### STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

IN RE:

**DOCKET NO. 265** 

PROPOSAL OF DOMINION NUCLEAR: CONNECTICUT, INC. TO MODIFY THE: EXISTING MILLSTONE [NUCLEAR]: POWER STATION TO ESTABLISH: AN INDEPENDENT SPENT FUEL: STORAGE INSTALLATION (DRY: STORAGE SYSTEM) ON PROPERTY: LOCATED OFF ROPE FERRY ROAD: IN THE TOWN OF WATERFORD, CONNECTICUT:



CONNECTICUT SITING COUNCIL

MARCH 22, 2004

### CONNECTICUT COALITION AGAINST MILLSTONE AND CO-PARTIES' POST-HEARING BRIEF

The Connecticut Coalition Against Millstone ("CCAM") and co-parties Geralyn Cote Winslow, Clarence O. Reynolds, William H. Honan and Dr. Milton C. Burton (collectively, CCAM") submit herewith their Post-Hearing Brief.

The application fails to meet the statutory standards of Connecticut General Statutes, §16-50p and it is incomplete. In addition, it fails to comply with the Connecticut Environmental Protection Act. Accordingly, the application should be denied.

Connecticut General Statutes, §16-50p provides in pertinent part as follows:

Except as provided in subsection (c) of this section, the council shall not grant a certificate, either as proposed or as modified by the council, unless it shall, find and determine: (1) A public need for the facility and the basis of the need; (2) the nature of the probable environmental impact, including a specification of every significant adverse effect, whether alone or

cumulatively with other effects, on, and conflict with the policies of the state concerning, the natural environment, ecological balance, public health and safety, scenic, historic and recreational values, forests and parks, air and water purity and fish, aquaculture and wildlife; (3) why the adverse effects or conflicts referred to in subdivision (1) of this subsection are not sufficient reason to deny this application."

Section 16-50p(c) provides that for purposes of the statute as it concerns electric generators and storage facilities, "a public benefit exists if such a facility is necessary for the reliability of the electric power supply of the state or for a competitive market for electricity."

#### I. There is no public need for the facility.

The Dominion Nuclear Connecticut, Inc. ("Dominion") application proposes to construct an above-ground dry storage facility for spent nuclear fuel ("ISFSI").

The fuel is presently maintained in pools at each of the three Millstone reactors.

Dominion's representatives testified that the spent fuel pools presently provide safe storage for spent fuel.

Dominion recently received U.S. Nuclear Regulatory Commission approval to double the storage capacity of its Unit 3 pool. The Unit 3 pool will safely accommodate Unit 3 spent fuel through the year 2013 without further modification. Thus, an ISFSI is not needed for storage of Unit 3 spent fuel at this time. The record establishes that there is no public need for an ISFSI to accommodate Unit 3 spent fuel.

Dominion maintains that Millstone Unit 2 will run out of space to store additional spent fuel in its pool following the next scheduled refueling in the year 2005.

If there were a public need for the continued operation of Unit 2, an argument might be made that there is a public need for an ISFSI to accommodate Unit 2 spent fuel.

However, no evidence was presented in these proceedings that there is a public need for an ISFSI to be built for the sole purpose of continued operation of Unit 2.

Indeed, the evidence was to the contrary. The **870** megawatts generated by Unit 2 at full power are no longer needed in this state because other safer generators have come online since 1997 and generate a combined **3,162** megawatts, according to the Connecticut Siting Council, CCAM Exhibit 8.

Nor does an ISFSI designed to accommodate Unit 2 spent fuel qualify as a "public benefit" under the statute because no evidence was presented to establish that continued Unit 2 operations are necessary for the "reliability of the electric power supply of the state or for a competitive market for electricity."

