

**Restart of the Yucca Mountain License Application Review Directed by the
U.S. Court of Appeals for the District of Columbia - 14645**

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ABSTRACT

While campaigning for President in 2007, Senator Barack Obama stated that after spending billions of dollars on the Yucca Mountain Project, there were still significant questions about whether nuclear waste could be stored safely there. As President, he took action to dismantle the Yucca Mountain Project, in obvious contradiction to his own scientific integrity policy that stated that when scientific or technological information was considered in policy decisions, the information should be subject to well-established scientific processes, arguing instead that Yucca Mountain was unworkable. As part of the actions of Secretary Chu in ceasing activity on the Project, the Department of Energy attempted to withdraw the Yucca Mountain license application with prejudice. The Department also followed another presidential directive and established a Blue Ribbon Commission to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle, including all alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel and nuclear waste. The Nuclear Regulatory Commission's Atomic Safety and Licensing Board rejected the Department's attempt to withdraw the license application because, it ruled, the Department did not have the authority to do so under the Nuclear Waste Policy Act. Nuclear Regulatory Commission Chairman Jaczko took numerous steps to stop staff from working on the license application review, culminating in stopping publication of near complete Safety Evaluation Report volumes, dismantling the Licensing Support Network, and, using questionable arguments about budgets, shutting the program down.

Several entities took actions to force the Nuclear Regulatory Commission to complete the license application review, which were combined in a case before the U.S. Court of Appeals for the District of Columbia Circuit, with the Petitioners seeking a writ of mandamus to force the restart of the review. The Judges hearing the case faced the difficult precedent setting challenge of forcing the government to follow the Nuclear Waste Policy Act, and initially held the petition temporarily in abeyance, to give Congress an opportunity to provide an indication that stopping the program was consistent with the intent of Congress. Congress took no action to provide the guidance sought by the Court, and 475 days after the abeyance ruling, in a landmark decision, the U.S. Court of Appeals for the District of Columbia ruled that the Nuclear Regulatory Commission had continued to violate the law governing the Yucca Mountain licensing process, and the Court believed it had no choice but to grant the petitions of Nye County, Nevada, the States of Washington and South Carolina, Aiken County, South Carolina, as well other Petitioners. In doing so, the Court ordered the NRC to move forward with the licensing process and approve or disapprove the Department of Energy's license application for the Yucca Mountain nuclear waste repository.

BACKGROUND AND HISTORY RELATED TO THE MANDAMUS LAWSUIT

While campaigning for President, Senator Obama sent a letter [1] to the Las Vegas Review Journal on May 20, 2007, stating that *I want every Nevadan to know that I have always opposed using Yucca Mountain as a nuclear waste repository*. The reasons he gave included that after spending billions of dollars on the Yucca Mountain Project, there were still significant questions about whether nuclear waste could be safely stored there and that he believed a better short-term solution was to store nuclear waste on-site at the reactors where it was produced, or at a designated facility in the state where it was

produced, until a safe, long-term disposal solution based on sound science was found (emphasis added). He further stated that spending on Yucca Mountain should be directed to *exploring other long-term disposal options*. Of note, no authoritative basis critical of the safety of a Yucca Mountain repository, or the science supporting it was acknowledged.

He reiterated that position in a letter [2] to Senators Reid and Boxer on Oct 31, 2007, wherein he stated that legitimate scientific questions had been raised about the safety of storing spent nuclear fuel at Yucca Mountain, and that he believed that it was no longer a sustainable federal policy for Yucca Mountain to be considered as a permanent repository. Not long thereafter, the Department of Energy submitted its Yucca Mountain license application [3] to the Nuclear Regulatory Commission on June 3, 2008 [4]. Of relevance to the issue, in August, 2008, the ten National Laboratory Directors (including future Secretary of Energy Chu from Lawrence Berkeley National Laboratory) signed a position paper [5] noting the importance of the licensing of the Yucca Mountain Repository as a long-term resource. On September 8, 2008, the Yucca Mountain license application was ruled sufficiently complete to begin final technical review and docketed [6] by the Nuclear Regulatory Commission. In November 2008 Senator Obama was elected President.

In one of his first acts as President, on March 9, 2009, he issued a Scientific Integrity Policy memorandum [7], directing that political officials should not suppress or alter scientific or technological findings and conclusions, and that if scientific and technological information is developed and used by the Federal Government, it should ordinarily be made available to the public. To the extent permitted by law, there should be transparency in the preparation, identification, and use of scientific and technological information in policymaking. In the same month, coinciding with the issuance of the Administration policy on the need for openness, transparency, and scientific integrity in making major decisions, the Department of Energy initiated an effort to stop the congressionally mandated Nuclear Regulatory Commission review of the Yucca Mountain license application [8]. Early testimony by Secretary Chu reiterated Senator Obama's rhetoric that the science of Yucca Mountain was bad: *[w]hile it's fair to say that the whole history of Yucca Mountain was more political than scientific, but also, very truthfully, I can say that given what we know today the repository looks less and less good. So now we're in a situation where it can't move forward* [9]. The lack of scientific justification for the abandonment of the Yucca Mountain project, coupled with the blatant disregard for the Administration's own policy of integrity and openness is staggering. To complete the structure needed for the dismantlement of the Yucca Mountain project, on May 13, 2009, Nuclear Regulatory Commission Commissioner Jaczko, a former staff member for Senator Reid, was appointed Chairman of the Commission.

