

U.S. Nuclear Waste Technical Review Board



Fiscal Year (FY) 2015 Congressional Budget Justification

*Including Board Strategic Objectives and
Performance Goals for FY 2014-2015*

March 7, 2014



U.S. Nuclear Waste Technical Review Board

Budget Submittal

Fiscal Year 2015

Summary

The U.S. Nuclear Waste Technical Review Board (Board) is an independent federal agency in the Executive Branch. The Board performs ongoing unbiased peer review of the technical and scientific validity of activities undertaken by the Secretary of Energy related to the implementation of the Nuclear Waste Policy Act (NWPA) (P.L. 97-425, as amended). The Board provides technical review of spent nuclear fuel (SNF) and high-level radioactive waste (HLW) storage, transportation, and disposal activities undertaken by DOE. In addition to reviewing DOE activities, the Board advises and makes recommendations to Congress and the Secretary on technical and scientific issues related to managing and disposing of SNF and HLW. The Board's independent technical and scientific perspective and its objective evaluation are intended to enhance confidence in the technical and scientific process.

The Board's budget request for fiscal year (FY) 2015 is \$3,400,000. The requested amount reflects the Board's commitment to sound budgeting and cost-effective management practices.

The Board's Mission

The Board was established in the 1987 amendments to the NWPA to "...evaluate the technical and scientific validity of activities [related to managing and disposing of spent nuclear fuel and high-level radioactive waste] undertaken by the Secretary [of Energy], including

- (1) site characterization activities; and
- (2) activities relating to the packaging or transportation of high-level radioactive waste or spent nuclear fuel."

As set forth in the Legislative History of the Nuclear Waste Policy Amendments Act (NWPAA), the purpose of the Board is to provide independent expert advice to Congress and the Secretary of Energy on technical and scientific issues and to review the technical and scientific validity of the U.S. Department of Energy's (DOE) implementation of the NWPA. In accordance with this mandate, the Board conducts objective, ongoing, and integrated technical and scientific peer review of DOE activities related to the management and disposition of commercial SNF and of DOE SNF and HLW. The Board reports its findings, conclusions, and recommendations to Congress and the Secretary.

The Board's Continuing Role

For more than 20 years, DOE focused on developing a deep geologic repository for the permanent disposal of SNF and HLW at Yucca Mountain in Nevada. Throughout this period, the Board provided technical and scientific findings, conclusions, and recommendations on the validity of DOE's efforts. DOE submitted the license application (LA) for Yucca Mountain to the U.S.

Nuclear Regulatory Commission (NRC) in June 2008. In early 2010, DOE petitioned the NRC for permission to withdraw the LA. At approximately the same time, the Secretary of Energy announced the formation of the Blue Ribbon Commission on America's Nuclear Future (BRC) to consider alternatives for managing the back end of the nuclear fuel cycle. The BRC submitted its recommendations to the Secretary in January 2012, and DOE issued its *Strategy for the Management and Disposal of Used Nuclear fuel and High-Level Radioactive Waste* one year later. In August 2013, the U.S. Court of Appeals for the DC District ruled that NRC must resume consideration of DOE's LA for the Yucca Mountain repository. In response to that ruling, in November 2013, NRC issued an order in the Yucca Mountain proceeding requesting that DOE prepare a supplemental environmental impact statement, which the NRC staff had determined was needed to review the LA.

Even as options for managing nuclear waste are evaluated, DOE continues to have responsibility under the NWPA for the management and disposition of DOE SNF and HLW and for the disposal of SNF from commercial nuclear power plants. Similarly, the Board's statutory responsibility for conducting ongoing technical and scientific peer review of these DOE activities and for advising Congress and the Secretary on technical and scientific issues related to nuclear waste management and disposal continues unchanged.

The Board's Performance Plan for FY 2014-2015

The Board identifies on an annual basis Performance Goals that will lead to the accomplishment of the Strategic Objectives established in its Strategic Plan. The Strategic Objectives are presented below, together with the applicable Performance Goals for FY 2014-2015.

