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Re: Nye County comments on the Final Report to the Secretary of Energy from the Blue Ribbon Commission on America's Nuclear Future

I am providing the following comments on behalf of my client Nye County, Nevada, regarding the Blue Ribbon Commission's Final Report on America's Nuclear Future.

#### **EXECUTIVE SUMMARY OF PRINCIPAL COMMENTS**

- 1. Nye County, Nevada, agrees with a principal finding and recommendation of the Blue Ribbon Commission ("BRC") that the United State should undertake "the timely development of one or more permanent deep geological facilities for the safe disposal of spent fuel and high-level nuclear waste." In its previous draft report, BRC had acknowledged a need "to promptly" develop one or more deep geological repositories. Whether BRC's concern is for "timely" or "prompt" development of a permanent repository, the only repository that can possibly be completed in the near term is the proposed Yucca Mountain repository. A neutral BRC recommendation could have called for the NRC to reach a final decision on the merits of the currently pending Yucca Mountain license application, which took billions of taxpayer dollars to produce. This added recommendation would have been consistent with the BRC's support for "timely development" of a permanent deep geological repository and could be implemented while BRC's other sweeping recommendations are considered.
- 2. The BRC suggestion that a new corporation be established to comprehensively handle spent fuel and high level waste disposal issues should be implemented prospectively only, if implemented at all. The call for new legislation should not interfere with the Yucca Mountain licensing proceeding pursuant to the NWPA. The complex BRC proposal recommending this and other major statutory, regulatory, and social changes, in addition to research programs, as a substitute for the current NWPA framework would take decades to implement, with no guarantee of success, and would be just as vulnerable to last minute political derailment as the Yucca Mountain proceeding.

- 3. Nye County opposes BRC's recommendation that the NWPA be amended so that consolidated interim storage facilities may be sited and licensed before the first permanent repository is licensed. On one hand, all but the final site selection and construction of such a storage facility can be achieved under the NWPA. However, as BRC acknowledges, if interim storage is allowed to proceed ahead of the repository, it could become de facto permanent or long-term storage. The current staging required by the NWPA is therefore prudent and should be maintained.
- 4. The BRC report now briefly acknowledges that *Nye County supports completion of the NRC licensing proceeding, and construction of the project if NRC determines it is safe.* However, the report minimizes the extent of local support for the repository and asserts that the majority of the State of Nevada opposes the project without providing documentary support. Other adjoining counties have stated support for the project, which is opposed by Nevada's federal and State politicians.
- 5. Nye County agrees that all affected levels of government must have, at a minimum, a meaningful consultative role in important decisions and that funding of active local participation in repository activities is essential to its success. Pursuant to the NWPA, Nye County has actively consulted with DOE on every step of the repository project, has provided meaningful oversight of all activities at Yucca Mountain, and is a full party participant in the Yucca Mountain licensing proceeding pending before the NRC. Nye County has informed DOE of its consent to serve as the host county for the Yucca Mountain repository.

#### **OVERVIEW**

For many decades, Republican and Democrat Administrations alike struggled to find a permanent solution for the safe disposal of high-level nuclear waste and spent nuclear fuel. When the political parties and other stakeholders finally reached an acceptable compromise on a policy direction for the Nation, that policy was embodied in law as the Nuclear Waste Policy Act ("NWPA"). Adhering to the statutory requirements and scientific and technical criteria for site selection, the Executive and Legislative Branches collectively narrowed site characterization to a single, geologically suitable location for the repository, Yucca Mountain, in Nye County, Nevada, about 100 miles from the nearest major population center, Las Vegas. After the State of Nevada failed multiple times to thwart that selection politically and in federal court, the Department of Energy ("DOE") finally filed a license application ("LA") to construct the repository with the Nuclear Regulatory Commission ("NRC") in 2008.

In accordance with carefully crafted statutory and regulatory licensing requirements, interested state, local government, tribal, and other parties intervened in the NRC licensing proceeding, ensuring that all sides on the key issue-- whether or not the facility could be constructed and operated safely-- would be fully heard in a neutral forum. The parties filed approximately three hundred environmental, health, and safety contentions with the assigned NRC Atomic Safety and Licensing Board ("ASLB"). The State of Nevada filed the vast majority of the contentions, re-raising many issues that had already been adjudicated in the past.

