

Statement of Stephen E. Kuczynski
Chairman, President and Chief Executive Officer
Southern Nuclear Operating Company, Inc.

BEFORE THE U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY & COMMERCE
SUBCOMMITTEE ON ENVIRONMENT & THE ECONOMY

“Update on the Current Status of Nuclear Waste Management Policy”

May 15, 2015

SUMMARY

- At Southern Nuclear, our safety focus continues throughout the nuclear fuel cycle. We are dedicated to maintaining the highest standards for safely handling radioactive waste to protect the public, the environment and our employees. We have safe, reliable on-site options to store spent nuclear fuel (SNF) at our nuclear plants for the duration of our plant licenses and the expected life of the plants.
- Although the industry has demonstrated that SNF can be safely stored in spent fuel pools or dry casks, the federal government and the general public should not view these temporary measures as a de facto permanent solution to the SNF disposal issue. Under the Nuclear Waste Policy Act and the DOE's Standard Contract with the nuclear utilities, SNF disposal is the federal government's obligation. In fact, the federal government has made the Standard Contract with DOE a prerequisite for the issuance or renewal of nuclear power plant licenses.
- On the basis of these contracts, Southern Company entities have paid over \$1.2 billion into the Nuclear Waste Fund (NWF). Nationwide, contributions to the NWF have exceeded \$30 billion (inclusive of interest allocation). The federal government, however, has yet to build the permanent SNF repository that is required by the NWPA and the Standard Contract.
- While there is good reason for optimism, such as recent court rulings affirming the requirements of the NWPA and the NRC's issuance of the safety reports for the Yucca Mountain repository, we also recognize that sustaining progress has been elusive. Failing to move forward with the permanent repository at Yucca Mountain would have several adverse impacts, such as prolonging regulatory uncertainty for the nuclear industry and unfairly creating concern on the part of the public about nuclear power at a time when nuclear energy is absolutely critical to meeting the nation's economic, energy, and environmental needs. In addition, lack of action on a permanent repository will require nuclear power plant operators to continue to manage, secure, and oversee SNF storage systems, which take up valuable space at power plants, create additional site security concerns, and drive up the costs for operating nuclear reactors. As importantly, inaction will only serve to impose increased costs on the federal government and taxpayers.
- This testimony concludes with general observations about various nuclear waste policy issues, ranging from interim storage and the Blue Ribbon Commission recommendations to nuclear waste fees and spent fuel prioritization.

Good morning Chairman Shimkus, Ranking Member Tonko, and Members of the Subcommittee. Thank you for the opportunity to appear before you today.

My name is Steve Kuczynski, and I am the Chairman, President and CEO of Southern Nuclear Operating Company, Inc., where I am responsible for the operation of a fleet of six nuclear power units at three sites as well as the construction of two new reactors at Plant Vogtle near Augusta, Georgia. It is an honor to appear before this Subcommittee to share my views on nuclear waste policy generally. Central to this discussion is, of course, a significant and challenging, yet entirely achievable, energy policy objective: completion of a permanent repository for the nation's spent nuclear fuel (SNF) as currently required by the Nuclear Waste Policy Act (NWPA). Other relevant issues also merit discussion as part of this conversation, such as SNF contracts and related claims for DOE's breach of contract, operation of spent fuel pools and dry cask systems, prioritization of SNF removal from certain sites, the possibility of centralized interim storage facilities, among other things. I look forward to discussing these issues with you today.

During my career, I have been responsible for a wide range of issues at nuclear power plants—from safety, training and emergency preparedness to radiation protection, operations, and construction. In my testimony today, I will discuss Southern Company's fleet of nuclear power plants, including the ongoing construction of our two newest reactors. I will also share some reasons why I believe it is imperative for our nation to move forward with the national repository at Yucca Mountain, focusing on the ways such action would help support sound energy policy and would mitigate the tremendous costs already incurred as a result of the government's failure to open a permanent repository. My testimony will conclude with a few

general observations for the Subcommittee to review and consider as you delve deeply into significant nuclear waste policy questions.

