

# Friends of the Earth

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April 26, 2013

Chief, Rules, Announcements, and Directives Branch  
Division of Administrative Services  
Office of Administration  
Mailstop TWB-05-B01 M  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

RECEIVED

3/8/2013

78 FR 15055

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**Re: SCOPING COMMENT CONCERNING THE SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2,  
LICENSE RENEWAL APPLICATION REVIEW**

*Docket Nos. 50-327 and 50-328*

To whom it Concerns:

Attached you will find documentation that the Tennessee Valley Authority (TVA) is considering production of tritium for nuclear weapons in the Sequoyah reactors. As the Nuclear Regulatory Commission has already licensed this activity, this issue clearly must be involved in any relicensing considerations of the Sequoyah reactors.

Likewise, TVA is actively considering use of plutonium fuel (MOX) made from weapons-grade plutonium in the Sequoyah reactors. While there is no NRC license request by TVA for MOX testing or use, the review of TVA concerning MOX must be taken into account during the review of the Sequoyah license extension.

Thank you for including in the scoping document that an analysis of all aspects tritium production and MOX testing and use must be included in license renewal documents.

Please add me to any distribution list you prepare on the scoping and/or license renewal;  
tomclements329@cs.com.

Sincerely,

Tom Clements  
Southeastern Nuclear Campaign Coordinator

SUNSI Review Complete

Template= ADM - 013

E-RIDS= ADM-03

Add= E. Sayoc (ecs4)

1112 Florence Street • Columbia, SC 29201  
803.834.3084 phone & fax • tomclements329@cs.com • www.foe.org

Documentation of  
 TVA's interest in  
 using plutonium fuel  
 (MOX) in the  
 Sequoyah reactors -  
 for Sequoyah license  
 renewal scoping

**SUMMARY:** The U.S. Department of Energy (DOE) announces its intent to modify the scope of the *Surplus Plutonium Disposition Supplemental Environmental Impact Statement* (SPD Supplemental EIS, DOE/EIS-0283-S2) and to conduct additional public scoping. DOE issued its Notice of Intent (NOI) to prepare the SPD Supplemental EIS on March 28, 2007, and issued an Amended NOI on July 19, 2010. DOE now intends to further revise the scope of the SPD Supplemental EIS primarily to add additional alternatives for the disassembly of pits (a nuclear weapons component) and the conversion of plutonium metal originating from pits to feed material for the Mixed Oxide (MOX) Fuel Fabrication Facility (MFFF), which DOE is constructing at the Savannah River Site (SRS) in South Carolina. Under the proposed new alternatives, DOE would expand or install the essential elements required to provide a pit disassembly and/or conversion capability at one or more of the following locations: Technical Area 55 (TA-55) at the Los Alamos National Laboratory (LANL) in New Mexico, H-Canyon/HB-Line at SRS, K-Area at SRS, and the MFFF at SRS. In addition, DOE has decided not to analyze an alternative, described in the 2010 Amended NOI, to construct a separate Plutonium Preparation (PuP) capability for non-pit plutonium because the necessary preparation activities are adequately encompassed within the other alternatives.

The MOX fuel alternative is DOE's preferred alternative for surplus plutonium disposition. DOE's preferred alternative for pit disassembly and the conversion of surplus plutonium metal, regardless of its origins, to feed for the MFFF is to use some combination of facilities at TA-55 at LANL, K-Area at SRS, H-Canyon/HB-Line at SRS and MFFF at SRS, rather than to construct a new stand-alone facility. This would likely require the installation of additional equipment and other modifications to some of these facilities. DOE's preferred alternative for disposition of surplus plutonium that is not suitable for MOX fuel fabrication is disposal at the Waste Isolation Pilot Plant (WIPP) in New Mexico.

**DATES:** DOE invites Federal agencies, state and local governments, Native American tribes, industry, other organizations, and members of the public to submit comments to assist in identifying environmental issues and in determining the appropriate scope of the SPD Supplemental EIS. The public scoping period will end on March 12, 2012. DOE will consider all comments

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**DEPARTMENT OF ENERGY**

**Second Amended Notice of Intent To Modify the Scope of the Surplus Plutonium Disposition Supplemental Environmental Impact Statement and Conduct Additional Public Scoping**

**AGENCY:** U.S. Department of Energy, National Nuclear Security Administration.

**ACTION:** Amended Notice of Intent.

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received or postmarked by March 12, 2012. Comments received after that date will be considered to the extent practicable. Also, DOE asks that Federal, State, local, and tribal agencies that desire to be designated cooperating agencies on the SPD Supplemental EIS contact the National Environmental Policy Act (NEPA) Document Manager at the addresses listed under **ADDRESSES** by the end of the scoping period. The Tennessee Valley Authority (TVA) is a cooperating agency for sections of the EIS as described below. DOE will hold a public scoping meeting:

- February 2, 2012 (5:30 p.m. to 8 p.m.) at Cities of Gold Hotel, 10-A Cities of Gold Road, Pojoaque, NM 87501.

The scoping period announced in this second Amended NOI will allow for additional public comment and for DOE to consider any new information that may be relevant to the scope of the SPD Supplemental EIS. Because the additional alternatives do not involve new locations except for LANL, and because there have been two previous scoping periods for this SPD Supplemental EIS, DOE does not intend to hold additional scoping meetings except at Pojoaque, NM, or to extend the scoping period beyond that announced herein.

**ADDRESSES:** Please direct written comments on the scope of the SPD Supplemental EIS to Ms. Sachiko McAlhany, SPD Supplemental EIS NEPA Document Manager, U.S. Department of Energy, P.O. Box 2324, Germantown, MD 20874-2324. Comments on the scope of the SPD Supplemental EIS may also be submitted via email to [spdsupplementaleis@saic.com](mailto:spdsupplementaleis@saic.com) or by toll-free fax to (877) 865-0277. DOE will give equal weight to written, email, fax, telephone, and oral comments. Questions regarding the scoping process and requests to be placed on the SPD Supplemental EIS mailing list should be directed to Ms. McAlhany by any of the means given above or by calling toll-free (877) 344-0513.

