IN THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 10-1082

STATE OF WASHINGTON, Petitioner

v.

UNITED STATES DEPARTMENT OF ENERGY, et al., Respondents

ON PETITION FOR REVIEW AND FOR DECLARATORY AND INJUNCTIVE RELIEF

RESPONDENTS' RESPONSE IN OPPOSITION TO PETITIONER'S MOTION FOR PRELIMINARY INJUNCTION

IGNACIA S. MORENO Assistant Attorney General Environment & Natural Resources Division

LISA E. JONES
AARON P. AVILA
ALLEN M. BRABENDER
ELLEN J. DURKEE
Appellate Section, Environment & Natural
Resources Division, U.S. Dep't of Justice
P.O. Box 23795, L'Enfant Plaza Station
Washington, D.C. 20026
(202) 514-4426

On April 13, 2010, the State of Washington filed a Petition for Review and for Declaratory and Injunctive Relief seeking review of an alleged decision by the Department of Energy ("DOE") and the Secretary of Energy "to irrevocably terminate development of a permanent repository for high-level radioactive waste and spent nuclear fuel at Yucca Mountain, Nevada" by, among other things, moving to withdraw a license application for construction authorization. Pet. 1. Petitioner also moved for a preliminary injunction enjoining DOE "from taking any further actions to terminate or dismantle operations related to the siting and licensing of a permanent nuclear waste repository at Yucca Mountain" pending this Court's review. Mt. 1.

The motion should be denied for multiple, independent reasons. First, Petitioner is unlikely to prevail on the merits. While there is no dispute that, as a policy matter, DOE has decided to consider new approaches to disposition of spent nuclear fuel and high-level radioactive waste and that DOE has filed a motion with the Nuclear Regulatory Commission ("NRC") requesting to withdraw its pending license application with prejudice. The case is also not justiciable under ripeness and exhaustion principles. Significantly, on April 23, 2010, the Commissioners of the NRC issued an order directing the NRC Licensing Board to issue a decision on DOE's motion no later than June 1, 2010.

Moreover, nothing that DOE has done or intends to do violates any statute. On the contrary, the Secretary of Energy is merely exercising authority expressly granted to him by the Atomic Energy Act and DOE Organization Act in a manner that is consistent with the NRC's rules, as the Nuclear Waste Policy Act ("NWPA") explicitly contemplates. Equally important, Petitioner cannot meet the irreparable

injury requirement for injunctive relief. Petitioner's claim of harm is that, at some point in the distant future – at least a decade from now – high-level waste will not leave Washington as quickly as it otherwise would unless this Court grants an immediate injunction. Pet. 6-7. However, the NWPA does not authorize the opening or operation of a Yucca Mountain repository. Even if DOE proceeded with the Yucca Mountain license application and NRC approved it, there are many contingencies – including Congress passing new legislation – that would need to occur before any Yucca Mountain repository could be constructed and operated. And, by the same token, alternatives to Yucca Mountain, such as interim storage, could well result in waste leaving Washington more quickly. In all events, no action DOE has taken or is planning to take would prevent it from resuming licensing activities if required to do so by a court or agency. For these reasons, Petitioner's claim involves speculative, remediable injury years in the future, not irreparable injury that is of "such imminence that there is a 'clear and present' need for equitable relief." Chaplaincy of Full Gospel Churches v. England, 434 F.3d 290, 297 (D.C. Cir. 2006) (citation omitted).

Even if Petitioner could establish immediate, irreparable harm, the balance of harms and the public interest weigh against granting the motion. The injunction that Petitioner seeks would thwart DOE's efforts to ensure an orderly and responsible conclusion to the Yucca Mountain licensing process and would impede DOE's ability to take measures that would protect relevant documents and scientific knowledge, as well as to treat federal employees fairly.

BACKGROUND

A. DOE's Statutory Authority - DOE has broad authority to manage radioactive waste. The Atomic Energy Act, enacted in 1954, established a comprehensive regulatory regime for defense and civilian nuclear energy and vested in the Atomic Energy Commission the exclusive, plenary responsibility to regulate nuclear materials covered by the Act. 42 U.S.C. § 2011 et seg.; see, e.g., 42 U.S.C. §§ 2210(b), 2201(i)(3). DOE and NRC are successors to the Atomic Energy Commission. Under the DOE Organization Act, Pub. L. No. 95-91, 91 Stat. 565, codified as amended at 42 U.S.C. §§ 7101 et seq., DOE's waste management responsibilities include control over existing government facilities for the treatment and storage of nuclear wastes; control over all existing nuclear waste in the possession or control of the government; establishment of facilities for treatment, storage, management, and ultimate disposal of nuclear wastes; and the establishment of programs for the treatment, management, storage, and disposal of nuclear wastes. 42 U.S.C. § 7133(a)(8)(A), (B), (C) and (E). Among other things, the Act confers on the Secretary of Energy broad discretion "to establish, alter, consolidate or discontinue such organizational units or components within the Department as he may deem to be necessary and appropriate." 42 U.S.C. § 7253(a).

B. DOE's License Application – In 1982 Congress enacted the NWPA, 42 U.S.C. § 10101 *et seq.*, to address the disposal of the Nation's nuclear waste. In pertinent part, 42 U.S.C. § 10134(b) provides that if the President recommends to Congress the Yucca Mountain site under § 10134(a) and site designation is permitted to take effect under § 10135, "the Secretary [of Energy] shall submit to the [NRC] an

application for a construction authorization for a repository at such site." *See* 42 U.S.C. § 101034(b). The NWPA does not impose on DOE any further obligations regarding the license application except for reporting requirements and does not require NRC to approve a license application. *See infra* at 11-13. Nor does it require – or even permit, without further congressional action (*see infra* at 12) – construction and operation of the repository if a construction license were approved.

In 2008, DOE submitted to the NRC a license application for construction authorization for a permanent spent nuclear fuel and high-level radioactive waste geologic repository at Yucca Mountain. The licensing proceeding, *In re U.S. Dep't of Energy*, Docket No. 63-001-HLW, ASLBP No. 09-892-HLW-CAB04, was docketed by NRC in September 2008, and is still pending, *see infra* at 5-6.

C. The Blue Ribbon Panel and Budget Request – Scientific and engineering knowledge on issues relevant to disposition of high-level waste and spent nuclear fuel has advanced dramatically over the two decades since the Yucca Mountain project was first initiated. ¹ Ex. 7; *see also* Ex. 4. On January 29, 2010, at the direction of the President, the Secretary of Energy established the Blue Ribbon Commission on America's Nuclear Future, chaired by former National Security Advisor Brent Scowcroft and former Congressman Lee Hamilton. The Commission will conduct a comprehensive review of, and consider alternatives for, disposition of spent nuclear

^½ For example, there have been substantial advances in knowledge relevant to the durations of storage of spent nuclear fuel. *See*, *e.g.*, 64 Fed. Reg. 68006 (1999); http://www.iaea.org/OurWork/ST/NE/NEFW/nfcms_spentfuel_conf2003_res.html (2003 international conference: "both wet and dry storage technologies have evolved significantly over the last 20 years"; "[e]stimated storage durations have been trending upward during the past few years").

fuel and high-level radioactive waste. *See* 75 Fed. Reg. 5485 (Jan. 29, 2010); Ex. 4. Congress endorsed this Commission by appropriating \$5 million in October 2009 for it to evaluate and recommend such "alternatives." Pub. L. No. 111-85, 123 Stat. 2845, 2864-65 (2009). The Commission must issue recommendations within 24 months and consider solutions not only for commercial spent nuclear fuel but also for DOE high-level waste. Ex. 5 ¶ 10. Future proposals for the disposition of high-level waste and spent nuclear fuel will be informed by the Blue Ribbon Commission's comprehensive scientific analysis.

