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Appropriations for FY2003: Energy and Water Development

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Summary

The Energy and Water Development appropriations bill includes funding for civil works projects of the Army Corps of Engineers, the Department of the Interior's Bureau of Reclamation (BOR), most of the Department of Energy (DOE), and a number of independent agencies. The Bush Administration requested $25.5 billion for these programs for FY2003 compared with $25.2 billion appropriated in FY2002.

The House Appropriations Committee recommended a bill, H.R. 5431, with $26.0 billion on September 5, 2002. On July 24, 2002, the Senate Appropriations Committee had reported out its own bill, S. 2784, providing $26.3 billion in funding. However, neither of these bills reached the floor. Before adjourning sine die, the 107th Congress passed H.J.Res. 124 (P.L. 107-294), making continuing appropriations for FY2003 for Energy and Water, and other programs, through January 11, 2003.

The 108th Congress extended temporary funding until February 20 (H.J.Res. 1, P.L. 108-2, and H.J.Res. 18, P.L. 108-5), and on January 23 the Senate passed an omnibus appropriations resolution (H.J.Res. 2), including all 11 unpassed appropriations bills for the rest of FY2003. After a House-Senate conference the omnibus measure passed both Houses February 12 and was signed by the President February 20, 2003 (P.L. 108-7). The final bill funded Energy and Water Development programs at $26.7 billion (less an across-the-board reduction of 0.65%, approximately $173 million).

Key issues involving Energy and Water Development appropriations programs included:

- Matching budget request amounts with ongoing Corps construction schedules ("full capability funding") and congressional priorities;
- Funding for major water/ecosystem restoration initiatives such as Florida Everglades and California "Bay-Delta";
- Increased funding for DOE's civilian nuclear waste management program as the Department prepares a construction permit application for a waste repository under Nevada's Yucca Mountain;
- A proposed $1.1 billion Environmental Management Cleanup Reform account in DOE, focused on radioactive sites where environmental regulators would allow alternative cleanup methods; and
- DOE's "Nuclear Power 2010" initiative, to "identify the technical, institutional and regulatory barriers to the deployment of new nuclear power plants by 2010."

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Abstract

Appropriations are one part of a complex federal budget process that includes budget resolutions, appropriations (regular, supplemental, and continuing) bills, rescissions, and budget reconciliation bills. The process begins with the President's budget request and is bounded by the rules of the House and Senate, the Congressional Budget and Impoundment Control Act of 1974 (as amended), the Budget Enforcement Act of 1990, and current program authorizations.

This report is a guide to one of the 13 regular appropriations bills that Congress passes each year. It is designed to supplement the information provided by the House and Senate Appropriations Subcommittees on Energy and Water. It summarizes the current legislative status of the bill, its scope, major issues, funding levels, and related legislative activity. The report lists the key CRS staff relevant to the issues covered and related CRS products.

NOTE: A Web version of this document with active links is available to congressional staff at: http://www.crs.gov/products/appropriations/apppage.shtml.

Most Recent Developments

On February 20 the President signed an omnibus appropriations resolution for the rest of FY2003 (H.J.Res. 2, P.L. 108-7) that included all 11 appropriations bills that had failed to pass during the 107th Congress. The final measure included funding for Energy and Water Development programs totaling $26.5 billion, compared to the Bush Administration request of $26.2 billion.

Status

Table 1. Status of Energy and Water Appropriations, FY2003

Subcommittee Markup		House Report	House Passage*	Senate Report	Senate Passage*	Conf. Report	Conference Report Approval		Public Law
House	Senate						House	Senate	
7/10/02	7/22/02	H.Rept. 107-681 H.R. 5431	H.J.Res. 2 1/8/03	S.Rept. 107-220 S. 2784	H.J.Res. 2 1/23/03	H.Rept. 108-10	2/12/03	2/12/03	2/20/03 P.L.108-7

*H.R. 5431 and S. 2784 did not reach the floor during the 107th Congress.

Overview

The Energy and Water Development bill includes funding for civil works projects of the Army Corps of Engineers, the Department of the Interior's Bureau of Reclamation (BOR), most of the Department of Energy (DOE), and a number of independent agencies, including the Nuclear Regulatory Commission (NRC) and the Appalachian Regional Commission (ARC). The Administration's request was $26.2 billion for these programs for FY2003, compared with $25.8 billion appropriated for FY2002.

The Energy and Water bill was one of 11 appropriations bills that did not pass in the 107th Congress, although both the House and Senate Appropriations Committees reported their versions of the bill. Funding for these programs was provided by a series of continuing resolutions, including two in the 108th Congress (H.J.Res. 1, P.L. 108-2, covering the period through January 31, 2003, and H.J.Res. 18, P.L. 108-5, through February 20). In the meantime the Senate took up H.J.Res. 2, which passed the House January 8, adopting an amendment in the nature of a substitute by Appropriations Chairman Stevens to fund programs in all 11 unpassed appropriations bills for the remainder of FY2003. After numerous amendments were considered on the Senate floor, the bill passed the Senate January 23. After a House-Senate conference the omnibus measure passed both Houses February 12 and was signed by the President February 20.

The Energy and Water programs are funded in Division D of H.J.Res. 2. In this CRS report, funding levels of individual programs are given as requested by the Administration, as recommended by the House and Senate Appropriations Committees in the 107th Congress, as passed in H.J.Res. 2 by the Senate January 15, and as signed into law February 20. The appropriations tables include all these figures except last year's Senate Appropriations Committee figures. H.J.Res. 2 as passed by the Senate contained an offset across-the-board rescission of 2.9%, and the final measure provides for an across-the-board cut of 0.65%. These across-the-board cuts are not reflected in the appropriations table figures or in the figures cited in the text of the report.

For the Corps of Engineers, the Administration requested $4.17 billion in FY2003, about $450 million less than the amount appropriated for FY2002. The House Appropriations Committee recommended $4.76 billion, and the Senate recommended $4.55 billion. The final bill funded the civil works of the Corps at $4.63 billion.

The Administration asked for $881 million for FY2003 for the Department of the Interior programs included in the Energy and Water bill—the Bureau of Reclamation and the Central Utah Project. This would have been a decrease of approximately $61 million from the FY2002 funding level. The House recommended $947.5 million for this title, the same as appropriated for FY2002. The Senate approved $956.2 million, and the final bill appropriated $953.5 million.

The request for DOE programs was $20.89 billion, about $928 million more than the previous year. The major activities in the DOE budget are energy research and development, general science, environmental cleanup, and nuclear weapons programs. The House Appropriations Committee recommended $20.68 billion for these programs; the Senate Appropriations Committee recommended $20.93 billion. H.J.Res. 2 as passed by the Senate maintained the Senate figure. The final bill appropriated $20.89 billion. (Funding of DOE's programs for fossil fuels, energy efficiency, and energy statistics is included in the Interior and Related Agencies appropriations bill. The FY2003 net appropriations request for these programs was $1.7 billion.)

The request for funding the independent agencies in Title IV of the bill was $214.4 million, compared with $220.5 million in FY2002. The House bill would have cut this funding to $151.9 million, and the Senate Appropriations Committee recommended $219.7 million. H.J.Res. 2 as passed by the Senate maintained the Senate funding level, and the final bill appropriated $208.0 million.

Table 2. Energy and Water Development Appropriations, FY1996 to FY2003

(budget authority in billions of current dollars*)

FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03 (Req.)
19.3	20.0	21.2	21.2	21.2	23.9	25.2	25.5

*These figures represent current dollars, exclude permanent budget authorities, and reflect rescissions.

Table 2 includes budget totals for energy and water appropriations enacted for FY1996 to FY2002 and the Administration's request for FY2003. Tables 3-7 provide budget details for Title I (Corps of Engineers), Title II (Department of the Interior), Title III (Department of Energy) and Title IV (independent agencies) for FY2002 - FY2003.

Title I: Corps of Engineers

The President's budget request for FY2003 included $4.173 billion for the civil works projects of the U.S. Army Corps of Engineers (Corps), a decrease of $450 million from the total enacted level for FY2002. (The Corps received $4.486 billion via the annual Energy and Water appropriations bill for FY2002. An additional $139 million was appropriated for Site Security/Counter Terrorism in the FY2002 Defense and Emergency Supplemental Appropriations bill, P.L. 107-117.) The House Appropriations Committee recommended funding of $4.76 billion for Corps programs; the Senate included $4.55 billion. The final bill (P.L. 108-7) funded the Corps at $4.63 billion.

The final legislation included appropriations for some of the Corps' controversial projects. The bill authorized and directed the Corps to use $5 million for construction of the emergency outlet from Devils Lake, North Dakota, subject to numerous provisions. One of the provisions was that no funds be used to carry out a feasibility study—a study that a tabled amendment by Senator McCain would have required before appropriations could be spent for outlet construction. The final funding level for the Yazoo Basin's Backwater Pumping Plant was $10 million; previous language had placed funding as high as $15 million, while another tabled amendment by Senator McCain would have reduced funding to $0.25 million. The final appropriations bill contained no language related to the flow regime in the Missouri River, despite attempts by Senator Bond to include language restricting actions by the Fish and Wildlife Service (FWS).

Table 3. Energy and Water Development Appropriations
Title I: Corps of Engineers
(in millions of dollars)

Program	FY2002	FY2003 Request	House H.R. 5431	Senate H.J.Res. 2*	P.L. 108-7*
Investigations & Planning	154.3	102.5	143.7	148.3	135.0
Construction	1,716.0	1,415.6	1,824.0	1,636.6	1,756.0
Flood Control, Mississippi River	346.0	280.7	342.1	346.4	344.6
Operation and Maint.	1,874.8	1,913.8	1,990.3	1,956.2	1,940.2
Regulatory	127.0	144.3	134.0	144.3	139.0
General Expenses	153.0	155.7	154.7	155.7	155.2
FUSRAP	140.0	140.3	150.0	140.3	145.0
Flood/Coastal Emergencies	—	20.2	20.0	20.2	15.0
Total	**4,625.0**	**4,173.0**	**4,760.0**	**4,548.0**	**4,629.9**

*Figures do not include across-the-board recisions: 2.9% in Senate H.J.Res. 2, 0.65% in P.L. 108-7.