In a June 26, 2009, letter to Congress [10], the Nuclear Waste Technical Review Board noted that the Administration's announcement that it would terminate the Yucca Mountain Project while developing nuclear waste disposal alternatives prompted the Board to look at the scientific and engineering implications of the decision. They concluded that technical lessons from the Yucca Mountain Project may be of value regardless of how the nation deals with nuclear waste in the future, and that the Board supported the Secretary's decision to continue the licensing process for a Yucca Mountain repository, which would allow a full adjudication of the technical issues and allow all the parties to the process to identify and support their contentions, so that the maximum scientific and engineering benefit could be derived from the effort. Clearly, at that time the Department had not articulated its intention to withdraw the license application. On January 29, 2010, the President directed [11] the Secretary of Energy to establish a Blue Ribbon Commission to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle, including all alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel and nuclear waste (emphasis added).

The Department of Energy budget presentation on February 1, 2010 indicated an intent to withdraw the Yucca Mountain license application, noting that the President's fiscal year 2011 budget instructed the Department to discontinue the license application for a high-level nuclear waste repository at Yucca Mountain, and that the Department was filing a motion to stay all proceedings for 30 days and within this period, it would move to withdraw the license application. It also noted the announcement for the formation of the Blue Ribbon Commission. The next day, February 2, 2010, Senator Reid sent a letter [12] to the Comptroller General asking that the Government Accountability Office perform a study to find other uses for Yucca Mountain.

Concluding that that the Department's action became final and subject to review under the Nuclear Waste Policy Act [13] on or about January 29, 2010 (the day the formation of the Blue Ribbon Commission was announced), several entities took legal action. Aiken County filed a petition on February 19, 2010 (Case No. 10-1050) asking the Court to review, remand, vacate, and/or defer the final action of the President and Secretary of Energy to abandon and not to proceed with plans to apply for and pursue a license for, and to construct, a repository for high-level radioactive waste at Yucca Mountain, Nevada. Robert L. Ferguson, William Lampson, and Gary Petersen filed a similar petition on February 26, 2010 (Case No. 10-1052); and the State of South Carolina filed on March 26, 2010 (Case No. 10-1069) The Court consolidated all of the petitions into a single action referred to as Aiken I on April 8, 2010[14]. Subsequently, the state of Washington filed its similar petition on April 13, 2010 (Case No. 10-1050) and was included in the Aiken I proceeding.

Aiken I represented the actions of four entities, two in South Carolina where the Savannah River Laboratory produces high-level radioactive waste destined for disposal at Yucca Mountain, and two in Washington state, where the Hanford facility produces high-level radioactive waste destined for disposal at Yucca Mountain, in efforts to prevent the Department of Energy from withdrawing, with prejudice, the application for a license to construct a repository at Yucca Mountain. Near the same time, and pursuant to the February 1 announced intent by the Department to withdraw the license application, on February 26, 2010, the States of Washington and South Carolina, and Aiken County petitioned the Atomic Safety and Licensing Board [15] to allow them to intervene as a full party to the proceeding for the license application for the geologic repository at Yucca Mountain. The purpose of the requested intervention was to oppose, as a matter of law, the anticipated motion of the Department of Energy to withdraw, with prejudice, the license application in this case.

In testimony [16] before the House Committee on Science and Technology on March 3, 2010, Secretary Chu stated that in 2010 the Department would discontinue its application to the Nuclear Regulatory Commission for a license to construct a high-level waste geologic repository at Yucca Mountain, noting that both he and the President had made it clear that Yucca Mountain was not an option. He noted that to deal with waste management needs, the Administration had brought together a range of experts to conduct a comprehensive review of the back-end of the fuel cycle to provide recommendations for developing a safe, long-term solution to managing the Nation's used nuclear fuel and its nuclear waste. He further noted that the Administration had determined that the Yucca Mountain repository was not a workable option and had decided to terminate the Office of Civilian Radioactive Waste Management by the end of fiscal year 2010. Interestingly, he stated that the Administration remained committed to fulfilling its obligations under the Nuclear Waste Policy Act, including administration of the Nuclear Waste Fund and the Standard Contract, with the Office of Nuclear Energy leading future waste management activities. On March 3, 2010, the Department of Energy filed its motion to withdraw the license application with prejudice [17]. The Department next took steps to reprogram \$115 million in fiscal year 2010 funds to bring the Yucca Mountain project to an orderly close. Secretary Chu originally said, in his March 25 testimony, that he would work with Appropriations Committee, but then reversed that position the next day, in a March 26 letter [18], and said he had the authority to reprogram the funds. On April 6, 2010, the

Atomic Safety and Licensing Board suspended briefing on the intervention petitions of the Prairie Island Indian Community and the National Association of Regulatory Utility Commissioners and the Department's Motion to Withdraw, until further notice [19]. The Board noted the pending court case against the Department and determined that the Court of Appeals should address the legal issue in the first instance. Both the Department of Energy and Nye County, Nevada petitioned the Commission for interlocutory review of the April 6, 2010 Board order [20]. On April 23, 2010, the Commission properly vacated the April 6, 2010 Board order and remanded the matter back to the Board for resolution of the Department's Motion to Withdraw [21].

