

# **U.S. NUCLEAR WASTE TECHNICAL REVIEW BOARD**



## **CONGRESSIONAL BUDGET JUSTIFICATION FISCAL YEAR 2020**

**INCLUDING BOARD PERFORMANCE AND MANAGEMENT GOALS FOR  
FISCAL YEARS 2019 THROUGH 2020**

**AND**

**EVALUATION OF BOARD PERFORMANCE IN FISCAL YEAR 2018**

**MARCH 12, 2019**



**U.S. NUCLEAR WASTE TECHNICAL REVIEW BOARD**  
**CONGRESSIONAL BUDGET JUSTIFICATION**  
**FISCAL YEAR 2020**  
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# U.S. NUCLEAR WASTE TECHNICAL REVIEW BOARD

## CONGRESSIONAL BUDGET JUSTIFICATION

### FISCAL YEAR 2020

## INTRODUCTION

The U.S. Nuclear Waste Technical Review Board (Board) is an independent agency in the Executive Branch of the federal government. The Board performs ongoing and objective peer review of the technical and scientific validity of activities undertaken by the Secretary of Energy under the Nuclear Waste Policy Act (NWPA) (Public Law 97-425, as amended), including the packaging, transportation, and disposal of spent nuclear fuel (SNF) and high-level radioactive waste (HLW). The Board also advises and makes recommendations to Congress and the Secretary on technical issues related to nuclear waste management and disposal.

Contained in this Fiscal Year (FY) 2020 Congressional Budget Justification is the Board's Performance Plan for FYs 2019 through 2020 and the Board's evaluation of its FY 2018 performance. The Board's Budget Request for FY 2020 is \$3,600,000, which is the same amount as the agency's appropriation for each fiscal year from FY 2016 through FY 2019. The Board's Budget Request for FY 2020 reflects its continued strong commitment to sound budgeting and cost-effective management practices and the focus of the Board's leadership on maximizing program performance and efficiency through evidence-based decision making and ongoing evaluation of the agency's performance.

## ABOUT THE BOARD

The Board was established in the 1987 amendments to the NWPA to "...evaluate the technical and scientific validity of activities undertaken by the Secretary after the date of enactment of the Nuclear Waste Policy Amendments Act of 1987, including

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

In accordance with this mandate, and in line with the Legislative History of the Nuclear Waste Policy Amendments Act (NWPAA), the Board conducts an independent peer review of U.S. Department of Energy (DOE) activities and provides expert advice to DOE and Congress on technical issues related to nuclear waste management and disposal. The law requires the Board to report its findings, conclusions, and recommendations to Congress and the Secretary not less than two times per year. The Legislative History of the NWPAA makes clear that the Board cannot compel DOE to accept Board recommendations, but DOE is expected to heed the Board's advice or clearly state why it does not. According to the NWPAA, "the Board shall cease to exist not later than one year after the date on which the Secretary begins disposal of high-level radioactive waste or spent nuclear fuel in a repository."

## **THE BOARD'S CONTINUING ROLE**

When Congress amended the NWPA in 1987 to identify Yucca Mountain in Nevada as the sole site to be characterized for its suitability as the location for a deep geologic repository, concerns were raised that without a comparison of sites the technical and scientific credibility of the site-characterization effort might be questioned. Congress created the Board to ensure that an ongoing independent peer review of DOE's nuclear waste management activities would be undertaken, including packaging and transporting SNF and HLW and developing a repository for the permanent disposal of the wastes.

For more than 20 years following the enactment of the NWPA, the Board's review focused on DOE work related to characterizing the Yucca Mountain site and developing a deep geologic repository. Since 2013, the Board has focused on DOE efforts to integrate the waste management system and research related to the performance of SNF and HLW in a repository. From the time the Board began operation, it has continued to report the findings, conclusions, and recommendations from its ongoing review of the technical and scientific validity of DOE's activities to Congress and the Secretary of Energy. The Board's objective and independent peer review of DOE waste management and disposal activities will continue to be indispensable to the technical credibility, successful implementation, and public acceptance of the DOE nuclear waste management program in the future.