Key Policy Issues—Corps of Engineers

Funding for the Corps' civil works program has often been a contentious issue between the Administration and Congress, with final appropriations typically providing more funding than requested, regardless of which political party controls the White House and Congress. For FY2001, for example, Congress added $480 million (12%) to the $4.08 billion requested by the Clinton Administration. Similarly, the FY2002 House bill funded the Corps at almost 15% more than requested by the Bush Administration, and the final act appropriated slightly more than that.

The FY2003 budget followed a similar pattern. The request as presented in February 27, 2002, testimony in the House recommended a cut from current spending: approximately 4% overall, but 30% less for investigation/studies, and 16% less for construction – with virtually no "new starts" in these two accounts during fiscal year 2003. Request priorities continued only projects with Administration support – not congressionally added projects from FY2002 that lacked favorable executive branch review (such as water supply assistance). The Senate Appropriations Committee report (S.Rept. 107-220) noted that four projects accounted for 30% of the Administration's proposed general construction budget.

The budget proposal received considerable media attention in the wake of the March 2002 resignation of the Assistant Secretary of the Army for Civil Works (who sets policy for the Corps' civil activities). The resignation, or dismissal by some accounts, was reportedly over a rift with the White House on the budget proposal. The Senate Committee report noted that the absence of a replacement for the Assistant Secretary resulted in the committee accepting written testimony from the Administration in lieu of an oral statement. The House report did not comment on the resignation *per se*, but both the Senate and House reports expressed displeasure with the relatively low budget request.

Project Construction & Maintenance Backlog

The Administration estimated the current project backlog for ongoing work at $21 billion and used this backlog in part to justify its "no new starts" stance on construction. The Senate Committee countered that the Administration's request would cause the construction backlog to grow from $40 billion to $44 billion and result in a critical maintenance backlog of $884 million (a $182 million increase from FY2002 levels). The House Appropriations Committee noted that "many ongoing construction projects would be negatively impacted" by the budget proposals; it included in its recommendations several new construction projects and studies "in the belief that the water resources development needs of the Nation are growing and cannot be met with just the projects currently underway." P.L. 108-7 funded the Corps at 11% higher than the Administration's request.

Changes in Corps Operation

There are currently two initiatives to change the operation of the civil works (and military programs) of the Army Corps of Engineers: the government-wide President's Management Agenda (PMA) and an Army initiative referred to as the Third Wave. Neither initiative specifically targets the Corps, but both encompass the Corps activities.

The PMA was undertaken by the Bush Administration as part of a movement toward more "entrepreneurial government;" one of the five components of the PMA is a competitive sourcing initiative. The PMA directed executive agencies to competitively source commercial activities in order to produce quality services at a reasonable cost through efficient and effective competition between public and private sources. The Administration mandated for FY2002 and FY2003 the competition of 5% and 10%, respectively, of the commercial positions at agencies, including the Corps.

The Army's Third Wave initiative is broader than the PMA. The Third Wave is searching for ways to not only improve the Army's operations but also focus its energies on its core war-fighting competencies. Under the Third Wave, the Army is reviewing all its commands, including the Corps, to identify how to focus the agency's activities. The Third Wave reviews all positions and functions (i.e., entire areas of responsibilities and missions, such as wetlands regulation) that are not part of the Army's core competencies. Options that can be considered under the Third Wave for non-core functions and positions include competitive sourcing, transfer of responsibilities to other agencies, and divestiture. A significant portion of the Corps' workforce is included in the current early phase of the Third Wave because much of the work performed by the Corps is not considered as essential to the Army's war-fighting competencies.

P.L. 108-7 included language that prohibits the use of funds to study or implement any "plans privatizing, divesting or transferring of any Civil Works missions, functions, or responsibilities" without specific direction by Congress. The continuing resolutions have contained a related provision since H.J.Res. 122 (P.L. 107-240) which went into effect on October 11, 2002.

Proposed "Reforms" of Corps Processes and Procedures

During the 107th Congress, the Corps came under criticism for the way it evaluates and undertakes projects. Although the issue received media attention, it was not directly addressed in consideration of FY2003 appropriations. Legislation proposing changes to the project development and authorization process was introduced in the 107th Congress (*e.g.*, see H.R. 1310 and S. 1987); however, no action was taken.

Some have called for major agency "reforms"; others have called for review of Corps programs and policies. The 106th Congress, in passing the Water Resources Development Act of 2000 (WRDA, P.L. 106-541, Section 216) directed the Corps to contract with the National Academy of Sciences to study the feasibility of establishing an independent review panel for Corps studies. Its July 2002 report recommended that large-scale Corps projects be independently reviewed by experts outside the agency. In response to the criticism, the Corps initiated during FY2002 an additional internal staff review of project justifications by the office of the Assistant Secretary of the Army for Civil Works.

In reporting the FY2002 Energy and Water Development Appropriations bills, the House and Senate Appropriations Committees acknowledged criticism of the Corps; however, both committees generally supported the Corps' efforts to deal with such criticisms. Neither committee addressed reform issues in reporting the bills for FY2003. These issues might be addressed during consideration of a biennial authorization bill for the Corps, the Water Resources Development Act (WRDA). The WRDA expected in 2002 did not pass; a WRDA in 2003 is anticipated. (For more information, see CRS Report RL30928, *Army Corps of Engineers: Reform Issues for the 107th Congress.*)

P.L. 108-7 did not address Corps reform directly; however, it did change authorizations for some activities criticized by those supporting reforms. For example, the authorization for municipal water infrastructure projects in rural Nevada was increased from $25 million to $100 million, and a $25 million authorization for Idaho was added. Municipal infrastructure is an area that has historically been the responsibility of local government, with the federal government providing directed grants and low-interest loans. Prior to 1992, the Corps' involvement in municipal infrastructure was limited to water supply from Corps' reservoirs and was paid for by local project sponsors. The increase in authorizations for municipal infrastructure has drawn criticism not only from taxpayer groups and fiscal conservatives but also from beneficiaries of projects in the Corps' traditional missions who are concerned about dilution of the agency's efforts and funding.

Missouri River Water Flows

The current drought in the Missouri River basin has contributed to the ongoing debate on the operations of the basin's dams. Operations of the mainstem dams of the Missouri River are managed under a Master Manual and annual operating plans. In late January 2003, the Corps published the 2002-2003 Operating Plan. Nonetheless, the flow regime that will be implemented during the nesting season for threatened and endangered species, and during the navigation season that begins April 1, has yet to be finalized. The Corps has proposed two options: a steady flow release and a flow to meet navigation targets. The Fish and Wildlife Service has expressed concerns with both the regimes. The Corps and the FWS have renewed consultation on the 2002-2003 Operating Plan.

The revision of the Master Manual continues to be a contentions issue. The Master Manual has been in a revision process for 14 years. The Master Manual guides the operation of the Missouri River's dams. The timing of water releases affects competing uses of the river such as barge traffic, threatened and endangered species protection, and upstream recreation. In February 2003, a coalition of 10 national and regional conservation organizations filed a suit against the Corps and FWS due to the adverse impacts of current operations on threatened and endangered species. The suit was filed in the U.S. District Court for the District of Columbia.

The Corps and FWS reinitiated formal consultation on the operation of the Missouri River mainstem dam system in December 2002. The reconsultation was initiated to review the

information that the Corps presented in its Supplemental Biological Assessment for the Master Manual, published in January 2003. In this document, the Corps challenged the recommended flow regime presented by the FWS in its November 2000 biological opinion. The FWS had recommended altering dam operations to provide higher springtime water releases to benefit the pallid sturgeon. This change was believed by some to also benefit other threatened and endangered species negatively affected by dam operations. In the Supplemental Biological Opinion, the Corps concluded that the changes proposed by FWS are not warranted at this time and that a research, monitoring, and evaluation program of the pallid sturgeon is needed.

Missouri River management issues have been taken up in appropriations legislation in recent years. After extended debate in both the House and the Senate, Section 116 of the final Energy and Water Development Appropriations bill for FY2002 included Senate language that prohibited the use of funds "to accelerate the schedule to finalize the Record of Decision for the revision of the Missouri River Master Water Control Manual and any associated changes to the Missouri River Annual Operating Plan." The amended provision also directed the Corps to consider views of other federal and non-federal agencies and individuals "to ensure that other congressionally authorized purposes are maintained" in addition to endangered species protection. The provision represented a temporary compromise of an ongoing issue that had led President Clinton to veto the Energy and Water Development appropriations bill for FY2001.

Neither the House nor the Senate Appropriations Committee FY2003 reports mentioned Missouri River operations. Senator Bond offered an amendment to the Interior portion of the Stevens Amendment that would have restricted the use of funds by the FWS to require a steady release flow and to prevent the Corps from relocating bird nests along its banks. On the Senate floor, the amendment (SA186) was modified to a Sense of the Congress provision that encouraged agreement on a flow regime for 2003 among the Member States and Tribes of the Missouri River Basin Association. (The language in the Congressional Record for January 23, 2003, on page S1428 was confusing because the Sense of the Congress language appears alongside part of the FWS language that was expected to be removed. On January 28, the Senate by unanimous consent further modified the amendment to contain only the Sense of the Congress language.) During conference, Bond tried again to include language restricting FWS actions. The final bill included neither the FWS restrictions nor the Sense of the Congress.

Everglades

Implementation of a Comprehensive Everglades Restoration Plan (CERP) was authorized in 2002 by Title VI of WRDA. CERP is one of many efforts to restore the Central and Southern Florida ecosystem. The annual Energy and Water Development Appropriations bill provides funding for the Corps' participation in these efforts. Funding for the participation of the DOI agencies, such as the National Park Service and Fish and Wildlife Service, is part of the annual Department of the Interior and Related Agencies Appropriations bill.

