Summary Statement of Marvin S. Fertel
Blue Ribbon Commission on America's Nuclear Future
May 25, 2010

The Nuclear Energy Institute's utility members and the Nation's electricity ratepayers have committed over $34 billion* since 1982 to the Nuclear Waste Fund for the federal program that was supposed to have begun removing used fuel from commercial nuclear power plant sites over 12 years ago.

Within the federal government, inconsistency in the approach to managing used nuclear fuel and a lack of policy and management accountability have impeded the ability to build political consensus on this issue and pursue needed used fuel management projects. The following principles will help ensure that a stable used nuclear fuel management policy is created:

- The Nation must have a durable policy to manage used nuclear fuel responsibly.
- The Nation must have a plan for the ultimate disposal.
- An ideal technical solution is not required to begin implementation of a new policy direction. Evolutionary (and even revolutionary) advances in technology improvements can be incorporated over time without deferring decisions until decades of research are completed.
- Non-proliferation goals must be met.
- The successes and failures of the past (particularly in facility siting) must be heeded.

The following recommendations are offered to assist the Commission to judge the various policies, technologies, and systems that are available now or might be in the future.

1. An integrated used fuel management system will include both near- and long-term programs that must be operated over decades cannot be successful if policies regarding used fuel and high-level waste are continually subject to change.
2. The costs of a long-term management program must not be an undue burden.
3. Geologic disposal will be necessary in any used fuel management scenario and the nation's policy must establish a clear and achievable path to disposal; the licensing review of Yucca Mountain should be completed, even if the project will not be used.
4. Future disposal efforts should build broad based public support with a step-wise approach.
5. Centralized interim storage should be a strategic element of used fuel management.
6. The commercial used nuclear fuel program should be transferred to an entity with a management and financing structure that is able to function in the presence of the inevitable political and policy changes that will occur over the coming decades
7. Both current and advanced recycling and related nuclear fuel cycle technologies will not provide the sole solution for used fuel management, but can be a strategic element of used fuel management. Consistent, sustained political and policy support is a must and any system must provide value to justify the investment. Meeting non-proliferation goals is a must.
8. Research, development and demonstration of advanced technologies should be pursued, but real, practical approaches that the private sector would be willing to develop, finance, and that can be successful in the market place are needed.
9. Different technologies can be developed to handle fuels from different types of reactors to gain greater benefits.

In closing, the greatest service that the Commission can render to the Nation is to develop a used fuel management policy that will endure, define a process for implementing the policy, determine the timelines to be followed to achieve the policy, and delineate the legal and legislative changes needed to make the policy a reality.

* Including interest earned in the Fund and one-time fees owed.

Statement before

Blue Ribbon Commission on America's Nuclear Future

Marvin S. Fertel
President and Chief Executive Officer
Nuclear Energy Institute

May 25, 2010

Chairmen Hamilton and Scowcroft and distinguished members of the Commission, my name is Marvin S. Fertel and I am President and Chief Executive Officer of the Nuclear Energy Institute (NEI). Thank you for the invitation to speak with you today about the vital question of the future of our Nation's used nuclear fuel management policies and programs. We appreciate the opportunity to open an on-going dialogue with the Commission as it carries out its mandate.

NEI is the national policy organization of the nuclear industry.[1] NEI's utility members and the Nation's electricity ratepayers have committed over $34 billion[2] since 1982 to the Nuclear Waste Fund for the federal program that was supposed to have begun removing used fuel from commercial nuclear power plant sites over 12 year ago.

We look forward to the work of this Commission to recommend policies and programs that will manage commercial used fuel as required by the Nuclear Waste Policy Act of 1982.

Over the past seventy years, applications of nuclear fission including defense, research, medicine, naval propulsion and power production have produced immeasurable benefits for our society. They have also resulted in a large and growing inventory of used nuclear fuel and high-level radioactive waste. The commercial nuclear industry and the federal government have demonstrated that it can safely and securely store used nuclear fuel and high-level radioactive material. And, while we have about 63,000 MTU commercial used fuel in safe and secure storage, these practices are not meant to be permanent. By now, DOE should have already moved 25,250 MTU used fuel from our sites and be continuing to move an additional 3,000 MTU per year.

Nuclear power is now poised for growth to meet America's energy needs and environmental goals. Within the federal government, inconsistency in the approach to managing used nuclear fuel and a lack of policy and management accountability have impeded the ability to build political consensus on this issue and pursue needed used fuel management projects.

[1] NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

[2] Including interest earned in the Fund and one-time fees owed.

It is the view of the nuclear industry that adherence to the following principles will help ensure that a stable used nuclear fuel management policy is created:

- The Nation must have a durable policy to manage used nuclear fuel responsibly.
- The Nation must have a plan for the ultimate disposal of the byproducts from nuclear power generation.
- An ideal technical solution is not required to begin implementation of a new policy direction. Evolutionary (and even revolutionary) advances in technology improvements can be incorporated over time without deferring decisions until decades of research are completed.
- Regardless of the nuclear fuel cycle ultimately used, it must be designed and operated to ensure that non-proliferation goals are met.
- The successes and failures of the past must be understood to help guide the innovation of the future, especially the need to build public trust and confidence in the systems and facilities ultimately developed.