Southern Nuclear

Headquartered in Birmingham, Alabama, Southern Nuclear is a subsidiary of Southern Company, the nation's premier energy company serving the Southeastern United States through its subsidiaries. Southern Nuclear currently operates six nuclear reactors: Units 1 and 2 at Plant Farley near Dothan, Alabama; Units 1 and 2 at Plant Hatch near Baxley, Georgia; and Units 1 and 2 at Plant Vogtle near Augusta, Georgia.¹ We have been in the nuclear power business for almost 50 years, dating back to Southern Company's decision in 1967 to build Plant Hatch, our very first nuclear power plant, which began commercial operation in 1975. Together, Plants Farley, Hatch and Vogtle provide approximately 20% of the electricity used in Alabama and Georgia. This is made possible by our talented and committed workforce of over 4,000 men and women working at our fleet of nuclear power plants and corporate offices, all of whom are also part of the larger Southern Company team of over 26,000 employees across the States of Alabama, Florida, Georgia, and Mississippi.

Nuclear power is a leading source of affordable, reliable, clean, American energy that can power our economy, protect our environment, and provide jobs for thousands of our fellow citizens. Southern Nuclear's top priority is the safety and health of the public and our employees. We are committed to the safe operation of our nuclear generating facilities with equipment and systems that meet rigorous safety and design regulations. Plants Farley, Hatch and Vogtle are national leaders in safe operation and reliability with an average three-year fleet capability factor of 92.62% from 2012 to 2014, which exceeded the national average of 88.96% for the same

¹ Plant Farley is owned by Alabama Power Company. Plants Hatch and Vogtle are co-owned by Georgia Power Company, Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia, and Dalton Utilities.

period.² Just last month, the U.S. Nuclear Regulatory Commission (NRC) completed the 2014 site assessment and concluded that our nuclear power plants met all of the NRC safety standards and that there were no major issues. With the nation's increasing focus on reducing emissions of carbon dioxide (CO₂), we are proud that our existing fleet of nuclear reactors prevents more than 56 million metric tons of CO₂ from entering the atmosphere, which is the equivalent of taking 10 million cars off the road—more than the number of cars registered in Alabama and Georgia, combined.

Delivering the Next Generation of Nuclear Power

Southern Company is leading the nation by constructing two new nuclear units at Plant Vogtle (currently anticipated to begin commercial operation in 2019 and 2020, respectively). Taken together, these state-of-the-art Westinghouse AP1000 units are projected to supply over 2,200 megawatts (MW) of new, baseload, zero-emission electric generation, creating more than 5,000 total construction jobs and 800 permanent jobs. These are some of the first new nuclear units to be built in the United States in over 30 years. Enormous in size and complexity, the Vogtle site is among the largest ongoing construction projects in the United States. This is a joint effort with our power plant ownership team, which includes Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and Dalton Utilities, and a construction consortium consisting of Westinghouse Electric Company LLC and Stone & Webster, Inc. Throughout the duration of this construction project, just as with the operation of our existing plants, safety always comes first. We remain focused on completing Vogtle 3 and 4 with safety, quality, and compliant construction as top priorities. We will not compromise.

² See Fourth Quarter 2014 Data File, World Ass'n of Nuclear Operators (Mar. 9, 2015) (on file with Southern Nuclear Operating Company, Inc.). Capability factor measures the amount of time the plant is on-line and producing electricity. For more information about the nuclear industry's 2014 performance measures, please visit <http://www.nei.org/CorporateSite/media/filefolder/Policy/WANO%20performance%20indicators/INPO-Performance-Indicators-2015.pdf?ext=.pdf>.

Storage of Spent Nuclear Fuel

Our safety focus continues throughout the nuclear fuel cycle at all our nuclear plants. We are dedicated to maintaining the highest standards for safely handling radioactive waste in a manner that protects the public, the environment and our employees. We have safe, reliable on-site options to store SNF at our nuclear plants for the duration of our plant licenses and the expected life of the plants.

A short explanation of nuclear fuel may be useful. Before use in a nuclear reactor, fuel pellets (comprised of uranium or other fissionable elements) are placed into long tubes made of a noncorrosive material. These tubes are grouped together into a bundle (referred to as a fuel bundle or fuel assembly). A single fuel bundle for a boiling water reactor (BWR) contains 63 or 92 fuel tubes. A BWR reactor core contains 560 fuel bundles. A single fuel assembly for a pressurized water reactor (PWR) contains 264 fuel tubes. A PWR reactor core contains 157 or 193 fuel assemblies.