Strategic Objective #1: *The Board will continue its technical and scientific evaluation of DOE activities related to implementation of the NWPA. Based on its evaluation, the Board will report its findings, conclusions, and recommendations to Congress and the Secretary.*

Performance Goal 1-A: In FY 2014-2015, the Board will continue to evaluate and report on the technical and scientific validity of activities undertaken by DOE-NE's Office of Fuel Cycle Technology related to implementing the NWPA, including the "ongoing activities" in DOE's *Strategy for the Management and Disposal of Used Nuclear fuel and High-Level Radioactive Waste*. As identified by DOE in the Strategy released in January 2013, those activities include:

- Evaluation of whether direct disposal of existing storage containers used at utility sites can be accomplished in various geologic media
- Evaluation of various types and design features of back-filled engineered barriers systems and materials
- Evaluation of various geologic media for their impacts on waste isolation
- Evaluation of thermal management options for various geologic media
- Establishing cooperative agreements with international programs
- Developing a research and development plan for deep borehole disposal
- Planning for a large-scale transportation program

- Evaluating operational options for consolidated storage and furthering the design of a generic consolidated storage facility
- Evaluating the inventory, transportation interface, and shipping status of used nuclear fuel at shut-down reactor sites

Performance Goal 1-B: In FY 2014, the Board will issue a report on DOE SNF being stored at federal facilities that will eventually require disposal in a deep geologic repository. This is the culmination of a three-year study by the Board of, among other things, the status of DOE SNF, the potential waste forms that will require disposal, the condition of the DOE SNF, and the amounts of DOE SNF being stored at Hanford, the Idaho National Laboratory, the Savannah River Site, and Fort St. Vrain.

Performance Goal 1-C: In FY 2014-2015, the Board will evaluate the technical validity of activities undertaken by DOE's Office of Environmental Management (DOE-EM) related to classifying the HLW waste form or forms for management and/or disposal.

Strategic Objective #2: *The Board will develop objective technical and scientific information to advise Congress and the Secretary on technical and scientific issues related to SNF and HLW management and disposal. The Board will communicate such information to Congress and the Secretary in reports, correspondence, and testimony.*

Performance Goal 2-A: In November 2013, the Board held a workshop on the impacts of SNF dry-storage container design on the waste management system and the geologic disposal of SNF in the United States. The workshop included participation by DOE, NRC, the nuclear industry, international experts, and the interested public. The Board will publish a report to Congress and the Secretary on the topics discussed at the workshop.

Performance Goal 2-B: In FY 2014, the Board will issue a report summarizing its activities since the submission of the Yucca Mountain license application. The report will include archival material such as testimony and correspondence to DOE and Congress.

Performance Goal 2-C: In FY 2014-2015, the Board will develop "factsheets" on technical and scientific topics related to DOE's implementation of the NWPA. The factsheets will be posted on the Board's website and circulated among decision-makers and the interested public.

Strategic Objective #3: *The Board will compile technical and scientific information and report to Congress and the Secretary on its findings, conclusions, and recommendations from experience gained over more than twenty years of reviewing the U.S. nuclear waste management and disposal program and from observing waste management efforts in other countries.*

Performance Goal 3-A: In FY 2014-2015, the Board will update and extend the analyses presented in the Board's December 2009 *Survey of National Programs Report*.

Performance Goal 3-B: In FY 2015, the Board will produce a report on issues related to repository siting, including the experiences of national programs in other countries related to implementing a consent-based approach to facility siting.

Performance Goal 3-C: Using the Board's waste management systems analysis tool, NUWASTE, in FY 2014-2015, the Board will develop information in support of its analysis of DOE activities related to different options for the disposition of SNF from light-water reactors, including (1) long term dry-storage of SNF, (2) permanent disposal of SNF in a geologic repository, and (3) a combination of reprocessing and geologic disposal. A report on the results of the Board's analysis may be issued in FY 2015.

Achieving the Strategic Objectives and Performance Goals in FY 2014-2015

Authority under the Law. The Board has the necessary authority, under current law, to achieve its Strategic Objectives and Performance Goals.

Establishing the Strategic Objectives and Annual Performance Goals. The Board's Strategic Objectives are established in its Strategic Plan. The Board also identifies, on an annual basis, shorter-term Performance Goals that will lead to the accomplishment of the Strategic Objectives and includes the Strategic Objectives and Performance Goals in its annual Performance Plan. The Performance Plan is used as the basis for the Board's annual Budget Submittal.