## **BOARD STRATEGIC OBJECTIVES FOR FYS 2018 THROUGH 2022**

The Board established three Strategic Objectives in its Strategic Plan for fiscal years 2018 through 2022. The Strategic Objectives reflect the Board's continuing commitment to its mission established in the NWPA, including (1) conducting an ongoing, independent technical and scientific evaluation of DOE activities related to the NWPA and (2) advising Congress and the Secretary. During FYS 2018 through 2022, the Board will:

- continue its evaluation of DOE activities related to implementation of the NWPA and relevant amendments to that Act. Based on its evaluation, the Board will report its findings, conclusions, and recommendations to Congress and the Secretary.
- develop objective technical and scientific information that will be useful to policy makers in Congress and the Administration on issues related to SNF and HLW management and disposal. The Board will communicate such information to Congress and the Secretary in letters, reports, and testimony.
- compile information and report to Congress and the Secretary on its findings, conclusions, and recommendations from experience gained over more than twenty-five years of reviewing the U.S. nuclear waste management and disposal program and from observing waste management efforts in other countries.

## **ACHIEVING THE STRATEGIC OBJECTIVES**

**LEADERSHIP ENGAGEMENT:** On an annual basis, the Board's leadership updates its Performance and Management Goals for the current year and identifies Goals for the subsequent year that will lead to the accomplishment of the Strategic Objectives. The Performance and Management Goals are included in the Board's Performance Plan.

**LEARNING AGENDA APPROACH** – The Board’s Performance Plan for a given year includes its *Strategic Objectives*, its *Performance Goals*, its *Management Goals*, and a description of Board attributes, activities, and practices supporting the achievement of the Goals. An evaluation of Board performance in a given year is included in the Board’s budget request and is used as input in updating the Performance Plan and developing the Board’s budget request for the subsequent year. In updating and implementing the plan, the Board’s leadership will continue to use a learning agenda approach, which includes using evidence to:

- (1) proactively evaluate the agency’s performance to determine what works well and where performance can be improved;
- (2) maximize results by strategically focusing resources and attention where the needs are greatest;
- (3) reinforce the strategic direction, timeliness, and relevance of the Board’s technical evaluations of DOE activities;
- (4) adapt agency direction as evidence and context shifts;
- (5) develop plans to increase collaboration with DOE and Congress and to keep other stakeholders informed of the Board’s activities.

**EVIDENCE-BASED APPROACH** – The Board is one of the smallest agencies in the federal government and cannot absorb the level of effort or cost of appointing a senior evaluation official or creating an evidence evaluation office. However, to ensure the effective and efficient execution of its mission, as noted above, the Board employs a learning agenda and evidence-based approach to set priorities that guide its decision making, operational planning, and development of its budget.

## **PERFORMANCE PLAN FOR FYS 2019 THROUGH 2020**

**STRATEGIC OBJECTIVES AND PERFORMANCE GOALS FOR FYS 2019 THROUGH 2020** - Presented below are the Board’s Strategic Objectives for FYS 2018 through 2022, followed by the relevant Performance Goals (PGs) for FYS 2019 through 2020. Both the Strategic Objectives and the PGs reflect the goals of the agency leadership and are outcome-oriented.

***STRATEGIC OBJECTIVE #1:** The Board will continue its evaluation of DOE activities related to implementation of the NWPA and relevant amendments to that Act. Based on its evaluation, the Board will report its findings, conclusions, and recommendations to Congress and the Secretary.*

### **PERFORMANCE GOALS FOR FYS 2019 THROUGH 2020**

**PG 1-A:** In FY 2019, the Board will hold a public meeting on DOE’s SNF-related R&D activities, including R&D on casks for high burnup SNF and activities and studies on direct disposal of SNF dry-storage canisters.

