BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON ENERGY AND AIR QUALITY

TESTIMONY OF THE HONORABLE STANCIL O. WISE CHAIRMAN, GEORGIA PUBLIC SERVICE COMMISSION ON BEHALF OF THE NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS

ON

NUCLEAR FUEL MANAGEMENT AND DISPOSAL

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National Association of Regulatory Utility Commissioners 1101 Vermont Ave, N.W., Suite 200 Washington, D.C. 20005 Telephone (202) 898-2200, Facsimile (202) 898-2213 Internet Home Page http://www.naruc.org Good Morning Mr. Chairman, Ranking Member Boucher, and Members of the Committee.

My name is Stan Wise. I am the Chairman of the Georgia Public Service Commission. I also am the immediate past president of the National Association of Regulatory Utility Commissioners (NARUC). I am testifying today on behalf of NARUC. I greatly appreciate the opportunity to appear before you this morning. The issues that you are addressing in this hearing are very important to NARUC's membership and my State, and I am grateful to have this opportunity to present our point of view concerning the disposition of spent nuclear fuel currently stored at nuclear power plant sites that is intended for ultimate disposal at the Yucca Mountain geologic repository.

I would like to summarize my testimony and have my full statement entered into the record.

NARUC is a quasi-governmental, non-profit organization founded in 1889. Its membership includes the State public utility commissions serving all States and territories. NARUC's mission is to serve the public interest by improving the quality and effectiveness of public utility regulation. NARUC's members regulate the retail rates and services of electric, gas, water, and telephone utilities. We are obligated under the laws of our respective States to ensure the establishment and maintenance of such utility services as may be required by the public convenience and necessity and to ensure that such services are provided under rates and subject to terms and conditions of service that are just, reasonable, and non-discriminatory.

NARUC's goals in the nuclear waste area are well known and have been stated before this and other Congressional committees on a number of prior occasions. NARUC believes that the federal government needs to meet its obligation under the Nuclear Waste Policy Act of 1982, as amended, to accept spent nuclear fuel from utilities and other nuclear generators in a timely manner for safe disposal. NARUC further believes that the nation's ratepayers have upheld their end of the bargain struck in the Nuclear Waste Policy Act by providing, either directly or through income generated on prior payments, over \$25 billion for use in constructing a nuclear waste repository. Finally, NARUC believes that the Nuclear Waste Fund should only be employed for its intended purpose and that the monies in the Nuclear Waste Fund should be utilized, along with appropriations from the Department of Defense budget, for the sole purpose of supporting the opening of the Yucca Mountain facility in a timely fashion. The basic principles underlying NARUC's approach to the nuclear waste program.

Two years ago, the repository program seemed to be very close to having the repository license application completed for submittal to the Nuclear Regulatory Commission during 2004, but was further delayed due to the need for the Environmental Protection Agency to revise the radiation standard to be used in the license review. In addition, there were some difficulties between DOE and the NRC in meeting the documentation certification requirements of the Licensing Support Network (LSN) that many of us outside the government did not fully understand. And there was the revelation that there may have been some records falsification by some employees of the United States Geologic Survey who had worked on the project. Since then, EPA has issued their proposed revised radiation standard and has concluded the public comment period. We don't know the status of the LSN documentation but the USGS and DOE records investigations seemed to be concluded, with the program scientific work reaffirmed.

NARUC's primary concern with the civilian radioactive waste management program is for Congress to reform the way the Nuclear Waste Fund is managed and the way in which appropriations are made from the Fund. Reform of the Fund appropriations process is necessary to provide a stable financial footing so that the government can fulfill its statutory and contractual obligation to provide safe disposal of spent nuclear fuel and other high-level radioactive waste as was the intent of the Nuclear Waste Policy Act. Although the House Energy and Commerce Committee voted favorably on H.R. 3981 in the previous Congress, the bill never made it to a floor vote and no action was taken in the Senate. We did not consider that a perfect bill (it was only for a five year period) but it would have helped ensure that more of the fee revenue collected by the Fund would actually be appropriated for its intended use. While the FY 2006 budget referred to the Administration's remaining interested in pursuing a similar proposal for reclassification of NWF fees as offsetting collections and discussing it with Congress, no legislation was developed that year. NARUC's and State utility regulator's prime concern for the repository program remains to reform the Nuclear Waste Fund appropriations process. It is difficult for us to see how the repository program can ever shift into an implementation phase when funding requirements would need to increase by orders of magnitude compared with the pre-licensing phase. Simply put, the repository cannot be built without a more stable financing arrangement. Without the repository, spent nuclear fuel continues to accumulate and be stored in places that were never designed or permitted for indefinite storage. Spent fuel would be stored at 72 locations along rivers and lakes in 34 States instead of in a more secure, well-designed repository. Although we see many favorable signs for investment in new nuclear power plants, including provisions of the Energy Policy Act of 2005, we also continue to hear that lack of a clear path towards disposal of spent nuclear fuel may hold back that investment.