The President's request for FY2003 included a total of $151 million for Corps' construction projects in the region. The FY2003 request for the Kissimmee River restoration and the Everglades and South Florida ecosystem restoration was $23.7 million and $19.5 million, respectively. For these two projects, the House and Senate Appropriations Committees, and the final bill, P. L. 108-7, provided the same funding level as requested. For the Central and Southern Florida project, the Administration requested $108 million (which included $37 million for CERP activities). The final appropriations bill funded that project at $90 million. The Senate and Stevens reports explained that the reduction resulted from questions raised about the implementation of the project, specifically that it was too heavily weighted in favor of commercial development of water supplies.

The final omnibus appropriations bill included language in the Department of the Interior portion that not only funded Everglades restoration activities performed by Interior agencies but also authorized the Corps to implement a controversial plan know as Alternative 6D. This plan is being undertaken as part of the Modified Water Delivery Project. This project seeks to improve water deliveries to Everglades National Park and, to the extent possible, restore the natural hydrological conditions within the park. Implementation of the Modified Water Delivery Project will increase the flooding risk for an area known as the 8.5 Square Mile Area. The Alternative 6D Plan is expected to control flooding in much of this area through flood control measures and land acquisitions, which will require the acquisition of 77 residences. More information on Interior agencies activities and appropriations for Everglades restoration is available in CRS Report RL31306, *Appropriations for FY2003: Interior and Related Agencies*. More information on the Modified Water Delivery Project is available in CRS Report RS21331, *Everglades Restoration: Modified Water Deliveries Project*.

Title II: Department of the Interior

For the Department of the Interior, the Energy and Water Development bill provides funding for the Bureau of Reclamation (BOR) and the Central Utah Project Completion Account. For FY2003 the President requested $36.2 million for the Central Utah Project Completion Account and $844.9 million for BOR (gross current authority; the net current authority request was $805.4). The total Title II request for FY2003 was $881.2 million. The total appropriation for these programs in FY2002, according to congressional sources, was $951.5 million: $915.3 million for BOR (gross current authority), and $36.2 million for the Central Utah Project Completion Account.

The House Appropriations Committee recommended $947.5 million for this title, the same as appropriated for FY2002 prior to supplemental appropriations of $7 million contained in P.L. 107-206. The Senate approved $956.2 million in its version of H.J.Res. 2, and the final bill, P.L. 108-7, appropriated $953.5 million.

Table 4. Energy and Water Development Appropriations
Title II: Central Utah Project Completion Account
(in millions of dollars)

Program	FY2002	FY2003 Request	House H.R. 5431	Senate[3] H.J.Res. 2	P.L.[3] 108-7
Central Utah project construction and oversight	—	25.0	—	25.0[2]	23.6
Mitigation and conservation activities[1]	—	11.0	—	11.3	11.3
Total, Central Utah Project	**36.2**	**36.2**	**36.2**	**36.2**	**36.2**

Columns may not total because of rounding.

[1] Includes funds available for Utah Reclamation Mitigation and Conservation Commission activities and $5 million for the contribution authorized by §402(b)(2) of the Central Utah Project Completion Act (P.L. 102-575). Totals do not reflect permanent appropriations of approximately $1.2 million.

[2] Includes $1.33 million for program administration and oversight; $23.64 million for Central Utah Project construction.

[3] Figures do not include across-the-board recisions: 2.9% in Senate H.J.Res. 2, 0.65% in P.L. 108-7.

Table 5. Energy and Water Development Appropriations
Title II: Bureau of Reclamation
(in millions of dollars)

Program	FY2002	FY2003 Request	House H.R. 5431	Senate[3] H.J.Res. 2	P.L.[3] 108-7
Water and Related Resources	799.8[1]	726.2	807.5	816.2	813.5
Loan Program Account	7.5	—	—	—	—
Policy & Admin.	53.0	54.9	54.9	54.9	54.9
Central Valley Project (CVP) Restoration Fund	55.0	48.9	48.9	48.9	48.9
California Bay-Delta (CALFED)	—	15.0	—	—	—
Gross Current Authority	**915.3**	**844.9**	**911.3**	**919.1**	**917.3**
CVP Restoration Fund Offset[2]	44.9	39.6	—	—	—
Net Current Authority	**863.4**	**805.4**	**—**	**—**	**—**

[1]Includes $30.3 million from Site Security/Counter Terrorism appropriated in the FY2002 Defense and Emergency Supplemental Appropriation Act, P.L. 107-117.

[2] In presenting its budget justifications, the Bureau includes an "offset" of approximately $39.6 million for the CVP restoration fund, resulting in Net Current Authority of $805.4 million. (Figures may not total due to rounding.)

[3] Figures do not include across-the-board recissions: 2.9% in Senate H.J.Res. 2, 0.65% in P.L. 108-7.

Background on Reclamation Policy

Most of the large dams and water diversion structures in the West were built by, or with the assistance of, the Bureau of Reclamation (BOR). Whereas the Corps built hundreds of flood control and navigation projects, BOR's mission was to develop water supplies and to reclaim arid lands in the West, primarily for irrigation. Today, BOR manages more than 600 dams in 17 western states, providing water to approximately 10 million acres of farmland and 31 million people. BOR is the largest supplier of water in the 17 western states and the second largest hydroelectric power producer in the nation. BOR facilities also provide substantial flood control, recreation, and fish and wildlife benefits.

Bureau of Reclamation Budget In Brief

For FY2003, the Administration requested a total of $844.9 million in gross current authority for BOR. This request was $70.4 million less than BOR's appropriated funding of $915.3 million in gross authority for FY2002. The FY2003 request as presented included a $39.6 million "offset" for the Central Valley Project (CVP) Restoration Fund, yielding a "net" current authority of $805.4 million.

BOR's single largest account, Water and Related Resources, encompasses the agency's traditional programs and projects, including operations and maintenance, the Dam Safety Program, Water and Energy Management Development, and Fish and Wildlife Management and Development, among others. For this account in FY2003, BOR requested $726.2 million, $36.3 million less

than appropriated in the regular annual appropriations for FY2002 and $73.6 million less than the total appropriations. (Total BOR FY2002 funding for this account included $30.3 million for site security and counterterrorism appropriated in the FY2002 Defense and Emergency Supplemental Appropriations Act, P.L. 107-117, and an additional $7 million in supplemental appropriations provided in P.L. 107-206). The House Appropriations Committee recommended $807.5 million for the Water and Related Resources Account, while the Senate approved $816.2 million in its version of H.J.Res. 2. Conferees agreed on $813.5 million, $13.7 million more than the total appropriated for FY2002, in the final FY2003 bill, P.L. 108-7.

Key Policy Issues – Bureau of Reclamation

CALFED

Funds have not been appropriated for the California Bay-Delta Restoration Program (Bay-Delta, or CALFED) account since FY2000, when the authorization for appropriations expired. However, funds were provided for FY2002 for some activities that support the CALFED program. The Administration for FY2003 requested $15 million for the program, for the Environmental Water Account and costs associated with administrative support. Neither the House nor the Senate bill provided funding directly for the CALFED account; however, the Senate recommended $30 million for activities that support the goals of the program in funding for the Central Valley Project (CVP) in the Water and Related Resources account, and the House recommended $2 million in the same account to support local work to accelerate investigations associated with determining the feasibility of constructing Sites Reservoir. (For information on the status of authorization bills, see CRS Issue Brief 10019, *Western Water Resource Issues*.)

The final FY2003 bill provided $23 million for CVP activities that support the goals of the CALFED program within the Water and Related Resources Account instead of the $30 million proposed by the Senate. Several specific activities were identified in the conference agreement, including $1.75 million for investigations of storage opportunities in the Upper San Joaquin watershed (Friant Division); $9 million for the Environmental Water Account (under Miscellaneous Project Programs); $1.5 million to continue planning activities related to the Sites Reservoir (Sacramento River Division); and $2.5 million for evaluation of potential impacts of raising Shasta Dam (Shasta Division). Section 215 of the bill specifically authorizes the Secretary, “in carrying out CALFED-related activities,” to begin feasibility studies for Sites Reservoir, enlargement of Los Vaqueros Reservoir, and an Upper San Joaquin Storage project.

Other Issues

BOR requested $28.4 million for continued heightened safety and security efforts at BOR facilities. This request included $26.6 million specifically for counterterrorism measures, including guards and surveillance and equipment to provide increased security for the general public, BOR employees and facilities (including rehabilitation), and information technology security. Both the House and Senate recommended $28.4 million in funding for FY2003, the same as the President’s request, and this amount was appropriated in the final bill. (For more information on terrorism and security issues involving the water infrastructure sector, see CRS Report RS21026: *Terrorism and Security Issues Facing the Water Infrastructure Sector*, CRS Report by Claudia Copeland and Betsy A. Cody, updated September 4, 2002).

Title III: Department of Energy

The Energy and Water Development bill includes funding for most of DOE's programs. Major DOE activities in the bill include research and development on renewable energy and nuclear power, general science, environmental cleanup, and nuclear weapons programs. The Administration's FY2003 request for DOE programs in the Energy and Water bill is $20.53 billion, about $650 million more than the amount appropriated for FY2002. (The FY2003 appropriations request for DOE's programs for fossil fuels, energy efficiency, the Strategic Petroleum Reserve, and energy statistics, included in the Interior and Related Agencies appropriations bill, was $1.8 billion. For details, see CRS Report RL31306, *Appropriations for FY2003: Interior and Related Agencies*.)

The House Appropriations Committee recommendation for these programs was $147 million over the Administration's request, $800 million over the FY2002 appropriation. The Senate Appropriations Committee bill included funding of $20.96 billion, $430 million greater than the request. H.J.Res. 2 as passed by the Senate included the same figure as the Senate bill. The final bill appropriated $20.89 billion.