After a uranium fuel bundle or assembly in a nuclear power reactor has been irradiated and has produced electricity for between 36 to 72 months, it is no longer reactive enough to efficiently produce electricity. It is, however, still radioactive and must be stored after it is removed from the reactor core. Generally speaking, the fuel is stored in one of two ways: (1) in a spent fuel pool, which places the radioactive fuel rods beneath approximately twenty feet of water for shielding and cooling, or (2) after cooling in the spent fuel pool for 5–10 years, in dry casks and/or canisters, which are large welded or bolted metal canisters into which numerous bundles or assemblies are placed. After being loaded with SNF, these canisters are typically placed inside large concrete overpacks for additional shielding. Table 1 provides information

about the number of fuel assemblies in the spent fuel pools and dry casks currently at each of our nuclear power plants.

Table 1. Total number of fuel assemblies in spent fuel pools vs. dry cask (approx. figures)

Nuclear Power Plant	Spent Fuel Pools	Dry Casks
Plant Farley (PWR)	2,300	930
Plant Hatch (BWR)	5,000	4,150
Plant Vogtle (PWR)	2,600	480

Spent fuel pools and dry casks are regulated and approved by the NRC under comprehensive safety, security, and environmental regulations.³ The spent fuel pools themselves are located within the reactor buildings of the power plant structures, while loaded dry casks are stored in appropriate areas on the plant sites, but outside the structures. Both the pools and casks are located within the security protected area of the plant.⁴ In addition, Southern Nuclear has dry cask storage campaigns at each of our nuclear power plants, usually on an annual basis, to ensure we maintain adequate room in our spent fuel pools. Although not an NRC requirement, our fleet objective is to maintain dual core offload capability. At the plants where the two reactors share a spent fuel pool, this means maintaining enough room to simultaneously move the fuel out of both reactors into the spent fuel pool. Loading plans to transition SNF from the spent fuel pools into dry casks are established to support this objective, when possible. We agree with the NRC's position, as supported by recent NRC studies, that "spent fuel pools and dry casks both provide

³ See Spent Fuel Storage Regulations, Guidance, and Communications, U.S. Nuclear Regulatory Comm'n <http://www.nrc.gov/waste/spent-fuel-storage/regs-guides-comm.html> (last updated Apr. 28, 2015).

⁴ Additional safety measures and emergency preparedness upgrades have been made to enhance our spent fuel pool capabilities following the events at Fukushima, Japan in 2011.

adequate protection of the public health and safety and the environment,” and there is “no pressing safety or security reason to mandate earlier transfer of fuel from pool to cask.”⁵

SNF Disposal Is the Government’s Obligation under Existing Law and Contracts

Although the nuclear energy industry has demonstrated that SNF can be safely stored in spent fuel pools or dry casks, the federal government and the general public should not view these temporary measures as a de facto permanent solution to the SNF disposal issue. SNF disposal is both a statutory and contractual obligation of the federal government.

During the 1970s, when many of the existing nuclear plants were licensed and constructed, SNF was expected to be reprocessed off-site. In the United States, reprocessing of commercial SNF was performed in the late 1960s and early 1970s at West Valley, New York. Therefore, spent fuel pools were not designed to store all SNF generated during the life of the plant. However, concerns began to arise that nuclear fuel reprocessing could contribute to the proliferation of nuclear weapons material, and in 1976, President Ford expressed this concern in a presidential statement on nuclear policy, concluding that “that the United States and other nations can and should increase their use of nuclear power for peaceful purposes even if reprocessing and recycling of plutonium are found to be unacceptable” but that the “reprocessing and recycling [of SNF] should not proceed unless there is sound reason to conclude that the world community can effectively overcome the associated risks of proliferation.”⁶ President Ford further stated that “the United States should no longer regard reprocessing of used nuclear fuel to produce plutonium as a necessary and inevitable step in the nuclear fuel cycle”⁷ In 1977, President Carter’s veto of the Department of Energy Authorization Act of 1978 – Civilian

⁵ See Spent Fuel Storage in Pools and Dry Casks Key Points and Questions & Answers, U.S. Nuclear Regulatory Comm’n, <http://www.nrc.gov/waste/spent-fuel-storage/faqs.html> (last updated Apr. 13, 2015).

⁶ Gerald R. Ford Presidential Documents, vol. 12, no. 44, at 1626–27 (1976).

⁷ *Id.*

Applications effectively halted commercial reprocessing in the United States, making storage the only option for SNF.