We also need reform of the Nuclear Waste Fund because we owe it to the ratepayers who pay the fees in their electric bill. For the past five years, three quarters of the fees collected for nuclear waste disposal have gone to other unrelated federal purposes. In the current fiscal year total fee payments into the Nuclear Waste Fund are expected to be \$750 million. That compares with \$99 million appropriated for the repository program. All that we as utility regulators can show ratepayers is a financial report from the Department of Energy that there is an account in the Treasury called the Nuclear Waste Fund that supposedly has \$18 billion in it for the repository program. It is a cruel fact of life that for all practical purposes those funds are inaccessible or already

spent. All the ratepayers want is for the government to remove the spent fuel for disposal as they were promised over 24 years ago would already have begun by now.

We are grateful for the leadership of House Energy and Water Development Appropriations Subcommittee and its unwillingness to simply do nothing last year while the repository license application was delayed and no reform to the Nuclear Waste Fund was in the works. In the markup of the FY 2006 budget, Energy and Water Appropriations Subcommittee Chairman David Hobson sought to add \$10 million to initiate an interim storage program using DOE sites that are presumed to already have the security and other support that could accommodate spent fuel from commercial reactors. DOE would take title to and ship utility waste to the unspecified locations that already store similar government radioactive waste. We had many questions about that approach, but it could have been a step in the right direction, especially for spent fuel now stored at 14 shutdown reactor sites. We doubt that any significant quantity could have been moved in FY 2006, as the Subcommittee report indicated, or that much could be done for the \$20 million the bill would have appropriated. Of course, when the Senate did not include similar provisions or equal funding, the proposal did not survive in conference.

For FY 2007, the House again took up an interim storage proposal in the appropriations bill, this time adding \$30 million, not from the Nuclear Waste Fund, for development of some undetermined amount of interim storage of spent fuel at "integrated spent fuel recycling facilities" that could be serve as a vanguard for demonstration of spent fuel reprocessing under the Advanced Fuel Cycle Initiative being pursued within

DOE as part of the broader Global Nuclear Energy Partnership (GNEP.) There was a stipulation in the bill that authorization be obtained for interim storage, since DOE has maintained that it lacked authority to establish interim storage.

Then the Senate Appropriations Committee released its proposal, as Section 313 of the FY 2007 Energy and Water Appropriations Bill (Senate Report 109-274), that calls for DOE to propose "consolidation and preparation facilities" for interim storage of spent fuel in each State with a commercial nuclear reactor or, alternatively, regional CAP facilities. We understood Chairman Domenici wanted to stimulate a dialogue on interim storage and to get States involved. A NARUC witness testified before a hearing of the Senate Energy and Natural Resources Committee on August 3rd. I have been surprised at the muted reactions from many States, who may be tending to more pressing matters like wildfires, budget crises and other real-time issues. I will say this, however: States are involved in nuclear waste storage at reactors. In my State, we have utilities expressing great interest in building new nuclear plants to provide emissions-free reliable baseload power for forecasted energy demand. Yet, the utilities indicate they may have difficulty raising capital without greater certainty on nuclear waste disposal. State utility commissioners are also involved in another way: those utilities making payments into the Nuclear Waste Fund pass those costs on to their ratepayers. Since 1983, close to \$900 million has been paid into the Fund from Georgia.

We have many questions about the CAP proposal. NARUC shared some of them in a letter to Chairman Barton on July 11th. Unless DOE is better staffed than I suspect

they are, it would seem unlikely that DOE could undertake a delicate site search concurrently in 31 States within the 270 day timeline indicated in the bill. There are environmental impact considerations and the potential for litigation that could slow the process. Are we even sure that every State has a storage deficiency? It is my understanding that once it was apparent that DOE would not meet the 1998 waste acceptance mandate, many utilities resigned themselves to the necessity to develop dry cask storage on-site to supplement pool storage. There is litigation over recoupment of those expenses, but for the active reactors, there has been a steady increase (over 38 so far) of separately licensed dry cask facilities and more are planned. The shutdown plants had little choice but to put their fuel in dry cask storage and some of those sites could stand some relief from continuing to store spent fuel.

