

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

_____)	Docket No. 63-001-HLW
In the Matter of)	
U.S. DEPARTMENT OF ENERGY)	
(License Application for Geologic)	August 23, 2013
Repository at Yucca Mountain))	
_____)	

**NYE COUNTY'S MOTION FOR RECUSAL/DISQUALIFICATION OF NRC COMMISSIONER
ALLISON M. MACFARLANE AND POINTS AND AUTHORITIES IN SUPPORT OF MOTION**

Robert M. Andersen
Clark Hill PLC
601 Pennsylvania Ave. N.W.
North Building, Suite 1000
Washington, D.C. 20004
Voice: (202) 772-0924
Fax: (202) 572-8688
Email: randers@clarkhill.com

Christopher B. Clare
Clark Hill PLC
601 Pennsylvania Ave. N.W.
North Building, Suite 1000
Washington, D.C. 20004
Voice: (202) 572-8671
Fax: (202) 572-8691
Email: cclare@clarkhill.com

Counsel for Nye County, Nevada

TABLE OF CONTENTS

TABLE OF CONTENTS ii

TABLE OF AUTHORITIES iii

MOTION 1

POINTS AND AUTHORITIES IN SUPPORT OF MOTION 2

 I. COMMISSIONER MACFARLANE’S PUBLICATIONS AND STATEMENTS WOULD LEAD A REASONABLE PERSON TO QUESTION HER IMPARTIALITY IN JUDGING YUCCA MOUNTAIN LICENSE MATTERS, INCLUDING THOSE RELATED TO THE RESUMPTION OF REVIEW OF THE LICENSE APPLICATION, AND SHE HAS EXTRAJUDICIAL KNOWLEDGE OF DISPUTED EVIDENTIARY FACT PERTINENT TO THE YUCCA MOUNTAIN LICENSING PROCEEDING.2

 A. Dr. Macfarlane’s Extrajudicial Positions Critical of DOE’s Modeling and Factual Support for the Yucca Mountain License Application Raise Serious Doubts About Her Impartiality In Now Judging Those Same Issues, Including Issues Related to the Resumption of Review of the License Application.....3

 B. Commissioner Macfarlane had Extrajudicial Knowledge of Disputed Evidentiary Facts Pertinent to the Yucca Mountain Licensing Proceeding..... 11

 II. THIS MOTION IS FILED IN A TIMELY MANNER. 13

CONCLUSION13

TABLE OF AUTHORITIES

Federal Cases

ATX Inc. v. U.S. Dep't of Transp.,
41 F.3d 1522 (D.C. Cir. 1994)10

Caperton v. A.T. Massey Coal Co.,
556 U.S. 868 (2009)7, 9

Cinderella Career & Finishing Sch., Inc. v. FTC,
425 F.2d 583 (D.C. Cir. 1970)10

Edgar v. K.L.,
93 F.3d 256 (7th Cir. 1996)12

Hayes v. Williamsville Cent. School Dist.,
506 F. Supp. 165 (W.D.N.Y. 2007)..... 3

In re Aiken County, et al.,
Case No. 11-1271 (D.C. Cir. Aug. 13, 2013) 3

In re M.C., 8 A.3d 1215,
(D.C. Cir. 2010)11

Liteky v. U.S.,
510 U.S. 540 (1994).....2, 7, 9

Nuclear Info. & Res. Serv. (LAIRS) v. NRC,
509 F.3d 562 (D.C. Cir. 2007)10

Parker v. Connors Steel Co.,
855 F.2d 1510 (11th Cir. 1988)11

Pillsbury Co. v. FTC,
354 F.2d 952 (5th Cir. 1966)10

Price Bros. Co. v Philadelphia Gear Corp.,
629 F.2d 444 (6th Cir. 1980)11

U.S. v. Bullock,
2005 U.S. Dist. LEXIS 1833 (E.D. Penn. 2005)12

Statutes

Nuclear Waste Policy Act,
Pub L. 95-91, 91 Stat. 570, 42 U.S.C. § 7101 *et seq.*..... 5

Regulations

10 C.F.R. § 2.323(2)(b) 1
10 C.F.R. § 63.102(j)..... 4
28 U.S.C § 455(b)(1)..... 11, 12, 13
28 U.S.C. § 455(a)2, 3
28 U.S.C. § 455(b) 2
40 C.F.R. § 197.20..... 4

NRC Cases

In re Joseph J. Macktal,
CLI-89-14, 30 NRC 85 (1989)2, 3
Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1),
CLI -84-20, 20 NRC 1061 (1984) 3
Public Service Elec. and Gas Co. (Hope Creek Generating Station, Unit 1),
ALAB-759, 19 NRC 13 (1984)..... 2
State of Nevada’s Petition to Intervene as a Full Party, *In re U.S. Dep’t of Energy*,
NRC No. 63-001, ASLBP No. 09-892-HLW-CAB04 (December 19, 2008)4, 7, 8
U.S. Department of Energy’s Motion to Stay the Proceeding, *In re U.S. Dep’t of Energy*,
NRC No. 63-001, ASLBP No. 09-892-HLW-CAB04 (Feb. 1, 2010) 6
U.S. Department of Energy’s Motion to Withdraw, *In re U.S. Dep’t of Energy*,
NRC No. 63-001, ASLBP No. 09-892-HLW-CAB04 (Mar. 3, 2010) 6
U.S. Nuclear Regulatory Commission, Office of the Inspector General,
NRC Chairman’s Unilateral Decision to Terminate NRC’s Review of DOE Yucca
Mountain Repository License Application, OIG Case No. 11-05 (2011).....7, 14

Congressional Testimony

*Hearing on the Status of the Yucca Mountain Project Before the S. Comm. On Environment
and Public Works*, 109th Cong. (2006) (testimony of Allison M. Macfarlane)...5, 6, 8, 9, 10, 11
*Joint Hearing on NRC Policy and Governance Oversight Before the Subcomm. On
Environment and the Economy and Subcomm. On Energy and Power of the H. Comm.
On Energy and Commerce*, 112th Cong. (2012) (testimony of Allison M. Macfarlane)10