The LA adjudication was entering the discovery phase in 2010, and the ASLB was ready to rule on purely legal contentions and proceed with discovery, when DOE abruptly announced that it wanted to withdraw its LA with prejudice, even though DOE still maintained that the repository could be safely built and operated. The ASLB denied DOE's formal Motion to Withdraw on June 29, 2010, and the NRC unilaterally requested parties to file brief's on the question of whether or not NRC should review the ASLB's decision. Thereafter, NRC's Chairman improperly halted staff development of Safety Evaluation Reports (SERs) essential to the licensing proceeding, even though the SERs were nearly complete and the ASLB adjudicatory process was still pending.<sup>2</sup> An observer of the licensing proceeding need not be a cynic to conclude that the timing of the actions by the Secretary of DOE and NRC's Chairman were based on the fear that the SERs, and the licensing proceeding itself, were about to add weight to the claim that Yucca Mountain could be constructed safely. On September 9, 2011, after more than a year delay, NRC issued a split 2 to 2 decision that left the ASLB decision intact as a matter of law. However, the NRC acted inconsistent with that decision in also ordering the ASLB to preserve its record of the proceedings and suspend the licensing determination until Congress provided additional funding. That decision is currently pending review by the United States Court of Appeals for the DC Circuit.

Prior to DOE's filing the Motion to Withdraw, President Obama stated that advances in science and technology demanded a rethinking of the entire back-end of the nuclear fuel cycle and asked DOE to establish this Blue Ribbon Commission ("BRC") and directed it to consider all alternatives for the storage, processing, and disposal of civilian and defense spent nuclear fuel and nuclear waste. The BRC published its draft report<sup>3</sup> open for public comment until October 31, 2011. Nye County filed formal comments with the BRC on October 25, 2011. BRC then issued its Final Report on January 26, 2012. <sup>4</sup>

BRC's Final Report offers numerous suggestions for, in essence, establishing a revised policy and new program for nuclear waste disposal and restarting the repository site selection process. While Nye County agrees in principle with some of the BRC proposed recommendations and key strategies for the future, most of those changes can be made **prospectively** for future projects without further delaying the Yucca Mountain licensing proceedings under the NWPA. Nye County is deeply concerned that implementation of a new policy and the requisite statutory and regulatory changes will be costly, time consuming, and in the end, still dependent upon the cooperation of many diverse parties within the federal government and among state, local and tribal parties, and the public at large. In short, implementation of BRC strategies will assuredly take decades, and may not be implementable at all, given political realities. Therefore, Nye County strongly recommends completion of the

<sup>&</sup>lt;sup>1</sup> Order of ASLB, *In re* Dep't of Energy, NRC No. 63-001, ASLB No. 09-892-HLW-CAB04 (June 29, 2010) at 4 (hereinafter cited as "ASLB Order")

<sup>&</sup>lt;sup>2</sup> The NRC Staff has now issued TERs on safety issues that presents staff findings short of conclusions regarding safety. See note 35 *infra*, and accompanying text.

<sup>&</sup>lt;sup>3</sup> Blue Ribbon Commission on America's Nuclear Future, Draft Report to the Secretary of Energy, July 29, 2011 (hereinafter cited as "Draft Report").

<sup>&</sup>lt;sup>4</sup> Blue Ribbon Commission on America's Nuclear Future, Report to the Secretary of Energy, January 26, 2012 (hereinafter cited as "Final Report").

ongoing Yucca Mountain licensing proceeding, regardless of whether the BRC's recommendations are implemented for future nuclear waste programs.

### I. YUCCA MOUNTAIN IS THE ONLY REPOSITORY SITE THAT HAS THE POTENTIAL TO BE EXPEDITIOUSLY DEVELOPED

Nye County agrees with a principal finding and recommendation of the BRC that the United State should undertake "the timely development of one or more permanent deep geological facilities for the safe disposal of spent fuel and high-level nuclear waste."<sup>5</sup>

Given BRC members shared "sense of urgency" and their final determination that a geological repository is essential, it is difficult to reconcile the report's treatment of the one repository that potentially could be developed promptly, namely Yucca Mountain. Acknowledging the central importance of finding a suitable geological "medium" for nuclear waste disposal; the considerable time it has taken to find such a location; and the fact that a final decision relative to the Yucca Mountain license application was about to be made, BRC's recommendation regarding the need for one or more repository leads inevitably and logically to a single conclusion: the Yucca Mountain licensing proceeding should be completed as soon as possible. An objective assessment of all relevant factors demonstrates that no other site will be available for decades, even under the most optimistic view of the future.

The NRC has now finally ruled on DOE's Motion to Withdraw the license application and left the ASLB denial of DOE's Motion intact as a matter of law. Therefore, the ALSB is required by the NWPA to continue the licensing proceeding to determine if Yucca Mountain could be constructed and operated safely. Given the history of the long search for a suitable site for a repository, and the amount of effort and resources that have already been invested in the Yucca Mountain licensing proceeding, obtaining a final NRC safety determination is the only timely method to secure the first suitable site for a United States repository.