Indeed, the evidence was to the contrary. Millstone Unit 2 is the most unreliable power plant in the State of Connecticut. See CCAM Exhibit 1. As former Millstone employee Clarence O. Reynolds testified:

Millstone Unit 2 has been plagued by unplanned shutdowns ("scrams") during its operational history. According to Dominion's own reckoning (See CCAM Exhibit I), Unit 2 has suffered 122 *unplanned* outages since going online in 1975, on an average of one every three months. This does not include the planned refueling outages which have kept the reactor shut down for 1,481 days, or 4.6 *years* (13.6 per cent) of its operational life. Many of the unplanned shutdowns –

which typically entail dropping from 100 per cent to zero power within a fraction of a second, causing enormous changes to heat and pressure and leading to metal fatigue and other hazards - have occurred repeatedly in malfunctioning systems. This was the case in March of 2003 when charging pumps malfunctioned and radiation was released into the environment. (See CCAM Exhibit 2.)

Indeed, during the brief interval between the close of the hearing and the deadline for briefs in this case, Millstone Unit 2 has suffered two more unplanned shutdowns within ten days of each other because of recurring problems with its pump systems. See www.nrc.gov.

# II. The application is incomplete insofar as it does not adequately identify the nature of the probable environmental impact.

The applicant's environmental assessment is cursory and incomplete and its testimony was evasive. Thereby, the applicant provided sufficient grounds for denial of the application without prejudice to submittal of a complete application.

#### A. Longterm Storage Impacts Not Considered

For purposes of this application, given the testimony of all as to the availability of an alternate location for storage of high-level nuclear waste in this country, the Council should consider that the application is for *de facto* permanent nuclear waste storage. However, the application fails to give any attention to the longterm environmental prospects of the above-ground storage. Thus, the application contains no analysis of the environmental effects of the facility in the coming decades and beyond as degradation of materials occurs. Unfortunately, the Siting Council will be without jurisdiction to address these shortcomings in the future because of federal preemption. Without adequate information fully

analyzing the environmental impact into the future, the application must be denied as incomplete.

#### B. Environmental Analysis Cursory

The application contains scanty information and analysis. For example, no information was provided in the application or at hearing about the probable impacts of flooding in hurricane conditions other than a cursory statement that the facility is designed for high levels of water. That response was misleading because the design criteria was pressure, not other aspects involved in a major hurricane or other turbulent weather event.

The application contains no analysis of heat impacts to the local environment.

At hearing, a calculation was presented orally without documentation as to the total heat load, but there was no analysis of the environmental effects.

The application contains no information on the probable environmental impact of a fire, although such an event is credible. (Testimony of David A. Lochbaum)

The application contains no information on the probable environmental impact of a major accident or malevolent act, although such event is credible. See, e.g., Riverkeeper, Inc. v. Collins, 2004 U.S.App. LEXIS 3398 (2d Cir. 2004)(released February 24, 2004) and Attorney General Richard S. Blumenthal's Petition to the U.S. Nuclear Regulatory Commission to shut down the Indian Point Nuclear Power Station, 68 Fed. Reg. 41, 187 (July 10, 2003).

Since Dominion failed to present evidence to the contrary in its rebuttal, the Siting Council should conclude from the testimony of David A. Lochbaum that the canisters proposed for the site by Dominion are of the "pre-911 Cheapie" version

which have not been tested under post-911 standards. The application contains no evaluation of the probable environmental consequences flowing from its use of "cheapie" canisters.

#### C. No Analysis of Public Health and Safety

The application provides no considered assessment of the consequences of the application on the public health and safety.

The record demonstrates that the consequences to the public health and safety are negative.

First, the application introduces a new source of routine radiation emissions into the environment. Even if the facility works as designed, it will emit dangerous levels of radiation to all the workers who will provide routine maintenance and surveillance, as well as wildlife which may come into contact with it.

As the testimony of Kevin Kamps demonstrated, Dominion and other nuclear licensees have suffered serious problems with dry cask storage installations which pose a danger to the public health and safety. Dominion withheld this information from these proceedings until Mr. Kamps brought the information to light.