Other Authorities

ALLISON M. MACFARLANE & RODNEY C. EWING, *UNCERTAIN UNDERGROUND: YUCCA MOUNTAIN AND THE NATION'S HIGH LEVEL NUCLEAR WASTE* (The MIT Press) (2006)3, 5, 6, 8, 9, 11

Budget of the U.S. Government, Fiscal Year 2011, Appendix
(available at <http://www.whitehouse.gov/omb/budget/fy2011/assets/doe.pdf>). 6

David Talbot, *Life After Yucca Mountain*, MIT Technology Review,
June 23, 200910

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

_____)	Docket No. 63-001-HLW
In the Matter of)	
U.S. DEPARTMENT OF ENERGY)	
)	
(License Application for Geologic)	August 23, 2013
Repository at Yucca Mountain))	
_____)	

**NYE COUNTY'S MOTION FOR RECUSAL/DISQUALIFICATION OF
NRC COMMISSIONER ALLISON M. MACFARLANE**

Nye County, Nevada hereby moves that Commissioner Allison M. Macfarlane recuse herself and be disqualified from any consideration related to the above-captioned matter, and further that she make a determination regarding this motion before further considering any other pending matters related to the Yucca Mountain licensing proceeding. The State of South Carolina, Aiken County, South Carolina, and the National Association of Regulatory Utilities Commissioners concur in the filing of this Motion by Nye County.¹

Respectfully Submitted,

/Signed (electronically) by/

Robert M. Andersen
Christopher B. Clare
Clark Hill PLC
601 Pennsylvania Ave. N.W.
North Building, Suite 1000
Washington, D.C. 20004

Counsel for Nye County, Nevada

August 23, 2013

¹ Counsel has in good faith attempted to contact all of the parties to the Yucca Mountain proceeding in accordance with 10 C.F.R. § 2.323(2)(b). As a result of those consultations, the State of Washington, the Staff of the Nuclear Regulatory Commission, the Department of Energy, Clark County, Nevada, Inyo County, California, the Nuclear Energy Institute, and the State of Nevada took no position on the Motion and reserved the right to respond to the Motion until they have had an opportunity to review the Motion. Counsel did not receive responses from any other parties.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

_____)	Docket No. 63-001-HLW
In the Matter of)	
U.S. DEPARTMENT OF ENERGY)	
(License Application for Geologic)	August 23, 2013
Repository at Yucca Mountain))	
_____)	

POINTS AND AUTHORITIES IN SUPPORT OF MOTION

- I. **COMMISSIONER MACFARLANE’S PUBLICATIONS AND STATEMENTS WOULD LEAD A REASONABLE PERSON TO QUESTION HER IMPARTIALITY IN JUDGING YUCCA MOUNTAIN LICENSE MATTERS, INCLUDING THOSE RELATED TO THE RESUMPTION OF REVIEW OF THE LICENSE APPLICATION, AND SHE HAS EXTRAJUDICIAL KNOWLEDGE OF DISPUTED EVIDENTIARY FACTS PERTINENT TO THE YUCCA MOUNTAIN LICENSING PROCEEDING.**

Nuclear Regulatory Commission (“NRC”) case law governing the recusal of Commissioners is based upon the statutory standards for recusal of Federal Judges. *In re Joseph J. Macktal*, CLI-89-14, 30 NRC 85, 91 (1989) (citations and internal quotation marks omitted). There are essentially two independent bases for recusal of a Commissioner. Under 28 U.S.C. § 455(a): "Any justice, judge, or magistrate judge of the United States shall disqualify himself in any proceeding in which his impartiality might reasonably be questioned." *Liteky v. U.S.*, 510 U.S. 540 (1994); *Public Service Elec. and Gas Co.* (Hope Creek Generating Station, Unit 1), ALAB-759, 19 NRC 13, 20-21 (1984). Under NRC’s interpretation of 28 U.S.C. § 455(b), a Commissioner, must also disqualify herself if they “either have a personal bias or prejudice concerning a party, or *personal knowledge of disputed evidentiary facts concerning the proceeding.*” *Public Service Elec. and Gas Co.* (Hope Creek Generating Station, Unit 1), ALAB-759, 19 NRC 13, 14 (1984) (emphasis added). Commissioner Macfarlane should recuse herself based upon application of either of these two standards.

A. Dr. Macfarlane’s Extrajudicial Positions Critical of DOE’s Modeling and Factual Support for the Yucca Mountain License Application Raise Serious Doubts About Her impartiality In Now Judging Those Same Issues, Including Issues Related to the Resumption of Review of the License Application.

Under 28 U.S.C. § 455(a), recusal is required whenever a reasonable person “would harbor doubts about the judge’s impartiality” if the person knew all the relevant circumstances. *In re Joseph J. Macktal*, CLI-89-14, 30 NRC 85, 91 (1989); *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI -84-20, 20 NRC 1061, 1078 n. 46 (1984). Nye County respectfully submits that a reasonable person would certainly question or harbor serious doubts about Commissioner Macfarlane's impartiality in judging matters related to the Yucca Mountain licensing proceeding. See 28 U.S.C. §455(a). Therefore, she should recuse herself from any action before the NRC related to the Yucca Mountain licensing proceeding, recently ordered to be restarted by the United States Court of Appeals for the District of Columbia Circuit. *In re Aiken County, et al.*, Case No. 11-1271 (D.C. Cir. Aug. 13, 2013)