For general information concerning the DOE NEPA process, contact: Carol Borgstrom, Director, Office of NEPA Policy and Compliance (GC-54), U.S. Department of Energy, 1000 Independence Avenue SW., Washington, DC 20585-0103; telephone (202) 586-4600, or leave a message toll-free (800) 472-2756; fax (202) 586-7031; or send an email to [askNEPA@hq.doe.gov](mailto:askNEPA@hq.doe.gov). This second Amended NOI will be available on the Internet at <http://energy.gov/nepa>.

**SUPPLEMENTARY INFORMATION:**

**Background**

To reduce the threat of nuclear weapons proliferation, DOE is engaged in a program to disposition its surplus, weapons-usable plutonium in a safe, secure, and environmentally sound manner, by converting such plutonium into proliferation-resistant forms not readily usable in nuclear weapons. The U.S. inventory of surplus plutonium is in several forms. The largest quantity is plutonium metal in the shape of pits (a nuclear weapons component). The remainder is non-pit plutonium, which includes plutonium oxides and metal in a variety of forms and purities.

DOE already has decided to fabricate 34 metric tons (MT) of surplus plutonium into MOX fuel in the MFFF (68 FR 20134, April 24, 2003), currently under construction at SRS, and to irradiate the MOX fuel in commercial nuclear reactors used to generate electricity, thereby rendering the plutonium into a spent fuel form not readily usable in nuclear weapons.

DOE announced its intent to prepare a SPD Supplemental EIS in 2007 to analyze the potential environmental impacts of alternatives to disposition about 13 MT of surplus plutonium (72 FR 14543; March 28, 2007). DOE issued an Amended NOI in 2010 "to refine the quantity and types of surplus weapons-usable plutonium material, evaluate additional alternatives, and no longer consider in detail one alternative identified" in the 2007 NOI (75 FR 41850; July 19, 2010).<sup>1</sup> The 2007 NOI and 2010 Amended NOI are available at <http://www.nnsa.energy.gov/nepa/spdsupplementaleis> and details from them are not reproduced in this second Amended NOI.

In the 2010 Amended NOI, DOE proposed to revisit its decision to construct and operate a new Pit Disassembly and Conversion Facility (PDCF) in the F-Area at SRS (65 FR 1608; January 11, 2000) and analyze an alternative to install and operate the pit disassembly and conversion capabilities in an existing building in K-Area at SRS. With this second Amended NOI, DOE is proposing to analyze additional

<sup>1</sup> The 2010 Amended NOI describes changes in the inventory of surplus plutonium to be analyzed in the SPD Supplemental EIS, though the total quantity remained about 13 MT. On March 30, 2011, DOE made an amended interim action determination to disposition approximately 85 kilograms (0.085 MT) of surplus, non-pit plutonium via the Defense Waste Processing Facility at SRS or disposal at the Waste Isolation Pilot Plant (WIPP) in New Mexico. On October 17, 2011, DOE made another interim action determination to dispose of 500 kilograms (0.5 MT) of surplus, non-pit plutonium at WIPP. These determinations do not affect the range of reasonable alternatives to be analyzed in the SPD Supplemental EIS.

alternatives for pit disassembly and conversion, which could involve the use of TA-55 at LANL, H-Canyon/HB-Line at SRS, K-Area at SRS, and the MFFF at SRS. These alternatives are described below under Potential Range of Alternatives.

**Purpose and Need for Agency Action**

DOE's purpose and need remains to reduce the threat of nuclear weapons proliferation worldwide by conducting disposition of surplus plutonium in the United States in an environmentally safe and timely manner. Comprehensive disposition actions are needed to ensure that surplus plutonium is converted into proliferation-resistant forms.

**Potential Range of Alternatives**

Since the 2010 Amended NOI, DOE has reconsidered the potential alternatives for pit disassembly and conversion. DOE now is proposing to analyze additional alternatives.

The EIS analysis will account for the possibility that DOE could use some combination of facilities at TA-55 at LANL, K-Area at SRS, H-Canyon/HB-Line at SRS, and MFFF at SRS to disassemble pits, and produce feed for the MFFF.

DOE has determined that the construction of a separate Plutonium Preparation (PuP) capability would not be required because the alternatives that are being considered for the disposition of non-pit plutonium include any necessary preparation activities.

The complete list of alternatives that DOE proposes to analyze in detail in the SPD Supplemental EIS is provided below.

**Surplus Plutonium Disposition**

DOE will analyze four alternative pathways to disposition surplus plutonium. There are constraints on the type or quantity of plutonium that may be dispositioned by each pathway. For example, there are safety (criticality) limits on how much plutonium can be sent to the Defense Waste Processing Facility (DWPF) at SRS, and some plutonium is not suitable for fabrication into MOX fuel. Accordingly, DOE expects to select two or more alternatives following completion of the SPD Supplemental EIS.

- H-Canyon/DWPF—DOE would use the H-Canyon at SRS to process surplus non-pit plutonium for disposition. Plutonium materials would be dissolved, and the resulting plutonium-bearing solutions would be sent to a sludge batch feed tank and then to DWPF at SRS for vitrification. Depending on the quantity, adding additional plutonium to the feed may

increase the amount of plutonium in some DWPF canisters above historical levels.

- **Glass Can-in-Canister**

Immobilization—DOE would install a glass can-in-canister immobilization capability in K-Area at SRS. The analysis will assume that both surplus pit and non-pit plutonium would be vitrified within small cans, which would be placed in a rack inside a DWPF canister and surrounded with vitrified high-level waste. This alternative is similar to one evaluated in the 1999 Surplus Plutonium Disposition EIS (SPD EIS; DOE/EIS-0283), except that the capability would be installed in an existing rather than a new facility. Inclusion of cans with vitrified plutonium would substantially increase the amount of plutonium in some DWPF canisters above historical levels.