**PG 1-B:** In FYS 2019 through 2020, the Board will review DOE R&D activities related to the management and disposal of aluminum-based and accident-tolerant SNF.

**PG 1-C:** In FYS 2019 through 2020, the Board will continue to monitor, and review DOE R&D activities related to transport, storage, and disposal of borosilicate glass waste.

**PG 1-D:** In FYS 2019 through 2020, the Board will continue to review the technical issues DOE will need to address before it can begin the implementation of an integrated program for the nationwide transport of SNF and HLW.

***STRATEGIC OBJECTIVE #2:** In FYs 2019 through 2020, the Board will develop objective technical and scientific information that will be useful to policy makers in Congress and the Administration on issues related to SNF and HLW management and disposal. The Board will communicate such information to Congress and the Secretary in letters, reports, and testimony.*

**PERFORMANCE GOALS FOR FYs 2019 THROUGH 2020**

**PG 2-A:** In FY 2019, the Board will issue a report on the technical issues DOE will need to address before it can begin the implementation of an integrated program for the nationwide transport of SNF and HLW.

**PG 2-B:** In FY 2019, the Board will issue a report summarizing its review activities, and its findings, conclusions and recommendations, from January 1, 2016, through June 30, 2018.

**PG 2-C:** In FY 2019 the Board plans to issue a report on the performance of high burnup SNF during extended dry storage and transportation.

**PG 2-D:** In FY 2019, the Board plans to issue a report on the system-wide implications of using large canisters for the dry storage of SNF.

***STRATEGIC OBJECTIVE #3:** In FYs 2019 through 2020, to enhance its review of DOE activities and to help inform Congress and the Secretary of Energy, the Board will compile information and report its findings, conclusions, and recommendations from experience gained over more than 25 years of reviewing the U.S. nuclear waste management and disposal program and from observing waste management efforts in other countries.*

**PERFORMANCE GOALS FOR FYs 2019 THROUGH 2020**

**PG 3-A:** In FY 2019, the Board will hold a workshop on advances in repository science and operations from international underground research laboratory collaborations.

**PG 3-B:** In FYs 2019 through 2020, the Board will continue to monitor activities in other countries related to programs for the management and disposal of SNF and HLW and update the information on its website, as appropriate.

**MANAGEMENT GOALS FOR FYs 2019 THROUGH 2020** – To enhance the effectiveness and efficiency of Board activities supporting its Strategic Objectives and Performance Goals, the Board has identified the following Management Goals (MG) for FYs 2019 through 2020:

**MG-1:** The Board will continue to implement actions to optimize organizational efficiency and accountability and maximize employee performance.

**MG-2:** The Board will identify any potential constraints on the agency’s ability to perform its mission and develop and implement integrated strategies for mitigating such constraints through proactive management and allocation of resources.

**MG-3:** The Board will maintain and enhance effective communications among Board members who are geographically dispersed. The Board will also facilitate communication between the Board members and the senior professional staff members who support the Board’s technical and scientific review of DOE activities from the Board offices in Arlington, Virginia.

**MG-4:** The Board will continue webcasting its meetings and making available archived video recordings of the webcasts on its website.

**MG-5:** The Board will endeavor to conduct its ongoing review in the most cost-effective means possible.

**MG-6:** The Board will take action to ensure that institutional memory and expertise are passed on to succeeding Board members and staff. When appropriate, the Board may also provide opportunities for one or more undergraduates or graduate students in disciplines related to the Board's activities to support the Board's technical staff in performing information research and technical analysis.

**MG-7:** The Board will update its technical resources and capabilities, as necessary, to maintain and improve the core competencies of its professional staff. The Board will develop and implement initiatives to identify, recruit when necessary, and retain, highly qualified professionals with the expertise and related knowledge needed to support the work of the Board members and help the Board achieve its Strategic Objectives and Performance Goals.