On February 1, 2010, the Administration's Fiscal Year (FY) 2011 Budget stated that "[i]n 2010 the Department [of Energy] will discontinue its application[] to the [NRC] for a license to construct a high-level waste geological repository at Yucca Mountain." Ex. 6, p. 437, 62. It further stated that "all funding for development of the [Yucca Mountain] facility will be eliminated" for FY 2011. *Id.* DOE remains committed, however, to fulfilling the federal responsibility to provide for the permanent disposal of the Nation's spent nuclear fuel and high-level radioactive waste and to meet its contractual obligations under the Standard Contract with nuclear utilities. Meeting this commitment does not depend on development of a repository at Yucca Mountain.

D. Pending Motion to Withdraw – On March 3, 2010, DOE filed in the licensing proceeding before the NRC's Atomic Safety and Licensing Board ("Board") a motion to withdraw its license application. Ex. 7. Five parties, including the State of Washington, petitioned to intervene to oppose DOE's motion. In an April 6, 2010, order the Board announced that it would withhold decisions on the petitions to

intervene and DOE's motion to withdraw pending this Court's ruling on petitions pending before this Court. Ex. 9. Although NRC's regulations and fundamental principles of administrative law assign those decisions to the Board in the first instance, the Board deemed it more expedient to wait for this Court's "guidance" on whether DOE has authority to seek to withdraw the license application, and then decide whether to grant DOE's motion. Ex. 9 at 12. On April 12, 2010, DOE filed a request for review of the Board's interlocutory order by the Commission, the body with the final authority over NRC adjudications. Ex. 10. On April 23, 2010, the Commission granted DOE's request and ordered the Board to establish a briefing schedule on DOE's motion to withdraw and to issue a decision on DOE's motion no later than June 1, 2010. Ex. 19.

Given the likelihood that DOE will have no funds for FY 2011 for Yucca Mountain activities (including licensing), DOE has taken measures to suspend most activities related to the licensing of the repository and has redirected its focus to ensuring an orderly conclusion of such activities by the end of FY 2010, including the preservation of scientific data and program records related to Yucca Mountain and assistance to affected federal employees. Ex. 1; *see infra* n. 9,10.

ARGUMENT

"A preliminary injunction is an extraordinary remedy never awarded as of right." *Winter v. NRDC*, 129 S. Ct. 365, 376 (2008). A party seeking a preliminary injunction must establish that it is likely to succeed on the merits, that it is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in its favor, and that an injunction is in the public interest. *Id.* at 374. The movant

bears the burden of proving these factors *Davis v. Pension Ben. Guar. Corp.*, 571 F.3d 1288, 1292 (D.C. Cir. 2009). Petitioner fails to satisfy its burden.

I. Petitioner is unlikely to succeed on the merits.

A. This Court lacks jurisdiction; Petitioner fails to state a claim upon which relief can be granted; and the petition is non-justiciable – The petition invokes, *inter alia*, this Court's original and exclusive jurisdiction under 42 U.S.C. § 10139(a)(1)(A) over any civil action for review of any final decision or action of the Secretary of Energy, the President, or the NRC under Part A, subchapter I of the NWPA. Petitioner brings suit under the Administrative Procedure Act ("APA"), alleging violations of the NWPA, the National Environmental Policy Act ("NEPA"), and the APA.

The APA provides a waiver of sovereign immunity and a cause of action to review a "final agency action." *See* 5 U.S.C. §§ 702, 704. It does not, however, authorize the federal courts to entertain challenges to everything that an agency may

² Contrary to Petitioner's claim (Pet. 4), neither the Declaratory Judgment Act nor the APA are jurisdiction-conferring statutes. *See Skelly Oil Co. v. Phillips Petroleum*, 339 U.S. 667, 671-74 (1950) (Declaratory Judgment Act); *Trudeau v. FTC*, 456 F.3d 178, 183 (D.C. Cir. 2006) (APA). The petition shows a fundamental misunderstanding of the interplay between the NWPA and the APA. Although the NWPA can confer jurisdiction, it does not provide a waiver of sovereign immunity or a cause of action. The APA, conversely, can provide a waiver of sovereign immunity and a cause of action, but it cannot confer jurisdiction. *Cf. I.C.C. v. Brotherhood of Locomotive Engn'rs*, 482 U.S. 270, 282 (1987) ("While the Hobbs Act [a jurisdiction conferring statute similar to the NWPA] specifies the form of proceeding for judicial review . . ., it is the [APA] that codifies the nature and attributes of judicial review"). The APA can also provide a civil action for review of a NEPA claim. *See Public Citizen v. U.S. Trade Representatives*, 5 F.3d 549, 551 (D.C. Cir. 1993).

do, or fail to do, when conducting its business. *See Norton v. S. Utah Wilderness Alliance* ("*SUWA*"), 542 U.S. 55, 64 (2004). The APA's limitations necessarily exclude broad attacks on agency policies or how an agency implements a program assigned to it. *See Lujan v. Nat'l Wildlife Fed'n*, 497 U.S. 871, 891 (1990). Such programmatic and policy attacks are to be made in the offices of the Executive branch or the halls of Congress, not the courts *Id.* Thus, under the APA, Petitioner cannot challenge DOE's policy toward Yucca Mountain or the administration of its on-going high-level nuclear waste and spent fuel program. *See Cobell v. Kempthorne*, 455 F.3d 301, 307 (D.C. Cir. 2006) ("Because an on-going program or policy is not, in itself, a final agency action under the APA, our jurisdiction does not extend to reviewing generalized complaints about agency behavior.").

The APA authorizes challenges only to discrete, circumscribed, and final agency actions, *see Nat'l Wildlife Fed'n*, 497 U.S. at 891-94; *SUWA*, 542 U.S. at 63-65, and then authorizes courts only to "hold unlawful and set aside" those discrete agency actions, *see* 5 U.S.C. § 706(2). Here, Petitioner has not challenged an "agency action" much less a "final agency action." Thus, Petitioner has failed to state an actionable cause for relief under the APA, and, because finality is a jurisdictional prerequisite to filing in the court of appeals pursuant to the NWPA, 42 U.S.C. § 10139(a)(1)(A), this Court lacks jurisdiction.