A reasonable person would certainly "harbor doubts" about Commissioner Macfarlane's impartiality because of her publications, Congressional testimony, and statements critical of the U.S. Department of Energy’s (“DOE”) technical, legal, and policy approach to the Yucca Mountain licensing, most importantly in her book, ALLISON M. MACFARLANE & RODNEY C. EWING, UNCERTAIN UNDERGROUND: YUCCA MOUNTAIN AND THE NATION’S HIGH LEVEL NUCLEAR WASTE (The MIT Press) (2006).² “What matters . . . is not the reality of bias . . . or prejudice, but its appearance.” *Hayes v. Williamsville Cent. School Dist.*, 506 F. Supp. 165 (W.D.N.Y. 2007). The portion of the book written by Dr. Macfarlane herself finds fault with the safety modeling and other methods for assessing safety that DOE was required by law and regulation to use in developing the license application. DOE’s approach

² Hereinafter cited as “Uncertainty Underground.” Of particular importance are Chapters 24, written by Allison M. Macfarlane alone, and Chapter 1, written by Allison M. Macfarlane and Rodney C. Ewing.

has not fundamentally changed since 2006, and its application was based upon the same modeling and technical record that Dr. Macfarlane criticized in her book.

In fairness, Dr. Macfarlane's criticisms of the foundations for DOE's licensing application were offered by her as an academic and independent technical consultant. She could not have known at the time that she would later be nominated to serve as a Commissioner on the NRC, and was entitled, as a scientist and private citizen, to draw her own conclusions about the adequacy of DOE license application. Nevertheless, by stating her unvarnished conclusions about factual, legal, and policy issues that are now the subject of a contested licensing proceeding pending before the NRC, Dr. Macfarlane has disqualified herself from serving as an impartial judge of those same issues. In fact, many believe that she, like her predecessor, was chosen to chair the NRC precisely because she supports DOE's attempt to withdraw the Yucca Mountain license application, opposes DOE's technical and policy approaches to Yucca Mountain that it expressed in its filed application, and supports the Administration's efforts to develop an entirely new approach to nuclear waste disposal.

For example, at the heart of DOE's license application is the Total System Performance Assessment ("TSPA") **required** to be used by both U.S. Environmental Protection Agency ("EPA") and NRC regulations, 40 C.F.R. § 197.20 and 10 C.F.R. § 63.102(j). The TSPA modeling is the basis for DOE's post-closure safety case in support of the repository and is essential to the DOE license application. The TSPA is the subject of numerous contentions in the NRC licensing proceeding.³ In extrajudicial pronouncements,

³ The State of Nevada alone has filed over 150 safety contentions attacking DOE's TSPA or the conceptual models and data on which it relies. See State of Nevada's Petition to Intervene as a Full Party, *In re U.S. Dep't of Energy*, NRC No. 63-001, ASLBP No. 09-892-HLW-CAB04 at 9 (December 19, 2008) (hereinafter "Nevada Petition to Intervene").

Dr. Macfarlane has unequivocally stated that DOE's TSPA is invalid as a method for demonstrating safety at the repository.

Dr. Macfarlane accurately describes the TSPA as "an attempt to predict the behavior of the Yucca Mountain repository over time using a complex computer modeling method called probabilistic performance assessment."⁴ She also acknowledged that the results of probabilistic performance assessment will be used by both the DOE and the NRC to determine the suitability of the Yucca Mountain site.⁵ Nevertheless, she criticized DOE's TSPA modeling approach, and ultimately recommended that it be abandoned:

Models of natural systems over geologic periods of time, such as the TSPA model, ignore the realities of the complexity of open systems over large timescales. **It is therefore unrealistic** to think that the modeling of such a complex system as the Yucca Mountain repository could provide a single number **that is in any way valid** and represents the "truth." But this is just what the TSPA model does. According to the DOE, the TSPA model suggests that the dose from the repository ten thousand years after the waste is put in place will be 0.1 millirems per year.⁶

Dr. Macfarlane goes on to assert that the TSPA modeling should not be relied upon in the decision-making process, because "adjustments may cause substantial divergence from the original model, calling into question the use of these models in policy making."⁷ Finally, she posed and answered the following question: "If the TSPA is **neither an accurate nor reliable** method of judging the Yucca Mountain repository site, then how should the site be judged?"⁸ Her answer is to go back to the drawing board and develop new alternatives that are outside the

⁴ *Hearing on the Status of the Yucca Mountain Project Before the S. Comm. On Environment and Public Works*, 109th Cong. at *5 (2006) (testimony of Allison M. Macfarlane) (hereinafter cited as "Testimony") ("The performance assessment of the Yucca Mountain repository is made up of numerous submodels of systems that will affect repository behavior such as the climate, the unsaturated zone, the waste package, etc.").

⁵ Testimony at *6.

⁶ *Uncertainty Underground* at 397-98 (emphasis added).

⁷ *Id.* at 396.

⁸ *Id.* at 400.

legal solutions proscribed by the Nuclear Waste Policy Act, Pub L. 95-91, 91 Stat. 570, 42 U.S.C. § 7101 *et seq.* (“NWPA”), and NRC’s own regulations.⁹ This is precisely the position taken by the Obama Administration and DOE in calling for withdrawal of the Yucca Mountain license application and in advocating a new approach to nuclear waste storage and ultimate disposal that does not include Yucca Mountain.¹⁰

NRC regulations also require that the TSPA model be calibrated and validated as a part of the license application process. Yet Dr. Macfarlane has already concluded that DOE could do neither, even though those are contested issues in the licensing proceeding as well:

One of the main conclusions from these works is that these models cannot be validated or verified. Winograd (1990) goes so far as to say that models such as the TSPA cannot even be calibrated.¹¹

Dr. Macfarlane’s Congressional testimony then flatly reached a conclusion on the validity of the DOE’s TSPA model:

“From the perspective of an earth scientist, it is not possible to validate or verify models of the earth systems...The Yucca Mountain repository is one of those open systems, and therefore it is not possible to legitimately validate the performance assessment model.”¹²

⁹ *Id.* at 405–08 (“First, I suggest that policymakers, including the DOE and the NRC, de-emphasize the importance of performance assessment. The long discussion above highlights the many reasons that complex models such as the DOE’s TSPA will not be able to make adequate predictions, and as a result these predication cannot be validated or verified. . . . Thus, I propose that Yucca Mountain be evaluated via comparison to other existing or planned sites about which a substantial set of information has been gathered.”). See also Testimony at *8 (“[T]he NRC and DOE should move away from sole reliance on probabilistic performance assessment as the method to determine compliance with the EPA’s standard and opt for a broader and more qualitative assessment scheme, similar to that of France and Sweden.”).