Governors will want to know how the site search process within their States will proceed. Some States have restrictions on developing new nuclear facilities within the State and, although the factual record on nuclear waste transportation safety is superb, there is nonetheless public concern over transportation and unease over siting that is not likely assuaged by assurances in the bill that the CAP storage would only be for 25 years.

NARUC has supported interim storage away from reactor storage sites for some time, whether by the government or at private facilities provided by the utilities themselves such as proposed at Skull Valley, Utah. In our view, the Nuclear Waste Policy Act does not permit government interim storage to be financed by the Nuclear Waste Fund (Section 302.d.). Some of the expenses relating to waste shipping casks and transportation might be permitted since they could be interpreted as needed for the permanent repository. However, there is a broader question of equity: why should the Nuclear Waste Fund, which is supposed to be used to develop a permanent repository, be used for expenses that could have been avoided had DOE met its statutory and contractual obligations to begin spent fuel acceptance in 1998? This is at the heart of the ongoing litigation by numerous utilities against DOE and it is not anticipated that the Nuclear Waste Fund will be used to make damage payments that may be awarded in those cases.

Also relevant to the use of the Nuclear Waste Fund is the 2002 decision by the Eleventh Circuit of the United States Court of Appeals (*Alabama Power, Carolina Light and Power, et al. v. Department of Energy*) ruling that the Nuclear Waste Fund may only be used for disposal and that interim storage is not an act of disposal.

Last year, the House Appropriations Report (109-086) called for DOE to initiate a plan to begin spent fuel reprocessing (or re-cycling) in FY 2007. Members of the Committee are familiar with the history of reprocessing in this country and the experiences in other countries. We know the 2001 National Energy Plan recommended that the subject be re-visited, and that DOE has an Advanced Fuel Cycle Initiative as part of a research effort to look at what to many is an intuitively appealing goal of 'recycling' used fuel. Yet technology, economics, environmental and proliferation concerns remain. Testimony by industry and academic experts before the House Science Committee last July also suggested there are many economic and other questions to be addressed. We

will leave that for others to sort through, but I want make a single point here: There is no known reprocessing method in use today or likely to be developed in the future that does not result in some quantity of high-level radioactive waste that will require disposal in a repository. Therefore, whether we reprocess in this country or not we will still need a repository like Yucca Mountain. Put another way, reprocessing is not an alternative to building a repository, as much as some might wish it to be. There may be less waste if we reprocess and it may be of different toxicity, but it still must be isolated from the human environment. All of the countries that reprocess know this and are planning long-term disposal.

Moreover, the repository design that is being proposed for Yucca Mountain does not preclude a future decision to retrieve any or all spent fuel emplaced in it for reprocessing (or other reasons) until the decision is made to seal the repository, which, according to DOE, could be anywhere from 50 to 300 years in the future. If spent nuclear fuel is indeed an energy asset, Yucca Mountain will be an ideal place to store it until needed.

With the FY 2007 Department of Energy Budget, Secretary of Energy Samuel Bodman announced the initiative called the Global Nuclear Energy Partnership (GNEP.) It has many dimensions and purposes, but one that we are interested in is the suggestion that if advanced forms of reprocessing and recycling of spent nuclear fuel were to be developed under the GNEP vision, that the amount of nuclear waste requiring disposal might be greatly reduced and its radiation characteristics would be hazardous over a much shorter period of time. Naturally, we are interested in learning more about the proposal and its feasibility in terms of achievable technology, economics, environment and non-proliferation considerations. It is too new for us to take a position on the matter until we learn more, but our existing policy remains current. In 2000, we revised our Nuclear Waste Guiding Principles to include: "Reprocessing of spent fuel may be worthy of research, but, even if feasible, does not eliminate the need for a permanent repository." Accordingly, we support the research proposed for GNEP and the Advanced Fuel Cycle Initiative in the FY 2007 DOE budget request. It appears to be a worthwhile investment that could pay dividends down the road while investigating the feasibility of proliferation-resistant reprocessing.

We have been troubled by the legislative proposal to have the Department of Energy take title to spent nuclear fuel at commercial reactor sites and manage it there for some unspecified time, as in S. 2099. We see press reports that the scheme would be financed by the Nuclear Waste Fund and we also interpret the real objective is to somehow—with no clear terminating point—keep the spent fuel where it is instead of building the repository. Obviously, to abandon the repository would require amendment or possibly repeal of the Nuclear Waste Policy Act. Proponents of this proposal seem to disregard the finding in the Nuclear Waste Policy Act that "Federal efforts during the past 30 years to devise a permanent solution to the problems of civilian radioactive waste disposal have not been adequate." Instead, they would have us revert to that Square One posture.