# II. THE NWPA PROGRAM FOR DEVELOPMENT OF A PERMANENT NUCLEAR WASTE REPOSITORY, WHILE DELAYED, IS WORKABLE AND INCORPORATES THE VERY STRATEGIES RECOMMENDED BY THE BRC

While noting what the BRC views as numerous deficiencies in the current policy and repository requirements established by the NWPA, DOE, and NRC, the Final Report fails to emphasize that substantial progress was being made toward a final decision on the LA. Nor are

<sup>&</sup>lt;sup>5</sup> Final Report at Ch. 4, p. 27. The Draft BRC Report at Ch. 4, paragraph 1, stated the goal in the following manner: "Our first recommendation, therefore, is that the United States must proceed promptly to develop one or more permanent deep geological facilities for the safe disposal of spent fuel and high-level nuclear waste." (emphasis added).

<sup>&</sup>lt;sup>6</sup> Final Report at p. vi.

<sup>&</sup>lt;sup>7</sup> Final Report at p. xi.

<sup>&</sup>lt;sup>8</sup> NWPA, 42 U.S.C. § 10134(d). The Inter-Agency Group established by President Carter and the works of several National Academy of Science ("NAS") committees have addressed delays in establishing a permanent repository, particularly in the 2001 NAS study, *Disposition of High-Level Waste and Spent Nuclear Fuel: The Continuing Societal and Technical Challenges*. All of these groups reached same conclusion: but for the politicization of nuclear waste issues, the solution proposed in the NWPA would be nearing completion of significant safety milestones.

the new strategies outlined by the BRC guaranteed to expeditiously achieve the ultimate goal of safe permanent disposal. Most importantly, if Yucca Mountain is abandoned, and the new strategy and processes outlined by BRC fail, the Nation will have wasted decades of progress achieved under the NWPA.

Proceeding with the ASLB adjudication of the LA would safeguard against such an eventuality and would not foreclose the improvements recommended by the BRC for consolidated interim storage, major organizational changes, modifications in the management of the nuclear waste fund, and a search for a suitable location for a second repository under an improved statutory and regulatory framework.

BRC's draft and final reports both assert that the BRC takes no position on the proposed Yucca Mountain repository or the stalled NRC licensing proceeding. However, that position is undermined by the erroneous or unsupported BRC findings of flaws in the NWPA and Yucca Mountain repository program contained elsewhere in the report.

Both the BRC's draft report and Final Report described the NWPA and the statutorily established Yucca Mountain repository program in the report as "troubled" and "deeply flawed." BRC still contends that "it will cost something to implement a successful U.S. waste management program; however, trying to implement a deeply flawed program is even more costly..." Despite the detailed comments and corrections provided to BRC by Nye County and numerous other sources regarding the draft report, BRC's Final Report still does not present an even-handed or complete review of the existing NWPA programs, and consistently fails to provide adequate supporting evidence and analysis demonstrating that the current program is fundamentally flawed.

For example, the U.S. repository development program is not characterized by decades of failed efforts, despite BRC conclusion to the contrary. Rather, the program has advanced at least as far, if not farther, than repository development programs in other nations. Currently, the U.S. repository program is thirteen years behind the schedule outlined in the NWPA, as amended.

<sup>&</sup>lt;sup>9</sup> The Final Report at p. vii-viii, and the Draft Report at p. vi., both state the following: "We have not: Rendered an opinion on the suitability of the Yucca Mountain site or on the request to withdraw the license application for Yucca Mountain. Instead, we focused on developing a sound strategy for future interim storage and permanent disposal facilities and operations that we believe can and should be implemented regardless of what happens with Yucca Mountain." See also Final report at xii. The Final Report asserts that an assessment of Yucca Mountain was not in BRC's charter. Final Report at pp. vii, xii. On the contrary, the Charter, which calls for a "comprehensive review" of "all alternatives" for "nuclear waste disposal" would seem to require an assessment of the only currently existing permanent disposal option, not preclude such an assessment. Final Report, BRC Charter at p. 122. Simply because the BRC was "not a siting committee" does not foreclose an assessment of Yucca Mountain generally or consideration of whether or not the Yucca licensing proceeding should continue as a possible means to "timely develop" a permanent repository. BRC notes that, in any event, the NWPA limits the amount of spent fuel that can be disposed at Yucca until a second repository is built. However, that comment appears to be no more than an excuse to avoid directly addressing the Yucca Mountain option. The BRC knows full well that Yucca's capacity was arbitrarily limited and could easily be expanded if the design and location are determined to be safe. Moreover, BRC was not hesitant to recommend changes in the NWPA in other areas where it supported its position. See, e.g., Final Report at Ch. 5.

<sup>&</sup>lt;sup>10</sup> Final Report at p. vii; Draft Report at pp. i, iv, vi, xiv.

<sup>&</sup>lt;sup>11</sup> Final Report at p. vii; Draft Report at p. iv.

However, significant annual progress to advance the repository development initiative was being accomplished until recent actions by the Administration sought to terminate the Yucca Mountain program without safety justification for such action. Rather than being viewed as failed efforts, the activities of the past 24 years could be viewed as the results of an "adaptive management" approach, coupled with "appropriate Congressional control," the very approach recommended by the BRC in its Final Report.<sup>12</sup>

Recent political opposition by the Administration and litigation by a single state have been the primary impediments to the timely implementation of the Nuclear Waste Policy Act. A neutral and balanced analysis would also have mentioned that many of BRC's suggestions for future nuclear waste programs are already incorporated in the NWPA and were implemented during the process of siting the Yucca Mountain project.