Technical Analysis. Analyses of technical information are performed by Board members with assistance from a small, full-time senior professional staff. On the basis of these analyses, the Board reports its findings and recommendations to Congress and the Secretary of Energy. When necessary, the Board is authorized to hire expert consultants to support its in-depth reviews of specific technical and scientific topics.

Evaluating Board Performance. The Board also includes in its annual Budget Submittal an evaluation of the Board's performance in achieving its annual Performance Goals for the preceding year. The process for evaluating Board performance is discussed under that heading below. Progress toward achieving the Board's Performance Goals is reviewed quarterly by Board management, and appropriate actions are taken to facilitate the achievement of the goals during the time period.

Coordinating and Focusing Board Activities. Board members are assigned by the Chairman to lead Board activities, as appropriate. The work of the Board members is supported by the Board's senior professional staff. The Board maintains the option of organizing panels or working groups to help facilitate, integrate, and focus its technical review, and for other purposes.

Information Gathering. Much of the Board's peer review and information gathering takes place at the Board's open public meetings where technical information is presented by DOE and representatives of other relevant organizations according to an agenda prepared by the Board. At these meetings, Board members and staff question presenters, and time is provided for input and comments from interested members of the public. The Board holds two or three public meetings each year. Board panels and other small groups of Board members and staff hold other meetings, as needed, to investigate specific technical and scientific topics. The Board's public meetings are announced in the *Federal Register* typically four to six weeks before the meetings are held.

The Board also gathers information from site visits, visits to national laboratories and facilities, and meetings with DOE and national laboratory and contractor staff working on specific projects and programs. Board members and staff attend national and international symposia and conferences related to the science and technology of SNF and HLW management and disposition. From time to time, Board members and/or staff travel to other countries to meet with organizations involved in the management of SNF and HLW to observe their technical and scientific programs and best practices, perform benchmarking, and assess potential analogs, among other things. The information gathered is used to enhance the Board's technical and scientific review of DOE programs and to advise Congress.

Communicating Board Findings, Conclusions, and Recommendations. On the basis of the Board's evaluations and other evidence, the Board reports its technical and scientific findings, conclusions, and recommendations to Congress and the Secretary of Energy. The Chairman and other members of the Board and Board staff testify before Congress, as requested. Board reports, testimony, correspondence and meeting agendas, transcripts, presentations, and public comments are posted on the Board's Web site at www.nwtrb.gov.

Management Goals for FY 2014–2015. To enhance the effectiveness and efficiency of Board activities supporting the achievement of its Strategic Objectives and Performance Goals, the Board has identified the following Management Goals for FY 2014-2015:

- The Board will maintain effective communications among Board members who are geographically dispersed and the senior professional staff members who support the Board's technical and scientific review of DOE activities from the Board's offices in Arlington, Virginia.
- The Board will, to the extent feasible, facilitate access to the Board's discussions and deliberations by the interested public.
- The Board will endeavor to obtain information and conduct its review in the most cost-effective means possible.
- The Board will take actions to ensure that its institutional memory and expertise can be passed on to succeeding Board members and staff as well as to Congress, the Secretary of Energy, and interested members of the public.
- The Board will regularly assess its senior professional staff's core technical and scientific competencies. The Board will develop and implement initiatives to identify, recruit when necessary, and retain, highly qualified professionals with the technical and scientific knowledge needed to support the Board's work and achieve its unique mission.
- The Board will update its technological resources and capabilities to enhance its technical and scientific peer review and to engage the interested public and keep it informed of Board-related activities.

Evaluation of Board Performance in FY 2013

The Board's progress in meeting its annual Performance Goals is evaluated quarterly, and adjustments are made, as necessary. The Board uses the evaluation of its performance as input in developing its annual Performance and Management Goals for the following fiscal year and

revising, as necessary, its Strategic Objectives. The Performance Evaluation also is used as input for the development of the Board's budget submittal for the subsequent year.