Table 6. Energy and Water Development Appropriations
Title III: Department of Energy
(in millions of dollars)

Program	FY2002	FY2003 Request	House H.R. 5431	Senate H.J.Res. 2	P.L. 108-7
Energy Supply R&D					
Solar and Renewable	396.0	407.0	396.0	448.1	422.3
Nuclear Energy	250.5	249.8	213.7	324.1	261.7
Other	38.3	37.1	26.2	43.1	22.7
Adjustments	(18.1)		(2.0)	—	—
Total, Energy Supply	666.7	693.9	633.9	815.3	701.5
Uranium Facilities Maintenance & Remediation	418.4	382.2	382.2	471.2	456.5
General Science					
High Energy Physics	716.1	725.0	725.0	730.0	727.0
Nuclear Physics	380.5	382.4	382.4	387.4	384.4
Basic Energy Sciences	1,003.7	1,020.0	1,000.0	1,044.6	1,030.0
Bio. & Env. R&D	527.4	504.2	504.2	531.2	530.0
Fusion	248.5	257.3	248.5	259.3	250.0
Advanced Scientific Computing	158.1	169.6	174.6	169.6	172.6
Other	216.5	225.7	235.6	226.7	236.3
Adjustments	(17.7)	(4.4)	(18.6)	(19.4)	(24.4)
Total, General Science	3,233.1	3,279.5	3,270.0	3,329.5	3,305.9
Non-Defense Environmental Management	236.4	166.0	213.3	176.0	215.1

Program	FY2002	FY2003 Request	House H.R. 5431	Senate H.J.Res. 2	P.L. 108-7
National Nuclear Security Administration (NNSA)					
Weapons	5,560.2	5,867.0	5,770.0	6,109.0	5,954.2
Nuclear Nonproliferation	1,029.6	1,113.6	1,170.0	1,115.6	1,113.6
Naval Reactors	688.0	706.8	706.8	706.8	706.8
Office of Administrator	312.6	335.9	261.9	335.9	330.9
Total, NNSA	7,590.5	8,023.3	7,900.0	8,267.3	8,105.6
Defense Activities **Defense Environmental Management**					
Environ. Restoration	5,242.8	4,544.1	4,543.7	5,370.5	5,470.2
Environ. Mgmt. Cleanup Reform		800.0	1,100.0	—	—
Defense Facilities Closure Projects	1,092.9	1,091.3	1,091.3	1,125.3	1,138.3
Environ. Restoration Privatization	153.5	158.4	158.4	158.4	158.4
Total, Defense Env. Man.	6,489.2	6,593.8	6,893.4	6,654.3	6,766.9
Other Defense Activities	547.5	468.7	485.1	537.7	546.6
Defense Nuclear Waste	280.0	315.0	315.0	280.0	315.0
Total, Defense Activities	14,907.2	15,400.9	15,601.9	15,739.2	15,734.0
Departmental Admin. (net)	73.0	161.7	128.7	97.7	87.4
Office of Inspector General	32.4	37.7	37.7	37.7	37.7
Power Marketing Administrations (PMA's)					
Southeastern	4.9	4.5	4.5	4.5	4.5
Southwestern	28.0	27.4	27.4	27.4	27.4
Western	171.9	162.8	162.8	168.9	168.9
Falcon & Armistad O&M	2.7	2.7	2.7	2.7	2.7
Total, PMA's	207.5	197.4	197.4	203.5	203.5
FERC (revenues)	184.1 (184.1)	192.0 (192.0)	192.0 (192.0)	192.0 (192.0)	192.0 (192.0)
Civilian Nuclear Waste	95.0	209.7	209.7	56.0	145.0
Total, Title III	**19,869.8**	**20,528.9**	**20,675.9**	**20,925.8**	**20,886.6**

Figures do not include across-the-board recisions: 2.9% in Senate H.J.Res. 2, 0.65% in P.L. 108-7.

Key Policy Issues—Department of Energy

Renewable Energy

The FY2003 request for DOE's Renewable Energy Program seeks "to meet the growing need for clean and affordable energy," according to the Appendix to the U.S. Government's FY2003 Budget (p. 397). In accordance with this policy, DOE proposed to increase solar and renewables funding under DOE's Office of Energy Efficiency and Renewable Energy (EERE) from $396.0 million in FY2002 to $407.0 million in FY2003 (excluding funding for programs under the Office of Science).

In the 107th Congress, the Senate Appropriations Committee recommended $448.1 million (excluding $15.0 million in prior year balances) for the Renewable Energy Program. This is $41.1 million, or 13%, more than the request. This includes $14.0 million more for Biomass/Biofuels, $10.5 million more for Geothermal, $6.0 million more for Wind, $5.1 million more for Hydrogen, $4.1 million more for Concentrating Solar Power, and $4.0 million more for Program Support.

In contrast, the House Appropriations Committee sought $396.0 million for the Renewable Energy Program. This was the same amount, not accounting for inflation, as the FY2002 appropriation, and it was $11 million, or 3%, less than the Administration's request.

The Senate report found that DOE has not adequately implemented "congressionally-directed activities" that were specified in the previous year's conference report. The House report also expressed concern about DOE's "slow pace in executing projects" directed in the previous year's appropriation bill. Additionally, the House report aimed to "renew" its previous year's direction to DOE to provide Congress with "quantitative measures that can be used to evaluate the potential costs and benefits of various renewable energy technologies." The House found that DOE failed to meet the previous request for this information and, thus, "had no objective basis for supporting the changes in research emphasis proposed in the fiscal year 2003 budget request."

In the 108th Congress, the Senate Appropriations Committee's recommendations in the 107th Congress totaling $448.1 million (excluding $15.0 million in prior year balances) were adopted into the Senate-passed version of H.J.Res. 2. The Conference Committee approved $422.3 million (excluding $10.0 million from prior year balances) for DOE's Renewable Energy Program. Relative to the request, the final bill provides $15.3 million, or 4%, more for the Program. Compared to FY2002, it provides $26.3 million, or 7%, more (not adjusting for inflation). This includes $22.0 million more for Electric/Storage, $9.0 million more for Hydrogen, $3.0 million more for Wind, and $2.0 million more for Renewable American Indian Resources. It also includes $3.2 million less for Program Direction and $3.0 million less for Biomass/Biofuels.

Nuclear Energy

P.L. 108-7 provides $261.7 million for nuclear energy programs in FY2003, about $12 million above the FY2002 level and the Administration request. The omnibus bill includes funding for an initiative to encourage construction of new commercial reactors by 2010 ("Nuclear Power 2010") and additional funding for advanced ("Generation IV") reactor designs that could be ready for deployment after 2010. Funding is also provided for an Advanced Fuel Cycle Initiative to develop spent fuel reprocessing and treatment technologies, and the Nuclear Energy Research Initiative for innovative nuclear research.

"Nuclear energy is the only expandable, large-scale electricity source that avoids air emissions and meets the energy demands of a growing, modern economy," according to the DOE FY2003 budget justification. However, opponents have criticized DOE's nuclear research program as

providing wasteful subsidies to an industry that they believe should be phased out as unacceptably hazardous and economically uncompetitive.

The House Appropriations Committee in the 107th Congress recommended $213.7 million for nuclear energy programs, a decrease of $36.1 million from the Administration request. However, the reduction would have come entirely from transferring funds for decommissioning the Fast Flux Test Facility (FFTF) from nuclear energy to the environmental management program. The Senate Appropriations Committee recommended $324.1 million, including FFTF and the Advanced Accelerator Applications program, previously funded elsewhere in the energy and water bill. The final bill includes the accelerator activities but transfers FFTF to environmental management.

The budget request sought $46.5 million for nuclear energy technologies, which included $38.5 million for Nuclear Power 2010 and $8.0 million for Generation IV advanced reactor technologies. The House Appropriations Committee recommended cutting the nuclear energy technologies request to $41.5 million so that $5 million could be shifted to the nuclear energy plant optimization program (NEPO), which the Administration had proposed to terminate. The House panel also called for $5 million of the nuclear energy technologies funding to go toward pursuing the advanced nuclear reactor and fuel-cycle recommendations of a joint U.S.-Russian task force. The Senate voted to boost the nuclear energy technologies request to $48.5 million, and the final omnibus bill provides $45 million.

According to the DOE budget justification, the Nuclear Power 2010 program, which received a $30.5 million increase over FY2002, will "identify the technical, institutional and regulatory barriers to the deployment of new nuclear power plants by 2010." The program seeks to deploy both a water-cooled reactor (similar to most existing commercial plants) and a gas-cooled reactor. The current phase of the initiative would include site approval, reactor design certification, license applications, detailed design work, and development of improved construction techniques. DOE announced it would seek proposals for joint DOE/industry teams in which DOE would pay up to half the cost of these activities.

DOE's request for Generation IV technologies was double the FY2002 level. A variety of concepts are under consideration, according to the budget justification, including reactors fueled by plutonium recovered through reprocessing of spent nuclear fuel. The Administration's *National Energy Policy* report contends that plutonium recovery could reduce the long-term environmental impact of nuclear waste disposal and increase domestic energy supplies. However, opponents contend that the separation of plutonium from spent fuel poses unacceptable environmental risks and undermines U.S. policy on nuclear weapons proliferation.

DOE requested $18 million to study pyroprocessing technology and for electrometallurgical treatment of spent fuel from the Experimental Breeder Reactor II (EBR-II) in Idaho. No funding was requested for waste transmutation, which involves bombarding nuclear waste with neutrons from a fast reactor or particle accelerator to convert long-lived radioactive isotopes into radioisotopes that decay more quickly. Because those programs involve plutonium separation, they are generally opposed by nuclear nonproliferation groups. DOE announced July 17, 2002, that work on advanced nuclear reactor and reprocessing technologies would be centered at the Idaho National Engineering and Environmental Laboratory (INEEL), which would be placed under the control of the DOE Office of Nuclear Energy, Science, and Technology.

The Senate proposed to boost DOE's advanced nuclear fuel cycle activities to $77.9 million, including the requested $18 million for EBR-II fuel treatment. According to the Senate Appropriations Committee report, "This program subsumes the Advanced Accelerator Applications program and its activities and will focus on the development of advanced fuel

cycles, recycle or reprocessing of spent fuel, and transmutation technologies." The House panel also approved the $18 million request for EBR-II but, aside from the $5 million related to the joint U.S.-Russia task force (noted above), recommended no additional FY2003 funding for reprocessing and transmutation. The final omnibus bill provides $58 million for the renamed Advanced Fuel Cycle Initiative, which includes electrometallurgical treatment, accelerator transmutation, and reprocessing technologies.