**BOARD ATTRIBUTES, ACTIVITIES, AND PRACTICES SUPPORTING THE ACHIEVEMENT OF THE PERFORMANCE GOALS AND STRATEGIC OBJECTIVES** – The following attributes, activities, and practices support the implementation of the Board's ongoing peer review and reflect the Board's commitment to its core values of objectivity, openness, technical and scientific rigor, and timeliness.

- **AUTHORITY UNDER THE LAW** – The Board has the necessary authority, under current law, to achieve its Strategic Objectives and Performance Goals.
- **CULTURE OF ACCOUNTABILITY** – Analyses of DOE's technical and scientific work are performed by Board members who are appointed by the President from a list of nominees submitted by the National Academy of Sciences. The Board members are eminent experts in their fields and serve part-time. They are supported by a small, full-time professional staff whose members are highly credentialed in the relevant scientific and technical disciplines. The Board reports its findings, conclusions, and recommendations to Congress and the Secretary of Energy at least twice each year, and the Chair and other members of the Board and Board staff testify before Congress, as requested. Board reports, testimony, and correspondence, along with meeting agendas, transcripts, presentations, webcasts, and public comments, are posted on the Board's website at [www.nwtrb.gov](http://www.nwtrb.gov).
- **EFFECTIVE USE OF ANALYTICAL RESOURCES** – Board members and members of the Board's senior professional staff are assigned by the Chair to lead or support Board activities, as appropriate. The Board maintains the option of organizing panels and working groups to help facilitate, integrate, and focus its technical and scientific review, and for other purposes. When necessary, the Board is authorized by its enabling legislation to hire expert consultants to support the Board's in-depth reviews of specific technical topics.
- **TRANSPARENCY, COLLABORATION, AND PUBLIC ENGAGEMENT** – To support its peer review and information gathering activities, the Board holds public meetings, at which technical information is presented by representatives of DOE, its contractors, and other organizations involved in nuclear waste management and disposal. At these meetings, Board members and Board staff question presenters, and time is provided for input and comments from interested members of the public. The Board typically holds two or three public meetings per year, which are announced in the *Federal Register* from four to six weeks before the meetings are held. Beginning in 2015, the Board increased the transparency of its deliberations through "webcasting" of its public meetings. Webcasts are archived and are available on the Board's website. In addition to the Board's public meetings, which are typically attended by all Board

members, Board panels or other small groups of Board members and staff also hold smaller meetings, as needed, to investigate specific technical topics.

The Board also engages in 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 technical symposia and conferences related to SNF and HLW management and disposal. On occasion, Board members and/or staff travel to other countries to meet with organizations involved in the management and disposal of SNF and HLW, to observe their technical programs and best practices, perform benchmarking, and assess potential analogs, among other things. The information gathered from these visits is used to enhance the Board’s evaluation of DOE activities and to advise and inform Congress and the Secretary of Energy.

**EVALUATION OF BOARD PERFORMANCE IN FY 2018**

The Board uses annual evaluations of its performance as input in updating its PGs and Management Goals (MG) for the current year and identifying Goals for the subsequent year. The PGs reflect the objectives of the agency leadership and are outcome-oriented. The annual evaluations of the Board’s performance also are used as input to the development of the Board’s annual budget request submittal.

**BOARD PERFORMANCE IN FY 2018 – PERFORMANCE GOALS** – The PGs, which are the subject of this evaluation, were included as part of the Board’s Performance Plan for FYs 2018 through 2019 contained in the Board’s Budget Request Submittal for FY 2019. In the following evaluation, the Strategic Objectives on which the PGs are based are stated followed by a table displaying the associated PGs and the activities undertaken by the Board to accomplish the PGs in FY 2018.

