Science Facilities Maintenance and Repair

The Department's Facilities Maintenance and Repair activities are tied to its programmatic missions, goals, and objectives. The Facilities Maintenance and Repair activities funded by the budget and displayed below and are intended to ensure that the scientific community has the facilities required to conduct cutting edge scientific research now and, in the future, to meet Department of Energy (DOE) goals and objectives.

Costs for Direct-Funded Maintenance and Repair (including Deferred Maintenance Reduction)

(dollars in thousands)

| | FY 2022 Planned Cost | FY 2022 Actual Cost | FY 2023 Planned Cost | FY 2024 Planned Cost |
|--|-------------------------|------------------------|-------------------------|-------------------------|
| Brookhaven National Laboratory | 5,578 | 6,715 | 6,863 | 7,014 |
| Lawrence Berkeley National Laboratory | 19,089 | 1,640 | 21,850 | 21,200 |
| Oak Ridge Institute for Science and Education | _ | 1,159 | 582 | _ |
| Oak Ridge National Laboratory | 28,886 | 32,048 | 33,009 | 34,000 |
| Oak Ridge Office | 6,410 | 4,869 | 5,376 | 4,229 |
| Office of Scientific and Technical Information | 397 | 492 | 569 | 586 |
| Pacific Northwest National Laboratory | | | - | - |
| SLAC National Accelerator Laboratory | 3,934 | 6,509 | - | - |
| Thomas Jefferson National Accelerator Facility | 133 | 95 | 81 | 83 |
| Total, Direct-Funded Maintenance and Repair | 64,427 | 53,527 | 68,330 | 67,112 |

General purpose infrastructure includes multiprogram research laboratories, administrative and support buildings, as well as cafeterias, power plants, fire stations, utilities, roads, and other structures. Together, the Office of Science (SC) laboratories have over 1,600 operational buildings and real property trailers, with nearly 24 million gross square feet of space.

Generally, facilities maintenance and repair expenses are funded through an indirect overhead charge. In some cases, however, a laboratory may charge maintenance directly to a specific program. One example would be when maintenance is performed in a building used only by a single program. Such direct-funded charges are not directly budgeted.

Indirect-Funded Maintenance and Repair (including Deferred Maintenance Reduction)

Facilities maintenance and repair activities funded indirectly through overhead charges at SC laboratories are displayed in the table below. Since this funding is allocated to all work done at each laboratory, the cost of these activities is charged to funding from SC and other DOE organizations, as well as other Federal agencies and other entities doing work at SC laboratories. Maintenance reported to SC for non-SC laboratories is also shown. The figures are total projected costs across all SC laboratories.

Costs for Indirect-Funded Maintenance and Repair (including Deferred Maintenance Reduction)

| | FY 2022 Planned Cost | FY 2022 Actual Cost | FY 2023 Planned Cost | FY 2024 Planned Cost |
|--|-------------------------|------------------------|-------------------------|-------------------------|
| Ames Laboratory | 2,400 | 2,634 | 2,900 | 3,000 |
| Argonne National Laboratory | 51,237 | 53,454 | 57,734 | 58,965 |
| Brookhaven National Laboratory | 33,352 | 41,250 | 42,158 | 43,085 |
| Fermi National Accelerator Laboratory | 23,183 | 21,648 | 21,167 | 21,836 |
| Lawrence Berkeley National Laboratory | 31,051 | 39,327 | 49,904 | 49,498 |
| Oak Ridge Institute for Science and Education | 656 | 642 | 731 | 753 |
| Oak Ridge National Laboratory and Y-12 | 55,925 | 62,482 | 64,356 | 66,287 |
| Oak Ridge Office | 2,236 | 1,703 | 2,559 | 2,622 |
| Pacific Northwest National Laboratory | 11,270 | 9,863 | 14,172 | 12,728 |
| Princeton Plasma Physics Laboratory | 6,280 | 6,267 | 7,285 | 7,600 |
| SLAC National Accelerator Laboratory | 14,089 | 17,051 | 21,128 | 22,784 |
| Thomas Jefferson National Accelerator Facility | 7,634 | 8,403 | 9,004 | 9,274 |
| Total, Indirect-Funded Maintenance and Repair | 239,313 | 264,724 | 293,098 | 298,432 |

Science Report on FY 2022 Expenditures for Maintenance and Repair

This report responds to the requirements established in Conference Report (H.Rep. 108-10) accompanying Public Law 108-7 (pages 886–887), which requires the DOE to provide an annual year-end report on maintenance expenditures to the Committees on Appropriations. This report compares the actual maintenance expenditures in FY 2022 to the amount planned for FY 2022, including Congressionally directed changes.