¹⁰ On March 3, 2010, at the direction of the President, DOE filed with the ASLB a motion to withdraw its license application with prejudice. U.S. Department of Energy’s Motion to Withdraw, *In re U.S. Dep’t of Energy*, NRC No. 63-001, ASLBP No. 09-892-HLW-CAB04 (Mar. 3, 2010). See also U.S. Department of Energy’s Motion to Stay the Proceeding, *In re U.S. Dep’t of Energy*, NRC No. 63-001, ASLBP No. 09-892-HLW-CAB04 at 1 (Feb. 1, 2010); Budget of the U.S. Government, Fiscal Year 2011, Appendix at 437 (available at <http://www.whitehouse.gov/omb/budget/fy2011/assets/doe.pdf>).

¹¹ Uncertainty Underground at 397. See also Testimony at *7 (“I would argue that the current U.S. performance assessment methodology is actually a qualitative approach masquerading as a quantitative one. In the current situation, what should the U.S. do to bring more clarity to its process to determine site suitability?”). Dr. Macfarlane then answers her own question by proposing a comparative system of multiple sites that is currently not authorized by the NWPA or NRC’s own regulations. *Id.* at *7–9.

¹² Testimony at *5.

Given these negative conclusions alone – regarding the validity of the TSPA, its calibration, and verification – any reasonable person would harbor serious doubts about whether Dr. Macfarlane can now impartially judge DOE’s use of the TSPA modeling system for the Yucca Mountain license. Her rejection of the validity of TSPA and DOE efforts to calibrate and validate the modeling used in the TSPA track the arguments and contentions raised by the State of Nevada in opposition to the Yucca Mountain licensing, and she has clearly prejudged those issues. For instance, in summarizing its 150 contentions challenging the TSPA, Nevada stated that “because DOE lacked necessary scientific data, it was unable to adequately validate all of the individual model components of the TSPA,”¹³ raising the same argument as Dr. Macfarlane did two years previously. A reasonable person would conclude that she has made up her mind on those issues in favor of opponents of the license.

In a recent opinion, the U.S. Supreme Court observed that a judge should be disqualified if it appears to a reasonable, objective observer "that he or she harbors [a]...disposition of a kind that a fair-minded person could not set aside when judging the dispute." *Caperton v. A.T. Massey Coal Co.*, 556 U.S. 868, 889 (2009) (quoting *Liteky v. U.S.*, 510 U.S. 540, 558 (1994) (Kennedy, J. concurring)). For Dr. Macfarlane to now disavow previous factual and policy conclusions on issues that are now being adjudicated by the ASLB would appear to be disingenuous to a reasonable, objective observer. The only proper course of action is recusal from any NRC action whatsoever concerning the potential licensing of the Yucca Mountain repository. Anything less would impair the reputation and integrity of the NRC regarding Yucca Mountain, exacerbating existing concerns related to the conduct of the previous NRC Chairman.¹⁴

¹³ Nevada Petition to Intervene at 7.

¹⁴ See U.S. Nuclear Regulatory Commission, Office of the Inspector General, NRC Chairman’s Unilateral Decision to Terminate NRC’s Review of DOE Yucca Mountain Repository License Application, OIG Case No. 11-05 (2011).

There are many other examples of Dr. Macfarlane's statements echoing the arguments of opponents to the repository, or vice versa. For example, DOE has consistently maintained that all essential features, events, and processes (so called "FEPs") essential to safety have been identified and assessed. By contrast, Dr. Macfarlane and the State of Nevada both assert that FEPs were improperly excluded from the TSPA. Nevada asserts that "DOE also has ignored or improperly analyzed certain system and design 'features,' numerous physical 'events,' and various physical and chemical 'processes,' collectively called 'FEPs.'"¹⁵ Remarking on DOE's response to Nevada and other critics of DOE's delineation of the relevant FEPs, Dr. Macfarlane states:

The DOE, however, disagrees: "Because uncertainty is fully integrated into the assessment of total system performance, DOE does not expect that additional information will significantly change the TSPA results or the conclusions reached in the site suitability evaluation and has confidence in the overall safety of the repository." But the DOE is basing its opinion on the assumption that it has characterized the uncertainty correctly, and further, that it has characterized all the features, events, and processes that will occur in the repository as it evolves. The chapters in this book underscore the fact that we are missing input data and knowledge of processes that will operate during the life of the repository.¹⁶

Dr. Macfarlane uses the language of an advocate opposed to the repository in reaching her blunt conclusion on the inadequacy of DOE's approach to FEPs in her Congressional testimony:

The DOE has argued that it has characterized all the relevant "features, events, and processes" at Yucca Mountain. I will **argue from my geologist's viewpoint that DOE cannot know all the features, events, and processes [FEPs] it needs** to describe the repository system because the repository is an evolving system whose basic thermodynamic and kinetic features are still not known.¹⁷

¹⁵ Nevada Petition to Intervene at 10 ("DOE's selection of which FEPs to include in the TSPA, an essential early step, ignores important events and processes and improperly excludes others.").

¹⁶ Uncertainty Underground at 396.

¹⁷ Testimony at *5 (emphasis added).