*STRATEGIC OBJECTIVE #1: The Board will continue its evaluation of DOE activities related to implementation of the NWPA and relevant amendments to that Act. Based on its evaluation, the Board will report its findings, conclusions, and recommendations to Congress and the Secretary.*

FY 2018 PERFORMANCE GOAL	BOARD ACTIVITIES
<p><b><u>PG 1-A:</u></b> The Board will continue to evaluate DOE activities under the NWPA related to the packaging, transportation, and disposal of SNF or HLW, including the following:</p>	
<ul style="list-style-type: none"> <li>• Evaluate DOE Research and Development (R&amp;D) related to the performance of high-burnup SNF during extended dry storage and transportation</li> </ul>	<ul style="list-style-type: none"> <li>➤ The Board held fact finding meetings on high burnup SNF in FY 2018.</li> <li>➤ A report on the performance of high burnup SNF during extended dry storage and transportation is planned for FY 2019.</li> </ul>

FY 2018 PERFORMANCE GOAL (CONT'D)	BOARD ACTIVITIES (CONT'D)
<ul style="list-style-type: none"> <li>• Evaluate DOE R&amp;D related to the potential degradation of dry-storage canisters and changes in spent fuel properties during long-term storage that may affect subsequent transport and disposal</li> </ul>	<ul style="list-style-type: none"> <li>➤ In November 2017 and April 2018, representatives of the Board attended meetings of the Electric Power Research Institute - Extended Storage Collaboration Program, at which DOE and laboratory scientists presented information on this topic.</li> <li>➤ In May 2018, the Board continued its information collection activities by attending the Annual Working Group Meeting of the DOE-NE Office of Spent Fuel and Waste Science and Technology, where DOE provided presentations on related R&amp;D.</li> </ul>
<ul style="list-style-type: none"> <li>• Review the status of DOE activities related to preparing to transport SNF and HLW</li> </ul>	<ul style="list-style-type: none"> <li>➤ On June 13, 2018, the Board held a public meeting in Idaho Falls, Idaho, on the technical issues DOE will need to address before it can begin the implementation of an integrated program for the nationwide transport of SNF and HLW: <a href="#">June 13, 2018, meeting.</a></li> <li>➤ On June 27, 2018, the Board sent a follow-up letter with its observations from the meeting to Ms. Anne White, DOE Assistant Secretary for Environmental Management, and Mr. Edward McGinnis, DOE Principal Deputy Assistant Secretary for Nuclear Energy: <a href="#">Letter to Ms. White and Mr. McGinnis.</a></li> </ul>
<ul style="list-style-type: none"> <li>• Review DOE R&amp;D activities related to disposal of SNF and HLW</li> </ul>	<ul style="list-style-type: none"> <li>➤ The Board is continuing its review of these DOE activities.</li> </ul>

**STRATEGIC OBJECTIVE #2:** *The Board will develop objective technical and scientific information that will be useful to policy makers in Congress and the Administration on issues related to SNF and HLW management and disposal. The Board will communicate such information to Congress and the Secretary in letters, reports, and testimony.*

FY 2018 PERFORMANCE GOAL	BOARD ACTIVITIES
<p><b>PG 2-A:</b> The Board will hold public meetings and develop reports to Congress and the Secretary of Energy, as appropriate, on technical information and issues related to activities undertaken by DOE related to the implementation of the NWPA and relevant amendments to that Act.</p>	<ul style="list-style-type: none"> <li>➤ In December 2017, the Board issued a Report to Congress and the Secretary of Energy on <i>Management and Disposal of DOE Spent Nuclear Fuel</i>. The Board Chair and staff provided briefings on the Report to DOE, members of Congress and congressional staff, and several of the citizen advisory boards for DOE facilities.</li> <li>➤ In December 2017, the Board issued fact sheets summarizing information on SNF management at the four sites reviewed in its report on DOE SNF:               <ul style="list-style-type: none"> <li>○ <a href="#">Fort St. Vrain Fact Sheet</a></li> <li>○ <a href="#">Savannah River Site Fact Sheet</a></li> <li>○ <a href="#">Idaho National Laboratory Fact Sheet</a></li> <li>○ <a href="#">Hanford Fact Sheet</a></li> </ul> </li> <li>➤ The Board is preparing reports that are expected to be issued in FY 2019 on the following:               <ul style="list-style-type: none"> <li>○ the technical issues DOE will need to address before it can begin the implementation of an integrated program for the nationwide transport of SNF and HLW</li> <li>○ the Board’s activities from January 1, 2016, through June 30, 2018</li> <li>○ the system-wide implications of using large canisters for the dry storage of SNF</li> </ul> </li> </ul>