On April 2, 2010, the Petitioners filed a request [22] for expedited briefing and consideration in Aiken I, noting that on January 29, 2010, the day the Blue Ribbon Commission was established, the President and Secretary of Energy violated the law that embodies political consensus by taking Yucca Mountain off the table as a repository for high-level radioactive waste. The Petitioners argued that the final decision was made contrary to the clear Congressional command in the Nuclear Waste Policy Act that the Secretary expeditiously proceed with actions needed to license, construct, and operate a repository at Yucca Mountain. On June 29, 2010, the Atomic Safety and Licensing Board issued an Order and Memorandum [23] denying the Department of Energy's motion to withdraw the Yucca Mountain license application, noting that: *[a]s to each such petitioner, the following contention is admitted: DOE lacks the authority under the Nuclear Waste Policy Act to withdraw the Application, and the Department's motion to withdraw the Application is denied.* This set in motion a lengthy period wherein the Commissioners failed to act to overturn the Atomic Safety and Licensing Board ruling until the Commission issued an order [24] on September 9, 2011, revealing that it was evenly divided on whether to take the affirmative action of overturning or upholding the Board's decision.

The first of the Yucca Mountain Safety Evaluation Reports [25], addressing the General Information volume, was issued in August, 2010; germane to the issues addressed by the mandamus lawsuit, the remaining Safety Evaluation Reports were not issued, although information presented subsequently in Congressional testimony, discussed later, indicated the documents were nearly ready for publication. Safety Evaluation Reports represent the Nuclear Regulatory Commission staff's regulatory positions and reflect its readiness to argue before the Atomic Safety and Licensing Board that a license should be granted. In a closely related matter, on February 14, 2011, the states of New York, Vermont and Connecticut filed suit in the Court of Appeals for the District of Columbia Circuit [26] challenging the 2010 Waste Confidence Rule update as violating two federal laws: the Administrative Procedures Act and the National Environmental Policy Act; specifically, the first governs the way in which federal administrative agencies may propose and establish regulations, while the second requires federal government agencies to study the environmental impacts of proposed federal agency actions. It was charged that the Nuclear Regulatory Commission violated these laws when it found reasonable assurance that sufficient, licensed, off-site capacity would be available to dispose of spent nuclear fuel when necessary, arguing that the Nuclear Regulatory Commission had insufficient basis for these claims since the only such nuclear waste facility in the United States, the Yucca Mountain repository in Nevada, was suspended in 2010 and no replacement facility had yet been identified. The Petitioners wanted the rule remanded back to the Nuclear Regulatory Commission and site specific analyses completed.

A June 2011 report [27] by the Majority Staff of the House Science, Space, and Technology Committee addressed the underlying questions about the quality of the science supporting the Yucca Mountain license application by noting that over the course of the previous two and one half years, Committee Republicans had reviewed in depth the Administration actions associated with the Yucca Mountain Project and disposal of the Nation's spent nuclear fuel and high-level radioactive waste, and that the results of that review were striking. They found that despite numerous suggestions by political officials, including President Obama, that Yucca Mountain was unsafe for storing nuclear waste, the Committee

could not identify a single document to support such a claim. To the contrary, the Committee staff found great agreement among the scientific and technical experts responsible for reviewing the suitability of Yucca Mountain that nuclear waste could be safely stored at the site for tens of thousands of years in accordance with Nuclear Regulatory Commission requirements. The Committee staff acknowledged that the review of the Administration's actions related to Yucca Mountain was undertaken in the context of promises and specific guidelines on scientific integrity, openness, and transparency set forth by President Obama and senior Administration officials. The staff reviewed an unredacted copy of the Safety Evaluation Report volume that addressed post closure safety and found that the staff agreed with 98.5% of the Department's findings and that the license application complied with applicable Nuclear Regulatory Commission safety requirements.

On July 1, 2011 the U.S. Court of Appeals for the District of Columbia Circuit responded [28] to petitions by three state and governmental units, along with individual citizens in the April 2010 Aiken I case. The Court found that at that point in the Nuclear Waste Policy Act process and schedule for the siting, construction, and operation of a federal repository for the disposal of spent nuclear fuel and high-level radioactive waste, the Department of Energy had submitted a construction license application for the Yucca Mountain repository and the Commission maintained a statutory duty to review that application. The Court noted that despite the respondents' pronouncements and apparent intentions, unless and until the Petitioners were able to demonstrate that one of the respondents had either violated a clear duty to act or otherwise affirmatively violated the law, Petitioner's challenges to the ongoing administrative process were premature because no final agency action had been taken by the Department of Energy. The Court therefore concluded that it lacked jurisdiction over the Petitioners' claims, and dismissed the petitions. Of significance to future actions of the Petitioners, Judge Brown wrote separately to note that while focusing on the President and his administration, the Petitioners all but ignored the only agency with an existing obligation under the Nuclear Waste Policy Act, the Nuclear Regulatory Commission. The suggestion for a request for writ of mandamus from the Court as the appropriate legal mechanism to pursue became a central point in future actions by the Petitioners.

