Testimony of South Carolina Public Service Commissioner David Wright before the Blue Ribbon Commission on America's Nuclear Future August 19, 2010

Good Morning, Mr. Chairman and Members of the Sub-Committee.

My name is David Wright and I am a legislatively elected commissioner and current Vice-Chairman of the South Carolina Public Service Commission. In addition, I am a member of the full Electricity Committee of the National Association of Regulatory Utility Commissioners, often referred to as NARUC, and the past Chairman and current member of that organization's Subcommittee on Nuclear Issues and Waste Disposal. I also serve as Chairman of the Nuclear Waste Strategy Coalition (NWSC).

The issues that you are addressing are very important to South Carolina and any other state that is the home to commercial spent nuclear fuel, or the nation's defense waste. I am grateful to have this opportunity to share our views concerning the disposition of spent nuclear fuel currently stored at nuclear power plants awaiting ultimate disposal at the Yucca Mountain geologic repository.

By way of the Nuclear Waste Policy Act of 1982 (NWPA), the federal government became responsible for taking title to and for disposal of high-level radioactive waste and spent nuclear fuel from commercial reactors. Utilities, ratepayers and regulators had the expectation that the Department of Energy (DOE) would begin waste acceptance and disposal in a licensed and constructed repository by January 31, 1998, as the NWPA required.

Utility ratepayers have paid, and continue to pay, for the disposal of the material. To date, ratepayers in states that receive power from commercial nuclear plants have paid over \$17 billion dollars into the Nuclear Waste Fund (NWF). Including interest, the NWF today totals almost \$35 billion, but only a fraction of the money collected has actually been spent on developing the Yucca Mountain repository. The ratepayers in South Carolina have paid nearly \$1.3 billion into the NWF, or more than \$2.3 billion including interest.

In other words, the federal government has our money while we still have all of the government's waste.

When DOE failed to meet its statutory and contractual obligation to begin waste acceptance in 1998, organizations that I and my state are a part of have simply asked that the government fulfill its part of the NWPA disposal bargain, remove the spent fuel per the Standard Contract since the utilities and ratepayers continue to pay for services not performed. We believe that the license application, if the review process proceeds, will show that the Yucca Mountain site will meet the scientific and technological

requirements of the NWPA.

If Yucca Mountain will not be licensed through the NRC process, we interpret the NWPA as still requiring DOE to develop and dispose of spent nuclear fuel in a geologic repository, unless the law is repealed or amended by Congress - the only body that can authorize DOE to conduct a site search for another permanent repository.

More than 62,000 metric tons of uranium is currently stored in pools or dry cask storage at nuclear plant sites in the United States. This amount increases with each refueling cycle, which generally occurs about every 18 months. License applications for at least 24 new nuclear units have been submitted to the Nuclear Regulatory Commission (NRC). The amount of spent nuclear fuel to be stored will increase as new units are constructed and old units are re-licensed.

Nearly 3,800 metric tons of Uranium is stored at four nuclear plant sites in South Carolina, which are home to seven reactors. Two new nuclear units at the VC Summer Nuclear Station in Jenkinsville, SC have been approved by the South Carolina Public Service Commission and are awaiting license approval by the NRC. License applications for another two nuclear units near Gaffney, SC have been submitted to the NRC, but not to the South Carolina Public Service Commission.

This nation will need more base load electric generation as the population grows and the economy recovers. Even with the budding renaissance of new nuclear plants to meet the need for new base load generation, without a solution to the storage of spent nuclear fuel, state regulators may be hesitant to approve the construction of new nuclear units, investors may be reluctant to fund new plants and utilities may therefore be hesitant to construct new nuclear units even if the NRC approves the license applications.

Federal courts have already ruled that the federal government is liable for the added storage costs past the dates agreed to in original contracts with spent fuel utilities. The Department of Energy already faces more than \$2 billion in court judgments and legal expenses resulting from failure to meet its obligations. When DOE had a plan to begin waste acceptance and disposal at Yucca Mountain by 2020 – Department of Justice officials estimated that the liability for 72 cases could reach \$13 billion, growing further by \$500 million for each additional year of delay. These liabilities are paid from the Judgment Fund.