As a result of the rising inventory of SNF that domestic nuclear electrical utilities were being required to store, Congress passed and President Reagan signed the NWPA, which reaffirmed federal responsibility “to provide for the permanent disposal of high-level radioactive waste and such [SNF] as may be disposed of in order to protect the public health and safety and the environment.”⁸ To achieve this goal, the NWPA directed the Secretary of Energy to find an appropriate repository site and, following Presidential and Congressional approval of that selection, proceed with construction authorization through the NRC. In 1987, the NWPA was amended to establish Yucca Mountain in Nevada as the sole candidate site for a permanent geologic repository.⁹

The NWPA also directed the Secretary to promulgate and enter into contracts with the nation’s nuclear utilities for the acceptance, transportation and disposal of SNF. As a result, DOE promulgated the Standard Contract for Disposal of Spent Nuclear Fuel and/or High Level Radioactive Waste, the terms of which are presented at 10 C.F.R. § 961.11. The Standard Contract provides, among other things, that in return for the payment of fees into the NWF, the government, beginning not later than January 31, 1998, would begin accepting and take title to SNF from each of the nation’s domestic nuclear electrical utilities for permanent storage at the to-be-constructed federal SNF repository at Yucca Mountain. The Standard Contract also requires that DOE provide the equipment, procedures, and transportation casks necessary to transfer title of the utilities’ SNF to the federal government. Entry into the Standard Contract was

⁸ 42 U.S.C. § 10131(a)(4).

⁹ See Omnibus Budget Reconciliation Act of 1987, Pub. L. No. 100-203, 101 Stat. 1330 (codified at 42 U.S.C. § 10172).

effectively mandatory. In fact, the federal government has made the Standard Contract with DOE a prerequisite for the issuance or renewal of nuclear power plant licenses.

DOE's Breach of Contract

Alabama Power and Georgia Power signed the Standard Contract for each of our currently operating plants in 1983. In the late 1990's, Plants Hatch and Vogtle added spent fuel storage racks to their spent fuel pools to expand storage capacity. Plant Farley, which has separate spent fuel pools for each unit, has usable spent fuel storage capacity of over 1,300 assemblies for each unit. Plant Hatch, where both units share a single pool, has usable storage capacity of over 5,900 assemblies. Plant Vogtle Units 1 and 2, which also share a spent fuel pool, has usable spent fuel storage capacity of over 3,400 assemblies.

On the basis of the Standard Contract, Alabama Power and Georgia Power¹⁰ have paid over \$1.2 billion into the NWF for the nuclear energy produced to date at Plants Farley, Hatch, and Vogtle. The federal government, however, has yet to build the permanent SNF repository that is required by the NWPA and the Standard Contract. Because of this failure, DOE did not begin accepting SNF from the nation's domestic nuclear electrical utilities by the January 31, 1998 deadline. As a result, nuclear utilities filed breach of contract actions against the federal government in the United States Court of Federal Claims. As existing law continues to require a repository, these actions are for partial breach of contract only, not total breach. Thus, as partial breach cases, the utilities are not recovering payments made into the NWF.¹¹ Instead, recoveries

¹⁰ Although Alabama Power and Georgia Power own Plants Farley, Hatch, and Vogtle, Southern Nuclear is the operating agent and attorney-in-fact for Alabama Power and Georgia Power with regard to those nuclear facilities.

¹¹ *Ind. Mich. Power Co. v. United States*, 422 F.3d 1369, 1372–73 (Fed. Cir. 2005) (finding DOE liable for breach of contract); *Me. Yankee Power Co. v. United States*, 225 F.3d 1336, 1342 (Fed. Cir. 2000), *aff'g* *Yankee Atomic Elec. Co. v. United States*, 42 Fed. Cl. 223 (1998) (DOE's failure to begin performance by January 31, 1998 was a partial breach and “[t]he breach involved all the utilities that had signed the contract—the entire nuclear electric industry.”).

to date have been limited to the costs that utilities have incurred in connection with construction, operation, and maintenance of their dry storage facilities, provided that the utility bringing the claim would not have needed those dry storage facilities if the government had begun accepting SNF for storage by January 31, 1998. Table 2 summarizes the recoveries to date by Southern Company entities in their breach of contract claims.