In the same Memorandum and Order that the Commission issued to announce that, by a two-to-two vote, it could not overturn the Atomic Safety and Licensing Board ruling on the Department's attempt to withdraw the license application [29], the Commission initiated the termination of the license application review. It directed the Atomic Safety and Licensing Board and staff to bring all review activities to an orderly closure by the end of September, 2011, based on an alleged lack of appropriated funds for such work in the coming fiscal year. Subsequently, the Board suspended the hearing process. As the Nuclear Regulatory Commission staff was nearing completion of its evaluation of the site's safety and preparing to state its conclusions about whether the staff considered the Department's license application ready to move to the next step of the licensing process, the Chairman was able to use administrative ploys to put the effort on hold [30]. In the summer of 2011, the Nuclear Regulatory Commission issued three Technical Evaluation Reports that were prepared in response to the Commission directives to close the program in Fiscal Year 2011. In July, the staff issued the volume addressing repository safety after permanent closure [31] and in September it issued the volume addressing repository safety before permanent closure [32] and the volume addressing administrative and programmatic topics [33]. The staff prepared these documents to capture the results of work done preparing the Safety Evaluation Reports, which as noted, other than the General Information volume, were not released. The Technical Evaluation Reports followed the format and content of the Safety Evaluation Reports, but did not include the staff's conclusions about the likelihood of complying with the Nuclear Regulatory Commission regulations. Nonetheless, sufficient technical detail was presented to make clear that there were not significant technical issues remaining.

By late 2011, conditions at the Nuclear Regulatory Commission related to the conduct of Commission operations, had become so contentious and intimidating that four Commissioners sent a letter to the White House Chief of Staff expressing grave concerns about the leadership and management style of Commission Chairman Jaczko [34]. The Commissioners alleged that Chairman Jaczko's behavior jeopardized the ability of the Commission to perform its mission. They noted specifically that Chairman Jaczko's actions were creating a chilled work environment, and that he specifically ordered staff to withhold or modify policy information and recommendations intended for transmission to the Commission. On May 21, 2012, in response to increasing evidence of poor management qualities, and improper actions, especially in dealing with subordinates, Commissioner Jaczko resigned as Chairman of the Nuclear Regulatory Commission [35].

A second coordinated petition (referred to as Aiken II) [36], this time for a writ of mandamus, was filed on July 29, 2011, by Aiken County, South Carolina; Robert L. Ferguson, William Lampson, and Gary Petersen; the State of South Carolina; the State of Washington; the National Association of Regulatory Utility Commissioners; and Nye County, Nevada, following the suggestion of Judge Brown writing separately in the Aiken I case decision. After the Aiken II case was fully briefed and argued by the parties, and Department of Justice filed its position on behalf of the United States at the specific request of the Judges, on August 3, 2012, the Court of Appeals for the District of Columbia Circuit ordered [37] that the case be held in abeyance and that the parties file, by no later than December 14, 2012, updates on the status of Fiscal Year 2013 appropriations with respect to the issues presented. This was to allow Congress an opportunity to provide an indication that it supported shutting down the Yucca Mountain project; Congress did not address this issue. On August 13, 2013, more than two years after the original mandamus petition and significantly more than three years after the original petitions to prevent the Department of Energy from withdrawing the license application were filed, the Court of Appeals finally concluded [38] that *we therefore have no good choice but to grant the petition for a writ of mandamus against the Commission*. Details of the ruling are discussed later.

SCIENTIFIC INTEGRITY POLICY

In response to the March 9, 2009 memorandum issued by President Obama articulating his principles central to the preservation and promotion of scientific integrity, John P. Holdren, the Assistant to the President for Science and Technology and Director of the Office of Science and Technology Policy, issued an important memorandum on scientific integrity [39]. As Director of the Office of Science and Technology Policy, Dr. Holdren was responsible for ensuring the highest level of integrity in all aspects of the Executive Branches involved with scientific and technical processes. Dr. Holdren noted that it was important that policymakers involve science and technology experts where appropriate, and that it was important to facilitate the free flow of scientific and technological information. Open communication among scientists and engineers, and between these experts and the public was seen as crucial, and agencies were to expand and promote access to scientific and technological information underlying regulatory and policy decisions. There can be no doubt that by requiring the Department of Energy, in the Nuclear Waste Policy Act, to obtain a license from the Nuclear Regulatory Commission in an open process, Congress intended just that. The scientific integrity policy and its implementation bears on the consequences of the mandamus decision. The actions of the Administration vilified the scientific basis of the Yucca Mountain license application, and when challenged, officials were unable to provide evidence supporting the claim that the science was not sound. In spite of the Nuclear Regulatory Commission staff's effort to release the Safety Evaluation Reports, Chairman Jaczko suppressed their issuance until their release was overtaken by his actions to dismantle the program,