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We have been careful to avoid any suggestion that continued spent fuel storage at reactor sites is not as safe and secure as the Nuclear Regulatory Commission, which regulates it, maintains that it is, but let us at least suggest that the proposal to have DOE take title and manage spent fuel at present reactor storage sites is not consistent with the "compelling national interests" that former Secretary of Energy Spencer Abraham referred to when he recommended Yucca Mountain as a suitable repository site to the President and Congress in 2002. He said, and we agree, that the repository is important to homeland security.

We strongly oppose the suggestion that the government take title to spent fuel which would remain at 72 reactor sites instead of going to a repository. That is not what was promised in the Nuclear Waste Policy Act and reaffirmed by Congress in a joint resolution in 2002 and it is most certainly not what ratepayers have paid \$25 billion in fees and interest over the past 22 years to achieve.

Before I conclude, there is one other item to discuss. We urge strong leadership on the part of the Department of Energy and its support contractors to keep this muchdelayed repository program moving forward. We have expressed our frustrations in the past with the chronic underfunding and series of delays that have troubled the program. DOE needs to work its way through whatever else needs to be done to put the repository licensing back on course. We commend the positive spirit and determination of Mr. Edward Sproat, the new director of the Office of Civilian Radioactive Waste Management, when he announced the revised schedule in July and we wish him and the

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repository team well in meeting that schedule. We appreciate EPA meeting the challenge of responding to the court remand with its proposed revised radiation standard. Although we disagreed with extending the regulatory period to one million years, EPA did meet the mandate of the court and it is time to issue the final rule. We have been aware that during the license application delay, DOE has been conducting a re-examination of repository plans. We saw some of the results of what is termed "program re-direction" in a press release last October. A change in approach was described as being "simpler, safer and more cost-effective," mostly as a result of a shift to standardized spent fuel canisters that will allow significant changes in fuel handling at the receipt facilities at Yucca Mountain. We certainly applaud cost savings, improved safety and the prospect of reducing the licensing complexity, but we have two concerns that we want to pursue:

- Will these changes further delay the license application and how will that affect eventual repository operational dates? The revised schedule showing initial waste disposal in 2017 is predicated on a number of variables including adequate funding.
- 2. How will DOE and the utilities be able to ensure that all spent fuel presently stored at reactor sites (up to the current planned amount of 63,000 metric tons) will be able to be transferred into the standardized canisters? Spent fuel is increasingly being stored in sealed canisters in dry casks that will either have to be accepted as is or have the contents transferred to the standard canisters.

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Finally, NARUC has not taken any strong position on the other elements of the proposed Nuclear Fuel Management and Disposal Act (H.R. 5360), aside from our support for the Nuclear Waste Fund reclassification proposal. In general, we find the other provisions to be helpful for the overall goal of licensing, building and operating the repository. We agree that the 70,000 metric ton statutory limit on the repository capacity is arbitrary and the proposal to have the capacity be among the elements of the license review by the Nuclear Regulatory Commission makes sense. We have always urged DOE to plan and eventually conduct the spent fuel transportation in cooperation with other federal, State, tribal and local governments and, to the best of our knowledge the Department is planning to do that as required by the NWPA and as has been done successfully in previous nuclear waste shipments. We were disappointed to hear that Senator Domenici indicated last week that the counterpart Yucca Mountain bill (S. 2589) will not be taken up in the Senate this year.

Let me summarize what we support:

- Reform of the Nuclear Waste Fund so that collected fees are available for their intended purpose, as proposed in H.R. 5360.
- 2. DOE needs to press on with licensing the Yucca Mountain repository.
- 3. Central interim storage away from reactor sites that does not interfere with developing the repository.
- Research of advanced reprocessing and further study of all aspects of the GNEP initiative.

5. Infusing a sense of urgency in spent fuel repository development.

And, let me summarize what we strongly oppose:

- 1. Continued diversion of the Nuclear Waste Fund fee payments.
- 2. Having DOE take title of spent fuel at reactor storage sites and to retain it there.
- 3. Use of the Nuclear Waste Fund for interim storage, certainly not so long as appropriations for interim storage would come at the expense of adequate appropriations for the repository
- Putting as many as 31 States through a concurrent site search for interim storage before the costs and benefits of the proposed "consolidation and preparation" facilities have been determined.

Thank you for the opportunity to testify before you today. I look forward to your questions.