³The APA defines "agency action" as "the whole or a part of an agency rule, order, license, sanction, relief, or the equivalent or denial thereof, or failure to act." 5 U.S.C. § 551(13). To be considered "final": (1) the action must mark the consummation of the agency's decision-making process and not be merely tentative or interlocutory in nature; and (2) the action must be one by which rights or obligations have been determined or from which legal consequences will flow. *See Bennett v. Spear*, 520 U.S. 154, 178 (1997).

Petitioner's failure to identify the final agency action being challenged or to attach any order or decision document to the petition as required by Fed. R. App. 15(a)(2)(C) is telling. To be sure, the petition lists several statements made, or steps taken by, DOE with respect to its ongoing spent nuclear fuel and high-level nuclear waste program. Pet. 20-27. These include statements by the Secretary of Energy and DOE regarding Yucca Mountain, FY 2011 budget request, motion to withdraw the license application, withdrawal of ground water permit applications (relating to building a railroad for which planning ceased in 2009), cessation of certain operational activities at Yucca Mountain, and steps to close the Office of Civilian Radioactive Waste Management ("OCRWM"). These statements or actions are not reviewable under the APA, however, because they are not "final agency action"; they are activities committed to DOE's discretion by law, see 5 U.S.C. § 701(a)(2); and/or Petitioner lacks standing to complain about the activity.

As this Court stated in holding that a budget request is not a reviewable final agency action: "Much of what an agency does is in anticipation of agency action.

⁴ Petitioner's allegations are not necessarily correct. For example, Petitioner's allegation (Pet. ¶77) that DOE plans to formally terminate the USA-RS contract is incorrect. *See* Ex. 1 ¶8. Petitioner also erroneously implies that activity screening has been cancelled (Pet. ¶76). It has not. *See* Ex. 2 ¶8.

In addition, the NWPA vests this Court with "original and exclusive jurisdiction over any civil action – for review of any final decision or action . . . under this part." 42 U.S.C. § 10139(a)(1)(A) (emphasis added). To the extent any final agency action has been taken by DOE, that action would not have been taken under Part A, subchapter I of the NWPA. Rather, such an action would have been taken pursuant to DOE's authority under the Atomic Energy Act or the DOE Organization Act (which authority the NWPA did not revoke), and Petitioner, who bears the burden of conclusively establishing this Court's jurisdiction, has not shown otherwise.

Agencies prepare proposals, conduct studies, meet with members of Congress and interested groups, and engage in a wide variety of activities that comprise the common business of managing government programs." *See Fund for Animals v. BLM*, 460 F.3d 13, 19-20 (D.C. Cir. 2006). The budget request and the other statements and actions that Petitioner identifies represent the normal everyday discretionary activities undertaken, and statements made, by federal agencies. They are not "agency actions" within the meaning of the APA, *i.e.*, they are not a rule, order, license, sanction, or relief, *see* 5 U.S.C. § 551(13). "The most that can be said is that [the budget request and other items] outline the goals and methods of [DOE's] administrative program." *Id.* at 20. DOE's filing of a motion to withdraw its license application is also not a final agency action because, until the NRC rules on the motion, it has no legal consequences. *See supra* n.3.

Principles of justiciability, including ripeness and exhaustion doctrines, and fundamental principles of administrative law similarly support withholding judicial review until the NRC makes a decision on DOE's motion to withdraw the license application. As the Commission explained in its April 23, 2010, order, withholding judicial review until after the NRC has applied its expertise in the interpretation of the Atomic Energy Act, the NWPA, and NRC's regulations will inform and benefit the Court's consideration of issues. Ex. 19 at 4. The Commission's order directs the Board to resolve DOE's motion to withdraw by June 1, 2010.

B. Petitioner is unlikely to succeed on the merits of its NWPA claim – Petitioner contends (Mt. 10-12) that 42 U.S.C. § 10134(b) requires DOE to continue inexorably the construction authorization application process, depriving DOE of all

discretion in that process and thus forbidding DOE from moving to withdraw the license application. The plain text of that provision, however, simply requires the Secretary to "submit to the [NRC] an application." *Id.* It neither directs nor circumscribes DOE's actions with respect to the application after its submission. It does not require the Secretary to continue with the application proceeding if the Secretary decides that doing so is contrary to the public interest. The NWPA must be read in concert with the broad discretion granted to the Secretary under the Atomic Energy Act and DOE Organization Act to manage disposition of nuclear waste.

Moreover, in 42 U.S.C. § 10134(d), Congress explicitly provides that the licensing proceeding must be conducted "in accordance with the laws applicable to such applications." Those laws include the NRC's regulations governing license applications, including 10 C.F.R. § 2.107(a), which allows an applicant to request withdrawal of a license application and empowers NRC to regulate the withdrawal's terms and conditions.

Petitioner errs in suggesting (Mt. 11-12) that the structure or broader context of the NWPA supports its reading. Petitioner's core assumption that the NWPA requires DOE to move forward with "project implementation" through the "develop[ment] of a repository" (Mt. 10, 12), is incorrect. Although Congress established a process that led to the 2002 decision to authorize the filing of a license

⁹ Contrary to Petitioner's suggestion (Mt. 11), the further proviso in § 10134(d) setting a time limit for issuance of NRC's final decision approving or disapproving the license application imposes no restraint on DOE's authority or right to seek a withdrawal of the license application pursuant to NRC regulations. Among the actions the NRC may take in response to a motion to withdraw a license application is disapproval of the license. 10 C.F.R. § 2.107(a).

application, Congress has not required - or even permitted - the development of a repository. Construction and operation of a repository at Yucca Mountain clearly would require further action by many parties, including most importantly in this regard, Congress itself. Ex. 1 ¶10; Ex. 17. Petitioner relies on a mere *reporting* provision in 42 U.S.C. § 10134(e) as evidencing Congress's intent to compel DOE to march inexorably forward with developing the repository regardless of evolving knowledge and circumstances. This provision provides that the Secretary shall prepare and update, as appropriate, a "project decision schedule that portrays the optimum way to attain the operation of the repository, within the time periods specified in this part." 42 U.S.C.§ 10134(e). Contrary to Petitioner's reading, this reporting provision shows that Congress was not trying to anticipate every eventuality or imposing specific, judicially-enforceable mandates to develop and open the facility. Indeed, consistent with this understanding, Congress has funded the Blue Ribbon Commission with the explicit purpose of studying and recommending

² See, e.g., S. Rep. No. 107-159 at 13 (2009) ("It bears repeating that enactment of the joint resolution will not authorize construction of the repository or allow DOE to put any radioactive waste or spent nuclear fuel in it or even allow DOE to begin transporting waste to it. Enactment of the joint resolution will only allow DOE to take the next step in the process laid out by the Nuclear Waste Policy Act and apply to the NRC for authorization to construct the repository at Yucca Mountain"); H.R. Rep. No. 107-425 at 7 (2002) (congressional approval would "allow" DOE "to apply for a license" with the NRC).

And to the extent the NWPA is ambiguous in that regard, the existence of such ambiguity means that there is not the requisite discrete, ministerial, or nondiscretionary duty to support an APA "failure to act" claim. *See SUWA*, 542 U.S. at 62-65. Moreover, DOE's interpretation of ambiguity in the NWPA is entitled to deference. *See Coeur Alaska, Inc. v. Southeastern Alaska Conserv. Council*, 129 S. Ct. 2458, 2469 (2009), and cases cited therein.

alternatives for the disposal of high-level waste and spent nuclear fuel based upon advances in science and engineering.