There is a blatant and conspicuous inconsistency between the President's direction for open science, the intent of the Holdren memorandum, and the Administration's actions in suspending activities related to

the licensing of Yucca Mountain. To satisfy commitments made during the Presidential campaign, the Secretary of Energy, without technical basis, and without consulting Congress, attempted to withdraw, with prejudice, the license application that Congress directed the Department of Energy to prepare and submit to the Nuclear Regulatory Commission. The Department also unilaterally ceased work on the Yucca Mountain project. Under an equitable interpretation of the scientific integrity policy, the Safety Evaluation Reports should have been released so the public had an opportunity to judge for themselves the soundness of the Yucca Mountain science. The only reason for withholding their publication then, or now for that matter, was to allow Administration officials to attempt to maintain the façade that their actions had technical merit. To release them would potentially be embarrassing to the President and Senator Reid, both of whom had argued that the science of Yucca Mountain was unsound.

THE BLUE RIBBON COMMISSION ON AMERICA’S NUCLEAR FUTURE

The second Administration policy action that bears on the mandamus decision was the creation of the Blue Ribbon Commission on America’s Nuclear Future. It was created in response to a Presidential directive, ostensibly to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle, including all alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel and nuclear waste: Issues to be considered in the review included scientific, environmental, and management factors. All alternatives logically would have included Yucca Mountain, yet every time a question was posed to Department officials about including Yucca Mountain in the Blue Ribbon Commission deliberations, the answer was always *Yucca Mountain is off the table* [40]. Further, the same question also elicited the response from the Blue Ribbon Commission that *it was not a siting commission*, noting that accordingly they had not evaluated Yucca Mountain or any other location as a potential site for the storage or disposal of spent nuclear fuel and high-level waste, nor had they taken a position on the Administration’s request to withdraw the license application [41].

The charter [42] of the Blue Ribbon Commission is also specific in that it was to include all alternatives in its review. Section 5(b)(3) of the Federal Advisory Committee Act [43] requires that an advisory committee’s mandating legislation contain provisions to ensure that the advice and recommendations of the advisory committee will not be inappropriately influenced by the appointing authority or by any special interest, but will be the result of the advisory committee’s independent judgment. Statements by the Secretary and other senior Administration officials that *Yucca Mountain was off the table*, and the Commission’s refusal to address the issue by arguing that it was *not a siting commission*, provide a solid basis for an argument that the Federal Advisory Committee Act was also violated by the Administration’s actions.

Nonetheless, the Blue Ribbon Commission noted that they recognized that current law establishes Yucca Mountain as the site for the first U.S. repository for spent fuel and high-level waste, provided the license application submitted by the Department meets relevant requirements, and pointed out that regardless of what happens with Yucca Mountain, the U.S. inventory of spent nuclear fuel will soon exceed the amount that can be legally emplaced at the site until a second repository is in operation. They concluded that, under current law, the United States will need to find a new disposal site even if Yucca Mountain goes forward, and that they believed that the approach they recommended provided the best strategy for assuring continued progress, regardless of the fate of Yucca Mountain.

Efforts to move the disposal program forward by attempting to address the Blue Ribbon Commission’s recommendations for storage continue to support the delay of the Yucca Mountain license application process and appear to have little chance for success. Neither the Department of Energy’s plan to address the Blue Ribbon Commission recommendations [44], nor efforts by four key Senate leaders [45] of the Committee on Energy and Natural Resources to introduce legislation have yet succeeded, and there is

evidence of strong resistance to storage rather than disposal in the House. Congressman John Shimkus, chairman of the House Energy and Commerce Subcommittee on Environment and the Economy, which has jurisdiction over nuclear waste addressed the issue of storage [46]. He noted that *...some stakeholders and policymakers have asked, "Why don't we step back from the Yucca Mountain standoff and start looking for an alternative?"* and, that because there is a sense of urgency to resolve the issue, he and his colleagues who have spent years working on this issue have carefully reviewed these ideas. They noted that conceptually, interim storage seems to solve many challenges, but that this is only true if it can be sited and developed quickly and inexpensively. There are concerns that trying to implement interim storage will fall short of expectations. Importantly, they found that choosing a site for a nuclear waste storage facility, either permanent or interim, may begin on optimistic terms, but political opposition builds over time, making the process neither simple nor swift. They found that a close look confirmed their belief that building a repository at Yucca Mountain would still be the fastest, best, and most viable solution.

