claim that any process that addresses storage and transportation of highly radioactive waste will be fully transparent is a disservice to the public, who can easily read of the agencies half-century of failures at their Hanford and Savannah River atomic sites.

A clear sign that the DOE and Congress have taken the recommendations of the Blue Ribbon Commission seriously by forming a new agency to solely focus on a permanent solution to offsite storage of highly radioactive waste is vital to productive engagement of both states and the public at large. California will begin to participate in earnest when transport routes are discussed and approved, and that will no doubt be subject to much contention. One can hope that by the time a site is selected, the knowledge and experience gained in that process can be applied to the transport routes.

That new agency is the resource the federal government needs to regain public trust and move forward on a national repository for commercial nuclear waste.

Californians, their state and local elected officials, and concerned businesses and residents should continue to demand a solution from the federal government.