SUMMARY

H.R. 4378 would authorize appropriations for the Department of Energy (DOE) to establish a test reactor to support research and development of advanced nuclear reactor technologies. Assuming appropriation of the authorized amounts, CBO estimates that implementing the bill would cost nearly $2 billion over the 2018-2027 period.

Enacting H.R. 4378 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply. CBO estimates that enacting H.R. 4378 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2028.

H.R. 4378 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA).

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary effect of H.R. 4378 is shown in the following table. The costs of this legislation fall within budget function 270 (energy).

<table>
<thead>
<tr>
<th>By Fiscal Year, in Millions of Dollars</th>
<th>2018-2022</th>
<th>2018-2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorization Level</td>
<td>35 100 200 260 340 350 350 350 0 0 935 1,985</td>
<td></td>
</tr>
<tr>
<td>Estimated Outlays</td>
<td>11 41 101 172 250 305 338 349 245 140 575 1,952</td>
<td></td>
</tr>
</tbody>
</table>
BASIS OF ESTIMATE

H.R. 4378 would authorize appropriations totaling nearly $2 billion for DOE to establish, before calendar year 2026, a nuclear test reactor to support the research and development of advanced nuclear technologies. The bill also would specify technical capabilities that the proposed reactor must provide and would direct DOE to operate it as a national user facility that would be available for external use by nonfederal entities. Finally, the bill would direct DOE to consult the private sector, universities, national laboratories, and other federal agencies when it developed such a facility.

According to DOE, the agency is currently assessing the need for a test reactor similar to the one envisioned under H.R. 4378, the costs of which are uncertain. Assuming appropriation of the specified amounts, CBO estimates that federal spending to support the development of such a facility would total nearly $2 billion over the 2018-2027 period. That estimate is based on historical spending patterns for similar activities administered by DOE.

PAY-AS-YOU-GO CONSIDERATIONS: None

INCREASE IN LONG-TERM DIRECT SPENDING AND DEFICITS

CBO estimates that enacting the legislation would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2028.

MANDATES

H.R. 4378 contains no intergovernmental or private-sector mandates as defined in UMRA.

ESTIMATE PREPARED BY

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