- **WIPP**—DOE would provide the capability to prepare and package non-pit plutonium using existing facilities at SRS for disposal as transuranic waste at WIPP, provided that the material would meet the WIPP waste acceptance criteria. This alternative may include material that, because of its physical or chemical configuration or characteristics, could not be prepared for MFFF feed material and material that could be disposed at WIPP with minimal preparation.

- **MOX Fuel**—Plutonium feed material, beyond the 34 MT for which a decision already has been made, would be fabricated into MOX fuel at the MFFF, and the resultant MOX fuel would be irradiated in commercial nuclear power reactors. For purposes of analyzing this alternative, the EIS will assume all the surplus pit and some of the surplus non-pit plutonium would be dispositioned in this manner.

#### *Pit Disassembly and Conversion Capability*

Plutonium pits must be disassembled prior to disposition and, for the MOX alternative, plutonium metal from pits or non-pit material must be converted to an oxide form to be used as feed in producing MOX Fuel. DOE will analyze the potential environmental impacts of conducting pit disassembly and/or conversion activities in five different facilities to support its prior decision to disposition 34 MT of surplus plutonium by fabrication into MOX fuel and also any decision subsequent to this SPD Supplemental EIS to disposition additional surplus plutonium as MOX fuel. The Pit Disassembly and Conversion Capability Alternatives that NNSA proposes to analyze are:

- **PDCF** in F-Area at SRS—DOE would construct, operate, and

eventually decommission a stand-alone PDCF to disassemble pits and convert plutonium pits and other plutonium metal to an oxide form suitable for feed to the MFFF, as described in the SPD EIS and consistent with DOE's record of decision for that EIS (65 FR 1608; January 11, 2000).

- **Pit Disassembly and Conversion Capability in K-Area at SRS**—DOE would construct, operate, and eventually decommission equipment in K-Area at SRS necessary to perform the same functions as the PDCF. The alternative would include reconfiguration of ongoing K-Area operations necessary to accommodate construction and operation of the pit disassembly and conversion capability.

- **New alternatives for pit disassembly and conversion:**

- **LANL/MFFF**—DOE would expand existing capabilities in the plutonium facility (PF-4) in Technical Area-55 at LANL to disassemble pits and provide plutonium metal and/or oxide for use as feed material in MFFF at SRS. DOE also may add a capability to the MFFF to oxidize plutonium metal.

- **LANL/MFFF/K-Area/H-Canyon/HB-Line at SRS**—DOE would expand existing capabilities in the plutonium facility (PF-4) in Technical Area-55 at LANL to disassemble pits and provide plutonium metal and potentially oxide for use as feed material in MFFF at SRS. DOE also may add a capability to the MFFF to oxidize plutonium metal. To augment the capability to provide feed material to the MFFF, DOE also would disassemble pits in K-Area at SRS and process plutonium metal to an oxide form at the H-Canyon/HB-Line at SRS.

#### *Reactor Operations*

MOX fuel will be irradiated in commercial nuclear reactors used to generate electricity, thereby rendering the plutonium into a spent fuel form not readily usable in nuclear weapons.

- **DOE and TVA** will analyze the potential environmental impacts of any reactor facility modifications necessary to accommodate MOX fuel operation at up to five TVA reactors—the three boiling water reactors at Browns Ferry, near Decatur and Athens, AL, and the two pressurized water reactors at Sequoyah, near Soddy-Daisy, TN. DOE and TVA will analyze the potential environmental impacts of operating these reactors using a core loading with the maximum technically and economically viable number of MOX fuel assemblies.

- **DOE** will analyze the potential environmental impacts of irradiating MOX fuel in a generic reactor in the United States to provide analysis for any

additional future potential utility customers.

#### **Potential Decisions**

The SPD Supplemental EIS will not reconsider decisions already made to disposition surplus plutonium, other than the decision to construct and operate the PDCF. DOE already has decided to fabricate 34 MT of surplus plutonium into MOX fuel in the MFFF (68 FR 20134; April 24, 2003), currently under construction at SRS, and to irradiate the MOX fuel in commercial nuclear reactors used to generate electricity. Subsequent to completion of the SPD Supplemental EIS, DOE will decide, based on programmatic, engineering, facility safety, cost, and schedule information, and on the environmental impact analysis in the SPD Supplemental EIS, which pit disassembly and conversion alternative(s) to implement to provide feed to the MFFF, which alternative(s) to implement for preparation of non-pit plutonium for disposition, whether to use the MOX alternative to disposition additional surplus plutonium (beyond 34 MT), and which alternative(s) disposition path(s) to implement for surplus plutonium that will not be dispositioned as MOX fuel. DOE may determine that it can best meet its full range of requirements in each of these areas by implementing two or more of the alternatives analyzed in the SPD Supplemental EIS. It is also possible that DOE may determine that its full range of requirements may be best met by implementing a composite set of actions that would be drawn from within the scope of the set of alternatives proposed and analyzed in the SPD Supplemental EIS.

DOE considers those alternatives that would avoid extensive construction and/or facility modification for the pit disassembly and conversion capability and non-pit plutonium preparation capability as having particular merit and, thus, has identified its preferred alternative for this proposed action. For non-pit plutonium preparation and pit disassembly and conversion of plutonium metal to MFFF feed for the manufacture of MOX fuel, DOE's preferred alternative is to use some combination of existing facilities, with additional equipment or modification, at TA-55 at LANL, K-Area at SRS, H-Canyon/HB-Line at SRS, and MFFF at SRS, rather than to construct a new, standalone facility. The MOX fuel alternative is DOE's preferred alternative for surplus plutonium disposition. DOE's preferred alternative for disposition of surplus plutonium

that is not suitable for MOX fuel fabrication is disposal at WIPP.

As stated in the 2010 Amended NOI, DOE and TVA are evaluating use of MOX fuel in up to five TVA reactors at the Sequoyah and Browns Ferry Nuclear Plants. TVA will determine whether to pursue irradiation of MOX fuel in TVA reactors, and will determine which reactors to use initially for this purpose, should TVA and DOE decide to use MOX fuel in TVA reactors.