#### D. No Analysis of Effect on Scenic, Historic and Recreational Values.

The ISFSI site is within but a few hundred feet of a major regional recreational area – Jordan Cove – and only yards away from active community playing fields. The application contains no analysis of how recreational use will change if the application is approved.

## E. The Site Is Unsuitable for a *De Facto* Permanent Nuclear Waste Dump As Presently Proposed

The Millstone site suffers numerous constraints which make the siting of a *de facto* permanent nuclear waste dump clearly unsuitable.

First, the site is small. Two acres are set aside for the facility in the midst of an active and high-trafficked industrial area. The Millstone site itself is located within a densely populated urban area. Schools are nearby. Second, its location on a peninsula poses special security risks. The application provides no information on how security will be addressed. Third, high-tension transmission lines are in the way. Fourth, being close to sea level, and in a time of global warming, the site is subject to heavy flooding, which has not been analyzed. For all of these reasons, one would suspect, the Waterford Zoning Regulations sensibly preclude a high-level longterm nuclear waste storage facility at this location.

#### F. Prudent Alternatives Are Available

The following prudent and feasible alternatives are available and have not been sufficiently considered:

- Early shutdown of Unit 2 and conversion of the site to a clean energy generator;
- 2. Use of "post-911" canisters after thorough consideration in light of the American Academy of Sciences analysis *per* Mr. Lochbaum's testimony.

#### 3. Onsite burial

Onsite burial with proper engineering would provide more protection to the public health and safety than the proposed above-ground, highly visible facility.

4. Transport to the Commonwealth of Virginia.

Dominion's Surry site is large enough to accommodate the Millstone nuclear waste and easily accessible by water. According to Dominion's testimony, it has not studied this alternative.

#### 5. Transfer of Spent Fuel to Millstone Unit 3

This alternative is feasible and prudent and would avoid the creation of a new source of routine radiation emission to the environment and the associated risks of the ISFSI for the present time.

#### Conclusion

If the Siting Council approves an ISFSI of whatever dimension, it will lose its jurisdiction. Any conditions barring importation of nuclear waste from offsite would be nugatory as federal pre-emption would rule. Thus, a township ordinance prohibiting importation of spent nuclear fuel for storage within the locality is preempted by federal law and unenforceable. Jersey Cent. Power & Light Co. v. Lacey, 772 F.2d 1103 (3<sup>rd</sup> Cir. 1985), cert. den. 475 U.S. 1013.

In the deregulated energy environment, it should be borne in mind that Dominion's plans represent a business decision for which it is accountable to its shareholders. In these proceedings, Dominion refused to commit itself to removing the spent fuel offsite. Dominion may absolve itself of any obligations now or in the future with regard to the spent fuel by dissolving itself.

It is respectfully submitted that the citizens of Connecticut are entitled to robust rather than "cheapie" de factor permanent storage of high-level nuclear waste if they are to have to host it in their backyards. Terrorism is a factor at

Millstone as it is at Indian Point. Because the U.S. Nuclear Regulatory

Commission refuses to recognize the threat and act responsibly to protect the public health and safety, see, e.g., <u>Riverkeeper, Inc.</u>, supra, the responsibility of the Connecticut Siting Council is heightened significantly.

In these proceedings, CCAM's witnesses acquainted the Council with the dismal record of oversight practiced by the NRC. In its oversight, the NRC did not notice that Northeast Utilities lost track of two spent fuel rods from Millstone Unit 1. The rods still have not been located after 20 years. The residents of Connecticut deserve better protection. The CCAM parties therefore look to the Siting Council to exercise the highest level of prudence and caution with regard to this application, recognize it as a preliminary application and reject it.

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#### **CERTIFICATION**

This is to certify that a copy of the foregoing was mailed on March 22, 2004 to the following via U.S. Mail, postage pre-paid:

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