NYE COUNTY'S ROLE IN THE MANDAMUS LAWSUIT

Nye County joined the group of Petitioners in filing for a writ of mandamus [47] against the Nuclear Regulatory Commission and Chairman Jaczko on July 29, 2011, asking the Court to direct the Nuclear Regulatory Commission to continue with its statutory duty to consider the Department's license application under the Nuclear Waste Policy Act section 114 (d). Nye County is the host county for the proposed repository and was the only party to the court action that had timely filed a petition to intervene as a matter of right in the licensing proceeding being conducted by the Nuclear Regulatory Commission Construction Authorization Board assigned to adjudicate the application. Nye County also filed seven contentions with the Construction Authorization Board related to health, safety, and environmental protections. Thus, it clearly had standing in Court to challenge the actions taken by the Nuclear Regulatory Commission and its failure to continue the licensing process. As the host County for the repository, Nye County is recognized by the Nuclear Waste Policy Act section 2 as an affected unit of local government with jurisdiction over the site. As the host County and an affected unit of local government, Nye County is entitled under the Nuclear Waste Policy Act to receive several forms of financial assistance and to participate as a full party with standing in the licensing proceeding. Section 117 of the Nuclear Waste Policy Act requires the Department of Energy to allow the host County the opportunity to designate a representative to conduct onsite oversight of activities at the site and to pay reasonable expenses; Nye County has taken advantage of this provision. The Nuclear Waste Policy Act section 116 requires the Department to make grants to the affected unit of local government for the purposes of participating in activities at the site; the Department of Energy has provided such grants in the past. Finally, section 116 of the Nuclear Waste Policy Act requires the Department to provide the affected unit of local government with additional financial assistance equal to the amount the affected unit of local government would receive if authorized to tax the site characterization and development and operation of the repository. The Department of Energy has provided money for this purpose in the past.

Nye County appropriately has used the funding provided under these provisions to assist in the characterization of the site and to conduct scientific and technical oversight of activities at the repository site. Thus, it has been a full participant in the process from the beginning and has a comprehensive understanding of the technical issues associated with the repository. Moreover, Nye County, has a unique, and statutorily recognized interest in the Nuclear Regulatory Commission licensing proceeding, because its citizens are those located closest to the repository and would be the among the first to be affected should an accident occur. Thus, Nye County's stake in the license adjudication exists regardless of the Nuclear Regulatory Commission's ultimate decision on construction authorization. Nye County also has an interest in preventing the repository from being abandoned without adequate safety justification, and in preserving

the economic and other benefits from the safe operation of the repository that are provided by the Nuclear Waste Policy Act for the host county.

U.S. COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA RULING

In a landmark decision, the U.S. Court of Appeals for the District of Columbia Circuit ruled in *Aiken II* on August 13, 2013 that the Nuclear Regulatory Commission had continued to violate the law governing the Yucca Mountain licensing process, and the Court believed it had no choice but to grant the petitions of Nye County, Nevada, the States of Washington and South Carolina, Aiken County, South Carolina, as well other Petitioners [48]. In doing so, the Court ordered the Nuclear Regulatory Commission to move forward with the licensing process and approve or disapprove the Department of Energy's license application for the Yucca Mountain nuclear waste repository.

Under the Nuclear Waste Policy Act, the Nuclear Regulatory Commission was required to consider the Department's application for the disposal of nuclear waste at Yucca Mountain and issue a final decision on the site within three years of the application's submission. The Nuclear Waste Policy Act also provided the Nuclear Regulatory Commission with the option for an additional year of review time if it could provide a written explanation as to why it needed more time. The Department submitted its application in 2008, but the Commission has still failed to act. Instead, it has admittedly stopped its review of the application, despite an existing \$11.1M in Congressional funding (coupled with additional funding from the Department of Energy that brings the total funds to approximately \$27M) meant to go towards the review process.

Writing for the majority, Judge Brett Kavanaugh explained that, regardless of any underlying policy debate, the Nuclear Regulatory Commission could not continue "flouting the law." The Commission Chairman's actions (or failure to act) have largely been the product of the Obama administration, but the Court noted that *the President may not decline to follow a statutory mandate or prohibition simply because of policy objections*. Going further, the Court explained that *our constitutional system of separation of powers would be significantly altered if we were to allow executive and independent agencies to disregard federal law in the manner asserted in this case*.

The Nuclear Regulatory Commission presented several justifications for its failure to act, but the Court found none to be persuasive. With respect to funding, the Court noted that Congress did not need to appropriate the full amount necessary for the complete licensing proceeding, but could instead appropriate funds on a step-by-step basis. Additionally, the Court found that any speculation as to what funding Congress might provide in the future was irrelevant and any argument as to the low amount of recent funding appropriated was similarly irrelevant because the Nuclear Regulatory Commission had sufficient funding to move forward for the time being. Furthermore, the Nuclear Regulatory Commission does not have the option of simply not pursuing Yucca Mountain as a policy matter because Congress sets the policy, not the Commission. Finally, Judge Kavanaugh speaking for the majority stated: *[i]t is no overstatement to say that our constitutional system of separation of powers would be significantly altered if we were to allow executive and independent agencies to disregard federal law in the manner asserted in this case by the Nuclear Regulatory Commission. Our decision today rests on the constitutional authority of Congress, and the respect that the Executive and the Judiciary properly owe to Congress in the circumstances here. To be sure, if Congress determines in the wake of our decision that it will never fund the Commission's licensing process to completion, we would certainly hope that Congress would step in before the current \$11.1 million is expended, so as to avoid wasting that taxpayer money. And Congress, of course, is under no obligation to appropriate additional money for the Yucca Mountain project. Moreover, our decision here does not prejudge the merits of the Commission's consideration or decision on the Department of Energy's license application, or the Commission's consideration or*

decision on any Department of Energy attempt to withdraw the license application. But unless and until Congress authoritatively says otherwise or there are no appropriated funds remaining, the Nuclear Regulatory Commission must promptly continue with the legally mandated licensing process. The petition for a writ of mandamus is granted.