The reliability of the evidence and data used to evaluate the Board's performance in achieving its annual Performance Goals is high and can be verified by accessing the referenced documents and meetings on the Board's Web site at www.nwtrb.gov.

Following is an evaluation of the Board's performance in completing the "Priority Tasks" (equivalent to Performance Goals) it established for FY 2013-14.

Performance Goal 1. *In accordance with its statutory mandate, the Board will continue its technical peer review and evaluation of DOE activities related to implementation of the NWPA. The Board will report on its evaluation of the technical validity of DOE's work to Congress and the Secretary of Energy.*

The Board's performance in completing the Priority Tasks established to support this goal in FY 2013 is evaluated below.

Task 1-A. Evaluate and report on the technical validity of activities proposed or undertaken by DOE-NE's Office of Used Fuel Disposition Research and Development, including analysis of the following: features, events, and processes (FEPs) related to generic repository sites; generic disposal system for SNF and HLW; generic natural system evaluation; generic engineered barrier system evaluation; thermal modeling for repositories in salt, granite, and clay; technical bases for very long-term storage and subsequent transportation of SNF.

Evaluation of Board Performance Related to Task 1-A:

At a meeting held on October 16-17, 2012, in Idaho Falls, Idaho, the Board heard from DOE-NE about its work and long-term R&D related to transportation of SNF, very long-term storage of SNF, research related to disposal of SNF in salt formations, generic engineered barrier system evaluation, and other ongoing R&D. The Board made recommendations to DOE in letters sent following the meeting. The letters are available on the Board's website at www.nwtrb.gov.

The Board also held a public meeting in Richland, Washington, in April 2013, at which DOE-NE presented studies related to disposal container size and design and the impacts of both on the waste management system. Following the meeting, the Board followed up with observations and recommendations in letters to DOE. These letters also are available on the Board's website at www.nwtrb.gov.

The Board held a workshop on the impacts of dry-storage container size on the waste management system in November 2013, with participation by DOE, NRC, the nuclear industry, international representatives, and the interested public. A Board meeting was held following the workshop at which DOE discussed the status of its work related to SNF and HLW management. The Board also followed up on this meeting with a letter to DOE recording the Board's observations and recommendations. The letter to DOE and a record of the workshop can be found on the Board's website at www.nwtrb.gov.

Task 1-B. Evaluate and report on activities undertaken by DOE’s Office of Legacy Management (DOE-LM) related to preserving Yucca Mountain data and documents. The Board is working with DOE-LM to develop a scope of work and to assess the preservation and accessibility of DOE documents. The Board will provide feedback in its summary reports to Congress and the Secretary on progress in this area.

Evaluation of Board Performance Related to Task 1-B:

A review of DOE activities related to preserving data and documents from the Yucca Mountain Program (YMP) was started in FY 2010 and continued into FY 2013 as part of the Board’s ongoing evaluation of DOE activities and at the direction of the House Appropriations Committee. The Board’s review involved visits to DOE facilities in Las Vegas, Nevada, and a “spot check” retrieval exercise at the DOE Legacy Management facility in Morgantown, West Virginia. The Board Chairman reported in testimony on the status of the review to the House Subcommittee on Energy and Water Development, Committee on Appropriations, in April 2013. The Board’s report, *Review of U.S. Department of Energy Activities to Preserve Records Created by the Yucca Mountain Project*, was posted on its website in August 2013.

Task 1-C. Evaluate and report on the technical validity of activities undertaken by DOE-EM related to storage, transportation, and disposal of DOE SNF and HLW. In FY 2013, the Board will:

- Complete the report started in FY 2011 on management of DOE-owned SNF and HLW at DOE facilities
- Monitor progress and follow-up on, issues raised in Board letters, such as the final disposition form and treatment of calcined waste at Idaho National Laboratory (INL)
- Evaluate decontamination and decommissioning activities and the effects of the activities on the generation of HLW
- Evaluate and report on technical issues associated with long-term storage and transportation of HLW and DOE-owned SNF.