C. Petitioner is unlikely to succeed on the merits of its NEPA claim – At this time, DOE has not undertaken any actions that change the environmental status quo or trigger NEPA. And DOE has already completed detailed NEPA analyses of a potential decision *not* to proceed with a permanent geologic repository at Yucca Mountain. Exs. 12,13. Petitioner thus is not likely to prevail on its NEPA claims.

Petitioner's NEPA argument incorrectly presumes that DOE will not evaluate any significant impacts from any new and presently unidentified alternatives to Yucca Mountain. In Petitioner's words (Mt. 15), "the siting of an alternative geologic repository will create land, air, water, and transportation impacts that require examination in an EIS." As the Supreme Court has explained, however, an EIS "need not be prepared simply because a project is *contemplated*, but only when a project is proposed." Weinberger v. Catholic Action of Hawaii/Peace Educ., 454 U.S. 139, 146 (1981) (emphasis in original). There is no alternative to Yucca Mountain proposed Rather, the Blue Ribbon Commission has been tasked with at this time. recommending those alternatives. Exs. 4,5. Thus far, the Commission has made no recommendations for future waste disposal and DOE certainly has made no decisions on such recommendations. It is well-settled that such preliminary research and development efforts do not trigger NEPA, or constitute final agency action under the APA. See Northcoast Envtl. Center v. Glickman, 136 F.3d 660, 669 (9th Cir. 1998); *Ohio Forestry v. Sierra Club*, 523 U.S. 726 (1997). To the extent Petitioner requests that an EIS be prepared for an alternative site for a new repository or other action that has yet to be proposed, DOE will conduct the requisite NEPA analysis at the appropriate time. ⁹ See Ex. 14 at S-13.

Mountain because DOE already has extensively studied such impacts. NEPA does not require redundant analyses. *See* 40 C.F.R. §§ 1500.4, 1502.4, 1502.20, 1502.21. In its 2002 EIS and in its 2008 supplemental EIS on the Yucca Mountain proposal, DOE included a no action alternative proposing that Yucca Mountain not be built, and analyzed all direct, indirect, and cumulative impacts stemming from this no action alternative. Exs. 12,13. The 2002 EIS also compared the impacts of the no action alternative with the action alternatives. Ex. 12(1-78to-88, 17-1 to -59, App. K; Ex. 13 (7-8 to -10). The EIS directly addresses the very issues that Petitioner demands that a new EIS be prepared to evaluate (Mt. 16-17), including long and short term safety, air and water quality, job loss and community impacts. DOE has also taken into consideration potential impacts at Hanford stemming from any decision not to proceed with Yucca Mountain. Ex. 14(S-13, S-118). NEPA does not require DOE to duplicate its prior efforts or prepare an EIS for a decision that has yet to be made.

D. Petitioner is not likely to prevail on its APA claim. – Petitioner is not likely to prevail on its third claim (Pet. 30), alleging a violation of the APA's arbitrary and capricious standard. There can be no freestanding "arbitrary and capricious" APA review under § 706(2)(A) independent of another statute. *See, e.g., Oregon Natural Resources Council v. Thomas*, 92 F.3d 792, 797-99 (9th Cir. 1996). To the

² Contrary to Petitioner's suggestion (Mt. 16), study of other viable, and perhaps more expedient, options does not limit the range of alternatives that can be studied for NEPA purposes.

extent that Petitioner's APA claim alleges that DOE violates the NWPA or NEPA or has failed to provide sufficient explanation for its actions, such claims provide no basis for granting its request for a preliminary injunction for several reasons: (1) as explained above, DOE has not violated the NWPA or NEPA; (2) DOE has provided reasons for its actions, *e.g.*, Exs. 7, 18 at 18-19; (3) no administrative record has been filed yet; and (4) there is no basis for this Court to render even a preliminary assessment of the adequacy of DOE's explanations in the absence of final agency action and in light of the ongoing NRC proceeding. As the NRC's April 23, 2010, order attests, briefing on DOE's motion to withdraw has yet to occur and the NRC's expertise may inform and benefit this Court's review.

II. Petitioner will suffer no irreparable injury without an injunction – "[T]he basis of injunctive relief in the federal courts has always been irreparable harm." *Chaplaincy of Full Gospel Churches*, 454 F.3d at 297. "A movant's failure to show any irreparable harm is therefore grounds for refusing to issue a preliminary injunction, even if the other three factors entering the calculus merit such relief." *Id.* Petitioner has not shown its alleged injury is likely, imminent, or irreparable. Petitioner's motion devotes only two cursory paragraphs to this issue and asserts only that "irreparable damage *may* occur" absent a preliminary injunction. Mt. 19 (emphasis added). This is insufficient on its face. A movant must "show that in the absence of its issuance he *will suffer* irreparable injury." *Doran v. Salem Inn*, 422 U.S. 922, 931 (1975) (emphasis added). While statistical certainty is unnecessary, a "likelihood" is. *Winter*, 129 S. Ct. at 375.

Beyond that, the harm Petitioner claims is harm that would occur (if at all)

decades from now from retaining waste in Washington that might otherwise eventually go to Yucca Mountain. Such harm, however, necessarily is predicated on the assumption that absent the decisions that DOE has allegedly made, there would be an operating Yucca Mountain facility. No such facility, however, could exist *until at least 2020*, and the opening of such facility on that or any other date could occur only if, among many other things, Congress passed new legislation and NRC granted construction and operation licenses. Ex. 1 ¶10. At the same time, it may well be the case that alternative methods analyzed by the Blue Ribbon Commission, such as interim storage, would lead to taking waste more quickly from Washington than would pursuing the Yucca Mountain alternative. The claimed harm here is thus speculative, distant, and contingent, not imminent and likely.

In any event, Petitioner fails to demonstrate that its injury is "irreparable" without an injunction. "Irreparable" means permanent or at least of sufficiently long duration to make it effectively permanent. *See Amoco Production Co. v. Village of Gambell*, 480 U.S. 531, 545 (1987). However, if any NRC or court decision should require DOE to continue with the license application, a workforce can be reassembled and contracts can be renewed. Moreover, the existing data relevant to the application

¹⁰ As David Zabransky, Acting Principal Deputy Director of OCRWM explains (Ex. 1 ¶6), DOE is assisting OCRWM federal employees seeking to remain at DOE and, to the extent successful, this would facilitate efforts to reconstitute the Yucca Mountain work force, should the need arise. With respect to the non-federal work force, approximately 141 individuals work for Sandia National Laboratory or other National Laboratories. DOE's expectation is that many of these individuals will continue to be employed by the Laboratories (to perform work on other projects) and their continued employment could facilitate establishment of a National Laboratories' support team if DOE is required to continue with the license

is being preserved and performance confirmation can be resumed. To be sure, restarting the licensing application process may well involve some delay, but delay alone is not irreparable injury. *See I.A.M. Nat'l Pension Fund Benefit Plan A v. Cooper Indus., Inc.*, 789 F.2d 21, 24-25 (D.C. Cir. 1986); *Nat'l Treasury Employees Union v. King*, 961 F.2d 240, 244 (D.C. Cir. 1992) (normal administrative delay not generally irreparable injury). Petitioner must, but fails to, identify some concrete and legally cognizable irreparable injury to its interests flowing from the potential for delay in restarting the licensing process before the extraordinary remedy of a preliminary injunction may issue.