**STRATEGIC OBJECTIVE #3:** *The Board will compile information and report to Congress and the Secretary on its findings, conclusions, and recommendations from experience gained over more than 25 years of reviewing the U.S. nuclear waste management and disposal program and from observing waste management efforts in other countries.*

FY 2018 PERFORMANCE GOAL	BOARD ACTIVITIES
<p><b>PG 3-A:</b> The Board will consider reviewing activities related to DOE’s efforts to develop a plan for monitoring repository performance and for retrieval of nuclear waste in the event this were to prove necessary prior to repository closure.</p>	<ul style="list-style-type: none"> <li>➤ On March 27, 2018, the Board held a public meeting in Washington, D.C., on issues associated with operational and performance-confirmation monitoring of geologic repositories and the retrievability of emplaced HLW and SNF: <a href="#">Spring 2018 meeting</a></li> </ul>
<p><b>PG 3-B:</b> In FYs 2018 through 2019, the Board will continue to monitor activities in other countries related to programs for the management and disposal of SNF and HLW. The Board also intends to update the information on its website, periodically, to record changes and progress made in the development of nuclear waste management programs in the U.S. and other countries.</p>	<ul style="list-style-type: none"> <li>➤ The Board invited several presenters from other countries to participate in its March 27, 2018, meeting on performance confirmation monitoring of geologic repositories and retrievability of emplaced HLW and SNF.</li> <li>➤ In May 2018, the Board issued a follow-up report with information from those presentations and Board observations from the meeting: <a href="#">Board report on monitoring and retrievability</a></li> </ul>

**BOARD PERFORMANCE IN FY 2018 – MANAGEMENT GOALS** – To enhance the effectiveness and efficiency of Board activities supporting its Strategic Objectives and Performance Goals, the Board identified the Management Goals (MGs) in the table below for FYs 2018 through 2019. The MGs were included in the Board’s Budget Request Submittal for FY 2019. The associated activities undertaken to accomplish the MGs are opposite their respective MGs in the table.

FY 2018 MANAGEMENT GOAL	BOARD ACTIVITIES
<p><b>MG-1:</b> The Board will implement actions to optimize organizational efficiency and accountability and maximize employee performance.</p>	<ul style="list-style-type: none"> <li>➤ In FY 2018, the Board: <ul style="list-style-type: none"> <li>○ proactively evaluated its performance to identify opportunities for improvement;</li> <li>○ focused on where the needs are greatest to ensure efficient operations;</li> <li>○ evaluated how the agency can achieve the best results.</li> </ul> </li> </ul>