What is really happening due to the federal government's failure to construct a permanent repository is that ratepayers are paying up to four times for ongoing spent fuel storage and future disposal – and that does not include decommissioning funds. First, ratepayers are paying into the NWF for storage at the deep geologic repository; second, because of the initial delay, ratepayers have to pay through rates to expand and re-rack their existing cooling pools in order to accommodate more waste; third, ratepayers are continuing to pay through rates to keep the waste stored at the existing plant sites in dry cast storage; and finally, all taxpayers – not just ratepayers – are paying through taxes for judgments and settlements through the Judgment Fund.

Not counting defense waste, spent fuel is scattered in 72 operating and shutdown reactor sites in 34 States.

How can this be more efficient, safe, secure or cost effective than having all spent nuclear fuel and defense waste at one secure, deep, geologic location?

Recently, there has been great interest in the reprocessing of spent nuclear fuel. Looking at closing the fuel cycle makes sense, too, but that's no reason to abandon the license proceeding for the nation's permanent repository. No matter the future course of this country - whether we reprocess, or maintain the status quo - **a geologic repository is still going to be needed** for defense and, commercial waste, and, the residue from any future reprocessing program.

The states of Idaho, South Carolina and Washington also have agreements with the federal government with a date certain to move defense waste out of their respective states. There are significant financial penalties to the federal government in the agreements for failure to comply – which is yet another way that all taxpayers, not just ratepayers, will have to pay compensation for the government's failure to build the site at Yucca Mountain.

In your letter of invitation to speak you asked three questions, but you wrote that "at this stage in the subcommittee's work we believe it is important for the Commission to hear your views, particularly as they pertain to the first question..."

"What role(s) should storage play in an integrated US waste management system and strategy in the future?"

Under the NWPA, the direction was for the federal government to dispose of all government and commercial high level radioactive waste, including spent fuel, in a geologic repository.

With the standard contracts that the reactor owners were required to enter with DOE, waste acceptance and removal for disposal was to have begun in 1998 and proceed at a rate specified in the contracts and in a "first discharged fuel first" sequence.

With the failure to meet the 1998 date and now, with the Administration seeking to cancel the repository at Yucca Mountain - and, there being no alternative disposal plan - it is plainly clear that on-site storage will continue for many more years as a result. That was not the intent when Congress enacted the NWPA or the utilities' intent when they signed their contract with DOE.

I would suggest that this Commission consider adopting a position that supports suspension of collection of the NWF fees, or refunding them in total, until there is a solution to the country's waste issue, because collection of the fees is not being applied to achieving the goals that the law set out. The NWSC wrote to the Subcommittee urging relocation and consolidation of the spent fuel now stored at the otherwise decommissioned sites. It is not economical to keep this material where it is.

Transporting nuclear waste is not something new in the United States. There have been numerous shipments of foreign nuclear waste that have already been ocean-shipped to Charleston, South Carolina and then trucked to the Savannah River Site in South Carolina. And, I am aware that nuclear waste from Hanford, Washington and Idaho National Lab has been shipped to the WIPP facility in New Mexico. So, waste can be, and is already being, moved – safely – and without incident in the United States.

The NWSC urges that the BRC recommend that the federal government develop a plan to move and temporarily store SNF that is currently stranded at decommissioned reactor sites and operating reactor site(s) for consolidation at locations that volunteer to host SNF and HLRW storage facilities, much like what was happening in the early stages of the Global Nuclear Energy Partnership program (GNEP).

In addition, we urge that the BRC recommend that the federal government also address the need for interim storage and disposal of greater-than-class-C waste. Centralized interim storage facilities are a safe and cost-effective option for managing SNF and HLRW from decommissioned power plants and other facilities and should be authorized and funded for the near-term while a permanent facility is being licensed and constructed. I want to emphasize that a centralized interim storage facility is not a substitute for a permanent repository and should be considered as a short-term solution only – even on a dual-track with the building of a permanent repository.

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