#### **Potential Environmental Issues for Analysis**

DOE has tentatively identified the following environmental issues for analysis in the SPD Supplemental EIS. The list is presented to facilitate comment on the scope of the SPD Supplemental EIS, and is not intended to be comprehensive or to predetermine the potential impacts to be analyzed.

- Impacts to the general population and workers from radiological and nonradiological releases, and other worker health and safety impacts.
- Impacts of emissions on air and water quality.
- Impacts on ecological systems and threatened and endangered species.
- Impacts of waste management activities, including storage of DWPF canisters and transuranic waste pending disposal.
- Impacts of the transportation of radioactive materials, reactor fuel assemblies, and waste.
- Impacts that could occur as a result of postulated accidents and intentional

destructive acts (terrorist actions and sabotage).

- Potential disproportionately high and adverse effects on low-income and minority populations (environmental justice).
- Short-term and long-term land use impacts.
- Cumulative impacts.

#### **NEPA Process**

The first scoping period for the SPD Supplemental EIS began on March 28, 2007, and ended on May 29, 2007, with scoping meetings in Aiken and Columbia, SC. DOE began a second public scoping period with publication of an Amended NOI on July 19, 2010, and continuing through September 17, 2010. Public scoping meetings were held in Tanner, AL; Chattanooga, TN; North Augusta, SC; and Carlsbad and Santa Fe, NM.

Following the scoping period announced in this second Amended NOI, and after considering all scoping comments received, DOE will prepare a Draft SPD Supplemental EIS. DOE will announce the availability of the Draft SPD Supplemental EIS in the **Federal Register** and local media outlets. Comments received on the Draft SPD Supplemental EIS will be considered and addressed in the Final SPD Supplemental EIS. DOE currently plans to issue the Final SPD Supplemental EIS in late 2012. DOE will issue a record of decision no sooner than 30 days after publication by the Environmental Protection Agency of a Notice of

Availability of the Final SPD Supplemental EIS.

#### **Other Agency Involvement**

The Tennessee Valley Authority is a cooperating agency with DOE for preparation and review of the sections of the SPD Supplemental EIS that address operation of TVA reactors using MOX fuel assemblies. DOE invites Federal and non-Federal agencies with expertise in the subject matter of the SPD Supplemental EIS to contact the NEPA Document Manager (see **ADDRESSES**) if they wish to be a cooperating agency in the preparation of the SPD Supplemental EIS.

Issued at Washington, DC, on January 6, 2012.

**Thomas P. D'Agostino,**

*Undersecretary for Nuclear Security.*

[FR Doc. 2012-445 Filed 1-11-12; 8:45 am]

**BILLING CODE 6450-01-P**



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

**Letter of Intent between Tennessee Valley Authority and Shaw AREVA MOX Services, LLC**

The U.S. Department of Energy (DOE) has contracted with Shaw AREVA MOX Services, LLC for the purpose of processing excess weapons plutonium and fabricating it into mixed oxide (MOX) fuel assemblies for use in commercial power generation reactors.

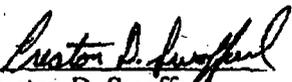
The Tennessee Valley Authority (TVA) has expressed an interest in using MOX fuel as an alternate fuel to provide for lower fuel costs for its reactors and the ratepayers it serves and to support DOE's nuclear nonproliferation plutonium disposition program.

As a result of the above, TVA is evaluating the irradiation of MOX fuel in its Sequoyah Units 1 and 2, as its first preference (dependent on reactor selection to meet tritium production requirements), and in Browns Ferry Units 1, 2, and 3, as an alternative. In addition, TVA may also choose to evaluate the use of MOX fuel in any future nuclear generation project(s) that may be undertaken by TVA. Shaw AREVA MOX Services, LLC has agreed to work with TVA in these evaluations.

EX 5

[ EX 5 ]

This letter is a non-binding expression of the present intent of the parties. Either party may terminate negotiations or other activities hereunder at any time without incurring any obligation or liability to the other as a result of such termination. This letter does not create any exclusive rights on behalf of either party.

  
Preston D. Swafford  
Chief Nuclear Officer and  
Executive Vice President  
Nuclear Power Group

6/26/09  
Date

  
Dave Stinson  
President  
Shaw AREVA MOX Services, LLC

6 July 09  
Date

# **Mixed Oxide Fuel Impact Evaluation**

*A Review of the Potential Impacts and Cost Associated with the  
Utilization of a Partial MOX Fuel Core*



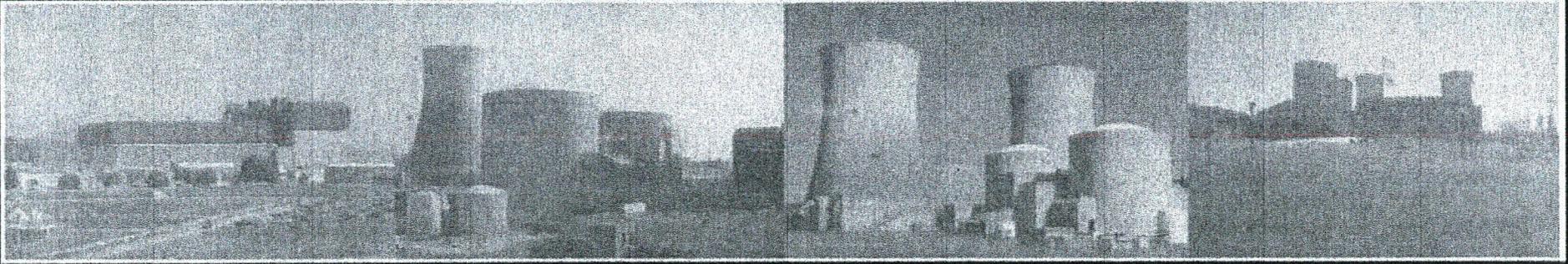
# Evaluation of Using MOX Fuel in TVA Reactors