Evaluation of Board Performance Related to Task 1-C:

- Staff retirements have delayed the completion of the Board’s report on DOE SNF. The Board plans to issue the report in FY 2014.
- Following a Board meeting held in Idaho Falls, Idaho in October 2012, the Board sent a letter to DOE-EM on the classification of sodium-bearing waste (SBW).
- The Board has deferred the review of DOE activities related to *decommissioning and decontamination* pending DOE activity in this area.
- In April 2013, the Board held a meeting in Richland, Washington, at which it reviewed efforts underway at the Hanford facility to develop a waste form and packaging for DOE SNF and HLW for eventual disposal. The Board sent a letter with observations and recommendations to DOE following the meeting. The Board is available on the Board’s website at www.nwtrb.gov.

Performance Goal 2. *The Board will develop and compile objective technical information to support its technical peer review of DOE activities and to advise Congress and the Secretary on technical issues related to SNF and HLW management.*

The Board's performance in completing Priority Tasks established to enable the Board to support this goal in FY 2012-2013 is evaluated below.

Task 2-A. Investigate the technical implications of changing from a repository site with an oxidizing environment to a repository site with a reducing environment.

Evaluation of Board Performance Related to Task 2-A: This issue was not directly investigated by DOE. This issue may be part of DOE's generic evaluation of geologic media in the future.

Task 2-B. Explore options for expanding the application of the Board's computer-based systems analysis tool, the Nuclear Waste Assessment System for Technical Evaluation (NUWASTE), for system enhancements, and for other activities, including:

- Applications
 - Develop further cost estimation methodology
 - Work with the Swedish National Council on activities that will demonstrate the general applicability of NUWASTE while providing support to the Board's corresponding organization in Sweden.
 - Complete sensitivity analyses to understand the impacts on dry storage cask requirements, amount of SNF and HLW destined for a repository, mass of natural uranium used, volumes of new waste streams generated, and facility cost of variables such as:
 - Start-date of facility operations
 - Facility throughput
 - SNF burn-up
 - Future nuclear generation capacity
 - Fuel composition
 - Perform evaluations of SNF and HLW management options under consideration by DOE as they emerge
- System enhancements
 - Include mass of tailings and mine waste from natural uranium mining
 - Add DOE HLW and SNF to process flow
 - Develop waste stream extension for sodium fast reactors
 - Design methodology to evaluate transportation requirements associated with waste management scenarios
- Other activities
 - Participate in benchmarking workshops, as appropriate

- Evaluate limitation on the number of times plutonium can be recycled in sodium fast reactors

Evaluation of Board Performance Related to Task 2-B:

- The Board is developing a Fact Sheet using NUWASTE analyses and will continue to assess the potential of the systems' analysis tool for enhancing the Board's review and evaluation of DOE activities.
- The Board provided information and perspectives from NUWASTE analyses that proved helpful to the Swedish National Council and demonstrated the general applicability of NUWASTE.

Task 2-C. Develop information on generic disposal issues to enhance the evaluation of DOE activities and provide information to decision-makers and the public on the following:

- Technical issues associated with designing repositories for specific waste forms, including
 - Deep borehole disposal for unrecyclable HLW such as vitrified waste
 - Potential repository media that allow for recovery of disposed of spent fuel with reprocessing/recycling potential
- Technical issues associated with optimizing HLW and SNF package sizes as a function of potential repository geologic media

Evaluation of Board Performance Related to Task 2-C:

- The Board developed and posted on its website a factsheet, which discusses the technical and scientific pros and cons of deep borehole disposal. In line with the position recorded in previous correspondence to DOE, the Board letter transmitting the fact sheet states that research on deep borehole disposal should not displace higher priority work on a mined geologic repository.
- The potential for some geologies to permit recovery of disposed waste can be inferred from some of DOE's generic investigation of different geologic media. At this point, it is not the focus of DOE's research so it has not been reviewed by the Board.
- As mentioned above, in November 2013, the Board held a workshop on the impacts on the waste management system of dry-storage canister design with participation by DOE, NRC, the nuclear industry, international experts, and the interested public. The Board will publish a report to Congress and the Secretary of Energy on the issues discussed at the workshop.

Task 2-D. Assess the effects of taking burnup credit on the management and disposal of SNF.