Any delay also must be put in context. As noted, a Yucca Mountain repository could not have opened before 2020 at the earliest. Ex. 1 ¶10. The NRC has directed the Board to issue a decision on DOE's motion to withdraw by June 1, 2010. Additionally, the current posture of the licensing proceeding does not affect the NRC Staff's independent technical review of the application; rather, the Staff expects to

application. *Id.* ¶7. Finally, there are no plans to terminate the Management and Operating Contract. Because the contract would remain in effect, DOE could add tasks to the contract to support licensing. *Id.* ¶8. The requested injunction could adversely effect these efforts.

DOE is maintaining all the functionalities of the "licensing support network" database containing the documents relevant to the licensing proceeding as well as materials of scientific significance. *See* Ex. 15 at 2. DOE could resume collection of data on rainfall and seismicity at Yucca Mountain and could validate the absence of any significant changes by reviewing data collected by others in the same general area. Ex. 2 ¶4. DOE also can obtain necessary data on tunnel convergence and rockfall through visual observation of the tunnel should inspections resume. *Id.* Contrary to Petitioner's suggestion (Mt. 1), performance confirmation monitoring without interruption is not legally required.

complete only two of five volumes of the Safety Evaluation Report on the application by November 2010, and not to complete the remaining three volumes until February 2012. Ex. 9 at 3. Hearings in the licensing proceeding on contested factual issues ordinarily would not take place until after the NRC Staff issues relevant portions of the Safety Evaluation Report. Ex. 16 at 1-2.

Petitioner emphasizes (Pet. 9-15) the "imminent" need to address tank waste at Hanford. However, as detailed in the Declaration (Ex. 3) of Dr. Ines Triay, DOE's Assistant Secretary for Environmental Management, high-level waste at Hanford already is being addressed by DOE's ongoing long term cleanup, irrespective of whether Yucca Mountain is delayed or never constructed. Ex. 3 ¶ 6-11. That cleanup includes the retrieval of highly radioactive mixed waste stored in underground storage tanks, the construction of a massive waste treatment plant to treat that high-level waste, and ultimately the treatment of that waste at the plant, by converting it to glass through vitrification. Vitrification is a prerequisite to transportation and storage at any repository and the process of converting all of the liquid high-level waste into glass waste forms will take several decades to accomplish; thus Petitioner has long known that such waste forms would remain on site for a lengthy period of time. *Id.* ¶ 11. Sufficient capacity exists or will be constructed at Hanford to store such wastes with no adverse impacts on the environment. Ex. 14 at 4-213, 4-218; Pet. Ex. 1, Attach 1 at 5. The notion that Hanford cleanup or construction of the treatment plant is dependent on opening Yucca Mountain is simply incorrect. 12 Ex. 3 ¶¶7,11, 13.

 $^{^{12}}$ The schedule for accomplishing this cleanup already is the subject of a proposed consent decree that DOE has negotiated with Washington, *State of Washington v*.

Petitioner also errs in suggesting (Pet. 14-15, Ex. 1 at 19-20) that termination of the Yucca Mountain project could cause delay or adjustments in construction of the Hanford waste treatment plant (including alleged changes as extreme as a construction tear-down and rebuild of the plant) because the treatment plant is designed to meet Yucca Mountain-specific standards. Dr. Triay explains that there is no likelihood this would occur because the treatment process for Hanford – vitrification of high-level waste into borosilicate glass – is *not* a Yucca Mountain-specific process. Ex. 3 ¶12-14. This waste form is currently the international standard and the material vitrified at Hanford's planned waste treatment plant will be sufficiently robust for disposal in any permanent repository. *Id.*

III. The balance of the harms and the public interest weigh against enjoining **DOE** – DOE would be harmed, as would the public, by an order enjoining the activities DOE is currently taking for an orderly wind-down of the Yucca Mountain project. Although DOE has taken steps to close its offices that have supported the research and study of Yucca Mountain, it is doing so because – based upon the President's proposed FY 2011 budget – as of October 1, 2010, no money will be appropriated to Yucca Mountain activities. Ex. 1 ¶5. DOE is planning to take steps to ensure that it archives all relevant studies and research and doing so is costly. Ex. 1 ¶6. It is in the public interest for this archiving effort to occur in the near term because of the likelihood that there will be no funding in FY 2011. DOE is also attempting to assist federal employees to find other positions within DOE. *Id.* ¶6.

Chu, No. 08 5085 FVS (E.D. Wa.). The proposed settlement would, if finalized, require treatment of all high-level mixed waste from the tanks no later than 2047.

DOE anticipates that many National Laboratory employees currently supporting the Yucca Mountain project will remain at the Laboratories performing other tasks. *Id.* ¶7. DOE's anticipated actions are in the public interest because they would ensure that all necessary information can be adequately preserved. An injunction that prevents DOE from undertaking these activities before, for instance, employees voluntarily choose to pursue other jobs, will hinder these efforts.

Likewise, an injunction requiring DOE to prosecute its license application — which costs DOE (and the public) \$9 million per month — is not in the public interest. Ex. 1 ¶9. The Secretary has the authority to study the best and most expedient manner in which to address high level nuclear waste, and Congress has funded a Blue Ribbon Commission for that purpose. Taxpayers should not have to shoulder the burden of funding a license proceeding when the Secretary has determined to pursue other options, which will be informed by the Blue Ribbon Commission's forthcoming analysis. In sum, DOE's steps to spend its budget wisely, to engage in an orderly process that preserves its records and science and seeks to minimize harm to its employees, and to account for scientific advances before making any permanent decision about nuclear waste is in the public interest and should not be enjoined.

CONCLUSION

Petitioner's motion for a preliminary injunction should be denied.

Respectfully submitted.

IGNACIA S. MORENO Assistant Attorney General Environment & Natural Resources Division

LISA E. JONES AARON P. AVILA ALLEN M. BRABENDER ELLEN J. DURKEE Appellate Section, Environment & Natural Resources Division, U.S. Dep't of Justice P.O. Box 23795, L'Enfant Plaza Station Washington, D.C. 20026 (202) 514-4426

90-13-5-13094

CERTIFICATE OF SERVICE

Pursuant to Fed. R. App. P. 25(c), D.C. Circuit Rule 25(c), and this Court's Administrative Order of May 15, 2009, I hereby certify that on April 23, 2010, I caused the foregoing to be filed upon the Court prior to 4 P.M. through the use of the D.C. Circuit CM/ECF electronic filing system, and thus also served counsel of record. The resulting service by e-mail is consistent with the preferences articulated by all counsel of record in the Service Preference Report. In addition, I caused four paper copies to be hand delivered to the Clerk's Office prior to 4 PM on April 23, 2010.