Table 2. Recoveries by Southern Company Entities for SNF Breach of Contract Claims

Lawsuit	Year Filed	Years of Breach	Judgments
1st Lawsuit	1998	1998-2004	Alabama Power: \$17M Georgia Power: \$56.7M
2nd Lawsuit	2008	2005-2010	Alabama Power: \$25.5M Georgia Power: \$36.5M
3rd Lawsuit	2015	2011-2014	Case Pending ¹²

The longer DOE delays performance of the Standard Contract and fails to take custody of nuclear utilities' SNF, the greater the burden on those utilities. Facilities utilizing dry cask storage technology will have to be expanded. At our three sites, construction of independent spent fuel storage installations (ISFSIs) and continued procurement of hundreds of casks and canisters over a twenty five year (25) period will result in a total of approximately half a billion dollars (not adjusted for inflation) to be spent by Alabama Power and Georgia Power on new storage equipment and expanded facilities. Ultimately, until the issue is resolved or storage is provided, Alabama Power, Georgia Power, and the nation's other nuclear utilities will continue to incur damages as a result of the government's failure to perform its obligations under the NWPA and the Standard Contract.

¹² In this third lawsuit, Alabama Power and Georgia Power are seeking a combined \$179 million. Discovery has just begun in that case, and trial is not expected until late 2016.

Recent Actions Support Yucca Mountain

Even as the industry faces continued challenges, there is increasing confidence that the nation's nuclear waste program is finally getting back on track, as supported by several recent developments.

First, the U.S. Court of Appeals for the D.C. Circuit recently ordered the NRC to comply with the NWPA and to use available funds to resume consideration of DOE's Yucca Mountain license application.¹³ NRC is complying with this court order.

Second, in a separate decision arising from a lawsuit filed by NEI and the National Association of Regulatory Utility Commissioners, the D.C. Circuit recognized DOE's deficient approach to addressing SNF and ordered DOE to cease collecting the annual fee of 1.0 mil (one-tenth of a cent) per kilowatt-hour of nuclear-generated electricity, which was established pursuant to the NWPA.¹⁴ DOE set the fee to zero effective May 16, 2014. A fee cannot be reinstated until DOE can demonstrate the appropriate rate commensurate with DOE's activities toward a permanent waste removal and disposal solution.

Third, in August 2014, the NRC issued the Continued Storage Rule (CSR), which replaced the Waste Confidence Decision that had previously been remanded by the courts, and allowed the NRC to resume licensing decisions. The CSR and accompanying Generic Environmental Impact Statement set forth the "environmental impacts of continued storage of spent nuclear fuel beyond the licensed life for operation of a reactor..."¹⁵ As explained by the

¹³ See *In re Aiken Cnty.*, 725 F. 3d 255 (D.C. Cir. 2013).

¹⁴ See *Nat'l Ass'n of Regulatory Utility Comm'rs v. U.S. Dep't of Energy*, 736 F.3d 517 (D.C. Cir. 2013).

¹⁵ Continued Storage of Spent Nuclear Fuel, 79 Fed. Reg. 56238, 56249 (Sept. 19, 2014).

Congressional Research Service: “In approving the storage rule, NRC ended its suspension of final licensing decisions for new reactors, spent fuel storage facilities, and license renewals.”¹⁶

Fourth, after an extensive scientific and technical review and federal expenditures exceeding \$15 billion, NRC staff recently issued the remaining volumes of the Safety Evaluation Report (SER) and concluded that Yucca Mountain is a safe location for disposing nuclear waste for at least one million years. To obtain final approval of Yucca Mountain, DOE must still acquire certain land and water rights, supplement an environmental report, and complete the NRC licensing/adjudicatory process, but the scientific analysis was clear: Yucca Mountain is a safe location for a permanent waste repository.

Finally, we are encouraged by the NRC’s recent decision to use available funds to complete the supplemental environmental impact statement for the Yucca repository, although additional funding will also be needed to allow the NRC to complete the licensing process. In that regard, it is noteworthy that the House of Representatives Energy and Water Appropriations Bill for FY2016 (H.R. 2028), which was approved by the full House of Representatives on May 1, 2015, would provide \$150 million for further progress on the Yucca license.

Costs of Inaction

While there is good reason for optimism, we also recognize that sustaining progress on the Yucca repository has been elusive. Failing to move forward with the permanent repository at Yucca Mountain would have several adverse impacts.