Evaluation of Board performance related to Task 2-D:

The implications of taking burnup credit on the management and disposal of SNF is an ongoing consideration in the Board's review of DOE's SNF management and disposal efforts. This issue, including changes that have been proposed to NRC regulations on burnup credit, will be discussed at the workshop on the impacts of dry-storage canister size and design.

Task 2-E. Evaluate the impact of the projected trend towards SNF with higher burnup, including the following:

- Minimum time before transfer to dry storage facilities
- Minimum time before transport to centralized storage facility
- Quantities of HLW and other radioactive waste streams generated
- Potential for recycle of separated uranium and plutonium in thermal reactors and the impact on HLW generation

Evaluation of Board Performance related to Task 2-E:

The Board is reviewing work being undertaken by DOE to address issues related to higher fuel burnups.

Performance Goal 3. *The Board will gather information and report findings and recommendations from experience gained over twenty years of reviewing the U.S. nuclear waste management and disposal program and from observing waste management efforts in other countries.*

The Board's performance in completing the Priority Tasks established to enable the Board to support this goal in FY 2012-2013 is evaluated below.

Task 3-A. Update the *Survey of National Programs Report* issued in December 2009. The tables in the widely-used report on the programs in 13 countries will be revised to reflect changes that have occurred since the original report was completed and information on programs in other countries will be added, to the extent it is available.

Evaluation of Board performance related to Task 3-A:

Completion of the update of the Survey report has been deferred to take into account important changes in nuclear waste programs that are imminent in other countries.

Task 3-B. Gather information on the basis for assessing site-suitability and "best practices" that can be determined from work done to characterize repository sites in other countries. The information gathered will provide input to Board reports.

Evaluation of Board performance related to Task 3-B:

This task is underway. Completion of a report titled "Designing a Process for Repository Site Selection" is planned for FY 2014. As mentioned above, in April 2013, the Board Chairman testified before the House Subcommittee on Energy and Water Development, Committee on Appropriations on the experiences of other countries related to consent-based repository programs.

Task 3-C. Evaluate the appropriate mix of engineering and science in repository development, natural transition points for a change in the mix, and how science and engineering can be integrated. The Board may issue a report based on its evaluation.

Evaluation of Board performance related to Task 3-C:

Consideration of these issues may be part of the Board's report on designing a repository siting process referred to above.

Task 3-D. Observe the management in other countries of spent MOX and recycled uranium fuel from thermal reactor operations.

Evaluation of Board performance related to Task 3-D:

The Board monitored these activities in FY 2013, and the information collected will provide input to Board reports.

Nuclear Waste Technical Review Board

Salaries and Expenses

(Including Transfer of Funds)

For necessary expenses of the U. S. Nuclear Waste Technical Review Board, as authorized by Public Law 100-203, section 5051, *\$3,400,000* to be derived from the Nuclear Waste Fund and to remain available until expended.

Budget Request Justification

To fulfill its statutory mandate for reviewing the technical and scientific validity of activities undertaken by the Secretary of Energy related to nuclear waste management and for providing independent technical information and advice to Congress and the Secretary, the Board requests \$3,400,000 for FY 2015. The Board's FY2015 request reflects its commitment to efficient and cost-effective budget management practices.

A detailed explanation of the Board's request by Object Class follows.

Object Class 11.0, Salaries: \$1,938,000

The estimate for this object class includes funding for 11 part-time Board members, Executive Schedule senior professional staff, and General Schedule support staff. The 11 part-time Board members are Special Government Employees and, in accordance with the Board's enabling legislation, each member is compensated at the rate of pay of Executive Schedule Level III. The senior professional staff members support the work of the 11 part-time Board members in evaluating the technical and scientific validity of DOE activities related to SNF and HLW management and disposal. The General Schedule staff members perform administrative activities related to the Board's ongoing technical and scientific evaluation and the operation of the organization. Administrative support activities include budget preparation and financial management, dissemination of Board publications, information technology activities, facilities management, travel planning, management of meeting logistics, and preparation and implementation of Board responses to federal directives.

Object Class 12.0, Civilian Personnel Benefits: \$436,000

The estimate for this object class represents the government's contribution for employee benefits for staff and Board members.