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Presented by  
TA Keys  
NRC Fuel Cycle Information Exchange



Nuclear

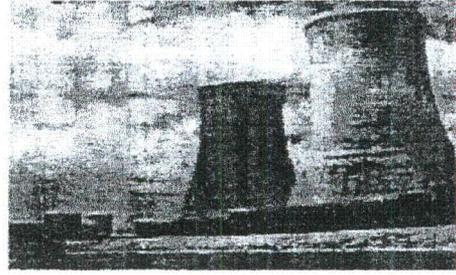
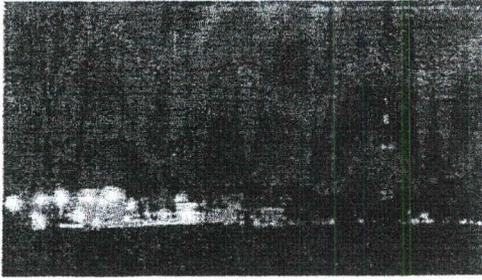


# ***TVA's Consideration of the Use of MOX to Fuel its Nuclear Reactors***

*Dan Stout*

September 14, 2011





Tennessee Valley Authority

Browns Ferry and Sequoyah Nuclear Plants  
Mixed Oxide (MOX) Fuel Cycle  
Impact Study

Phase I Estimate

Project No. 11291-240

May 26, 2011

Prepared by:

Sargent & Lundy, LLC  
401 Chestnut Street  
Suite 500  
Chattanooga, TN 37402  
(423) 752-5539

**Sargent & Lundy**<sup>LLC</sup>

Persons who wish to comment only on the environmental review of this project should submit an original and two copies of their comments to the Secretary of the Commission. Environmental commentors will be placed on the Commission's environmental mailing list, will receive copies of the environmental documents, and will be notified of meetings associated with the Commission's environmental review process. Environmental commentors will not be required to serve copies of filed documents on all other parties. However, the non-party commentors will not receive copies of all documents filed by other parties or issued by the Commission (except for the mailing of environmental documents issued by the Commission) and will not have the right to seek court review of the Commission's final order.

The Commission strongly encourages electronic filings of comments, protests, and interventions via the internet in lieu of paper. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site (<http://www.ferc.gov>) under the "e-Filing" link. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426.

Dated: September 22, 2011.

**Kimberly D. Bose,**  
Secretary.

[FR Doc. 2011-24961 Filed 9-27-11; 8:45 am]  
BILLING CODE 6717-01-P

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

[Docket No. PL10-4-000]

#### Technical Conference on Penalty Guidelines; Notice of Technical Conference on Penalty Guidelines

The staff of the Federal Energy Regulatory Commission (Commission) will hold a conference on November 17, 2011, to discuss the Penalty Guidelines, which the Commission issued on September 17, 2010.<sup>1</sup> The conference will be held from 1:00 p.m. to 4:30 p.m. Eastern Standard Time in the Commission Meeting Room at the Commission's headquarters located at 888 First Street, NE., Washington, DC 20426.

<sup>1</sup> *Enforcement of Statutes, Orders, Rules, and Regulations*. 132 FERC ¶ 61,216 (2010).

The purpose of the conference is to discuss the impact of the Penalty Guidelines on compliance and enforcement matters. More information on the topics to be explored and the number and composition of the panels will be provided in subsequent notices.

All interested persons are invited to attend the conference, and there is no registration fee to attend. The conference will not be transcribed but will be webcast. A free webcast of this event will be available through <http://www.ferc.gov>. Anyone with Internet access who desires to view this event can do so by navigating to <http://www.ferc.gov>'s Calendar of Events and locating this event in the Calendar. The event will contain a link to its webcast. The Capitol Connection provides technical support for the webcasts and offers access to the meeting via phone bridge for a fee. If you have any questions, you may visit <http://www.CapitolConnection.org>.

FERC conferences and meetings are accessible under section 508 of the Rehabilitation Act of 1973. For accessibility accommodations please send an e-mail to [accessibility@ferc.gov](mailto:accessibility@ferc.gov) or call toll free (866) 208-3372 (voice) or 202-502-8659 (TTY), or send a fax to 202-208-2106 with the required accommodations.

Questions about the technical conference may be directed to Jeremy Medovoy by e-mail at [Jeremy.Medovoy@ferc.gov](mailto:Jeremy.Medovoy@ferc.gov) or by telephone at 202-502-6768.

Dated: September 21, 2011.

**Kimberly D. Bose,**  
Secretary.

[FR Doc. 2011-24960 Filed 9-27-11; 8:45 am]  
BILLING CODE 6717-01-P

## DEPARTMENT OF ENERGY

### National Nuclear Security Administration

#### Notice of Intent To Prepare a Supplemental Environmental Impact Statement (SEIS) for the Production of Tritium in a Commercial Light Water Reactor

**AGENCY:** National Nuclear Security Administration (NNSA), U.S. Department of Energy (DOE).

**ACTION:** Notice of intent to prepare a supplemental environmental impact statement and conduct public scoping meetings.

**SUMMARY:** The Council on Environmental Quality's implementing regulations for the National Environmental Policy Act (NEPA) and

DOE's NEPA implementing regulations require the preparation of a supplement to an environmental impact statement (EIS) when there are substantial changes to a proposal or when there are significant new circumstances or information relevant to environmental concerns. DOE may also prepare a SEIS at any time to further the purposes of NEPA. Pursuant to these provisions, the NNSA, a semi-autonomous agency within DOE, intends to prepare a SEIS to update the environmental analyses in DOE's 1999 EIS for the Production of Tritium in a Commercial Light Water Reactor (CLWR EIS; DOE/EIS-0288). The CLWR EIS addressed the production of tritium in Tennessee Valley Authority (TVA) reactors using tritium-producing burnable absorber rods (TPBARs). In the Record of Decision (ROD) for the CLWR EIS, NNSA selected TVA's Watts Bar Unit 1 and Sequoyah Units 1 and 2, located in Spring City and Soddy-Daisy, Tennessee, respectively, for tritium production. TVA has been producing tritium for NNSA at Watts Bar Unit 1 since 2004.