Thus, Dr. Macfarlane had already reached a conclusion on the contested FEPs issue before the license had been filed, and the application and DOE's analysis of the FEPs has not fundamentally changed since Dr. Macfarlane reached that conclusion. If Dr. Macfarlane has already determined that DOE cannot analyze all of the FEPs it "needs" to describe the repository, she has per force concluded that the license may not issue based upon the NRC regulations. Her previous statements were not those of a neutral arbiter, who has an open mind regarding the adequacy of the DOE license application, but rather foreshadow or mimic those of advocates opposed to the repository, including those cited above from Nevada, which has filed contentions challenging the breadth and scope of DOE's FEP designations during the licensing proceeding. Dr. Macfarlane even intimated that she believed that DOE has reached its conclusion that Yucca Mountain was a suitable site based upon political expedience, rather than sound science and the technical record, because DOE was allegedly under political pressure to quickly find the Yucca Mountain site suitable.¹⁸ *Caperton v. A.T. Massey Coal Co.*, 556 U.S. 868, 889 (2009) ("hostility or aversion" to a party or position is grounds for recusal of a judge) (quoting *Liteky v. U.S.*, 510 U.S. 540, 558 (1994) (Kennedy, J. concurring)).

Dr. Macfarlane goes on to question many of the fundamental factual conclusions by DOE on numerous issues that DOE addressed in developing its license application, including precipitation rates, water percolation rates, climate change, volcanism, and seismic activity. For example, regarding seismic activity and volcanism, she unequivocally states, "The Yucca Mountain region is both seismically and volcanically active. . . ." ¹⁹ This is contrary to DOE's position in the license application on both of those critically contested issues. Similarly, her factual conclusions on other key issues being contested in the licensing proceeding have been

¹⁸ Uncertainty Underground at 404 ("In turn, because of the painful political process involved in the nuclear waste legislation, the DOE found itself under great pressure to deem Yucca Mountain a suitable site.").

¹⁹ Testimony at *2.

made public as well: “Besides the potential for future volcanism, the ‘dryness’ of the Yucca Mountain site weighs heavily on the suitability of the site. . . . In the mid-1990s, the discovery of bomb-pulse tracer isotopes affected the models of water transport in the unsaturated zone at Yucca Mountain.”²⁰ “For example the DOE intends to operate Yucca Mountain at relatively high temperatures to maintain the tunnels above the boiling point of water for the first few centuries. This plan increases uncertainties about water canister corrosion.”²¹

These and numerous other DOE conclusions of fact, technical judgments, and policy decisions integral to the Yucca Mountain licensing proceeding have been attacked by Dr. Macfarlane as inaccurate, erroneous, or ill-advised in her book, other publications, and public statements. Her published record on Yucca Mountain clearly demonstrates that a reasonable person would harbor doubts about her impartiality in now being asked to judge any issue related to the license application. To her credit, Dr. Macfarlane has admitted that her possible recusal could be the “appropriate action” in this case.²²

Beyond that standard, she has clearly judged issues that would be before her in the license application proceeding. In fact, in a 2009 interview, Dr. Macfarlane flatly stated that the Yucca Mountain was “unsuitable” for a nuclear waste repository.²³ Any agency official should be disqualified where a “disinterested observer may conclude that the official has in some measure adjudged the facts and law of a particular matter in advance of hearing it.”²⁴

²⁰ *Id.* at *3.

²¹ *Id.* at *8.

²² See *Joint Hearing on NRC Policy and Governance Oversight Before the Subcomm. On Environment and the Economy and Subcomm. On Energy and Power of the H. Comm. On Energy and Commerce*, 112th Cong. (2012) (testimony of Allison M. Macfarlane) (where Dr. Macfarlane indicated she would take “appropriate action, which could include possible recusal”).

²³ David Talbot, *Life After Yucca Mountain*, MIT Technology Review, June 23, 2009 (where, when asked whether Yucca Mountain was “unsuitable” as a nuclear waste repository, Dr. Macfarlane responded: “Yes.”).

²⁴ *Nuclear Info. & Res. Serv. (LAIRS) v. NRC*, 509 F.3d 562, 571 (D.C. Cir. 2007) (quoting *Cinderella Career & Finishing Sch., Inc. v. FTC*, 425 F.2d 583, 591 (D.C. Cir. 1970)). See also *Pillsbury Co. v. FTC*, 354 F.2d 952, 964 (5th Cir. 1966); *Accord ATX Inc. v. U.S. Dep’t of Transp.*, 41 F.3d 1522, 1527-30 (D.C. Cir. 1994).

B. Commissioner Macfarlane had Extrajudicial Knowledge of Disputed Evidentiary Facts Pertinent to the Yucca Mountain Licensing Proceeding.

The only question under subsection 28 U.S.C § 455 (b)(1) is whether Commissioner Macfarlane has extrajudicial "personal knowledge of disputed facts." As previously discussed, Nye County has already identified numerous extrajudicial statements made by Dr. Macfarlane that demonstrate without any doubt that she has personal knowledge not only of the technical record in this case, but also, and more importantly, an entire body of research that she has helped develop outside the NRC record. Moreover, she has determined that extra-record analysis is persuasive and dispositive of issues before the NRC in the licensing proceedings.²⁵

The question under subsection (b)(1) is not limited to whether Commissioner Macfarlane has prejudged the actual issue raised in the license. Rather, 28 USC § 445(b)(1) makes recusal mandatory if Commissioner Macfarlane has "come to have – no matter how – extrajudicial personal knowledge of a disputed evidentiary fact," regardless of whether a reasonable person would harbor doubts about the judge's impartiality. *In re M.C.*, 8 A.3d 1215, 1229 (D.C. Cir. 2010). *See also Parker v. Connors Steel Co.*, 855 F.2d 1510 (11th Cir. 1988) (the rule disqualifying a judge from presiding is a *per se* rule that lists particular circumstances requiring recusal). The question is whether she has "personal knowledge of" **any** disputed underlying evidentiary facts relevant to the license analysis or any other aspect of this case. *Price Bros. Co. v Philadelphia Gear Corp.*, 629 F.2d 444, 447 (6th Cir. 1980). If there is any question in this regard, Commissioner Macfarlane should recuse herself. *Id.*