In addition, the nuclear energy industry offers the following recommendations to the Commission for use in judging the various policies, technologies, and systems that are available now or might be in the future.

1. U.S. policy for the management of high-level radioactive material should:
    - recognize that an integrated management system will include both near- and long-term programs, must be operated over decades and cannot be successful if policies regarding used fuel and high-level waste are continually subject to change.
    - be implemented in a manner such that the costs of a long-term management strategy are not an undue burden to commercial and private entities in the nuclear industry nor to our society, the beneficiaries of nuclear technology.

2. Geologic disposal will be necessary in any used fuel management scenario and the nation's policy must establish a clear and achievable path to disposal.
    - Geologic disposal is required for the multiple waste forms — including defense material — that already exist and may not be suitable for recycling or other advanced fuel cycle technologies.
    - Future disposal efforts should endeavor to build broad based public support (local, state, and national) and should consider a step-wise approach that would demonstrate the viability of final disposal and cultivate public confidence.
    - The licensing process for Yucca Mountain should be completed, even if the facility is not ultimately used, to demonstrate the regulatory process and provide lessons learned for future repository programs.

3. Centralized interim storage should be considered as a strategic element of used fuel management and would provide a safe, near-term solution for consolidating used fuel from shutdown commercial reactor sites and storing used nuclear fuel away from operating sites. The centralized interim storage facility should be licensed by the Nuclear Regulatory Commission, take advantage of past projects, as warranted, and be deployed in a region where it has broad based public and political support. In addition, centralized interim storage:
    - could be used by the federal government to meet its statutory and contractual obligation to accept and remove used nuclear fuel from reactor sites while reducing or eliminating the liability for taxpayers.
    - could be a complementary, near-term element of disposal, and recycling and other advanced fuel cycle technologies.

- could reduce public concerns regarding the accumulation of used nuclear fuel at operating and shutdown reactor sites and bolster public confidence by demonstrating the ability of the federal government to effectively manage commercial used fuel.

4. America's used nuclear fuel program should be transferred to an entity with a management and financing structure that is able to function in the presence of the inevitable political and policy changes that will occur over the coming decades. The industry recommends that such an entity should:
   - be empowered to act on behalf of the United States for entering into and administering contracts to provide used nuclear fuel management and related products and services.
   - have access to the Nuclear Waste Fund and be held accountable for using these monies for actions that directly support the ability of the government to meet its statutory and contractual obligations.

5. Both current and advanced recycling and related nuclear fuel cycle technologies will not provide the sole solution for used fuel management, but can be a strategic element of used fuel management under the following conditions:
   - Consistent, sustained political and policy support is a must.
   - Providing significant value is required to justify the investment in any technology:
     - Enhance economical nuclear fuel supply and sustainability.
     - Reduce heat, volume and the radiotoxicity of the material to be placed in a disposal facility.
   - Research, development and demonstration of advanced technologies should be pursued to improve the benefits from recycling, but real, practical approaches that the private sector would be willing to develop, finance, and that can be successful in the market place are needed.
   - Different technologies can be developed to handle fuels from different types of reactors to gain greater benefits.
   - Systems are developed and operated in a manner that meets non-proliferation goals.
     - Recycling has been carried out safely on an industrial scale in European facilities for decades without any diversion of plutonium for unauthorized uses.
     - International nuclear fuel supply and used fuel take-back programs should be explored.

6. The approach to management and disposal of commercial used fuel should be integrated, to the extent practical, with the management and disposal of used fuel and high-level waste currently stored at Department of Energy (DOE) sites in South Carolina, Idaho, Washington and elsewhere.

The policies and programs this Commission recommends must be carried out in a manner that will enhance public trust and confidence. The Commission can initiate that process in several ways. Of critical importance is what your report will say about the issues that seem to vex the public and political leaders when they contemplate nuclear waste management. Such issues include, but are not limited to, safety and security of transportation, safety and security of storage, and what recycle actually means in terms of the use of plutonium as an energy fuel. The industry believes that there are good answers to these questions and that necessary activities are currently carried out while protecting public health and security. In your report, we urge that you provide actionable recommendations for moving forward with used fuel management in a way that enhances public trust and confidence.

In closing, the greatest service that the Commission can render to the Nation is to develop a used fuel management policy that will endure, define a process for implementing the policy, determine the timelines to be followed to achieve the policy, and delineate the legal and legislative changes needed to make the policy a reality.

Let me say, again, how much we appreciate the opportunity to speak with you today opening an on-going dialogue with the Commission.

Attached is a set of NEI Fact Sheets and Policy Briefs providing information that the Commission might find useful in its deliberations.

I would be pleased to answer any questions you may have.