After several years of tritium production experience at TVA's Watts Bar Unit 1, NNSA has determined that tritium permeation through TPBAR cladding into the reactor cooling water occurs at a higher rate than previously projected. The proposed SEIS will analyze the potential environmental impacts associated with increased tritium permeation levels observed since 2004; DOE's revised estimate of the maximum number of TPBARs required to support the current Nuclear Posture Review tritium supply requirements; and proposed changes to TVA facilities that may be used for future tritium production. TVA will be participating as a cooperating agency in the preparation of the SEIS. Any other agency that would like to be a cooperating agency in the preparation of the SEIS is requested to contact the SEIS Document Manager as noted in this Notice under ADDRESSES.

**DATES:** NNSA invites comments on the scope of the SEIS. The public scoping period starts with the publication of this Notice in the *Federal Register* and will continue until November 14, 2011. NNSA will consider all comments received or postmarked by that date in defining the scope of the SEIS. Comments received or postmarked after that date will be considered to the extent practicable. A public scoping meeting is scheduled to be held on October 20, 2011, from 6:30 p.m. to 10 p.m.

**ADDRESSES:** The public scoping meeting will be held at the Southeast Tennessee Trade and Conference Center, Athens, TN. NNSA will publish additional notices on the date, time, and location of the scoping meeting in local newspapers in advance of the scheduled meeting. Any necessary changes will be announced in the local media. The scoping meeting will provide the public with an opportunity to present comments, ask questions, and discuss issues with NNSA officials regarding the SEIS.

Written comments or suggestions concerning the scope of the SEIS or requests for more information on the SEIS and public scoping process should be directed to: Mr. Curtis Chambellan, Document Manager for the SEIS, U.S. Department of Energy, National Nuclear Security Administration, Box 5400, Albuquerque, New Mexico 87185-5400; facsimile at 505-845-5754; or e-mail at: [tritium.readiness.seis@doeal.gov](mailto:tritium.readiness.seis@doeal.gov). Mr. Chambellan may also be reached by telephone at 505-845-5073.

**FOR FURTHER INFORMATION CONTACT:** For general information on the NNSA NEPA process, please contact: Ms. Mary Martin, NNSA NEPA Compliance Officer, U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585, or telephone 202-586-9438. For general information about the DOE NEPA process, please contact: Ms. Carol Borgstrom, Director, Office of NEPA Policy and Compliance (GC-54), U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585, or telephone 202-586-4600, or leave a message at 1-800-472-2756. Additional information about the DOE NEPA process, an electronic archive of DOE NEPA documents, and other NEPA resources are provided at <http://energy.gov/nepa>.

**SUPPLEMENTARY INFORMATION:** NNSA is responsible for supplying nuclear materials for national security needs and ensuring that the nuclear weapons stockpile remains safe and reliable. Tritium, a radioactive isotope of hydrogen, is an essential component of every weapon in the U.S. nuclear weapons stockpile. Unlike other nuclear materials used in nuclear weapons, tritium decays at a rate of 5.5 percent per year. Accordingly, as long as the Nation relies on a nuclear deterrent, the tritium in each nuclear weapon must be replenished periodically. The last reactor used for tritium production during the Cold War was shut down in 1988. Since then, tritium requirements for the stockpile have largely been met from the existing original inventory through the harvest and recycle of

tritium gas during the dismantlement of weapon systems, and the replacement of tritium-containing weapons components as part of Limited Life Component Exchange programs. In December 1999, a new tritium production capability was established through an Interagency Agreement with TVA in which TPBARs are irradiated in the Watts Bar Unit 1 commercial nuclear power reactor and undergo extraction at the Tritium Extraction Facility (TEF) located at DOE's Savannah River Site (SRS) in South Carolina. In order to continue to provide the required supply, irradiation will increase from today's 544 TPBARs per fuel cycle to a projected steady state rate of approximately 1,700 TPBARs per fuel cycle, *i.e.*, approximately every 18 months.

To provide sufficient capacity to ensure the ability to meet projected future stockpile requirements, NNSA and TVA anticipate requesting authorization for TPBAR irradiation to be increased in fiscal year 2016 to a level that is beyond currently licensed rates for one reactor. Meeting the increased demand will require a license amendment from the Nuclear Regulatory Commission (NRC) to permit the irradiation of a greater number of TPBARs per reactor than can currently be irradiated at either the Watts Bar or Sequoyah site. License amendments are reactor specific. NNSA and TVA will supplement the 1999 CLWR EIS with analyses supporting the anticipated license amendment requests that also evaluate a higher level of tritium permeation through TPBAR cladding into the reactor cooling water than was previously analyzed. The tritium releases associated with the proposed increase in the number of TPBARs that could be irradiated at Watts Bar, Sequoyah, or both sites (compared to the number currently authorized by the NRC) would remain below Environmental Protection Agency (EPA) and NRC regulatory limits. Subsequently, TVA plans to adopt the SEIS for use in obtaining the necessary NRC license amendment(s).

The production of tritium in a CLWR is technically straightforward. All of the Nation's supply of tritium has been produced in reactors. Most commercial pressurized water reactors were designed to utilize 12-foot-long rods containing an isotope of boron (boron-10) in ceramic form. These rods are sometimes called burnable absorber rods. The rods are inserted in the reactor fuel assemblies to absorb excess neutrons produced by the uranium fuel in the fission process for the purpose of controlling power in the core at the beginning of an operating cycle. DOE's

tritium program developed TPBARs in which neutrons are absorbed by a lithium aluminate ceramic rather than boron ceramic. While the two types of rods function in a very similar manner to absorb excess neutrons in the reactor core, there is one notable difference: When neutrons strike the lithium aluminate ceramic material in a TPBAR, tritium is produced inside the TPBAR. These TPBARs are placed in the same locations in the reactor core as the standard boron burnable absorber rods. There is no fissile material (uranium or plutonium) in the TPBARs. Tritium produced in TPBARs is captured almost instantaneously in a solid zirconium material in the rod, called a "getter." The getter material that captures the tritium is very effective. During each reactor refueling cycle, the TPBARs are removed from the reactor and transported to SRS. At SRS, the TPBARs are heated in a vacuum at the TEF to extract the tritium from the getter material.