"Personal knowledge for § 455(b)(1) purposes is knowledge acquired from an extrajudicial source that leaves no trace in the record and cannot be controverted or tested by the tools of the adversary process. The extrajudicial source test focuses on the difference between a proper judicial proceedings and a judge acquiring disputed evidentiary facts from a

²⁵ Uncertainty Underground at 397. *See also* Testimony at *7

source outside the appropriate judicial proceedings.” *U.S. v. Bullock*, 2005 U.S. Dist. LEXIS 1833, at *4 (E.D. Penn. 2005) (internal citations and quotations omitted). Commissioner Macfarlane’s knowledge concerning the DOE’s application falls squarely under this definition. She has performed her own independent research, and through this research, she has accumulated a broad range of knowledge and opinions from various sources that were not part of any judicial proceedings or subject to the adversarial process in any way.

For example, among the disputed evidentiary facts in this case is whether the TSPA model can be calibrated and validated as part of the licensing application process, and Dr. Macfarlane’s publications have already demonstrated that she acquired knowledge (and actually formed an opinion) on this issue through a number of extrajudicial sources.²⁶ The Seventh Circuit addressed a similar situation when a trial judge appointed a panel of experts to investigate state mental institutions and then had private, off-the-record briefings with these experts. *Edgar v. K.L.*, 93 F.3d 256 (7th Cir. 1996). Explaining why such actions were grounds for recusal under 28 U.S.C. § 445(b)(1), the Seventh Circuit stated:

The point of distinguishing between “personal knowledge” and knowledge gained in a judicial capacity is that information from the latter source enters the record and may be controverted or tested by the tools of the adversary process. Knowledge received in other ways, which can be neither accurately stated nor fully tested, is “extrajudicial.” . . . Off-the-record briefings in chambers, by contrast, leave no trace in the record – and in this case the judge has forbidden any attempt at reconstruction. What information passed to the judge and how reliable it may have been, are now unknowable. **This is “personal” knowledge no less than if the judge had decided to take an undercover tour of a mental institution to see how the patients were treated. Instead of going himself, this judge appointed agents, who made a private report of how they investigated and what they had learned. Mandatory disqualification under § 455(b)(1) follows.**

Id. at 259 (internal citations omitted) (emphasis added).

²⁶ See *supra* pp. 4–7.

The only difference between Dr. Macfarlane's actions and those by the trial judge in *Edgar* is that the trial judge relied on a court-appointed expert panel to perform the investigation, but Dr. Macfarlane personally conducted her own investigations as a private citizen prior to appointment to the NRC. Therefore, should Dr. Macfarlane participate in the adjudication of this matter, she would run even further afoul of 28 U.S.C. § 445(b)(1).

Dr. Macfarlane clearly has personal knowledge about numerous disputed evidentiary facts in this case. And this knowledge was gained from extrajudicial sources during her independent investigation into DOE's application. It is irrelevant that she obtained this knowledge before she was appointed as a Commissioner. There are no exceptions under 28 U.S.C. § 445(b)(1), and her recusal is required.

II. THIS MOTION IS FILED IN A TIMELY MANNER.

Dr. Macfarlane was not a Commissioner when NRC illegally suspended and terminated consideration of the Yucca Mountain license application. The recent decision by the United States Court of Appeals determined those actions were illegal and ordered that the licensing be restarted. That decision becomes effective on September 3, 2013. Dr. Macfarlane has not participated in previous NRC decisions relative to the Yucca Mountain licensing proceeding. Therefore, this filing is timely.

CONCLUSION

Given the decision by the United States Court of Appeals, Dr. Macfarlane will be called upon to make, or participate in making, administrative, budgetary, and substantive adjudicatory decisions regarding the ASLB licensing, starting with whether or not the Court of Appeals' decision should be appealed. Recent history at the NRC reinforces two critical lessons: (1) the ASLB licensing proceeding can be influenced by the NRC Chairman or individual

Commissioners in ways other than the adjudication of issues involved in the licensing process itself; and (2) “partial” recusals are insufficient to protect the reputation and integrity of the NRC.²⁷ Commissioner Macfarlane should recuse herself immediately from all decisions related to the above-captioned proceeding, based upon the analysis above.

Respectfully submitted,

/Signed (electronically) by/

Robert M. Andersen

Email: randers@clarkhill.com

Christopher B. Clare

Email: cclare@clarkhill.com

Clark Hill PLC
601 Pennsylvania Ave. N.W.
North Building, Suite 1000
Washington, D.C. 20004

Counsel for Nye County, Nevada

August 23, 2013

²⁷ See U.S. Nuclear Regulatory Commission, Office of the Inspector General, NRC Chairman’s Unilateral Decision to Terminate NRC’s Review of DOE Yucca Mountain Repository License Application, OIG Case No. 11-05 (2011). The previous NRC Chairman recused himself for one year prior to embarking on a deliberate course of action to dismantle the NRC’s review of the Yucca Mountain license application.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of) Docket No. 63-001-HLW
)
U.S. DEPARTMENT OF ENERGY)
)
(License Application for Geologic)
Repository at Yucca Mountain))
_____)

CERTIFICATE OF SERVICE

I hereby certify that copies of the "Nye County's Motion for Recusal/Disqualification of NRC Commissioner Allison M. Macfarlane and Points and Authorities in Support of Motion" in the above-captioned proceeding have been served on the following persons this 23rd day of August, 2013, by Electronic Information Exchange.