Object Class 21.1, Travel and Transportation: \$225,000

The estimate for this object class includes travel costs for Board members, staff, and consultants who are required to travel to Board meetings, professional meetings, conferences, orientation activities, national laboratories, and other events and venues related to accomplishing the Board's strategic objectives and performance goals as detailed in the Board's Performance Plan.

Object Class 23.0, Rental Payments to the General Services Administration (GSA): \$233,000

The estimate for this object class represents the amount that the Board will pay to the General Services Administration (GSA) under its contract for rental of the Board's office space in Arlington, VA. Under a GSA lease agreement, the terms of the Board's lease increased in fiscal year 2013.

Object Class 23.3, Communication, Utilities, Miscellaneous: \$40,000

The estimate for this object class represents costs for long-distance and local telephone service, postage, local courier services, video teleconferencing, internet, and mailing services.

Object Class 24.0, Printing and Reproduction: \$60,000

The estimate for this object class is for costs associated with creating and publishing Board reports that are required by statute to be sent to Congress and the Secretary of Energy at least twice per year. The estimate also includes the costs associated with the publication of additional reports, and technical materials, as well as the costs associated with publishing meeting notices in the *Federal Register*.

Object Class 25.0, Consultants: \$58,000

The estimate for this object class includes funding for consultants to support and supplement Board and staff analyses of specific technical and scientific issues as authorized by Congress.

Object Class 25.1/2, Contractual Services - Other: \$200,000

The estimate for this object class includes contractual costs associated with accomplishing the Board's mission. Estimated commercial contract costs includes meeting-room rentals, stenography services and audio visual equipment rentals for Public Board Meetings, facility maintenance agreements, and professional development for Board supervisors and staff. Other program support contracts include services for contracted commercial IT support and report production and editing.

Object Class 25.3, Services from Other Government Agencies: \$100,000

The Board's enabling legislation authorizes the procurement of necessary administrative services from the GSA on a reimbursable basis. Starting in FY 2014, the costs associated with establishing support service agreements with GSA and other federal agencies will increase; consequently, the Board's estimate for this object class is above the 2014 request. The estimate for the object class includes funding for administrative support services such as payroll, accounting services, human resource related support related to management of official personnel folders, recording various personnel actions, and initiating personnel clearances. Other support includes legal advice from GSA, security clearances through the Office of Personnel Management, building security services from the Department of Homeland Security, website hosting services from the Government Printing Office, and other support provided through miscellaneous interagency agreements.

Object Class 26.0, Supplies and Materials: \$50,000

This estimate includes anticipated expenses for office supplies, subscriptions to technical publications, meeting supplies, and off-the-shelf technical reports and studies.

Object Class 31.0, Equipment: \$60,000

The estimate for this object class includes costs to purchase miscellaneous equipment, including computer hardware and software. The object class also includes the continuation of upgrades to IT security, continuity of operations (COOP), support of E-Gov telecommuting efforts, and technical support for the management of electronic records and e-mail.

U.S. Nuclear Waste Technical Review Board

FY2015 Budget Request by Object Classification

(Figures Rounded in Thousands of Dollars)

Object Class Code	Description	FY2013 Actual*	FY2014 Actual	FY2015 Requested
11.0	Salaries	\$1,768	\$1,802	\$1,938
12.0	Benefits	426	431	436
21.1	Travel and Transportation	342	288	225
23.0	Rent	206	228	233
23.3	Communications and Utilities	36	40	40
24.0	Printing and Reproduction	38	60	60
25.0	Consultants	96	64	58
25.1/2	Contractual Services - Other	130	298	200
25.3	Contractual Services - Federal	100	79	100
26.0	Supplies and Materials	41	60	50
31.0	Equipment	39	50	60
Total Budgetary Request		\$3,222	\$3,400	\$3,400

Total Full Time Equivalent (FTE)

Employees	12	13	14**
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NOTES:

*The fiscal year 2013 actual budget reflects reductions pursuant to the Continuing Appropriations Resolution of 2013 (P.L. 112-175), and the across-the-board reduction specified in the OMB March 1, 2013, Report, as well as the reductions provided for in the President's sequestration order, as enacted in the Continuing Appropriations Act of 2013 (P.L. 113-6).

**The Board anticipates filling a vacant senior professional staff position.