DOE's May 1999 Consolidated Record of Decision for Tritium Supply and Recycling (64 FR 26369) announced the selection of TVA's Watts Bar Unit 1, Sequoyah Unit 1 and Sequoyah Unit 2 for use in irradiating TPBARs and stated that a maximum of approximately 3,400 TPBARs would be irradiated per reactor during each 18-month fuel cycle. Since then, the projected need for tritium has decreased significantly. NNSA has determined that tritium demand to supply the Nuclear Weapons Stockpile could be satisfied using a maximum of approximately 2,500 TPBARs per fuel cycle, with a projected steady state number of approximately 1,700 TPBARs per fuel cycle.

#### **Purpose and Need**

Although NNSA's projected need for tritium to support the nuclear weapons stockpile today is less than originally planned, a higher than expected rate of permeation of tritium from TPBARs into reactor coolant water and subsequent release to the environment has restricted the number of TPBARs irradiated at TVA's Watts Bar Unit 1. Before TVA increases tritium production rates to meet expected national security requirements, the environmental analyses in the CLWR EIS are being updated to analyze and evaluate the effects of the higher tritium permeation, as well as any potential effects related to other changes in the regulatory and operating environment since publication of the original CLWR EIS.

As a cooperating agency in the preparation of the SEIS, TVA plans to use the SEIS in pursuing NRC licensing amendments to increase TPBAR

irradiation at TVA's Watts Bar Nuclear Plant (WBN) at Spring City, Tennessee, and/or the Sequoyah Nuclear Plant at Soddy-Daisy, Tennessee, beyond levels set in 2002. Four alternatives are expected to be analyzed in the SEIS: The No Action Alternative and three action alternatives, one using only the Watts Bar site, one using only the Sequoyah site, and one using both the Watts Bar and Sequoyah sites. As a matter of note, in a separate proceeding, DOE and TVA are also analyzing the potential use of mixed oxide fuel during some fuel cycles at the Sequoyah Nuclear Plant as part of the U.S. program for surplus plutonium disposition (75 FR 41850, July 19, 2010).

#### Proposed Action and Alternatives

The CLWR EIS assessed the potential impacts of irradiating up to 3,400 TPBARs per reactor unit operating on 18 month fuel cycles. It included TPBAR irradiation scenarios using multiple reactor units to achieve a maximum level of 6,000 TPBARs every 18 months. Subsequently, tritium production requirements have been reduced such that irradiation of approximately 1,700 TPBARs every reactor fuel cycle is expected to be sufficient to fulfill current requirements, consistent with the 2010 Nuclear Posture Review. To provide flexibility in future tritium supply decisions, the revised environmental analysis is expected to consider irradiation of up to a total of 2,500 TPBARs every 18 months. This approach would provide sufficient reserve capacity to accommodate potential future changes in requirements and to allow for production above currently expected annual requirement levels for short durations (i.e., several years) to recover from potential future shortfalls should that become necessary.

In the CLWR EIS, the permeation of tritium through the TPBAR cladding into the reactor coolant systems of potential tritium production reactors was estimated to be less than or equal to one tritium curie/TPBAR/year. After several years of tritium production experience at Watts Bar Unit 1, NNSA has determined that tritium permeation through TPBAR cladding is approximately three to four times higher than this estimate; nevertheless, tritium releases have been below regulatory limits. To conservatively bound the potential environmental impacts, the SEIS will assess the impacts associated with tritium production in CLWRs based on a permeation rate of approximately five tritium curies/TPBAR/year.

An assessment of tritium mitigation and management measures will be

included as part of the environmental analyses in the SEIS. Mitigation and management measures include an assessment of technologies commercially available to treat tritiated effluents, transportation of tritiated effluents and/or low level radioactive waste streams, and other applicable effluent management actions.

The SEIS, which will supplement the 1999 CLWR EIS, will support agency deliberations regarding potential changes in the tritium production at NRC licensed TVA facilities in order to meet the requirements of TVA's agreement with NNSA. These changes also require TVA to pursue an NRC license amendment request for these facilities. Accordingly, the SEIS is expected to substantially meet NRC requirements for an environmental report necessary to support TVA's license amendment request(s) for tritium production at the Watts Bar and/or Sequoyah Nuclear Plants.

*No Action Alternative:* Produce tritium at currently approved TVA facilities (Watts Bar Unit 1 and Sequoyah Units 1 and 2) at appropriate levels to keep permeation levels within currently approved NRC license and regulatory limits.

*Alternative 1:* Utilize TVA's Watts Bar site only to a maximum level of 2,500 TPBARs every reactor fuel cycle (18 months).

*Alternative 2:* Utilize TVA's Sequoyah site only to a maximum level of 2,500 TPBARs every 18 months.

*Alternative 3:* Utilize both the Watts Bar and Sequoyah sites to a maximum total level of 2,500 TPBARs every 18 months. The level of production per site would be determined by TVA. This alternative would provide the ability to supply stockpile requirements at either site independently, or using both sites with each supplying a portion of the supply.

#### Preliminary Identification of Environmental Issues

NNSA has tentatively identified the issues for analysis in the SEIS. Additional issues may be identified as a result of the scoping comment process. The SEIS will analyze the potential impacts on:

1. Air, water, soil, and visual resources.
2. Plants and animals, and their habitats, including state and Federally-listed threatened or endangered species and their critical habitats.
3. Irrecoverable and irreversible consumption of natural resources and energy, including transportation issues.

