Question and Answer Sheet
The Proposed Rulemaking to Notify Native American Tribes about Irradiated Reactor Fuel Shipments

1. Have Native American Tribes had an opportunity to comment on this proposed rulemaking?

To obtain input from Native American Tribes, from interested Federal, State, and local governments, industry, members of the public, and other U.S. Nuclear Regulatory Commission (NRC) stakeholders, the NRC published an Advance Notice of Proposed Rulemaking in December 1999, and 44 comment letters were received by the closing of the comment period in July 2000. These documents can be found at http://www.regulations.gov by searching under Docket ID NRC-1999-0005. The letters received were from Tribal governments, Tribal associations, private citizens, a State, a licensee, and an industry association. Virtually all the commentors favored providing advance notification to Tribal governments, with some disagreement on the details of implementation. Tribal representatives and others encouraged the NRC to communicate directly with Tribal governments during the rulemaking process, as well as when implementing procedures for advance notification

2. To which types of Tribal lands would the advance notification apply?

The advance notification of Native American tribes of HLW or spent fuel shipments applies only to federally recognized Tribes with Tribal reservations that will be crossed by at least one interstate highway and/or railroad on particular routes of individual shipments.

3. What type of radioactive materials requires advance notification?

As specified in Title 10 of the *Code of Federal Regulations* (10 CFR) 71.97 and 73.37, advance notification is to be made by each licensee for transport of a single shipment of radioactive reactor fuel or high-level radioactive waste.

4. What is spent fuel?

Uranium fuel powers reactors for a number of years, until its potential to produce electrical power is exhausted. The used uranium fuel is then referred to as “spent fuel.” Typically, about one-fourth to one-third of the reactor fuel is removed from a reactor every 18 to 24 months.

5. Where is spent fuel currently being stored in the U.S.?

Spent fuel from nuclear power plants is safely stored in specially designed pools at individual reactor sites around the country. For reactors with space limitations in their spent fuel pools, the NRC has also authorized nuclear power plant licensees to store spent nuclear fuel in NRC-approved dry storage casks on site known as independent spent fuel storage installations (ISFSIs). These dry storage casks are robust, massive concrete and steel structures.

6. How does the NRC protect the public from HLW/spent fuel radioactive waste that is being transported?

Spent fuel is highly radioactive and must be heavily shielded and contained to be transported safely. The NRC establishes regulations and standards for the design and construction of robust casks as the primary way to protect the public during transport. The NRC also has regulations that cover security related requirements for spent fuel shipments. Current NRC regulations require that spent fuel shipping casks meet certain performance standards; a cask must be capable to withstand both normal operating and hypothetical accident conditions. Casks provide enough shielding to reduce external radiation to low levels that meet both Department of Transportation and the NRC radiation limits during transportation.

7. What is the likelihood of these shipments being involved in an accident?

More than 1,300 spent fuel shipments regulated by the NRC have been completed safely in the U.S. during the past 25 years. From 1998 - 2007, on average, 17 shipments per year were completed. Although there have been four accidents involving spent fuel shipments, none have resulted in a release of radioactive material.

8. What are the regulatory requirements for spent fuel shipments?

The NRC regulates spent fuel shipments in terms of both safety and safeguards. Safety involves the protection of public health and safety during transport as well as in the event of handling or transportation accidents, whereas safeguards relates to the protection of shipments against deliberate, malevolent acts of persons.

9. How are shipping routes determined?

An NRC-approved route must meet Department of Transportation requirements, which provide that radioactive material shipments are to be carried over the Interstate System of highways and available city beltways as the primary roadways. No routing rule exists for rail shipments.

NRC licensees who transport or deliver to a carrier for transport spent fuel are required to submit proposed routes for such shipments to the NRC for approval, from a safeguards perspective, before the use of a given route. The NRC may approve a route for a single shipment or a specific series of shipments. The NRC approves a route for a stated period and may renew the approval after that period. All approvals expire unless renewed. NRC approval authorizes only spent fuel shipments and does not include other categories of nuclear waste material.

10. What does Safeguard Information (SGI) mean?

SGI is sensitive unclassified information that is neither National Security Information nor restricted data. It is detailed security-related information that identifies security measures for the physical protection of special nuclear material, or security measures for the physical protection and location of certain plant equipment vital to the safety of production or utilization facilities.

11. What are the requirements for handling Safeguard Information (SGI)?

Tribes would be required to protect the schedule and itinerary information contained in the advance notification as SGI as specified by §§ 73.21 and 73.22. Only individuals that have a “need-to-know” the information and have undergone both a Federal Bureau of Investigation (FBI) criminal history records check and a background check for determination of trustworthiness and reliability or have been relieved from these checks under §§ 73.57 or 73.59 may be provided access to the SGI. Basic protection requirements include storing unattended SGI in a locked security storage container. Access to the lock information, such as a combination, must be strictly controlled to prevent disclosure to an individual not authorized access to SGI. Documents containing SGI must be destroyed by burning, shredding, or any other method that precludes reconstruction by means available to the public at large. The specific requirements for the protection of SGI are located in § 73.22. Failure to comply with these regulatory requirements could result in civil or criminal penalties.