For example, the BRC recommends an approach to siting and developing nuclear waste management and disposal facilities in the United States that is adaptive, staged, consent-based, transparent, and standards-and science-based. The NWPA and its implementing regulations contain a careful balance of all these elements. The siting criteria and identification of potential repository sites were based upon scientific assessments that took years to complete. Moreover, the NWPA and the NRC licensing process are staged to allow neutral consideration of design, construction, and operation issues. The NWPA also requires Congressional involvement at each critical stage to insure that any adaptive changes necessary in the national interest are properly taken into account. Federal, State, local and tribal involvement and oversight are provided for at every phase of the process.

The BRC asserts that "[e]ffectively managing the back end of the nuclear fuel cycle requires a vision and a strategy. Both have been lacking in the U.S. waste management program to date." This sweeping statement is unfair, misleading, and inaccurate. The NWPA is a carefully crafted national strategy and vision for disposal of high level waste that enjoyed bipartisan support until the current President and DOE unilaterally decided to withdraw the Yucca Mountain license application without first seeking Congressional approval. The NWPA policy had endured for more than two decades under changing political landscapes and numerous Administrations. The policies and procedures established in the NWPA were being followed and the waste repository program was gathering momentum. Just as the NWPA policy framework was about to reach fruition in the NRC licensing process, with a possible independent verification that the Yucca Mountain Repository could be constructed safely, the longstanding policy framework was undermined by Executive Branch actions that sidestepped Congressional approval. Had it not been for this political interference, which the BRC apparently will not, or cannot acknowledge, the NWPA licensing proceeding for Yucca Mountain, although delayed, should now be close to completion, with an NRC final decision on relevant safety issues.

The BRC's appropriate insistence on "transparency" and "fairness" in nuclear waste decision-making is ironic. The most transparent and objective feature in the consideration of the

<sup>&</sup>lt;sup>12</sup> See generally Final Report at Ch. 2 ("Foundations of a New Strategy")

<sup>&</sup>lt;sup>13</sup> See generally Final Report at Ch. 2; Draft Report at p. xv.

<sup>&</sup>lt;sup>14</sup> Final Report at p. 4; Draft Report at Section 2.1, p. 4.

<sup>&</sup>lt;sup>15</sup> Final Report at pp. 6-7

proposed Yucca Mountain repository is the ASLB licensing proceeding. The adjudication is conducted by neutral administrative judges and NRC technical experts. Any party with a stake in the licensing proceeding may intervene as a party and file safety and environmental contentions. Evidence is presented in a public adjudicatory forum governed by rules similar to those in federal court. The only non-transparent action under the NWPA to date has been the DOE's and NRC's politically motivated interference with the statutory ASLB licensing process for reasons unrelated to safety.

The assertion that had the Administration not halted the Yucca program, the LA would have led to "further controversy, litigation, and protracted delay" turns the current situation on its head. Yes, there is an opportunity for judicial review of a final NRC decision on the repository license application. However, it was DOE's attempt to unilaterally withdraw the application, on grounds other than safety, and NRC's inexcusable delay in ruling on DOE's Motion to Withdraw that led to "further controversy [involving NRC's Inspector General, Congress, and the Courts], litigation, and protracted delay". DOE and the NRC Chairman's actions prevented the ASLB and NRC from meeting their statutory responsibility to rule on the safety merits of the LA within the three or four year period required by law. 17

Regarding the setting of regulatory standards, BRC starts with the concession that EPA and NRC should retain their respective roles in setting the repository safety and environmental standards. <sup>18</sup> Both agencies, together with the National Academies of Science, were directly involved in the setting of science-based standards and procedures for the Yucca Mountain repository under the NWPA, and the standard-setting process took from 1987 to 2005. There is no reason to believe that new, and *presumably* better, regulations could be promulgated and implemented, without litigation, any faster.

In this regard, the BRC recommends that safety and other performance standards and regulations should be finalized prior to the site-selection process. <sup>19</sup> BRC also recommends that EPA complete this process in a thorough and timely way.

Nye County agrees with those goals for future projects, and notes that thorough and effective standards have been painstaking promulgated with respect to the Yucca Mountain repository, although not as quickly as many would have wanted. Despite the implications in the BRC Final Report, there is no reason to believe that the current safety and radiological standards for Yucca Mountain are inadequate for the current proposal or for future repositories.<sup>20</sup> As noted

<sup>&</sup>lt;sup>16</sup> Final Report at p. vi; Draft Report at p. iii.

<sup>&</sup>lt;sup>17</sup> NWPA, 42 U.S.C. § 10134(d).