NERI was provided $25 million by the omnibus bill, the same as the request but $7 million below FY2002. Although the budget request sought no new funding for NEPO, the omnibus bill provided $5 million, $2 million below the FY2002 level.

Science

The DOE Office of Science conducts basic research in six program areas: basic energy sciences, high-energy physics, biological and environmental research, nuclear physics, fusion energy sciences, and advanced scientific computing research. Through these programs, DOE is the third-largest federal supporter of basic research and the largest federal supporter of research in the physical sciences.

For FY2003, DOE requested $3.279 billion for Science, compared with $3.233 billion appropriated in FY2002. Within this nearly flat overall funding, increases were requested for five of the six programs relative to their FY2002 levels, and a reduction was requested (but not received) for biological and environmental research. The House Appropriations Committee recommended a net reduction of $8 million from the request. The Senate Appropriations Committee recommended an increase of $50 million. P.L.108-7 provides $3.306 billion.

The requested funding for the largest program, basic energy sciences, was $1.020 billion, compared with $1.004 billion in FY2002. The request included $211 million for continued construction of the Spallation Neutron Source, a large facility at Oak Ridge National Laboratory for research in physics, materials science, and other fields. Funding for the Spallation Neutron Source in FY2002 was $276 million; the reduction in FY2003 reflected the planned construction schedule, not a delay or scaling back of the project. The House Appropriations Committee recommended funding basic energy sciences at the requested level. The Senate Appropriations Committee recommended an increase of $25 million. The final bill provides $1.030 billion. The two committee recommendations and the P.L. 108-7 all included full funding for the Spallation Neutron Source.

The largest requested percentage increase versus FY2002 was for the smallest program, advanced scientific computing research, which was requested to increase almost 8% to $170 million. The House Appropriations Committee recommended an further increase of $5 million for this program. The Senate Appropriations Committee recommended funding the program at the requested level. The final bill provided $173 million and encouraged DOE to request reprogramming that would provide additional FY2003 funding in response to recent Japanese progress in supercomputing.

The only program to be reduced in the request was biological and environmental research, which was requested to receive $504 million, compared with $527 million the previous year. The proposed reduction was explained as resulting mainly from the completion of 74 medical applications projects that were funded at congressional direction in FY2002. Funding for the Genomes to Life project, which was a new initiative in FY2002, was requested to increase to $37 million. The House Appropriations Committee recommended funding biological and environmental research at the requested level. The Senate Appropriations Committee recommended an increase of $27 million above the request, more than reversing the requested

reduction. Of the Senate increase, $10 million was designated for the Genomes to Life program, which the Committee "strongly encouraged" DOE to expand in FY2004, stating that it "shows tremendous potential and deserves enhanced support." Another $6 million of the Senate increase was designated for research and demonstration projects on removal of arsenic from municipal water supplies. The final bill provided $530 million, including $4 million for arsenic removal research and $50 million in directed funding for 46 medical applications projects.

The House Appropriations Committee recommended funding high-energy physics and nuclear physics at the requested levels of $725 million and $382 million respectively. In both cases this was an increase over FY2002. The Senate Appropriations Committee recommended increasing each of these programs by an additional $5 million above the request. The final bill provided $727 million and $384 million respectively.

The requested budget for fusion energy sciences was $257 million. The House Appropriations Committee recommended a reduction of $9 million and directed DOE to prepare an updated fusion program plan, including an evaluation of the possibility of re-engaging in the International Thermonuclear Experimental Reactor (ITER) project. (U.S. participation in ITER was discontinued by Congress in 1998 at the end of the initial engineering design phase. The remaining partners, Canada, Europe, Japan, and Russia, are currently in negotiations prior to the start of construction. On January 30, 2003, the Administration announced its decision to rejoin those negotiations.) The Senate Appropriations Committee recommended a $2 million increase above the request. The final bill provided $250 million. The Senate committee and the final bill both called for an evaluation of the "fast ignition" concept, with the report of that evaluation to be provided by August 1, 2003. The Senate committee provided $2 million additional for that evaluation; the final bill did not.

Nuclear Weapons Stockpile Stewardship

Congress established the Stockpile Stewardship Program (SSP) in the FY1994 National Defense Authorization Act (P.L. 103-160) "to ensure the preservation of the core intellectual and technical competencies of the United States in nuclear weapons." The program is operated by the National Nuclear Security Administration (NNSA), a semiautonomous agency established by Congress in the FY2000 National Defense Authorization Act (P.L. 106-65, Title XXXII) within DOE. It seeks to maintain the safety and reliability of the U.S. nuclear stockpile.

A key issue is whether this task can and should continue to be done without nuclear testing. While SSP has sought to maintain warheads without testing, statements in early 2002 implied a reduced commitment to that approach. Secretary of Defense Donald Rumsfeld said that nations with nuclear weapons have "a responsibility to see that they are safe and reliable. To the extent that can be done without testing, clearly that is the preference. And that is why the President has concluded that, thus far, that is the case." J.D. Crouch, Assistant Secretary of Defense for International Security Policy, stated that there is "no change in the Administration's policy at this point on nuclear testing. We continue to oppose CTBT [Comprehensive Test Ban Treaty] ratification. We also continue to adhere to a testing moratorium."

The Administration requested $15 million to improve "nuclear test readiness" – to reduce the time between a decision to test and the conduct of the test – pending completion of a study and policy on optimum test readiness time. The Senate Appropriations Committee, in its report accompanying S. 2784, the FY2003 Energy and Water Development Appropriations bill in the 107th Congress, stated the matter differently: "weapons activities [funds] provide for the continuing assurance of safety, reliability, and security of the nuclear weapons in our enduring nuclear weapons stockpile while adhering to the spirit of the Comprehensive Test Ban Treaty."

The committee bill provided "within available funds" $64.2 million for test site readiness (a category broader than nuclear test readiness), as well as other funds that "contribute to the test readiness posture." The House Appropriations Committee recommended providing the requested amount, while directing DOE to notify the committee before obligating any of these funds in FY2003. The final omnibus resolution contains $60.0 million for maintaining Nevada Test Site readiness and $15.0 million for enhanced test readiness, and directs DOE to notify the Appropriations Committees before obligating any of these funds in FY2003.

Stockpile stewardship consists of all activities in NNSA's Weapons Activities account, for which the FY2003 request was $5,867.0 million, compared to $5,560.2 million for FY2002. The Senate bill, S. 2784, provided $6,109.0 million, and that funding remained in H.J.Res. 2 as passed by the Senate. The House bill, H.R. 5431, provided $5,967.1 million, of which $195.0 million was prior year balances. The final bill, P.L. 108-7, contains $5,954.2 million.

The three main elements of stockpile stewardship, described below, are Directed Stockpile Work, $1,045.8 million for FY2002, $1,234.5 million requested for 2003 and provided by P.L. 108-7; Campaigns, $2,167.1 million for FY2002, $2,067.8 million requested for FY2003, $2,148.2 million provided by the Senate bill, $2,088.9 million provided by H.R. 5431, and $2,133.5 million provided by P.L. 108-7; and Readiness in Technical Base and Facilities, $1,553.1 million for FY2002, $1,688.2 million for FY2003, $1,849.8 million provided by the Senate bill, $1,738.2 million provided by H.R. 5431, and $1,832.2 million in P.L. 108-7.

NNSA manages two major programs in addition to Weapons Activities: Defense Nuclear Nonproliferation ($1,113.6 million requested; see below) and Naval Reactors ($706.8 million requested). The total FY2003 request for NNSA, including the foregoing elements and several smaller ones, was $8,023.4 million, compared with $7,590.5 million appropriated for FY2002. The Senate bill contained $1,115.6 million for Defense Nuclear Nonproliferation, $706.8 million for Naval Reactors, and $8,267.3 million in total for NNSA. Comparable figures for H.R. 5431 are $1,167.6 million, $706.8 million, and $7,908.4 million, respectively. Comparable figures in the final bill, P.L. 108-7, are $1,113.6 million, $706.8 million, and $8,105.6 million, respectively.

Most stewardship activities take place at the nuclear weapons complex, which consists of three laboratories (Los Alamos National Laboratory, NM; Lawrence Livermore National Laboratory, CA; and Sandia National Laboratories, NM and CA), four production sites (Kansas City Plant, MO; Pantex Plant, TX; Savannah River Site, SC; and Y-12 Plant, TN), and the Nevada Test Site. NNSA manages and sets policy for the complex; contractors to NNSA operate the eight sites.

Directed Stockpile Work (DSW)

This program involves work directly on nuclear weapons in the stockpile, such as monitoring the condition of weapons and maintaining them through repairs, refurbishment, life extension, and modifications. It includes R&D to support activities to be undertaken for specific warheads. The FY2003 DSW request would support work on a number of nuclear weapons: full-scale refurbishment of the W87, development engineering for the B61 mods 7/11, an engineering study of the W80 to extend its life and enhance surety, and development engineering to extend the life, refurbish major systems, and add new components to the W76. NNSA plans to begin production engineering for the latter two warheads in FY2003. It also plans to conduct a study for the "Robust Nuclear Earth Penetrator" (RNEP), for which $15.0 million was requested for FY2003. Warheads of this type would burrow into the ground before detonating in order to destroy underground targets with less explosive yield than a surface-burst weapon would require. The Senate Armed Services Committee's FY2003 defense authorization bill, S. 2514, included no funds for the RNEP and required a study on RNEP, including military requirements, employment

policy, targets, and conventional weapon alternatives. The House Armed Services Committee's bill, H.R. 4546, provided the requested amount. The National Defense Authorization Act, P.L. 107-314, fully funded the request but barred obligation of FY2003 funds for the study until 30 days after the Department of Defense (DOD) had submitted the RNEP study proposed by the Senate Armed Services Committee's bill. The House and Senate Appropriations Committee bills provided the amount requested for RNEP, and that funding remains in the final bill, P.L. 108-7.