FY 2018 MANAGEMENT GOAL (CONT'D)	BOARD ACTIVITIES (CONT'D)
<p><b>MG-2:</b> The Board will identify risks to the agency and develop and implement integrated strategies for mitigating risk through proactive management and allocation of resources.</p>	<p>➤ On an annual basis, the Board strategically assesses operational constraints that may affect its ability to achieve its mission and focuses attention and resources on addressing and mitigating the constraints.</p>
<p><b>MG-3:</b> The Board will maintain and enhance effective communications among Board members who are geographically dispersed. The Board will also facilitate communication between the Board members 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.</p>	<p>➤ In FY 2018, the Board expanded its use of an electronic "drop box" to facilitate Board member access to source materials and draft Board documents. The drop box has improved access to the documents and reduced the need for multiple paper copies. The Board continues to hold monthly teleconferences.</p>
<p><b>MG-4:</b> The Board will continue webcasting its meetings and making available archived video recordings of the webcasts on its website.</p>	<p>➤ In FY 2018, the Board continued to webcast its public meetings. The webcasts are archived and available on the Board's website: <a href="http://www.nwtrb.gov">www.nwtrb.gov</a>.</p>
<p><b>MG-5:</b> The Board will endeavor to conduct its ongoing review in the most cost-effective means possible.</p>	<p>➤ When possible, the Board reduces costs and increases public participation by holding meetings in the vicinity of DOE facilities. The Board continued this practice in FY 2018 by holding a public meeting in Idaho Falls, Idaho, near the Idaho National Laboratory site and DOE offices. To reduce costs and lessen the carbon footprint, the Board has significantly reduced the number of printed copies of its internal documents and Board reports. Board reports are available on the Board's website.</p>

FY 2018 MANAGEMENT GOAL (CONT'D)	BOARD ACTIVITIES (CONT'D)
<p><b><u>MG-6:</u></b> The Board will take action to ensure that institutional memory and expertise are passed on to succeeding Board members and staff to optimize the utility of the Board's work to Congress, the Secretary of Energy, and interested members of the public. When appropriate, the Board may also provide opportunities for one or more undergraduates or graduate students in disciplines related to the Board's activities to support the Board's technical staff in performing information research and technical analysis.</p>	<p>➤ In FY 2018, updates and briefings on the Board's mission, the Board's work-in-progress, and plans for future review activities were provided to Board members and staff at Board Business meetings held in conjunction with the Board's public meetings. Time sensitive information is provided to the Board as soon as possible upon receipt.</p>
<p><b><u>MG-7:</u></b> The Board will update its technical resources and capabilities, as necessary, to maintain and improve the core competencies of its professional staff. The Board will develop and implement initiatives to identify, recruit when necessary, and retain highly qualified professionals with the expertise and related knowledge needed to support the work of the Board members and help the Board achieve its Strategic Objectives and Performance Goals.</p>	<p>➤ In FY 2018, the Board continued to increase the efficiency of its technological resources and capabilities by providing training on relevant software. On an ongoing basis, key IT systems and programs are updated to take advantage of recent technological advances. The Board is currently moving to maximize the use of electronic resources to reduce its reliance on its physical library system.</p>

## **U.S. 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, \$3,600,000 to be derived from the Nuclear Waste Fund and to remain available until September 30, 2021.

## **DETAILS OF BUDGET JUSTIFICATION FOR FY 2020**

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 and scientific information and advice to Congress and the Secretary, the Board requests \$3,600,000, which is the same amount as the agency's appropriation for each fiscal year from FY 2016 through FY 2019. The Board's Budget Request reflects its continuing commitment to efficient and cost-effective budgeting and management practices even as costs rise.

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

### **OBJECT CLASS 11.0, SALARIES: \$2,165,000**

The estimate for this object class includes funding for 11 part-time Board members, one Senior Executive Service (SES) member, senior professional staff, and General Schedule support staff. The 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 SES acts as the chief operating officer for the Board and the senior professional staff members support the work of the Board members in evaluating the technical and scientific validity of DOE activities related to the management and disposal of SNF and HLW. 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: \$566,000**

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

### **OBJECT CLASS 21.1, TRAVEL AND TRANSPORTATION: \$125,000**

The estimate for this object class includes travel costs for Board members, staff, and consultants who are required to travel to Board meetings, fact-finding 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 for FYs 2019 through 2020.