<sup>&</sup>lt;sup>18</sup> See Final Report at Ch. 6, 9, 10.

<sup>&</sup>lt;sup>19</sup> See, e.g., Final Report at Ch 10; Draft Report at Section 9.3, page 104.

<sup>&</sup>lt;sup>20</sup> During a discussion of the nature of radiation hazards, the BRC draft report correctly states, "Human beings are exposed continuously to very low levels of naturally-occurring and man-made radiation (see text box and figure 7)." Draft Report, Section 3.2, p. 14, Figure 7 shows radiation doses of varying levels and the hazard posed at higher levels. In particular, the figure shows a dental x-ray produces about a 5 microSievert dose; daily background radiation to an average individual is about 10 microSieverts; a chest x-ray exposes an individual to about 100 microSieverts; and at 100 milliSieverts (an annual dose 10,000 times background radiation), effects of lifetime risk of cancer become evident. To put this information in proper perspective, as documented in DOE's Yucca Mountain license application, the estimated highest annual dose to a hypothetical Nye County resident living closer than anyone actually does to Yucca Mountain would be less than 3 microSieverts for 10,000 years and less than 30

elsewhere in the BRC report, it took EPA 16 years to establish the current Yucca Mountain standard. While the BRC voices a preference for generic standards, the history of environmental, health, and safety regulations demonstrates that site specific requirements are usually needed to adequately protect human health and safety. Those standards should be left intact for Yucca Mountain licensing and construction.<sup>21</sup>

The BRC Report emphasizes that the public is entitled to a clear understanding of how decisions were reached and how different values and interests were considered and resolved in the process. Following its own advice, the BRC should demand that the Administration provide a fuller explanation of why it makes sense to abandon decades of work and tens of billions of dollars in the hope of devising "better" regulations and disposal options compared to those governing the proposed Yucca Mountain project, when the radiation levels anyone could possibly receive at the proposed Yucca Mountain project are much lower than the very low levels of naturally occurring radiation.

Given the BRC's commitment to research into fundamental issues related to storage and disposal of nuclear waste, expressed throughout the Report, it is difficult to understand why BRC did not support capturing the value represented by billions of taxpayers' dollars already expended in examining the Yucca Mountain proposal. That capture would be accomplished by a final determination by the ASLB on whether or not repository construction could proceed safely. Such information would prove invaluable to future repository efforts, regardless of the NRC decision on the merits, as even the Administration acknowledged in 2010.

# III. NYE COUNTY OPPOSES BRC'S RECOMMENDATION THAT INTERIM STORAGE BE ALLOWED TO PROCEED BEFORE A PERMANENT REPOSITORY IS LICENSED SINCE THAT RISKS MAKING THE INTERIM STORAGE A DE FACTO REPOSITORY

A monitored retrievable storage facility ("MRS") allowed by the NWPA could serve as the type of consolidated interim storage facility advocated by the BRC.<sup>24</sup> As the BRC has acknowledged, the NWPA currently allows DOE to pursue many activities in advance of final site selection for an MRS, including performing the systems analyses and design studies needed for a conceptual design of a highly flexible, initial federal interim spent fuel storage facility; assembling information that would be helpful to the siting process for such a facility; attempting to identify local governments willing to host the site; and working with nuclear utilities, the nuclear industry, and other stakeholders to promote the standardization of dry cask storage

microSieverts for a million years. That means that for over one million years, the highest reasonably estimated dose to any individual resulting from a repository at Yucca Mountain would be equivalent to adding 3 days of background exposure to the individual and less than the radiation dose received by someone flying from New York to Los Angeles (40 microSieverts per Figure 7). In fact, the BRC members received a much higher radiation dose by flying from meeting to meeting than any member of the public ever would from the proposed Yucca Mountain Repository.

<sup>&</sup>lt;sup>21</sup> Nye County notes that requiring new standards to be completed upfront for the siting and construction of a second repository could also delay that process for decades.

<sup>&</sup>lt;sup>22</sup> Final Report at pp. 7-8.

<sup>&</sup>lt;sup>23</sup> See, e.g., Final Report at Ch. 11.

<sup>&</sup>lt;sup>24</sup> Final Report Ch. 5.

system.<sup>25</sup> However, any license issued by the NRC for a centralized interim storage facility under the current MRS provisions of the NWPA must specify that construction of the MRS cannot begin until after the NRC has issued a license for construction of a geologic repository.<sup>26</sup> BRC recommends that the NWPA be amended to allow the siting and construction of interim consolidated storage before the first permanent repository is licensed.

Nye County opposes this recommendation. The authority to select a site for the MRS and to proceed with construction or expansion of the MRS facility is **linked to progress on licensing and construction of a permanent repository for a very sound policy reason: Congress did not want the MRS to become a de facto permanent repository.** While recognizing this problem, <sup>27</sup> the BRC insists that interim storage is urgently needed and should not await the availability of a permanent repository. Nye County believes that the NWPA strikes the right balance and allows many elements of the consolidated storage program to proceed without serving as a potential roadblock to permanent disposal.