Campaigns

These are "focused scientific and engineering efforts" that seek to "develop and maintain special capabilities and tools needed for continued certification of the stockpile ... in the absence of underground nuclear testing." For FY2003, there are 16 campaigns. Examples are: Enhanced Surveillance ($82.3 million appropriated for FY2002, $77.2 million requested for FY2003 and appropriated in the final bill), which seeks to assess lifetimes of weapons components and predict defects resulting from aging; Advanced Design and Production Technologies ($75.5 million for FY2002, $74.1 million requested for FY2003 and provided by the final bill), which seeks to improve individual manufacturing processes, integrate product information, and develop the ability to fabricate complex parts in small lots; Advanced Simulation and Computing ($729.9 million for FY2002, $724.9 million requested for FY2003 and provided by H.R. 5431, $704.3 million provided by the Senate bill and by the final bill), which aims to obtain a 100-trillion operations per second computer by 2005 and is developing computer models (e.g., of nuclear weapon performance) needed to certify the stockpile; and Tritium Readiness ($123.5 million for FY2002, $126.3 million requested for FY2003 and provided by H.R. 5431, $112.9 million provided by the Senate bill, and $118.2 million provided by P.L. 108-7), which is developing means of using a commercial light water reactor to produce tritium, an isotope of hydrogen that is a key ingredient in nuclear weapons.

The Pit Manufacturing and Certification campaign has attracted much congressional interest. Pits are the fissile cores of nuclear warheads that trigger the thermonuclear secondary stage. The United States has been unable to produce pits for use in stockpiled weapons since 1989, when DOE suspended pit production at the Rocky Flats Plant (CO). As a result, the United States has been unable to make all-new nuclear warheads of existing or advanced new designs. The campaign supports two pit projects: installation of a low-capacity pit production facility, and supporting R&D, at Los Alamos National Laboratory; and planning for a higher-capacity Modern Pit Facility. R&D, procurement, and construction costs for the two projects might total some $5 billion over two decades. The FY2003 request was $194.5 million, compared with $219 million appropriated for FY2002. The request includes $112.5 million for manufacturing the pit for the W88 warhead, one of the two types of warheads used on the Trident II missile, $78.0 million for W88 pit certification, $2.0 million for pit activities not specifically supporting the W88, and $2.0 million for planning for the Modern Pit Facility.

In action on this issue for FY2002, the House Appropriations Committee recommended the requested amount, $128.5 million, but asserted that DOE cannot show "that it has a viable plan to manufacture and certify pits on the schedule dictated by national security needs," criticized the project as "years behind schedule and hundreds of millions of dollars over the original cost estimate," and stated that it will judge NNSA's success on how well the pit project succeeds. The Senate Appropriations Committee recommended increasing funding for FY2002 substantially to "fully fund" all relevant activities, viewing the then-current schedule, which would not certify a pit for use in the stockpile until FY2009, as "unacceptable." In its FY2003 request, NNSA states that it plans to "certify a W88 pit built at [Los Alamos National Laboratory] without underground nuclear testing by FY 2009, with a goal of achieving an earlier date of FY 2007." Further, NNSA

plans to defer detailed design of a Modern Pit Facility until FY2004, "with FY 2003 funding used to continue manufacturing concepts."

In its report on FY2003 energy and water appropriations, the Senate Appropriations Committee recommended $246.0 million for pit manufacturing and certification, an increase of $51.5 million over the request. The sum includes the requested $2.0 million for pit activities and $2.0 million for the Modern Pit Facility. The committee, however, "remains greatly concerned about the NNSA's refusal to request funds consistent with its own project plan submitted less than 1 year ago." Because this was not done, which would have resulted in a lower request for this project, "the Committee has been forced to reduce other items in the budget." The Senate Appropriations Committee directed NNSA to revise the plan and report to Congress before the end of the current fiscal year and then annually. The House Appropriations Committee provided $194.5 million, the requested amount, for pit manufacturing and certification. P.L. 108-7 provides $222.0 million for pit manufacturing and certification. According to the joint explanatory statement of the Committee of Conference, "The increase will ensure that the NNSA maintains its commitment to produce a certifiable W88 pit by 2003 and a certified W88 pit by 2007." The statement directed NNSA "to provide a revised pit production and certification plan to the relevant Congressional committees by March 31, 2003, and annually thereafter."

The National Ignition Facility (NIF), under construction at Lawrence Livermore National Laboratory, is to be the world's largest laser. It is a key project for the stockpile stewardship program. NIF is intended to help solve weapons problems, attract top physicists to the nuclear weapons program, and advance the quest for fusion power. A top priority of the facility is to achieve "ignition," in which nuclear fusion of deuterium and tritium (isotopes of hydrogen) would release more energy than was provided by the laser to achieve fusion.

In 1999, the NIF Project identified several problems with the original cost estimates and notified DOE that NIF could not be completed for the original estimated cost. The project was rebaselined and revalidated in 2000, adding approximately $1 billion to the cost and several years to the schedule. Over the years, various reports have raised questions about technical issues. The NIF Project Office, however, states that the project is now on the schedule and budget set forth in the new baseline, and that no technical obstacles remain. In its FY2003 request, DOE estimated total project-related costs for NIF at $3,448.1 million.

In its report on FY2003 energy and water appropriations, the Senate Appropriations Committee expressed great concern over changes to the project's scope implied by the request. The title of the campaign has changed from "Inertial Confinement Fusion and High Yield" to "High Energy Density Physics," which the Senate Appropriations Committee felt marked a shift "from a focus on achieving the specific goal of ignition to a generalized physics research program."

The Senate panel was also concerned that the performance criteria for acceptance testing of the laser beams could be reduced "significantly below what is required to support ignition experiments." The Committee expressed its "impression that NNSA is not committed to the NIF Project and might down scope the project to the point where laser performance that is needed to evaluate ignition targets would never be realized." In response, "[t]he Committee rejects this re-prioritization and down-scoping. Ignition is now and will remain the primary objective" for NIF. In part because of concern that the Administration did not request certain funds for equipment and technology essential for ignition, the Senate Appropriations Committee added $35.0 million to the FY2003 request for inertial confinement fusion, for a total of $487.3 million.

The House Appropriations Committee provided $498.8 million, and also expressed concern that NNSA was changing the focus "from the specific goal of ignition to a generalized physics

research program." Accordingly, it "direct[ed] NNSA to re-establish ignition as the primary objective and justification for the NIF."

The final bill, P.L. 108-7, provides $504.3 million for inertial confinement fusion, $52.5 million over the request. The $504.3 million includes $214.0 million, the same as the request, for continued construction of NIF. The conferees' statement did not provide further guidance on the focus of the inertial confinement fusion program.

Readiness in Technical Base and Facilities (RTBF)

This program provides infrastructure and operations at the nuclear weapons complex sites. The request includes eight categories. By far the largest is Operations of Facilities ($897.8 million for FY2002, $949.9 million requested for FY2003, $1,026.0 million provided by the Senate bill, $994.9 provided by H.R. 5431, and $1,026.8 million provided in the final bill). Other large categories include Program Readiness, which supports activities occurring at multiple sites or in multiple programs ($192.0 million appropriated for FY2002, $208.1 million requested for FY2003 and provided by H.R. 5431, $218.0 in the Senate bill, and $220.0 million in the final bill), and Construction ($204.9 million appropriated for FY2002, $270.3 million requested for FY2003 and provided by the House bill, $328.2 million in the Senate bill, and $308.8 million in P.L. 108-7).

Of particular interest is the RTBF element Nuclear Weapons Incident Response, for which $91.0 million was requested for FY2003 and provided in the House bill, $96.0 million was provided in the Senate bill, and $91.0 million is provided in P.L. 108-7, compared with $88.9 million appropriated for FY2002. This activity provides funds for an appropriate technical response to any nuclear or radiological emergency within DOE, in the United States, or abroad. In addition, the RTBF element Operations of Facilities includes $10.0 million requested for FY2003, unchanged from FY2002, for the National Center for Combating Terrorism. The Senate bill provides $27.0 million for this center, H.R. 5431 does not specify an amount, and the final bill provides $23.5 million.

Nonproliferation and National Security Programs

DOE's nonproliferation and national security programs provide technical capabilities to support U.S. efforts to prevent, detect, and counter the spread of nuclear weapons worldwide. These nonproliferation and national security programs are included in the National Nuclear Security Administration (NNSA).

Funding for these programs in FY2002 was provided both in the regular Energy and Water Development bill, which appropriated $803.6 million, and in the FY2002 Defense and Emergency Supplemental Appropriations Act (P.L. 107-117), which added $223 million, for a total of $1.0266 billion. In FY2001 these programs received $872.3 million. The FY2003 request maintained an increased level, at $1.1136 billion. The House Appropriations Committee recommended $1.17 billion. The Senate Appropriations Committee bill included $1.1156 billion, and this amount was included in H.J.Res. 2 as passed by the Senate. The final bill, P.L. 108-7, appropriated the requested amount, $1.1136 billion.

In particular, the Nonproliferation and Verification R&D program, which received a total of $286.5 million for FY2002, was funded at $283 million in the final bill, the amount requested by the Administration. Nonproliferation and International Security programs, formerly called "Arms Control," also received the amount requested, $132 million, compared with $118 million in FY2002. These programs include international safeguards, export controls, treaties and agreements, and two programs in the former Soviet Union, Initiatives for Proliferation Prevention

(IPP) and the Nuclear Cities Initiatives (NCI). (The final bill breaks out IPP and NCI into a separate line item called "Russian Transition Initiative" and lists the FY2003 appropriation for them as $39.3 million, compared to $42.0 million appropriated for FY2002.)

International Materials Protection, Control and Accounting (MPC&A), which is concerned with reducing the threat posed by unsecured Russian weapons and weapons-usable material, received a big increase in FY2002 to $293 million, from $174 million in FY2001. The request for FY2003 was $233 million, and that amount was appropriated in the final bill.