4. Cultural resources, including historical and pre-historical resources and traditional cultural properties.

5. Infrastructure and utilities.

6. Socioeconomic conditions.

7. Human health under routine operations and accident conditions, including potential impacts from seismic events.

8. Minority and low-income populations (Environmental Justice).

9. Intentional Destructive Acts, including terrorist acts.

10. Other past, present, and reasonably foreseeable actions (cumulative impacts).

SEIS Process and Invitation to Comment. The SEIS scoping process provides an opportunity for the public to assist the NNSA in determining issues and alternatives to be addressed in the SEIS. One public scoping meeting will be held as noted under **DATES** in this Notice. The purpose of the scoping meeting is to provide attendees with an opportunity to present comments, ask questions, and discuss issues regarding the SEIS with NNSA officials.

Comments can also be mailed to Mr. Chambellan as noted in this Notice under **ADDRESSES**. The SEIS scoping meeting will include an informal open house from 6:30–7 p.m. to facilitate dialogue between NNSA and the public. Once the formal scoping meeting begins at 7:00 pm, NNSA will present a brief overview of the SEIS process and provide individuals the opportunity to give written or oral statements. NNSA welcomes specific scoping comments or suggestions on the SEIS. Copies of written comments and transcripts of oral comments provided to NNSA during the scoping period will be available on the Internet at <http://nnsa.energy.gov/nepa/clwrseis>.

After the close of the public scoping period, NNSA will begin preparing the Draft SEIS. NNSA expects to issue the Draft SEIS for public review in 2012. A **Federal Register** Notice of Availability, along with notices placed in local newspapers, will provide dates and locations for public hearings on the Draft SEIS and the deadline for comments on the draft document. Persons who submit comments with a mailing address during the scoping process will receive a copy of or link to the Draft SEIS. Other persons who would like to receive a copy of or link to the Draft SEIS for review should notify Mr. Chambellan at the address noted under **ADDRESSES**. NNSA will include all comments received on the Draft SEIS, and responses to those comments in the Final SEIS.

Issuance of the Final SEIS is currently anticipated to take place in 2013. NNSA

will issue a ROD no sooner than 30 days after publication of EPA's Notice of Availability of the Final SEIS.

Issued in Washington, DC, this 23rd day of September 2011.

**Thomas P. D'Agostino,**

*Administrator, National Nuclear Security Administration.*

[FR Doc. 2011-24947 Filed 9-27-11; 8:45 am]

BILLING CODE 6450-01-P

## ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OAR-2002-0091, FRL-9472-8]

### Agency Information Collection Activities: Proposed Collection; Comment Request; Ambient Air Quality Surveillance

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice.

**SUMMARY:** In compliance with the Paperwork Reduction Act (PRA) (44 U.S.C. 3501 *et seq.*), this document announces that the EPA is planning to submit a request to renew an existing approved Information Collection Request (ICR) to the Office of Management and Budget (OMB). This ICR is scheduled to expire on April 30, 2012. Before submitting the ICR to the OMB for review and approval, the EPA is soliciting comments on specific aspects of the proposed information collection as described below.

**DATES:** Comments must be submitted on or before November 28, 2011.

**ADDRESSES:** Submit your comments, identified by Docket ID number OAR-2002-0091, by one of the following methods:

- <http://www.regulations.gov>: Follow the on-line instructions for submitting comments.

- *E-mail:* [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov).

- *Fax:* (202) 566-1741.

- *Mail:* Environmental Protection Agency, EPA Docket Center (EPA/DC), Air and Radiation Docket, Mail Code 6102T, 1200 Pennsylvania Avenue, NW., Washington, DC 20460.

**Instructions:** Direct your comments to Docket ID No. EPA-HQ-OAR-2002-0091. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you

consider to be CBI or otherwise protected through <http://www.regulations.gov> or e-mail. The <http://www.regulations.gov> Web site is an "anonymous access" system, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through <http://www.regulations.gov>, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment.

Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket, visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

**FOR FURTHER INFORMATION CONTACT:** Laurie Trinca, Air Quality Assessment Division, Environmental Protection Agency; *telephone number:* (919) 541-0520; *fax number:* (919) 541-1903; *e-mail address:* [trinca.laurie@epa.gov](mailto:trinca.laurie@epa.gov).

#### SUPPLEMENTARY INFORMATION:

#### How can I access the docket and/or submit comments?

The EPA has established a public docket for this ICR under Docket ID No. EPA-OAR-2002-0091, which is available for online viewing at <http://www.regulations.gov>, or in-person viewing at the Air and Radiation Docket in the EPA Docket Center (EPA/DC), EPA West, Room B102, 1301 Constitution Avenue, NW., Washington, DC 20460. The EPA/DC Public Reading Room is open from 8 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket is (202) 566-1742.

Use <http://www.regulations.gov> to obtain a copy of the draft collection of information, submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the public docket that are available electronically. Once in the system, select "search," then key in the docket ID number identified in this document.

#### What information is EPA particularly interested in?

Pursuant to section 3506(c)(2)(A) of the PRA, the EPA specifically solicits comments and information to enable it to:

(i) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(ii) Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(iii) Enhance the quality, utility, and clarity of the information to be collected; and

(iv) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses. In particular, the EPA is requesting comments from very small businesses (those that employ less than 25 people) on examples of specific additional efforts that the EPA could make to reduce the paperwork burden for very small businesses affected by this collection.

#### What should I consider when I prepare my comments for the EPA?

You may find the following suggestions helpful for preparing your comments:

1. Explain your views as clearly as possible and provide specific examples.
2. Describe any assumptions that you used.
3. Provide copies of any technical information and/or data you used that support your views.
4. If you estimate potential burden or costs, explain how you arrived at the estimate that you provide.
5. Offer alternative ways to improve the collection activity.
6. Make sure to submit your comments by the deadline identified under **DATES**.
7. To ensure proper receipt by the EPA, be sure to identify the docket ID number assigned to this action in the subject line on the first page of your response. You may also provide the name, date, and **Federal Register** citation.

#### What information collection activity or ICR does this apply to?

*Affected Entities:* Entities potentially affected by this action are those state,

**Tom Clements**

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