## IV. THE BRC FAILS TO ACKNOWLEDGE THE FULL EXTENT OF NATIONAL AND LOCAL SUPPORT FOR THE YUCCA MOUNTAIN LICENSING PROCEEDING AND DRAWS A FALSE CONTRAST BETWEEN YUCCA MOUNTAIN AND WIPP

BRC insists that the siting of any repository be "consent based" with the support and cooperation of the local communities surrounding the project. BRC devotes major portions of its Final Report to the concept of a consent-based approach to siting and development of a nuclear waste repository, and the need for local involvement and acceptance of the project. Because Nye County is the local government host for the proposed Yucca Mountain project, the County has a unique perspective on this recommendation—a perspective that until the final Report was virtually ignored by the BRC.

BRC's Report falsely implies that such factors were not properly accounted for previously under the NWPA framework; nor does it fully concede that unanimous support for any major project is impossible in this era of "not in my back yard" ("NIMBY").<sup>30</sup>

Regarding the first point, the BRC fails to provide a rigorous analysis of the numerous provisions in the NWPA that require just such local involvement. Congress may not have structured the provisions exactly as the BRC would have, but there is no assurance that any future legislation will strike closer to BRC's ideal. For example, several discrete provisions of the Act call for oversight of DOE's siting, construction, and operation of a nuclear waste repository by affected units of local government, tribes, and states at federal expense. The Final Report at least acknowledges what the BRC draft report entirely omitted: that Nye County, Nevada, which is the local County host for the proposed Repository, has from the outset supported the Yucca Mountain project, provided NRC ultimately determines that the project can

<sup>&</sup>lt;sup>25</sup> See generally Final Report Ch. 5; Draft Report at pp. 43-44.

<sup>&</sup>lt;sup>26</sup> NWPA § 148(d), 42 U.S.C. § 10168(d).

<sup>&</sup>lt;sup>27</sup> Final Report at p. 41

<sup>&</sup>lt;sup>28</sup> Final Report at Ch. 6.

<sup>&</sup>lt;sup>29</sup> See, e.g., Final Report at Ch. 4 and Ch. 6.

<sup>&</sup>lt;sup>30</sup> But see Draft Report at section 2.3.8 at p. 8.

<sup>&</sup>lt;sup>31</sup> See, e.g., NWPA, 42 U.S.C. §§ 10136, 10137; 10138.

be safely constructed and operated.<sup>32</sup> As now acknowledged by BRC, Nye County has been joined by other adjoining counties in support of continuing the Yucca Mountain project licensing proceeding. Indeed, broad national support over many decades for the NWPA framework persists, and is not counterbalanced by the State of Nevada's political opposition. <sup>33</sup>

The fact that the State of Nevada and Clark County, Nevada, have consistently opposed the project should not prevent the licensing process from reaching a conclusion on the basic safety issues. The ASLB assigned to the proceeding has already dismissed the purely legal contentions filed by Nevada and supported by Clark County, and has yet to sustain a single safety contention filed by any party. NRC staff Safety Evaluation Reports, although stripped of their technical conclusions regarding the safety of the repository construction, and issued instead as Technical Evaluation Reports at the direction of the NRC Chair, leave little doubt that staff believed that there were no major irresolvable safety issues with the LA. For example, the various DOE calculations of possible radiation exposures from the repository meet the regulatory requirements in 10 C.F.R. Part 63, and, in fact, such exposures are much lower than required.

<sup>32</sup> Nye County has informed BRC of its support for the licensing proceeding as early as February 2011. Nye County Letter to the BRC (February 7, 2011).

More than two dozen prominent national, state, local and Native American organizations have written to the U.S. Senate expressing their support for the resumption of the Yucca Mountain license review by NRC's ASLB and related licensing-support activities at DOE. The 26 organizations -- which comprise a cross-section of energy consumers, regulators, elected officials, Native Americans and community entities and businesses -- include the National Association of Regulatory Utility Commissioners, U.S. Chamber of Commerce, Prairie Island Indian Community, U.S. Nuclear Infrastructure Council, Institute for 21st Century Energy, Nuclear Waste Strategy Coalition, U.S. Nuclear Energy Foundation and the Sustainable Fuel Cycle Task Force. Referring to the above-stated findings by the BRC and by Congress, the letter states that "we agree that the need for the Federal government to meet its responsibility for commercial spent fuel and defense waste management under the Nuclear Waste Policy Act is a matter of urgency -- and that further delay is only exacerbating taxpayer liability and diminishing confidence in resolution of this national concern." Letter from Sustainable Fuel Cycle Task Force to United States Senate (September 15, 2011) at p. 2.