Funding for the Fissile Materials Disposition program for FY2003 in P.L. 108-7 was $448.0 million, the amount requested, compared with $302.4 million in FY2002. The Administration proposed abandoning plans to vitrify and immobilize a portion of surplus plutonium from dismantled U.S. nuclear weapons and instead dispose of almost all of it as fuel for commercial power reactors. Some of the increased funding would go toward construction of a facility to convert the plutonium to reactor fuel at Savannah River, SC. FY2003 funding for the project is $93.0 million, compared to $65.9 million for FY2002. Money for Russian surplus materials disposition also increased, from $61.0 million in FY2002 to $98.0 million in FY2003.

(For details on these programs, see CRS Issue Brief IB10091, *Nuclear Nonproliferation Issues*.)

Environmental Management

The amount of time and money needed to clean up environmental contamination resulting from the production of nuclear weapons during the Cold War has been a longstanding issue. Since the beginning of the U.S. atomic energy program, DOE and its predecessors have been responsible for administering the production of nuclear weapons and managing radioactive and other hazardous waste. In later years, DOE expanded its efforts to include the environmental restoration of radioactive sites and those with other hazardous contamination in buildings, soil, and water to ensure their safety for future uses. In 1989, the Bush Administration established an Environmental Management Program within DOE to consolidate the agency's efforts in cleaning up contamination from defense nuclear waste, as well as waste from civilian nuclear energy research. DOE is responsible for complying with numerous federal environmental laws and regulations in administering the program, and is subject to fines and penalties for violations of these requirements. Consequently, DOE has signed numerous legally binding compliance agreements with the Environmental Protection Agency (EPA) and the states to perform cleanup activities and dispose of waste according to specific deadlines.

DOE reports that there are a total of 114 contaminated sites in 30 states where the production of nuclear weapons, and civilian nuclear energy research and development activities, resulted in radioactive and other hazardous contamination. Together, these sites occupy approximately 2.1 million acres, which is equivalent to the land area of Rhode Island and Delaware combined. DOE reports that all response actions were complete at 75 sites as of the end of FY2002 at a cost of over $60 billion, and that cleanup is expected to be complete at two additional sites by the end of FY2003. However, the sites that have been cleaned up are relatively small and are among the least hazardous, and the sites where cleanup remains underway contain some of the most severely contaminated areas. DOE has estimated that cleanup at the remaining sites may take 70 years to complete, and that total cleanup costs may reach $220 billion if changes to the program are not made. DOE contends that these costs could be reduced by $50 billion to $100 billion through the use of risk-based approaches to accelerate cleanup schedules. However, DOE's past implementation of risk-based approaches has been criticized as ineffective, and questions have been raised as to how these goals would be accomplished without weakening environmental standards.

Five accounts within the annual appropriations bill for Energy and Water Development have traditionally funded DOE's Environmental Management Program. The Defense Environmental Restoration and Waste Management Account funds cleanup and waste management activities at nuclear weapons sites where all response actions are projected to continue *beyond* 2006. The Defense Facilities Closure Projects Account supports cleanup and waste management activities at nuclear weapons sites where all response actions are scheduled to be complete by the *end* of 2006. The Defense Environmental Management Privatization Account funds cleanup and waste management projects at nuclear weapons sites that are performed under "privatization" contracts. This contracting approach relies on the private sector to construct and operate facilities or conduct cleanup actions on a fixed-price, fee-for-service basis. The Non-Defense Environmental Management Account funds cleanup and waste management activities at civilian nuclear energy research and development sites. Lastly, the Uranium Facilities Maintenance and Remediation Account funds the cleanup of uranium and thorium processing sites.

For FY2003, DOE initially requested a total of $6.7 billion for the above accounts, approximately the same amount as enacted for FY2002. However, $800 million of the initial request would have been allocated to a new Environmental Management Cleanup Reform Account, which would have funded efforts to reduce risk, decrease cleanup costs, and accelerate cleanup schedules. The Administration budgeted the majority of the funding for this new account by decreasing support for sites funded under the Defense Environmental Restoration and Waste Management Account. Under this approach, funding would have been restored at these sites only if compliance agreements with the Environmental Protection Agency (EPA) and the states were re-negotiated to accelerate cleanup schedules. DOE has long argued that many of the requirements under its existing compliance agreements are too costly, ineffective, and unnecessarily time-consuming, and that its agreements need to be re-examined to explore ways to increase the pace of cleanup and reduce costs. Concerns were raised as to whether EPA and the states might agree to weaker cleanup standards rather than face the possibility of the loss of funds, which may have prevented sites from fulfilling existing agreements.

To date, DOE has signed letters of intent with EPA and the states to accelerate cleanup at the following sites: the Hanford site in Washington, the Oak Ridge site in Tennessee, the Idaho National Engineering and Environmental Laboratory, the Nevada Test Site, the Savannah River site in South Carolina, the Pantex site in Texas, and the Los Alamos National Laboratory and Sandia National Laboratories in New Mexico. On August 2, 2002, the President submitted a budget amendment to request an additional $300 million in FY2003 to fulfill these new agreements, increasing the request for a new Environmental Management Cleanup Reform Account to $1.1 billion, and the overall request for the Environmental Management Program to $7.0 billion.

During the 107th Congress, the Subcommittee on Oversight and Investigations of the House Committee on Energy and Commerce held a hearing on DOE's cleanup reform initiative on July 19, 2002. Jesse Roberson, Assistant Secretary for Environmental Management, testified that the objective of the cleanup reform initiative is to identify and implement more risk-oriented and efficient cleanup approaches, and that the intent is not to weaken any of DOE's compliance agreements. The General Accounting Office (GAO) testified on the status of compliance agreements with EPA and the states at each nuclear waste cleanup site, and indicated that DOE faces challenges in developing and implementing a risk-based method to prioritize cleanup activities due to failed attempts to do so in the past. GAO also indicated that DOE's reform initiative in some cases could involve "potential changes in technology or approach that would result in leaving more of the waste on site than currently planned and thus could significantly reduce cleanup costs. In other cases, it could allocate funding using a greater emphasis on risk reduction, which could shift funding among sites." Representatives from the states of

Washington, Idaho, and Tennessee indicated that the letters of intent to re-negotiate cleanup agreements in their states would not result in weakened cleanup standards, but would provide a framework for cooperation among the parties involved to establish new cleanup goals.

As signed by the President, the FY2003 Omnibus Appropriations resolution does not allocate any funding to the proposed Environmental Management Cleanup Reform Account. Instead, the resolution increased funding for the existing Defense Environmental Restoration and Waste Management Account by $926 million above the Administration's request of $4.54 billion in order to honor the letters of intent to accelerate cleanup that DOE had already signed. The increase will be allocated according to the existing structure of site categories within the account. During the appropriations debate, concerns were expressed about providing an unallocated sum for the reform account due to uncertainties as to how DOE would have divided the amount among various sites. Section 315 of the final bill indicates that none of the funding for environmental management activities may be obligated at individual sites that would be in excess of the amount obligated in FY2002 or requested for FY2003, whichever is greater, unless a performance management plan has been completed for that site that is consistent with the intent of DOE's environmental management and cleanup reform initiative.

The level of funding to appropriate for FY2003 for the four other accounts was less controversial. Overall, P.L. 108-7 appropriated nearly $7.0 billion for all five defense and non-defense accounts that support DOE's Environmental Management Program. This amount is approximately the same as the Administration's request of $7.0 billion, and is about $290 million more than the enacted FY2002 funding level of $6.7 billion.

Civilian Nuclear Waste

The Bush Administration sought $524.7 million for the DOE civilian waste disposal program for FY2003, a 40% boost over FY2002. The increased budget is intended primarily to pay for preparing a construction permit application for a national nuclear waste repository at Yucca Mountain, Nevada. DOE expects to submit the 10,000-page application to NRC in late 2004. The additional funds are also needed for detailed repository design work, repository performance studies, and transportation planning, according to DOE. With sufficient funding, according to program officials, DOE can begin receiving waste at the site by 2010.

The House Appropriations Committee recommended the full Administration request, citing enactment of the Yucca Mountain approval resolution discussed below. However, the Senate Appropriations Committee recommended cutting the request to $336 million, nearly 10% below the FY2002 level. The Yucca Mountain approval resolution was vigorously opposed by Senator Reid, Ranking Democrat on the Senate Committee's Energy and Water Development Subcommittee. The final omnibus bill provides $460 million.

The Nuclear Waste Policy Act of 1982 (NWPA, P.L. 97-425) as amended, names Yucca Mountain as the sole candidate site for a national geologic repository. Following the recommendation of Energy Secretary Abraham, President Bush on February 15, 2002, recommended to Congress that DOE submit an application to NRC to construct the Yucca Mountain repository. Nevada Governor Guinn then exercised his right under NWPA to submit a "notice of disapproval" (or "state veto") to Congress. Under NWPA, the state disapproval blocks the Yucca Mountain site unless a congressional approval resolution is signed into law within 90 days of continuous session. The approval resolution was signed July 23, 2000 (H.J.Res. 87, P.L. 107-200), allowing the Yucca Mountain project to proceed to the licensing phase.

Funding for the nuclear waste program comes from two sources. Under the FY2003 budget request, $209.7 million was to be provided from the Nuclear Waste Fund, which consists of fees

paid by nuclear utilities, and $315 million from the defense nuclear waste disposal account, which pays for disposing of high-level waste from the nuclear weapons program in the planned civilian repository. The omnibus bill, P.L. 108-7, provides $145 million from the Nuclear Waste Fund and $315 million from the defense account.

The 2010 target for opening a permanent repository is 12 years later than the Nuclear Waste Policy Act deadline of January 31, 1998, for DOE to begin taking waste from nuclear plant sites. Nuclear utilities and state utility regulators, upset over DOE's failure to meet the 1998 disposal deadline, have won two federal court decisions upholding the Department's obligation to meet the deadline and to compensate utilities for any resulting damages. Utilities have also won several cases in the U.S. Court of Federal Claims, although specific damages have not yet been determined.