First, continued inaction on Yucca Mountain would prolong regulatory uncertainty for the nuclear industry. Our industry has seen firsthand how issues related to SNF can seriously complicate, or even prevent, licensing and operation of power plants. This was clearly seen in the

¹⁶ Mark Holt, Cong. Research Serv., RL 33558, Nuclear Energy Policy 3 (2014), *available at* <https://www.fas.org/sgp/crs/misc/RL33558.pdf>

period of time between the court order remanding the Waste Confidence Decision in June 2012 and the NRC's issuance of the Continued Storage Rule in August 2014, when a virtual moratorium on new licensing decisions was in effect. Increased uncertainty about the future of SNF also risks impacting decisions to invest in new nuclear capacity, which is a source of clean, safe, and reliable energy.

Second, continued inaction unfairly creates concern on the part of the public about nuclear power. We are able to safely handle SNF, but the failure of the federal government to move it, using the funds already paid by customers, to a permanent repository could have a detrimental impact on public support for nuclear power at a time when nuclear energy is absolutely critical to meeting the nation's economic, energy, and environmental needs. This is regrettable because the overwhelming scientific evidence demonstrates that SNF can be safely stored on-site until it is moved to Yucca Mountain, where it can be safely placed for at least one million years. But temporary solutions by the industry are not the kind of permanent solutions needed nor are they the solutions required by the NWPA.

Third, inaction on Yucca Mountain means the nuclear power plants themselves must continue to manage, secure, and oversee SNF storage systems (whether spent fuel pools or dry casks), which takes up valuable space at power plants, causes operators to spend more on site security and storage facilities and drives up costs for operating nuclear reactors, as discussed in more detail earlier in this testimony.

Fourth, inaction on Yucca Mountain will impose increased costs on our customers, the federal government, and taxpayers. Nationwide, electricity customers have paid approximately \$750 million annually in nuclear waste fees for these purposes, pushing the current balance of

the NWF to more than \$30 billion (with accrued interest).¹⁷ Alabama Power has paid over \$399 million into the NWF for Plant Farley. Georgia Power (and its co-owners) has paid over \$400 million into the NWF for Plant Hatch and approximately \$445 million for Plant Vogtle (Units 1 & 2). Congress should not lose sight of the fact that these payments are made with funds collected from electricity customers—families and businesses throughout Alabama and Georgia. It is in the best interests of the nation, federal taxpayers, electricity customers, the general public, and the electric utilities to have all of the approximately 70,000 metric tons of nuclear waste—currently stored at nuclear facilities across 33 states—properly and safely disposed of in a permanent repository as required by the NWPA. The Government Accountability Office has estimated that, in total, the federal government’s liability for breach of the SNF contracts will exceed \$21 billion by 2071.¹⁸ These liability payments come out of the Judgment Fund, not from the NWF. Already, DOE payments (including those for SNF breach of contract claims) are reported to be the largest category of payments from the Judgment Fund in recent years.¹⁹

¹⁷ Nuclear waste fund payments, in total and state-by-state, are available on the Nuclear Energy Institute’s website. See Nuclear Energy Institute, US State by State Used Fuel and Payments to the Nuclear Waste Fund, <http://www.nei.org/Knowledge-Center/Nuclear-Statistics/On-Site-Storage-of-Nuclear-Waste/US-State-by-State-Used-Fuel-and-Payments-to-the-Nu> (last updated Apr. 2015). According to a recent audit report by the U.S. Department of Energy Inspector General, the “U.S. Treasury securities held by the [Energy] Department related to the NWF had a market value of \$39.8 billion...” U.S. Dep’t of Energy, Office of Inspector General, Dep’t of Energy Nuclear Waste Fund’s Fiscal Year 2014 Financial Statement Audit 2 (Nov. 2014), available at <http://energy.gov/sites/prod/files/2014/12/f19/OAS-FS-15-03.pdf>

¹⁸ See U.S. Gov’t Accountability Office, GAO-15-141, Spent Nuclear Fuel Management: Outreach Needed to Help Gain Public Acceptance for Federal Activities That Address Liability 16 (2014).

¹⁹ See National Law Journal, Judgment Fund: Energy Department Pays Out the Most — Again (Apr. 6, 2015), available at <http://www.nationallawjournal.com/id=1202722657674/Judgment-Fund-Energy-Department-Pays-Out-the-Most-mdash-Again#ixzz3ZqvxIWYr>.