<sup>&</sup>lt;sup>34</sup> Memorandum and Order of ASLB, *In re* Dep't of Energy, NRC No. 63-001-HLW, ASLB No. 09-892-HLW-CAB04 (Dec. 14, 2010) at pp. 1-35.

NUREG-1949, Volume 1, "Safety Evaluation Report Related to Disposal of High-Level Radioactive Wastes in a Geologic Repository at Yucca Mountain, Nevada; Volume 1: General Information" (Note that Volume 1 was issued as a Safety Evaluation Report. The title page includes the notation: "Manuscript Completed: August 2010, Date Published: August 2010"); NUREG-2107, "Technical Evaluation Report on the Content of the U.S. Department of Energy's Yucca Mountain Repository License Application; Postclosure Volume: Repository Safety After Permanent Closure." (ML11223A273) (Note that this is what would have been Volume 3 of the SER had NRC issued the postclosure volume as an SER. The title page includes the notation: "Manuscript Completed: July 2011, Date Published: August 2011"); NUREG-2108, "Technical Evaluation Report on the Content of the U.S. Department of Energy's Yucca Mountain Repository License Application; Preclosure Volume: Repository Safety Before Permanent Closure" (ML11250A093) (Note that this would have been SER Volume 2. The title page includes the notation: "Manuscript Completed: August 2011, Date Published: September 2011"); NUREG-2109, "Technical Evaluation Report on the Content of the U.S. Department of Energy's Yucca Mountain Repository License Application; Administrative and Programmatic Volume" (ML11255A002) (Note that this would have been SER Volume 4. The title page includes the notation: "Manuscript Completed: September 2011, Date Published: September 2011")

<sup>&</sup>lt;sup>36</sup> In the Introduction to the TER on postclosure issues, the NRC staff notes that the "TER was developed using the regulations at 10 CFR Part 63 and guidance in the Yucca Mountain Review Plan (YMRP). The TER does not, however, include conclusions as to whether or not DOE satisfies the Commission's regulations." NUREG-2107, "Technical Evaluation Report on the Content of the U.S. Department of Energy's Yucca Mountain Repository License Application; Postclosure Volume: Repository Safety After Permanent Closure." (ML11223A273) (The title page includes the notation: "Manuscript Completed: July 2011, Date Published: August 2011") at p.1, Introduction

The NRC staff reviewed the SAR and other information DOE submitted in support of its calculations and concluded the following: "DOE submitted information consistent with the guidance in the YMRP. Specifically, NRC staff notes that the repository (i) is composed of multiple barriers; (ii) the Total Systems Performance Assessments (TSPAs) used for the individual protection, human intrusion, and separate groundwater protection calculations are reasonable; and (iii) the technical approach and results in DOE's TSPA, including the average annual dose values and the performance of the repository barriers, discussed in this TER, are reasonable." <sup>37</sup> Thus, the NRC staff did, in essence, conclude that key safety features incorporated in DOE's license application met NRC regulatory safety requirements.

BRC is also well aware that unanimous backing, or even consensus support, for any major federal project is often unachievable, even if the project is located on federal lands, as Yucca Mountain is. The reasons are political, not sound science. A "consent based" approach advocated by the BRC is preferable, but hardly the most important siting factor. As the Final Report now acknowledges, the primary discriminator must be the scientific and technical suitability of the disposal medium. As our experience under the NWPA demonstrates, the technical site evaluation is a long and difficult process. Once that determination is made for one or more sites, then and only then, should cultural and political factors be weighed in the siting process. That is the approach taken in the NWPA.

When the NWPA was drafted, the Governors of the fifty States recognized this reality and recommended that the NWPA not grant the selected host state veto power over siting of the repository, knowing full well that political realities, rather than technical considerations, would make it virtually impossible for any governor to approve of the siting. Instead, the NWPA gave the governor of the host state the right to file an objection, and Congress and the President the ability to over-ride that objection. That is in fact what happened with the Yucca Mountain siting, and would almost certainly happen again with the siting in most, if not all, of the other forty-nine states.<sup>38</sup>

BRC's asserted differences between the local support for the Waste Isolation Pilot Project ("WIPP") in New Mexico and at Yucca Mountain in Nevada are not compelling. As BRC now acknowledges, both New Mexico and Nevada used litigation to oppose the nuclear waste projects in their respective state. The key difference between WIPP and Yucca are not the ones that are articulated by the BRC, but rather DOE's willingness to fully litigate the issues in WIPP and its determination to stay the course in New Mexico, but not at Yucca Mountain. EPA has been involved in the standards development process for both projects. The host local communities supported the project at WIPP, and from the outset at Yucca Mountain, so long as they were constructed and operated safely. The experts on the BRC are well aware of the difference between perceived and actual risks, but fail to emphasize that the local support in New Mexico measurably strengthened after the WIPP facility was constructed and operated safely for

<sup>&</sup>lt;sup>37</sup> Id. at p. xxii. (emphasis added)

<sup>&</sup>lt;sup>38</sup> Both the Final Report and the Draft Report discuss previous efforts to find a volunteer state for a repository site. The BRC notes there were several communities interested but, "In no case, however, was a host state supportive of having the process go forward." Draft Report at p. 24. A sober assessment of the future indicates state politics are unlikely to change in the future.