Power Marketing Administrations

DOE's four Power Marketing Administrations (PMAs) developed out of the construction of dams and multi-purpose water projects during the 1930s that are operated by the Bureau of Reclamation and the Army Corps of Engineers. The original intention behind many of these projects was conservation and management of water resources, including irrigation, flood control, recreation and other objectives. However, many of these facilities generated electricity for project needs. The PMAs were established to market the excess power; they are the Bonneville Power Administration (BPA), Southeastern Power Administration (SEPA), Southwestern Power Administration (SWPA), and Western Area Power Administration (WAPA).

The power is sold at wholesale to electric utilities and federal agencies "at the lowest possible rates ... consistent with sound business practice," and priority on PMA power is extended to "preference customers," which include municipal utilities, co-ops and other "public" bodies. The PMAs do not own the generating facilities, but they generally do own transmission facilities, except for Southeastern. The PMAs are responsible for covering their expenses and repaying debt and the federal investment in the generating facilities.

The 104th Congress debated sale of the PMAs and did, in 1995, authorize divestiture of one PMA, the Alaska Power Administration. There has been no press to dispose of the remaining PMAs, and none seems likely given the broader uncertainties governing electric utility restructuring.

The Administration's request for SEPA, SWPA, and WAPA for FY2003 was $197.4 million, a reduction from the FY2002 appropriation of $207.3 million. The Senate Committee on Appropriations recommended $203.5 million, which included an additional $6.1 million, added to the budget for the Western Power Administration, which would be transferred to the Utah Reclamation Mitigation and Conservation Commission. This was the level of funding approved in the final FY2003 Omnibus Appropriations resolution.

BPA receives no annual appropriation, but funds some of its activities from permanent borrowing authority, which was $3.75 billion in FY2002. For FY2003, BPA intended to borrow $630.8 million, to be used for transmission system construction, system replacement, energy resources, fish and wildlife, and capital equipment programs. BPA had requested an additional $2 billion in permanent borrowing authority in the FY2002 budget "to address critical infrastructure needs," but Congress did not support the request. The Administration requested an additional $700 million in borrowing authority for BPA in the FY2003 budget request. A provision for an increase of $1.3 billion in borrowing authority was included in the Senate version of comprehensive energy legislation, H.R. 4, which reached conference in the 107th Congress but was not enacted by adjournment. Consequently, Senator Craig submitted an amendment (SA 34) to H.J.Res. 2 to add $700 million in borrowing authority, the level supported by the Administration in its request.

The amendment was approved, and enacted in the final measure, P.L. 108-7. However, the conferees directed that BPA submit a detailed budget justification, by project, to the House and Senate Committees on Appropriations by March 30, 2003. BPA will be expected to submit a similar detailed budget justification as part of future budget requests. (For details on BPA's funding procedure see CRS Report RL31215, *Bonneville Power Administration's Authority to Borrow from the U.S. Treasury*.)

Title IV: Independent Agencies

Independent agencies that receive funding from the Energy and Water Development bill include the Nuclear Regulatory Commission (NRC), the Appalachian Regional Commission (ARC), and the Denali Commission.

Table 7. Energy and Water Development Appropriations
Title IV: Independent Agencies
(in millions of dollars)

Program	FY2002	FY2003 Request	House H.R. 5431	Senate* H.J.Res. 2	P.L.* 108-7
Appalachian Regional Commission	71.3	66.3	71.3	74.4	71.3
Nuclear Regulatory Commission (Revenues) Net NRC	578.5 (479.5) 99.0	585.0 (498.9) 85.6	578.0 (520.0) 58.0	578.2 (520.1) 58.1	578.2 (520.1) 58.5
Defense Nuclear Facilities Safety Board	18.5	19.0	19.0	19.0	19.0
Nuclear Waste Technical Review Board	3.1	3.1	3.1	3.2	3.2
Denali Commission	38.0	29.9	—	50.0	48.0
Delta Regional Authority	10.0	10.0	—	15.0	8.0
Total	**220.5**	**195.1**	**151.9**	**219.7**	**208.0**

*Figures do not include across-the-board recisions: 2.9% in Senate H.J.Res. 2, 0.65% in P.L. 108-7.

Key Policy Issues—Independent Agencies

Nuclear Regulatory Commission

The Nuclear Regulatory Commission (NRC) requested a total budget of $585.0 million for FY2003, including $6.8 million for the NRC inspector general's office. The funding request would provide an increase of $25.3 million from FY2002 (including FY2002 supplemental funding). Major activities conducted by NRC include safety regulation and licensing of commercial nuclear reactors, licensing of nuclear waste facilities, and oversight of nuclear materials users.

The omnibus bill provides the full NRC request, as recommended by House and Senate Appropriations panels.

In the wake of the September 11 terrorist attacks against the United States, NRC has focused additional attention on the security of nuclear power plants and other users of radioactive material. NRC's FY2003 budget request includes $29.3 million for activities related to homeland security, about $6 million below the $36 million provided in the FY2002 Emergency Supplemental Appropriations bill. According to the NRC budget justification, the funding is being used for:

- Re-analyzing the threat of radiological sabotage and the theft of nuclear material;
- Re-analyzing the adequacy of physical protection requirements for nuclear facilities and transportation of radioactive materials;
- Re-analyzing procedures for authorizing access to nuclear facilities;
- Strengthening NRC emergency preparedness and response capabilities;
- Better integrating NRC security and emergency preparedness planning; and
- Strengthening NRC infrastructure and communications capabilities.

(For more information on protecting licensed nuclear facilities, see CRS Report RS21131, *Nuclear Powerplants: Vulnerability to Terrorist Attack*.)

NRC proposes to more than double its spending on licensing of new commercial reactors, which are being seriously considered for the first time in at least 20 years. The FY2003 request includes $24.8 million for new reactor licensing, up from $10 million provided in FY2002. According to the NRC budget justification, the funding will be used for early site permits (sites approved for future reactors), reactor pre-licensing and licensing reviews, and updating the nuclear licensing infrastructure. The NRC licensing program dovetails with DOE's program to encourage construction of two new nuclear power plants by 2010.

For the decade before FY2001, NRC's budget was offset 100% by fees on nuclear power plants and payments by other licensed activities, such as the DOE nuclear waste program. The nuclear power industry had long contended that the fee structure required nuclear reactor owners to pay for a number of NRC programs, such as foreign nuclear safety efforts, from which they did not directly benefit. To account for that concern, the FY2001 Energy and Water Appropriations Bill included an NRC proposal to phase down the agency's fee recovery to 90% during the subsequent 5 years – two percentage points per year. As a result, 94% of the FY2003 NRC appropriation – minus $24.9 million transferred from the Nuclear Waste Fund to pay for waste repository licensing and $29.3 million for homeland security – was to be offset by fees on licensees, under the budget request. But the omnibus bill, as recommended by the House and Senate Appropriations Committees, requires that the 94% offset also apply to the homeland security funding, resulting in a lower net appropriation than in the budget request.

Additional Legislative Provisions

The omnibus appropriations bill includes an extension of the Price-Anderson Act nuclear incident liability system through December 31, 2003. The Senate had proposed attaching a 15-year extension that was identical to Price-Anderson provisions agreed to by House-Senate conferees on an omnibus energy bill (H.R. 4) in the 107th Congress. The energy conference agreement was not completed by the end of the session, however, so the proposed Price-Anderson extension was not enacted. The short extension in the omnibus appropriations bill does not change any other provisions in the Price-Anderson Act.

Under the Price-Anderson Act (primarily Section 170 of the Atomic Energy Act of 1954, 42 U.S.C. 2210), the owners of commercial reactors must assume all liability for reactor-related

radiological damages awarded to the public by the court system, but their total liability is limited to the amount provided by private insurance and a mandatory industry self-insurance system. The Price-Anderson Act also authorizes DOE to indemnify contractors who operate hazardous DOE nuclear facilities. The limit on DOE contractor liability is the same as for commercial reactors, except when the limit for commercial reactors drops because of a decline in the number of covered reactors.

Without an extension of the law, any commercial nuclear reactor licensed after August 1, 2002, could not have been covered by the Price-Anderson system, although coverage continued for existing reactors. Because no new U.S. reactors are currently planned, missing the deadline for extension had little short-term effect on the nuclear power industry. However, any new DOE contracts signed during a Price-Anderson lapse would have to use alternate indemnification authority. To prevent that problem, the National Defense Authorization Act for FY2003 (P.L. 107-314), signed December 2, 2002, extended Price-Anderson coverage for DOE contractors through December 31, 2004.

For Additional Reading

CRS Issue Briefs

CRS Issue Brief IB88090. *Nuclear Energy Policy*.

CRS Issue Brief IB92059. *Civilian Nuclear Waste Disposal*.

CRS Issue Brief IB10041. *Renewable Energy: Tax Credit, Budget, and Electricity Production Issues*

CRS Issue Brief IB10019. *Western Water Resource Issues*.

CRS Issue Brief IB10072. *Endangered Species: Difficult Choices*.

CRS Issue Brief IB10091. *Nuclear Nonproliferation Issues*.

CRS Reports

CRS Report RS20702. *South Florida Ecosystem Restoration and the Comprehensive Everglades Restoration Plan*.

CRS Report RL30928. *Army Corps of Engineers: Reform Issues for the 107th Congress*.

CRS Report RS20569. *Water Resource Issues in the 107th Congress*.

CRS Report RS20866. *The Civil Works Program of the Army Corps of Engineers: A Primer*.

CRS Report RL31116. *Water Infrastructure Funding: Review and Analysis of Current Issues*.

CRS Report RL31044. *Renewable Energy Legislation in the 107th Congress*.

CRS Report RL31215. *Bonneville Power Administration's Authority to Borrow from the U.S. Treasury*.

CRS Report RL30478. *Federally Supported Water Supply and Wastewater Treatment Programs*.

CRS Report RS21026. *Terrorism and Security Issues Facing the Water Infrastructure Sector*.

CRS Report RS21131. *Nuclear Powerplants: Vulnerability to Terrorist Attack*.

CRS Report RL31098. *Klamath River Basin Issues: An Overview of Water Use Conflicts*.

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