CAB 04

Thomas S. Moore, Chairman
Paul S. Ryerson
Richard E. Wardwell
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
[E-mail: tsm2@nrc.gov](mailto:tsm2@nrc.gov)
psr1@nrc.gov
rew@nrc.gov

Office of the Secretary
ATTN: Docketing and Service
Mail Stop: O-16C1
U.S. Nuclear Regulatory Commission
Washington, DC 20555
[E-mail: HEARINGDOCKET@nrc.gov](mailto:HEARINGDOCKET@nrc.gov)

Office of Commission Appellate
Adjudication
ocaamail@nrc.gov

Martin G. Malsch, Esq.
Egan, Fitzpatrick & Malsch, PLLC
1750 K Street, N.W. Suite 350
Washington, DC 20006
[E-mail: mmalsch@nuclearlawyer.com](mailto:mmalsch@nuclearlawyer.com)

Brian W. Hembacher, Esq.
Deputy Attorney General
California Attorney General's Office
300 South Spring Street
Los Angeles, CA 90013
[E-mail: brian.hembacher@doj.ca.gov](mailto:brian.hembacher@doj.ca.gov)

Timothy E. Sullivan, Esq.
Deputy Attorney General
California Department of Justice
1515 Clay Street. 20th Flr.
P.O. Box 70550
Oakland, CA 94612-0550
[E-mail: timothy.sullivan@doj.ca.gov](mailto:timothy.sullivan@doj.ca.gov)

Donald J. Silverman, Esq.
Thomas A. Schmutz, Esq.
Thomas C. Poindexter, Esq.
Paul J. Zaffuts, Esq.
Alex S. Polonsky, Esq.
Lewis Csedrik, Esq.
Raphael P. Kuyler, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, N.W.
Washington, DC 20004
[E-mail: dsilverman@morganlewis.com](mailto:dsilverman@morganlewis.com)
tschmutz@morganlewis.com
tpoindexter@morganlewis.com
pzaffuts@morganlewis.com
apolonsky@morganlewis.com
lcsedrik@morganlewis.com
rkuyler@morganlewis.com

Malachy R. Murphy, Esq.
18160 Cottonwood Rd. #265
Sunriver, OR 97707
[E-mail: mrmurphy@chamberscable.com](mailto:mrmurphy@chamberscable.com)

Susan L. Durbin, Esq.
Deputy Attorney General
1300 I Street
P.O. Box 944255
Sacramento, CA 94244-2550
[E-mail: susan.durbin@doj.ca.gov](mailto:susan.durbin@doj.ca.gov)

Ross D. Colburn
2020 L Street, Suite 250
Sacramento, CA 95811 [E-mail: rcolburn@ndnlaw.com](mailto:rcolburn@ndnlaw.com)

Shane Thin Elk
Fredericks Peebles & Morgan, LLP
3610 North 163rd Plaza
Omaha, Nebraska 68116
[E-mail: sthinelk@ndnlaw.com](mailto:sthinelk@ndnlaw.com)

Martha S. Crosland, Esq.
Angela M. Kordyak, Esq.
Nicholas P. DiNunzio
James Bennett McRae, Esq.
Sean A. Lev
U.S. Department of Energy
Office of the General Counsel
1000 Independence Avenue, S.W.
Washington, DC 20585
[E-mail: martha.crosland@hq.doe.gov](mailto:martha.crosland@hq.doe.gov)

angela.kordyak@hq.doe.gov
nick.dinunzio@rw.doe.gov
ben.mcrae@hq.doe.gov
Sean.Lev@hq.doe.gov

George W. Hellstrom
U.S. Department of Energy
Office of General Counsel
1551 Hillshire Drive
Las Vegas, NV 89134-6321
[E-Mail: george.hellstrom@ymp.gov](mailto:george.hellstrom@ymp.gov)

Robert M. Andersen
Christopher B. Clare
Clark Hill PLC
601 Pennsylvania Ave. N.W.
North Building, Suite 1000
Washington, DC 20004
[E-mail: randersen@clarkhill.com](mailto:randersen@clarkhill.com)
cclare@clarkhill.com

Frank A. Putzu
Naval Sea Systems Command Nuclear
Propulsion Program
1333 Isaac Hull Avenue, S.E.
Washington Navy Yard, Building 197
Washington, DC 20376
[E-mail: frank.putzu@navy.mil](mailto:frank.putzu@navy.mil)

John M. Peebles
Darcie L. Houck
Fredericks Peebles & Morgan LLP
1001 Second Street
Sacramento, CA 95814
[E-mail: jpeebles@ndnlaw.com](mailto:jpeebles@ndnlaw.com)
dhouck@ndnlaw.com

Clark County, Nevada
500 S. Grand Central Parkway
Las Vegas, NV 98155
Elizabeth A. Vibert, Deputy District Attorney
Elizabeth.Vibert@ccdavn.com

Ellen C. Ginsberg
Anne W. Cottingham
Jerry Bonanno
Nuclear Energy Institute, Inc.
1776 I Street, N.W., Suite 400
Washington, DC 20006
[E-mail: ecg@nei.org](mailto:ecg@nei.org)
awc@nei.org
jxb@nei.org

Kelly Brown
District Attorney
White Pine County District
Attorney's Office 801 Clark Street
Ely, NV 89301 [E-mail: kbrown@mwpower.net](mailto:kbrown@mwpower.net)

David A. Repka
William A. Horin
Rachel Miras-Wilson
Winston & Strawn LLP
1700 K Street N.W.
Washington, DC 20006
[E-mail: drepka@winston.com](mailto:drepka@winston.com)
whorin@winston.com
rwilson@winston.com

Jay E. Silberg
Timothy J.V. Walsh
Pillsbury Winthrop Shaw Pittman LLP
2300 N Street, N.W.
Washington, DC 20037-1122
[E-mail: jay.silberg@pillsburylaw.com](mailto:jay.silberg@pillsburylaw.com)
timothy.walsh@pillsburylaw.com