<sup>&</sup>lt;sup>39</sup> Final Report at pp. 3,57-58

several years. Once a project is completed, and benefits are accrued from a project, irrational fears and misunderstandings that persist before a project is built can be overcome. Sometimes even a vilified project becomes not only accepted, but welcomed by the community when its benefits become obvious once the project is constructed and operated.<sup>40</sup>

## IV. IN ESSENCE, THE BRC RECOMMENDS STARTING OVER AGAIN WITH ESTABLISHING REPOSITORY POLICY AND THE SITING PROCESS WITH NO ASSURANCE OF SUCCESS IN THE END

BRC's recommendation in Chapter 6 for a new approach to siting and developing nuclear waste management and disposal facilities in the future is in essence a suggestion for starting over with the entire process of finding sites for repositories. To accomplish this goal, the BRC has made a series of sweeping recommendations regarding establishing and funding a new independent organization for the handling of nuclear fuel disposal, changes to the management of the nuclear waste fund paid into by the utilities, accelerated development of interim storage, new generic regulations and siting criteria for facilities, and research both nationally and internationally—all of which require time, resources, and in most cases, statutory changes.

BRC's recommendations collectively amount to starting over and, as a result, the Nation would face 20 or more years to simply get back to where the Yucca Mountain program is now—with no assurance of greater State or local support than is present now. Throughout its Report, the BRC criticized ways in which the Yucca Mountain project has progressed by making a false comparison with the idealized way the BRC postulates site designation should proceed in the future—without doing a reality check. Site designation under the BRC proposal will take enormous amount of time and resources with no more guarantee of success than under the NWPA.

For example, BRC calls for a new, single-purpose organization to develop and implement a focused, integrated program for the transportation, storage, and disposal of nuclear waste in the United States. <sup>42</sup> Presumably, DOE's credibility in nuclear waste management is irretrievably lost. Assuming BRC's proposal ever achieves Executive and Legislative Branch approval, and stakeholder support, the new organization will be confronted with all the same challenges that hampered the DOE. There will always be political control on spending. The constancy of leadership for the nuclear waste program is the single most important element of success for any entity responsible for the repository program. The tenure of the individual that heads the organization must be more than the one to two years characterized by the current NWPA program heads.

More importantly, there is nothing fundamentally new in most of the BRC recommendations. The history of the NWPA itself and the evolution of the process over time included each and every one of the five siting processes included in this BRC recommendation. The option for a state to veto the site recommendation was considered and rejected, with sound

<sup>&</sup>lt;sup>40</sup> Melnyk & Andersen, OFFSHORE POWER, *Building Renewable Energy Projects in U.S. Waters* (PennWell 2009) at 94, 224-225.

<sup>&</sup>lt;sup>41</sup> Final Report at Ch. 6.

<sup>&</sup>lt;sup>42</sup> Final Report at p. vii, and Ch. 7.

justification, during deliberations on the NWPA. Any consent-based process must be subordinate to a rigorous scientific and technical process as discussed previously. BRC implies that the process of involving state and locals just needs to be done better, with greater efforts to involve and educate the host population. However, educating the general public on nuclear safety and risk has not been achievable, despite enormous effort by EPA, DOE, the National Academies of Science, and most of the independent academic community. Anti-nuclear advocates are willing to equate such disparate situations as Three Mile Island and Chernobyl in an effort to enflame public sentiment against all aspects of nuclear power and as a result public perception of risk for nuclear matters is much higher that actual risk. <sup>43</sup>

### CONCLUSION

The Nation's resources, time, and money invested in developing the NWPA and the Yucca Mountain Repository license deserve more than the passing consideration given them by the BRC. Together, they remain the Nation's best hope for finally solving the problem of permanent disposal of nuclear waste in this century.

For all of the above-sated reasons, Nye County, Nevada, the host County for the Yucca Mountain Nuclear Waste Repository, recommends (1) that the Yucca Mountain licensing process should be allowed to continue as the only possibility for prompt development of a permanent nuclear waste repository in accordance with the BRC's goals; (2) that establishment of a new nuclear waste organization, generally applicable safety rules, uniform siting criteria, and other BRC policies be implemented prospectively only, and not be allowed to impact the NWPA requirements for the Yucca Mountain licensing proceeding; and (3) that interim nuclear waste storage not be sited or licensed until a permanent repository is licensed for construction.

Sincerely

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<sup>&</sup>lt;sup>43</sup> Stephen Breyer, BREAKING THE VICIOUS CIRCLE, *Toward Effective Risk Regulation* (1992 Harvard University Press) at p. 21