S/

Ellen J. Durkee
Attorney, Appellate Section
Environment & Natural Resources Division
P.O. Box 23795, L'Enfant Plaza Station
Washington, D.C. 20530
(202) 514-4426

EXHIBIT 1

IN THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 10-1082

STATE OF WASHINGTON, Petitioner

٧.

UNITED STATES DEPARTMENT OF ENERGY, et al.,

DECLARATION OF DAVID K. ZABRANSKY

I, DAVID K. ZABRANSKY declare as follows:

- I am the Acting Principal Deputy Director of the Office of Civilian Radioactive
 Waste Management ("OCRWM") for the Department of Energy ("DOE"). I
 assumed this position in January of 2010 and report directly to the Under Secretary
 of Energy. I am responsible for all aspects of DOE's Civilian Radioactive Waste
 Management Program, and am personally responsible for the day-to-day operations
 of OCRWM. My present duties include closing down OCRWM in a responsible
 and orderly manner to ensure scientific data and program records are properly
 preserved or dispositioned.
- 2. OCRWM was established by Section 302 of the Nuclear Waste Policy Act of 1982 (NWPA) to carry out the functions of the DOE under the Act. OCRWM's mission is to fulfill the federal responsibility to provide for the permanent disposal of high-level radioactive waste and spent nuclear fuel in order to protect public health, safety, and the environment. OCRWM's duties include developing, licensing,

constructing and operating disposal and related facilities including transportation systems, performing relevant research and development activities, entering into contracts to take high-level radioactive waste and spent nuclear fuel for disposal, and collecting and managing fees to pay for these activities. OCRWM currently works on: (1) issues relating to the Yucca Mountain repository; (2) collecting and managing the waste fee; (3) managing the standard contracts with nuclear utilities; (4) supporting the Department of Justice with respect to the Standard Contract litigation and settlements resulting from DOE's failure to begin taking spent nuclear fuel by 1998; and (5) performing the administrative tasks to support the preceding activities.

- 3. In 2009 DOE ceased activities related to the planning for transportation of materials to Yucca Mountain. Those activities included developing a railroad to the site and transportation outreach. All activities related to completing the design and planning for construction and repository site upgrades were terminated.
 Ongoing science at the site was reduced to the minimal amount to support only the licensing process.
- 4. Two years ago there were approximately 2,700 employees working for OCRWM. This number decreased dramatically after submittal of the license application to the Nuclear Regulatory Commission and the redirection of work to only licensing activities. Today, there are approximately 620 employees working for OCRWM. Of this number, approximately 230 are federal employees, of whom approximately 175 are employed directly by OCRWM (OCRWM employees), approximately 35 are employed by other offices within the DOE, and approximately 20 are employed

- by the U.S. Geological Survey. The remainder (approximately 400) are contractor employees.
- 5. On February 1, 2010, the Administration's Fiscal Year 2011 Budget was announced and stated that "[i]n 2010, the Department [of Energy] will discontinue its application to the Nuclear Regulatory Commission (NRC) for a license to construct a high-level waste geological repository at Yucca Mountain, Nevada."
- 6. Given the fact that no money has been requested for OCRWM in FY 2011, DOE has taken several actions to prepare for the orderly shutdown of OCRWM by the end of Fiscal Year (FY) 2010 (September 30, 2010). These include actions to assist OCRWM employees such as: (1) priority consideration for any positions open within DOE; (2) approval from Office of Personnel Management for voluntary early retirement and voluntary separation incentive payments; (3) relocation allowances for OCRWM employees; (4) training for job interviews and the USAJOBS application process; and retirement training. In addition, while not yet finalized or approved, DOE has been developing a plan to terminate OCRWM in an orderly manner by the end of FY 2010. An orderly termination is important so that materials, databases, and documents can be stored properly and thus be available for later use as appropriate. Further delays in engaging in shutdown activities are contrary to the interest in ensuring an orderly shutdown. Additionally, assisting Yucca Mountain employees to remain with the DOE, to the extent successful, can facilitate efforts to reconstitute the Yucca Mountain work force, should the need arise.

- 7. With respect to the non-federal work force, approximately 141 individuals work for Sandia National Laboratory and other National Laboratories. DOE's National Laboratories have been developed and supported by DOE and its predecessors to provide world class research and development on issues that are important to the public and national interest. OCRWM has used the National Laboratories to provide scientific and modeling support for the license application and has designated Sandia National Laboratory as the Lead Lab to coordinate these efforts. DOE's expectation is that, when funding is no longer provided to the National Laboratories to support the license application for Yucca Mountain, many of the scientists who have been performing work on Yucca Mountain will continue to be employed by the National Laboratories and perform work on other projects. The continued employment of those scientists by the National Laboratories could facilitate establishment of a National Laboratories' support team if DOE were required to continue with the licensing proceeding.
- 8. DOE uses a special Management and Operating (M&O) Contract for many of its sites and facilities. OCRWM has an M&O contractor to manage the Yucca Mountain site, including the tunnel and related infrastructure as well as to develop the design for the repository and related facilities and coordinate licensing activities. The present M&O contractor for the Yucca Mountain Project is U.S.A. Repository Services, LLC ("USA-RS"), a subsidiary of Washington Group International, Inc., an Ohio Corporation doing business as the Washington Division of the construction and engineering design firm URS Corporation. Shaw Environmental and Infrastructure Inc. and Areva Federal Services, LLC are fee sharing subcontractors

to USA-RS. There are 101 employees under the M&O contract for OCRWM. There currently are no plans to terminate this M&O contract although there will be a descoping of all work related to repository licensing when OCRWM closes in September, with only to a few administrative tasks remaining. Because the contract would remain in effect, there would be no need to go through the government competitive process to hire a new M&O contractor if DOE were required to resume the licensing proceeding. Thus, DOE could add tasks to the contract to support licensing and other repository related tasks.

- 9. There are an additional 155 contractor or laboratory employees that are neither M&O contractors nor laboratory employees that will need to be terminated prior to September 30, 2010 for an orderly closure of OCRWM.
- 10. Even with the full complement of staff, the Yucca Mountain Repository could open no earlier than 2020. Even that date depends on a number of actions, all of which are beyond the control of DOE and could cause significant delays. For example, the U.S. Nuclear Regulatory Commission's ("NRC") Licensing Board, has stated in regard to its independent technical review of the license application, that the Staff estimates that review of the five volumes of the Safety Evaluation Report would be completed no earlier than February 2012. Hearings in the proceeding on contested factual issues usually do not occur until after the NRC Staff has completed its review of pertinent sections of the Safety Evaluation Report. Additionally, these hearings must be concluded before the NRC could consider issuing a license for construction of a repository. To open a facility, moreover, DOE would be required to obtain water rights, rights of way from the Bureau of Land Management for utilities and

access roads, and Clean Water Act § 404 permits for repository construction, as well as all the state and federal approvals necessary for an approximately 300-mile rail line, among many other actions. Moreover, Congress would need to take several actions including permanent land withdrawal of the repository site. Absent such congressional action, it is my understanding that no repository could open at Yucca Mountain, regardless of DOE's decisions.