General Observations

As this Subcommittee considers a range of nuclear waste policy issues, I would like to offer several additional observations for the Subcommittee's consideration. These are listed below in no particular order of significance.

- **Interim Storage:** As a general matter, we support a long-term centralized storage solution. We believe it would be appropriate to site such a facility at Yucca Mountain, either as part of the initial repository license or in a separate facility. We are not opposed to additional storage sites. We look forward to reviewing in detail recent proposals for private storage sites in Texas and New Mexico. We continue to support the principle—embodied in the existing NWPAA—that the NWF may be used to fund interim storage sites only after a permanent repository is licensed.
- **Nuclear Waste Fees:** We would support restoring collection of the Nuclear Waste Fee only after the federal government comes into compliance with the NWPAA. We believe Congress should dedicate nuclear waste fee dollars to the sole purpose of removal and disposal of SNF.
- **Spent Fuel Contracts:** We are concerned about proposals that would require DOE to remove SNF from decommissioned plants before operating plants or otherwise alter the current contractually established priority system. DOE should honor the current SNF queue and contractual provisions. To the extent changes in the SNF acceptance priorities are necessary, existing law and contracts already allow exchanges among SNF contract holders. These exchanges can be used to facilitate removal of SNF at decommissioned plants earlier than currently contemplated. Further, DOE could support exchanges to ensure that space in the SNF queue is efficiently utilized to remove SNF from decommissioned plants or to avoid costs associated with the need to build additional storage facilities at operating reactors.
- **State Incentives:** We would support reasonable incentives for the State of Nevada to help facilitate completion of Yucca Mountain and to compensate the state for costs it incurs on the basis of hosting this site. This is not a new position for our company. In 2006, one of my predecessors at Southern Nuclear, Bernie Beasley, testified before Congress about SNF issues, stating: “The nuclear energy industry supports an active and constructive role for Nevada in the development of Yucca Mountain to help ensure the safety of its citizens. The industry also supports compensation for the State to account for the program’s socioeconomic

impact, as called for in the Nuclear Waste Policy Act. This model is consistent with the siting and operation of the Waste Isolation Pilot Plant.”²⁰

- **Blue Ribbon Commission:** We appreciate the work of the Blue Ribbon Commission on America’s Nuclear Future and find several of their proposals to be worthy of further consideration. For example, we support the creation of a new federal corporation with responsibility for SNF storage and disposal. We also agree that this new corporation should have access to the NWF without the need for further congressional appropriations, although subject to ongoing congressional oversight and in a manner consistent with the existing NWPA. Creation of this new entity should be linked with reform of SNF funding to ensure access to the Nuclear Waste Fund for appropriate uses. Finally, it is critical that any new siting process be science-based and transparent. A lack of consent by a local host site should not override the technical suitability of a site.

Conclusion

As our nation moves ahead with the construction of new nuclear power plants, we must remain mindful of the federal government’s long-standing obligation, as expressed in the NWPA, to safely and permanently dispose of the nation’s SNF inventory. We believe the Yucca Mountain repository program should continue to be pursued. The nation has come too far and invested too much to abandon it now, particularly in light of the recent NRC safety reports demonstrating that it is a safe location for these purposes. Electricity customers around the country have, for several decades, paid billions of dollars in nuclear waste fees, but the government has yet to live up to its end of the bargain (or its obligation under the law).

I applaud this Subcommittee for taking a keen interest in tackling this complex and challenging problem. The good news is that it is not an insurmountable issue; indeed, from a technical, safety, financial, and legal perspective, the path forward is very manageable and

²⁰ Testimony of J. Barnie Beasley, Jr., President of Southern Nuclear Operating Company, before the Senate Energy and Natural Resources Committee (Aug. 3, 2006). Additionally, we are generally opposed to proposals to de-link permanent disposal of civilian and defense-related nuclear waste, as recently suggested by the Administration. We support the Reagan Administration’s 1985 decision to establish a permanent repository for both civilian and defense nuclear waste. We would encourage this Subcommittee to fully vet any such proposals to ensure that it advances the objective of establishing an operational permanent repository for civilian nuclear waste and brings the country into compliance with the existing spent fuel contracts and the NWPA.

understood. In many respects, the key challenges are political and in the domain of Congress to address. Thank you for allowing me to appear before this Subcommittee today. I will be glad to answer any questions you might have.