In his dissenting opinion, Judge Merrick Garland did not find that the Nuclear Regulatory Commission had complied with the Nuclear Waste Policy Act. Rather he would have exerted his discretion not to issue the requested writ because he argued the majority was ordering the Nuclear Regulatory Commission to do a useless thing. Because there would be insufficient funding to complete the application review process, Judge Garland would have denied the petitions and allowed the Nuclear Regulatory Commission to continue ignoring the application proceeding until Congress appropriated more funding for the process. Robert Andersen, counsel for Nye County, however, noted that the Petitioners informed the Court that no major multi-year project is funded upfront by Congress, and several critical licensing steps halted by the Nuclear Regulatory Commission's illegal actions could be completed or continued with the remaining funds. These include the issuance of the already completed Safety Evaluation Reports and continuation of already scheduled discovery.

IMPLICATIONS OF THE MANDAMUS RULING FOR RESTART OF THE YUCCA MOUNTAIN LICENSE APPLICATION REVIEW

Under both the Nuclear Regulatory Commission's promulgated schedule for carrying out its duties under the Nuclear Waste Policy Act section 114 (d) and the Atomic Safety and Licensing Board's revised schedule for Safety Evaluation Report issuance [49], all of the Safety Evaluation Reports should have already been issued when the Nuclear Regulatory Commission's orderly closure was completed on September 30, 2011. The publication of Safety Evaluation Report Volume 3 was and is essential to consideration of post closure safety addressed in the license application, and is thus key to the fulfillment of the Nuclear Regulatory Commission's statutory obligation to consider the license application and issue a final decision approving or disapproving issuance of a construction authorization. The Atomic Safety and Licensing Board noted [50] *[f]ew non-NEPA contentions can be adjudicated before relevant portions of the SER are issued, and [w]hen the Staff's SER becomes available, the Board intends to move this proceeding forward as expeditiously as circumstances permit* [51].

All unissued volumes of the Yucca Mountain Safety Evaluation Report should be issued by the Nuclear Regulatory Commission as expeditiously as possible. Volume 3, regarding repository safety after permanent closure, should be issued immediately; closely followed by Volume 2 regarding repository safety before permanent closure, and the remaining administrative and programmatic volume.

In testimony before Congress, Nuclear Regulatory Commission Senior Project Manager, Janet Kotra, testified that Volume 3 of the Safety Evaluation Report was complete in September 2010, when Chairman Jaczko directed that all work on the Safety Evaluation Report stop [52]. Further testimony by Newton Kingman Stablein, the Nuclear Regulatory Commission official responsible for leading the review of the Department of Energy's Yucca Mountain license application, noted that Volume 3 of the Safety Evaluation Report could have been ready for publication in September 2010 but was slowed because of Direction from former Chairman Jaczko not to issue the document before November 2010. Thus Nuclear Regulatory Commission staff expected to issue Volume 3 in November 2010 and the other three volumes by March 2011 [53]. Dr. Stablein and Dr. Kotra went on to recount that in September 2010, the Nuclear Regulatory Commission staff was directed to stop all work on the Safety Evaluation Reports and instead issue Technical Evaluation Reports with no regulatory findings. As Dr. Stablein so aptly summarized, *[t]he work of a generation of scientists and engineers continues to be systematically suppressed.*

Additional Congressional testimony by more senior Nuclear Regulatory Commission managers shows that the Yucca Mountain Safety Evaluation Report volumes can be completed and issued with relatively little effort and cost. Lawrence Kokajko, the Deputy Office Director for the Office of Nuclear Material Safety and Safeguards, testified: *[s]taff would have willingly followed any outcome from a faithfully executed legitimate process. Until such decision, staff was under the distinct impression that it could continue its safety review as long as sufficient funding existed. Further, I would go so far to say that many think as I do, the Nation paid for this review, and the Nation should get it* [54]. Testimony by Aby Mohseni, the Nuclear Regulatory Commission Acting Director of High-Level Waste Repository Safety, stated: *[f]or example, some senior managers contributed to the manipulation of the budget process and information to apparently make sure that the Yucca Mountain project would be left unfunded even if the license application was still before the Nuclear Regulatory Commission* [55]. Testimony by Catherine Haney, the Nuclear Regulatory Commission Director of the Office of Nuclear Materials Safety and Safeguards, stated: *we began the process of documenting and preserving the staff's review, which included converting the remaining volumes of the draft Safety Evaluation Report into a Technical Evaluation Report* [56]. From these statements, it is clear that all Safety Evaluation Report volumes exist in the Nuclear Regulatory Commission's archives in near final form. Dr. Kotra provided sound advice in the form of her Congressional testimony. In her closing she stated: *I remain deeply concerned that the ground-breaking regulatory work accomplished over so many decades by my colleagues not be lost or wasted. This seminal work is documented in the draft Safety Evaluation Report volumes staff has prepared.* Her final plea cannot be stated more succinctly: *"I implore you to take whatever action you deem necessary to allow completion and prompt, public release of the complete, unredacted, and uncensored volumes of the NRC staff's SERs.*

CONCLUSIONS

The Nuclear Regulatory Commission elected not to appeal the mandamus decision; the state of Nevada, did, however, appeal to the Court of Appeals for the District of Columbia Circuit, petitioning for a rehearing *en banc*, arguing that the Court's opinion failed to address critical equitable considerations such as whether the writ commanded a useless thing [57]. The Court declined the petition noting the absence of a request by any member of the Court for a vote [56].