11. DOE estimates that each month of delay in moving toward descoping the M&O contractor and other shutdown activities in FY 2010 limits the funds in FY 2010 for shutdown activities by about \$9 million a month.

I declare under penalty of perjury, this <u>22</u> day of April 2010, that the foregoing is true and correct to the best of my knowledge and belief.

David K. Zabransky

Acting Principal Deputy Director Office of Civilian Radioactive Waste Management

EXHIBIT 2

IN THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 10-1082

STATE OF WASHINGTON, Petitioner

٧.

UNITED STATES DEPARTMENT OF ENERGY, et al.,

DECLARATION OF WILLIAM J. BOYLE

I, William J. Boyle declare as follows:

- I am the Director of the Regulatory Affairs Division and am also Acting Director
 of the Office of Technical Management of the Department of Energy's ("DOE")
 Office of Civilian Radioactive Waste Management ("OCRWM").
- OCRWM was established by Section 302 of the Nuclear Waste Policy Act of 1982 (NWPA) to carry out the functions of DOE under the Act. OCRWM's mission is to fulfill the federal responsibility to provide for the permanent disposal of high-level radioactive waste and spent nuclear fuel in order to protect public health, safety, and the environment. OCRWM's duties include developing, licensing, constructing and operating disposal and related facilities including transportation systems, performing relevant research and development activities, entering into contracts to take high-level radioactive waste and spent nuclear fuel for disposal, and collecting and managing fees to pay for these activities.
- OCRWM currently works on: (1) issues relating to the Yucca Mountain repository;(2) collecting and managing the waste fee; (3) managing the standard contracts

- with nuclear utilities; (4) supporting the Department of Justice with respect to the spent nuclear fuel litigation and settlements resulting from the DOE's failure to begin taking spent nuclear fuel by 1998; and (5) performing the administrative tasks to support the preceding activities.
- 4. I made the decision to stop as of March 1, 2010 OCRWM's continuing "data collection and performance confirmation activities" at the Yucca Mountain site. The three "data collection and performance confirmation activities" that were ended were being conducted to provide data on: (1) seismicity in the vicinity of the Yucca Mountain site, (2) precipitation in the vicinity of the Yucca Mountain site, and (3) deformation of the existing tunnels at Yucca Mountain, such as by inward movement of the tunnel walls and rockfall from the tunnels' roofs. The data collected for seismicity was automatically recorded electronically and periodically retrieved from electronic storage. The precipitation data gathering was recording rain gauge readings. The tunnel deformation data gathering was based upon periodic visual inspections and measuring of rock movement around the tunnels.
- 5. It is my technical judgment that ceasing to conduct those data collection and performance confirmation activities at the site will not have a material effect on the DOE's understanding of the characteristics of the Yucca Mountain site. This is because, as the title "performance confirmation" implies, DOE already has a significant amount of data on the seismicity and precipitation at the Yucca Mountain site as well as the deformation of the tunnel and an understanding of how these will affect the performance of the repository. OCRWM was conducting

the data collection and performance confirmation activities to confirm (i.e., to provide additional confidence in) that data and understanding. The National Academy of Sciences has determined that the period of geologic stability at Yucca Mountain is on the order of one million years. Because seismicity and precipitation are related to the geologic and geographic setting in which they occur, one would not expect there to be any sudden or drastic change in seismicity or precipitation at Yucca Mountain over the next year or even decade. In the unlikely event that such a change were to occur while the OCRWM seismic and precipitation performance confirmation activities at the Yucca Mountain site were not being performed, the number of rain gauges and seismic monitoring stations in the western United States would still permit DOE to discern that a change was occurring that could affect the Yucca Mountain site. The deformation of the tunnels at Yucca Mountain was measured for more than 10 years and no surprises were found during this period. None is expected to occur at this point because for this geology, any deformation would be expected to occur sooner, rather than later, after excavation of the tunnel. Tunnel excavation was completed in October 1998. Measurements of deformation were always made by measuring the deformation after it had occurred. "Stopping" performance confirmation of tunnel deformation can be viewed simply as not yet scheduling the next measurement. The duration between measurements of deformation in the past has exceeded one year.

6. My judgment is informed by the long history of the characterization of the site which has given us a thorough understanding of the features of the site related to

the performance confirmation activities. Although OCRWM has ceased active monitoring of seismicity and rainfall at the Yucca Mountain site, other monitoring systems are continuing to monitor for seismic activity and rainfall in the general area of the site. Examples of these monitoring systems include weather stations on the Nevada Test Site and seismic stations in the vicinity of Yucca Mountain maintained by the Nevada Seismological Laboratory of the University of Nevada, Reno. These would identify unexpected anomalies in seismicity or rainfall in the area. With respect to construction monitoring, the primary parameters monitored are rockfall and convergence of the Exploratory Studies Facilities tunnels at Yucca Mountain. The convergence monitoring (that is, the measurement of the deformation of the rocks surrounding the tunnels, usually manifest as rocks moving in towards the tunnel, or converging) can be resumed with no anticipated loss of data for trending purposes and, as before, any rock falls not previously identified can be observed visually upon inspection of the tunnel.

7. The performance confirmation activities can be restarted for the foreseeable future simply by resupplying the power sources to the monitors or revisiting the monitoring stations. Given this, it is my judgment that even if these activities are suspended for a year or more, DOE could easily restart the activities and not affect the licensing process for Yucca Mountain or the technical understanding of the site in any material way with respect to seismicity, rainfall or rockfall and tunnel convergence, which are the three performance confirmation activities not currently being conducted.

8. The March 17, 2010 email and memo included as Exhibit 9 of the State of Washington's Petition for Review erroneously implied that activity screening for license application impact had been cancelled when in fact the procedure has not been cancelled. The activity screening process was instituted to ensure that neither the starting of new activities nor the stopping of existing activities would inadvertently cause a conflict with the License Application that had been submitted to the NRC. On March 22, we provided an email from Technical Support that screenings are to continue and to be done on an individual basis. Screening is in fact continuing. A screening evaluation was approved by me as recently as March 29, 2010.

I declare under penalty of perjury, this $\frac{22}{2}$ day of April 2010, that the foregoing is true and correct to the best of my knowledge and belief.

William J. Boyle
William J. Boyle

Director of the Regulatory Affairs

Division and

Acting Director of the Office of

Technical Management

Office of Civilian Radioactive Waste

Management

EXHIBIT 3

IN THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 10-1082

STATE OF WASHINGTON, Petitioner

v.