Total Costs for Maintenance and Repair

| | FY 2022 Planned Costs | FY 2022 Actual Costs |
|--|--------------------------|-------------------------|
| Ames Laboratory | 2,400 | 2,634 |
| Argonne National Laboratory | 51,237 | 53,454 |
| Brookhaven National Laboratory | 38,930 | 47,965 |
| Fermi National Accelerator Laboratory | 23,183 | 21,648 |
| Lawrence Berkeley National Laboratory | 50,140 | 40,967 |
| Oak Ridge Institute for Science and Education | 656 | 1,801 |
| Oak Ridge National Laboratory and Y-12 | 84,811 | 94,530 |
| Oak Ridge Office | 8,646 | 6,572 |
| Office of Scientific and Technical Information | 397 | 492 |
| Pacific Northwest National Laboratory | 11,270 | 9,863 |
| Princeton Plasma Physics Laboratory | 6,280 | 6,267 |
| SLAC National Accelerator Laboratory | 18,023 | 23,560 |
| Thomas Jefferson National Accelerator Facility | 7,767 | 8,498 |
| Total, Maintenance and Repair | 303,740 | 318,251 |

Science Excess Facilities

Excess Facilities are facilities no longer required to support the Department's needs, present or future missions or functions, or the discharge of its responsibilities. The table below reports the funding to deactivate and dispose of excess infrastructure, including stabilization and risk reduction activities at high-risk excess facilities. These activities result in surveillance and maintenance cost avoidance and reduced risk to workers, the public, the environment, and programs. This includes reductions in costs related to maintenance of excess facilities (including high-risk excess facilities) necessary to minimize the risk posed by those facilities prior to disposition. SC has no direct funded excess facilities costs to report.

Costs for Indirect-Funded Excess Facilities

| | FY 2022 | FY 2022 | FY 2023 | FY 2024 |
|--|--------------|--------------------|--------------|--------------|
| | Planned Cost | Actual Cost | Planned Cost | Planned Cost |
| Argonne National Laboratory | 400 | 597 | 550 | 600 |
| Brookhaven National Laboratory | 619 | 689 | 330 | 1,070 |
| Fermi National Accelerator Laboratory | 20 | 50 | 1,500 | 1,500 |
| Lawrence Berkeley National Laboratory | 2 | 330 | 200 | 550 |
| Oak Ridge National Laboratory | 250 | 1,110 | 1,492 | 1,500 |
| SLAC National Accelerator Laboratory | | 176 | 650 | 157 |
| Total, Indirect-Funded Excess Facilities | 1,291 | 2,952 | 4,722 | 5,377 |

Science Research and Development

| Basic | |
|---------------|--|
| Applied | |
| Subtotal, R&D | |
| Equipment | |
| Construction | |
| Total, R&D | |

| | · · | · · · · · · · · · · · · · · · · · · · | |
|-----------------|-----------------|---------------------------------------|---------------------------------------|
| FY 2022 Enacted | FY 2023 Enacted | FY 2024 Request | FY 2024 Request vs FY 2023 Enacted |
| 5,795,405 | 6,374,837 | 6,807,475 | +432,638 |
| _ | _ | _ | _ |
| 5,795,405 | 6,374,837 | 6,807,475 | +432,638 |
| 258,389 | 251,699 | 207,901 | -43,798 |
| 1,261,206 | 1,255,013 | 1,388,973 | +133,960 |
| 7.315.000 | 7.881.549 | 8.404.349 | +522.800 |

Science
Small Business Innovative Research/Small Business Technology Transfer (SBIR/STTR)

(dollars in thousands)

| | FY 2022 Enacted | FY 2023 Enacted | FY 2024 Request | FY 2024 Request vs FY 2023 Enacted | |
|--|--------------------|--------------------|--------------------|---------------------------------------|---------|
| Office of Science | | | | | |
| Advanced Scientific Computing Research | | | | | |
| SBIR | 28,194 | 10,112 | 12,093 | +1,981 | +19.59% |
| STTR | 3,965 | 1,422 | 1,701 | +279 | +19.62% |
| Basic Energy Sciences | | | | | |
| SBIR | 61,375 | 35,557 | 36,306 | +749 | +2.11% |
| STTR | 8,643 | 5,000 | 5,105 | +105 | +2.10% |
| Biological and Environmental Research | | | | | |
| SBIR | 25,184 | 21,327 | 22,278 | +951 | +4.46% |
| STTR | 3,545 | 2,999 | 3,137 | +138 | +4.60% |
| Fusion Energy Sciences | | | | | |
| SBIR | 13,457 | 10,921 | 18,765 | +7,844 | +71.82% |
| STTR | 1,899 | 1,536 | 2,642 | +1,106 | +72.01% |
| High Energy Physics | | | | | |
| SBIR | 22,179 | 13,911 | 13,073 | -838 | -6.02% |
| STTR | 3,119 | 1,956 | 1,838 | -118 | -6.03% |
| Nuclear Physics | | | | | |
| SBIR | 21,390 | 8,336 | 7,541 | -795 | -9.54% |
| STTR | 3,006 | 1,173 | 1,060 | -113 | -9.63% |
| Accelerator R&D and Production | | | | | |
| SBIR | 576 | 686 | 686 | _ | _ |
| STTR | 81 | 96 | 97 | +1 | +1.04% |
| Total, Office of Science SBIR | 172,355 | 100,850 | 110,742 | +9,892 | +9.81% |
| Total, Office of Science STTR | 24,258 | 14,182 | 15,580 | +1,398 | +9.86% |

Note:

⁻ The other DOE programs SBIR/STTR funding amounts are listed in the other DOE budget volumes.

⁻ Starting in FY 2023, Scientific User Facility operations funding is excluded from SBIR/STTR contribution.