The Nuclear Regulatory Commission did not act expeditiously to release the Safety Evaluation Reports. Rather, the Commission invited all participants in the mandamus proceeding to provide their views as to how the agency should continue with the licensing process [59]. In a letter to Commission Chairman Macfarlane, eighty-one members of the House asked that the Nuclear Regulatory Commission follow through on commitments made in Congressional testimony and focus the limited available Nuclear Regulatory Commission resources on completion of the safety evaluation reports [60]. On October 24, 2013, six members of the Senate urged the Nuclear Regulatory Commission to comply expeditiously with the writ of mandamus and focus efforts on completion of the Safety Evaluation Reports [61].

On November 18, 2013 the Commission voted to move forward with restarting the License Application Review [62]. The Commissioners outlined actions that needed to be addressed, although the adjudication remained suspended. The Order noted that Safety Evaluation Report volumes 2 through 5 could be completed and issued concurrently, in approximately twelve months after the Staff initiated work, at a cost of approximately \$8.3 M. The Order noted as well that completion of the Safety Evaluation Reports would require access to the Department's Licensing Support Network collection and directed the Department to load these documents into the non-public portion of the Nuclear Regulatory Commission records library promptly for use by the Staff in completing the Safety Evaluation Reports. Finally, the Order requested that the Department complete the Environmental Impact Statement supplement for consideration and potential adoption by the Nuclear Regulatory Commission staff. It is difficult to

conclude other than that the apparent strategy is to proceed with deliberate slowness. While the completion of the Safety Evaluation Reports is noted as the top priority, with the need to restaff following reassignment of the technical staff, much time will be required to review and approve the Safety Evaluation Reports even if there is sufficient funding to get them completed.

All unissued volumes of the Yucca Mountain Safety Evaluation Report can and should be released expeditiously. This position is shared by not only the five participants in the petition for the writ of mandamus, but also by White Pine County, Lincoln County, and the Nuclear Energy Institute. If the cited testimony of senior Nuclear Regulatory Commission managers is correct, this should be possible at a relatively low cost. Safety Evaluation Report Volume 3, regarding repository safety after permanent closure, can and should be issued immediately with the staff safety conclusions intact, closely followed by Volume 2 regarding repository safety before permanent closure, and the other volumes that were improperly converted to Technical Evaluation Reports by stripping them of the staff's conclusions.

Release of the Safety Evaluation Reports is expected to show that the Yucca Mountain license application is in fact an appropriate basis on which to begin the licensing hearings. Remaining funds should enable the Nuclear Regulatory Commission to adjudicate post-closure issues raised during Phase 1 discovery ordered to begin previously. The Nuclear Regulatory Commission and the Department of Energy have \$11 million and \$17 million, respectively, in existing funds to restart the program; the funds are sufficient to complete and issue the remaining Safety Evaluation Report volumes, which should, in all likelihood, show that the Nuclear Regulatory Commission technical staff review of the Yucca Mountain license application finds that a repository can be completed and operated safely, as proposed. Further, the license application serves as an appropriate basis on which to continue the licensing process. Remaining funds should enable the Nuclear Regulatory Commission to adjudicate post-closure issues raised following Phase 1 discovery that was illegally halted by the previous Nuclear Regulatory Commission Chairman.

In the Energy Reorganization Act of 1974 [63], Congress required that the establishment of a repository for receipt and disposal of high level radioactive waste be licensed by the Nuclear Regulatory Commission. The intent was to have an independent body, free of political meddling, with a full time competent and dedicated staff, conduct a scientific and technical review of the safety aspects related to disposal of high level radioactive waste. Congress wanted the proposed site to go through the rigors of an aggressive and thorough independent review that was fully open and transparent and fully documented, for which the criteria for success were established before the review process was initiated. A proper interpretation of President Obama's Scientific Integrity Policy would be consistent with the Nuclear Regulatory Commission review envisioned in the Energy Reorganization Act. Opponents arguing that the science of Yucca Mountain is not sound would have an opportunity for their evidence to be aired in public with qualified administrative law judges to confirm or deny their arguments.

The Nuclear Regulatory Commission should listen to Dr. Kotra's plea and release the complete, unredacted, and uncensored Safety Evaluation Reports. Otherwise the actions by the former Nuclear Regulatory Commission Chairman, that have now been ruled unlawful, will have accomplished their intended purpose of systematically suppressing the work of a generation of scientists and engineers.

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