UNITED STATES DEPARTMENT OF ENERGY, et al.,

DECLARATION OF DR. INES TRIAY

INES TRIAY declares as follows:

I was appointed by President Obama as DOE Assistant Secretary for Environmental Management and, after confirmation by the Senate, sworn into office in May 2009. In this position I am responsible for all aspects of DOE's Office of Environmental Management, and am personally responsible for the day-to-day operations of this Office. In particular, I have primary responsibility within the Department for the cleanup, management, and storage of DOE radioactive waste, including the radioactive waste currently located at the Hanford and Savannah River Sites. Prior to my appointment to be Assistant Secretary, I served as the cleanup program's Principal Deputy Assistant Secretary, Chief Operations Officer, and Deputy Chief Operations Officer. Prior to these positions in Washington D.C., I served as Manager of the Department's Carlsbad Field Office in New Mexico. During my tenure as the Manager, the number of shipments of contact-handled transuranic

- waste accepted at the Waste Isolation Pilot Plant (WIPP) increased from 1-2 per week to 25 per week. In order to sustain these shipments, I implemented a complete re-invention of the United States' national transuranic waste program.
- 2. I began my career as a postdoctoral staff member in the Isotope and Nuclear
 Chemistry Division at Los Alamos National Laboratory, New Mexico. I
 progressed through many positions to acting deputy director of the Chemical
 Science and Technology Division and group leader for the Environmental Science
 and Waste Technology Group. There, I directed multidisciplinary research on
 decontamination, transuranic waste characterization and treatment, environmental
 chemistry, contaminant transport and remediation, and isotope chemistry for
 environmental and nuclear problems. I led the team that was responsible for the
 first transuranic waste shipment to WIPP, which began operations in March 1999.
- 3. I have 25 years of professional experience in the field of radioactive waste handling and disposition.
- 4. My honors include the 2007 Wendell D. Weart Lifetime Achievement Award for my work in radioactive waste management, 2007 Presidential Rank Award, 2004 National Award for Nuclear Science from the Einstein Society of the National Atomic Museum, the American Society of Mechanical Engineers 2003 Dixy Lee Ray Award for environmental protection, the 2003 Woman of Achievement award from the Radiochemistry Society, and two distinguished performance awards from Los Alamos National Laboratory.
- 5. On February 1, 2010, the Administration's Fiscal Year 2011 Budget was announced and stated that "[i]n 2010, the Department [of Energy] will discontinue its

application to the Nuclear Regulatory Commission (NRC) for a license to construct a high-level waste geological repository at Yucca Mountain, Nevada." One of my responsibilities is to address the potential effects, if any, of the unavailability of the proposed Yucca Mountain repository on DOE cleanup activities, including those at the Hanford and Savannah River Sites.

- 6. The Department is committed to cleaning up its sites where highly radioactive waste is located by removing the waste from underground tanks in which it is currently stored, followed by the processing and treatment of that waste. These processes will result in the generation of very robust waste forms for high-level waste that are protective of human health and the environment. At Hanford and Savannah River, this is a glass waste form.
- 7. The licensing, construction, and operation of a repository at Yucca Mountain is not on the critical path of events that are necessary for the Department to move forward with the cleanup of DOE sites, including Hanford and Savannah River. For Hanford, these events include the Waste Treatment Plant becoming operational, which is scheduled in 2022. Once operational, the Waste Treatment Plant will process liquid waste currently stored in tanks into a robust glass waste form. At Savannah River, activities include retrieving 36 million gallons of liquid radioactive waste from 49 underground storage tanks and processing the waste destined for a geological repository through the Defense Waste Processing Facility, a plant that vitrifies waste (that is, puts it into a robust glass form that is protective of human health and the environment) and that is currently operating. In other words, the

Administration's decision to pursue alternatives to the disposal of high-level waste located at those sites will not affect current plans or schedules for cleaning up those sites.

- 8. As noted above, with respect to Hanford, the decision to withdraw the license application for a repository at Yucca Mountain will have no effect on current plans and schedules to retrieve highly radioactive liquid waste from the waste storage tanks and construct and operate the Waste Treatment Plant. This course of action was decided in a Record of Decision (published at 62 FR 8693), which followed issuance of the Hanford Tank Waste Remediation System Environmental Impact Statement. Likewise, the decision to withdraw will have no effect on the quality of the waste form because the Tri-Party Agreement, which is an enforceable Administrative Order on Consent between the Washington State Department of Ecology, the United States Environmental Protection Agency, and DOE setting forth milestones for the cleanup of the Hanford site, requires DOE to put the waste into the borosilicate glass waste form identified in the current plans. A proposed settlement with the State of Washington would convert this obligation into a judicial consent decree.
- 9. With respect to Savannah River, the decision to withdraw the license application for a repository at Yucca Mountain will have no effect on current plans to complete removal of highly radioactive waste from the tanks and convert the high-level waste portion into a similar glass waste form.
- 10. The completion of the process of converting liquid high level waste into glass waste forms will take several decades to accomplish, and DOE and the host states have

long known that such waste forms would remain on site for a lengthy period of time. At the Hanford site, the Tank Closure and Waste Management Draft EIS (DOE/EIS-0391, October 2009) anticipated the February budget announcement and included analysis of the impacts on Hanford cleanup. As stated in the document summary, "The analyses in this EIS are not affected by recent DOE plans to study alternatives for the disposition of the Nation's SNF [spent nuclear fuel] and HLW [high level waste] because the EIS analysis shows that vitrified HLW can be stored safely at Hanford for many years until disposition decisions are made and implemented." (Draft EIS at S-39, n.1.). This EIS also evaluates the potential need for more high level waste storage facilities at Hanford and "expects the impacts to be similar" to those previously found for high level waste storage. *Id.* at S-118. Finally, the EIS also anticipates the issue of disposition of cesium and strontium and assumes that this material will be added to the treatment process and create the need for additional waste canisters whose storage is also evaluated. Cesium and strontium are radionuclides that were previously removed from the liquid waste and are now stored in capsules.

11. The Dahl-Crumpler Affidavit speculates that termination of the Yucca Mountain project could cause "construction tear-down and rebuild of the [Waste Treatment Plant]" at Hanford that will vitrify the liquid waste. That is incorrect. The Dahl-Crumpler Affidavit is premised on a fundamental misunderstanding of the basic Hanford high level waste treatment process (vitrification). Vitrification of high level waste into borosilicate glass is not a Yucca-specific process. The use of vitrification is currently the international standard and is being pursued or in use by

- several nations such as the United Kingdom, France, Germany, Belguim, Japan, Russia, and China.
- 12. Moreover, the choice of borosilicate glass was the culmination of an intense scientific effort which long predated the choice of the Yucca Mountain site. For example, An "Environmental Assessment: Waste Form Selection for SRP High-Level Waste" (July 1982) finds that borosilicate glass was a better choice than various other waste forms considered, in part because, "It is compatible with a full range of repository geologies. . . . " (page 1-1, emphasis added). Thus, material vitrified at Hanford will be suitable for disposal in a permanent repository regardless of the future of the Yucca site.
- In sum, although it is true that DOE has paid careful attention to the Yucca Mountain waste acceptance criteria, termination of the Yucca Mountain project presents no valid reason to rebuild the Hanford Waste Treatment Plant, and I see no likelihood whatever that this would occur.

I declare under penalty of perjury, this <u>23</u> day of April 2010, that the foregoing is true and correct to the best of my knowledge and belief.

Ines Triay

Assistant Secretary

Office of Environmental Management