### **OBJECT CLASS 23.0, RENTAL PAYMENTS TO THE GENERAL SERVICES ADMINISTRATION: \$264,000**

The estimate for this object class represents the amount the Board will pay to the General Services Administration Public Buildings Service under its occupancy agreement for rental of the Board's office space in Arlington, VA.

### **OBJECT CLASS 23.3, COMMUNICATION, UTILITIES, MISCELLANEOUS: \$50,000**

The estimate for this object class represents costs for long-distance and local telephone service, postage, local courier services, video teleconferencing, webcasting support, internet, mailing services, and partnering with the General Services Administration to transition to Enterprise Infrastructure Systems (EIS) for network modernization.

**OBJECT CLASS 24.0, PRINTING AND REPRODUCTION: \$20,000**

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*. In keeping with the federal government's efforts to increase efficiency, the Board makes all its reports, publications, and correspondence available for download from its website. Hard copies of the reports are only provided on a limited distribution and when requested.

**OBJECT CLASS 25.0, CONSULTANTS: \$80,000**

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 the Board's enabling statute. Requested funding for this object class category also includes estimates for creative consultants to assist the Board in developing and implementing methods that will increase public on-line access to its deliberations, informational resources, and other Board matters.

**OBJECT CLASS 25.1/2, CONTRACTUAL SERVICES - OTHER: \$85,000**

The estimate for this object class includes contractual costs associated with accomplishing the Board's mission. Estimated commercial contract costs include meeting-room rentals, stenography and audio-visual support services, webcasting, and video recording equipment rentals for public 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 editing and production.

**OBJECT CLASS 25.3, CONTRACTUAL SERVICES - FEDERAL: \$200,000**

The estimate for the object class includes funding for administrative support services provided by other federal agencies, including payroll, accounting services, and human resource services related to managing official personnel folders, conducting personnel actions, and initiating personnel clearances, as well as legal support services from the General Services Administration. It also includes security background investigations through the Office of Personnel Management, and other support provided through interagency agreements. The Board's enabling legislation authorizes the procurement of necessary administrative services from the General Service Administration on a reimbursable basis. This estimate includes an increase in the costs of payroll and financial reporting services and \$5,300 in building security fees levied by the Department of Homeland Security Federal Protective Service as part of their new method for assessing basic building security fees beginning FY 2020.

**OBJECT CLASS 26.0, SUPPLIES AND MATERIALS: \$25,000**

This estimate includes anticipated expenses for office supplies, subscriptions to technical publications and on-line academic journals and research databases, meeting supplies, and off-the-shelf technical reports and studies.

**OBJECT CLASS 31.0, EQUIPMENT: \$20,000**

The estimate for this object class includes costs to maintain IT and other electronic equipment, including computer hardware and software. The object class includes funding for the continuation of upgrades and ongoing maintenance to the Board's IT and physical security equipment, continuity of operations (COOP), support of E-Gov telecommuting efforts, and technical support for the management and ongoing maintenance and upgrades of the Board's cybersecurity initiatives.

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**U.S. NUCLEAR WASTE TECHNICAL REVIEW BOARD**

## FY 2020 Budget Request by Object Class

(Figures Rounded in Thousands of Dollars)

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Object Class Code	Object Class Description	FY 2018 Actual	FY 2019 Actual	FY 2020 Request
11.0	Salaries	\$2,036	\$2,075	\$2,165
12.0	Benefits	509	519	566
21.1	Travel and Transportation	250	250	125
23.0	Rent	240	261	264
23.3	Communications and Utilities	40	40	50
24.0	Printing and Reproduction	40	20	20
25.0	Consultants	50	50	80
25.1/2	Contractual Services - Other	255	205	85
25.3	Contractual Services - Federal	80	80	200
26.0	Supplies and Materials	50	50	25
31.0	Equipment	50	50	20
<b>Total Budgetary Request</b>		<b>\$3,600</b>	<b>\$3,600</b>	<b>\$3,600</b>
Total Full Time Equivalent Employees		14	14	16