Gregory L. James
712 Owens Gorge Road
HC 79, Box 11
Mammoth Lakes, California 93546
[Email: gjames@earthlink.net](mailto:gjames@earthlink.net)

Arthur J. Harrington
Godfrey & Kahn, S.C. 780
N. Water Street
Milwaukee, WI 53202 [E-mail: aharring@gklaw.com](mailto:aharring@gklaw.com)

Steven A. Heinzen
Douglas M. Poland
Hannah L. Renfro
Godfrey & Kahn, S.C.
One East Main Street, Suite
500 P.O. Box 2719
Madison, WI 53701-2719 [E-mail: sheinzen@gklaw.com](mailto:sheinzen@gklaw.com)
dpoland@gklaw.com
hrenfro@gklaw.com

Robert F. List, Esq.
Jennifer A. Gores, Esq.
Armstrong Teasdale LLP
1975 Village Center Circle, Suite 140
Las Vegas, NV 89134-6237
[E-mail: rlist@armstrongteasdale.com](mailto:rlist@armstrongteasdale.com)
jgores@armstrongteasdale.com

Diane Curran
Harmon, Curran, Spielberg, & Eisenberg,
L.L.P.
1726 M Street N.W., Suite 600
Washington, DC 20036
[E-mail: dcurran@harmoncurran.com](mailto:dcurran@harmoncurran.com)

Ian Zabarte, Board Member
Native Community Action Council
P.O. Box 140
Baker, NV 89311
[E-mail: mrizabarte@gmail.com](mailto:mrizabarte@gmail.com)

Donald P. Irwin
Michael R. Shebelskie
Kelly L. Faglioni
Hunton & Williams LLP
Riverfront Plaza, East Tower
951 East Byrd Street
Richmond, VA 23219-4074
[E-mail: dirwin@hunton.com](mailto:dirwin@hunton.com)
mshebelskie@hunton.com
kfaglioni@hunton.com

Curtis G. Berkey
Scott W. Williams
Rovianne A. Leigh
Alexander, Berkey, Williams, & Weathers
LLP
2030 Addison Street, Suite 410
Berkley, CA 94704
[E-mail: cberkey@abwwlaw.com](mailto:cberkey@abwwlaw.com)
swilliams@abwwlaw.com
leigh@abwwlaw.com

Bret O. Whipple
1100 South Tenth Street
Las Vegas, Nevada 89104
[E-mail: bretwhipple@nomademail.com](mailto:bretwhipple@nomademail.com)

Gregory Barlow
P.O. Box 60
Pioche, Nevada 89043

[E-mail: lcda@lcturbonet.com](mailto:lcda@lcturbonet.com)

Michael L. Dunning
Andrew A. Fitz
H. Lee Overton
Jonathan C. Thompson
Todd R. Bowers
State of Washington
Office of the Attorney General
P.O. Box 40117
Olympia, WA 98504-0117

[E-mail: MichaelD@atg.wa.gov](mailto:MichaelD@atg.wa.gov)

AndyF@atg.wa.gov

LeeO1@atg.wa.gov

JonaT@atg.wa.gov

toddb@atg.wa.gov

Connie Simkins
P.O. Box 1068
Caliente, Nevada 89008
[E-mail: jcciac@co.lincoln.nv.us](mailto:jcciac@co.lincoln.nv.us)

Kenneth P. Woodington
Davidson & Lindemann, P.A.
1611 Devonshire Drive
P.O. Box 8568
Columbia, SC 29202
[E-mail: kwoodington@dml-law.com](mailto:kwoodington@dml-law.com)

Thomas R. Gottshall
S. Ross Shealy
Haynesworth Sinkler Boyd, PA
1201 Main Street, Suite 2200
Post Office Box 11889
Columbia, SC 29211-1889
[E-mail: tgottshall@hsblawfirm.com](mailto:tgottshall@hsblawfirm.com)
rshealy@hsblawfirm.com

Kevin W. Bell, Esq.
Senior Staff Counsel
California Energy Commission
1516 9th Street
Sacramento, CA 95814
[E-mail: kwbell@energy.state.ca.us](mailto:kwbell@energy.state.ca.us)

Dr. Mike Baughman
Intertech Services Corporation
P.O. Box 2008
Carson City, Nevada 89702
[E-mail: bigboff@aol.com](mailto:bigboff@aol.com)
Michael Berger
Robert S. Hanna
Attorney for the County of Inyo
233 East Carrillo Street Suite B
Santa Barbara, California 93101
[E-mail: mberger@bsglaw.net](mailto:mberger@bsglaw.net)
rshanna@bsglaw.net

Philip R. Mahowald
Prairie Island Indian Community
5636 Sturgeon Lake Road
Welch, MN 55089
[E-mail: pmahowald@piic.org](mailto:pmahowald@piic.org)

James Bradford Ramsay
National Association of Regulatory
Utility Commissioners
1101 Vermont Avenue NW, Suite
200 Washington, DC 20005
[E-mail: jramsay@naruc.org](mailto:jramsay@naruc.org)

Don L. Keskey
Public Law Resource Center PLLC
505 N. Capitol Avenue
Lansing, MI 48933
E-mail:
donkeskey@publiclawresourcecenter.com

Charles J. Fitzpatrick, Esq.
John W. Lawrence, Esq.
Egan, Fitzpatrick, Malsch & Lawrence PLLC
1777 N.E. Loop 410, Suite 600
San Antonio, TX 78217
[E-mail: cfitzpatrick@nuclearlawyer.com](mailto:cfitzpatrick@nuclearlawyer.com)
jlawrence@nuclearlawyer.com

/Signed (electronically) by/

Robert M. Andersen
Counsel for Nye County, Nevada
Clark Hill PLC
601 Pennsylvania Ave. N.W.
North Building, Suite 1000
Washington, DC 20004
(202) 772-0924
[E-mail: randersen@clarkhill.com](mailto:randersen@clarkhill.com)