International Atomic Energy Agency (IAEA) Director-General Mohamed ElBaradei June 13 presented the agency’s Board of Governors with a report outlining ways countries might work together to discourage the spread of uranium enrichment and spent fuel reprocessing facilities. The report came as the standoff over Iran’s nuclear program and increased interest in nuclear energy have prompted growing concern, including in Congress, about the spread of such facilities that could provide either fuel for power plants or fissile material for nuclear weapons.

The text of the report was not publicly released, reportedly because some board members objected to doing so. Nonetheless, knowledgeable sources said the report, written by IAEA staff, evaluates the legal, technical, financial, and institutional aspects associated with the problem, analyzing nearly a dozen proposals for multilateral cooperation put forward by IAEA member states, many at a special, two-day agency conference in September 2006. (See ACT, November 2006.) But the sources said the report does not advocate any particular plan for moving forward and leaves the thorniest issues for the states on the IAEA board to resolve.

The proposals outlined in the report essentially fall into three camps: reliance on the international market, backup commitments by individual states, and the establishment of a last-resort facility under the auspices of the IAEA. All are intended to convince countries to rely on the international market rather than national facilities to enrich uranium or to extract plutonium for spent nuclear fuel. In his June 11 statement to the board, ElBaradei essentially argued that all of the mechanisms could complement each other, calling for “an incremental approach, with multiple assurances in place.” In doing so, he stuck to a theme that he has embraced since receiving an IAEA expert group report in February 2005, which evaluated several steps toward a multilateral solution of the problem. (See ACT, March 2005.)

According to a June 15 IAEA press release, the report argues for moving toward a multilateral framework by creating mechanisms that would “assure the supply of fuel for nuclear power plants; over time, convert enrichment and reprocessing facilities from national to multilateral operations”; and “limit future enrichment and reprocessing to multilateral operations.”

The debate on how to prevent the spread of sensitive nuclear technology by limiting the construction of national nuclear fuel-cycle capabilities in additional states has gained new urgency since President George W. Bush in February 2004 proposed to limit supply of such technologies to states that already have such capabilities. (See ACT, March 2004.) Efforts to get the Nuclear Suppliers Group (NSG) to endorse such proposals permanently have languished, although the NSG has since approved annual moratoria on initiating any new agreements along these lines. Several developing countries, however, have criticized this approach as discriminatory, arguing that it institutionalizes a new cartel of technology holders. In particular, they say that it would infringe on their rights under the nuclear Nonproliferation Treaty for access to nuclear energy for peaceful purposes.

The agency says its proposals would not limit the right of states-parties to use nuclear energy for peaceful purposes and maintains that states would remain “free to choose their fuel options.” But it left important details to the IAEA board. For example, the board would still have to decide whether to limit supply assurances to countries that do not operate enrichment and reprocessing facilities or who renounce such an option. It would also have to decide whether it would require any potential
recipients to have in place an additional protocol to their safeguards agreement. Such protocols provide the agency with greater authority to search for undeclared nuclear activities.

A June 8 statement from the Group of Eight (G-8) summit in Heiligendamm, Germany, provides some indications of a possible board response. The group, which includes several key IAEA board members, stated that any proposal on fuel supply assurances should provide “added value” to the nonproliferation regime. Although the G-8 supported the IAEA’s position that participation in any fuel supply mechanism should be voluntary, there are differences regarding what that would mean. The G-8 said only that a possible future mechanism “should not preclude any state from purchasing nuclear fuel cycle services on the existing market beyond the frameworks of multilateral mechanisms,” without taking a position on the right to set up new indigenous enrichment and reprocessing facilities.

In an indication of the U.S. position, the House of Representatives on June 18 passed by voice vote the International Nuclear Fuel for Peace and Nonproliferation Act to help establish an international nuclear fuel bank. The bill was introduced by House Foreign Relations Committee Chairman Tom Lantos (D-Calif.) and provides $50 million to supplement an equivalent September 2006 pledge to the IAEA by the private Nuclear Threat Initiative (NTI).

Implementation of the NTI pledge and the Lantos bill, however, will depend on the pledge of an additional $50 million by a third party. The bill authorizes the contribution to establish the fuel bank on the territory of a non-nuclear-weapon state, including maintaining a reserve of low-enriched uranium (LEU) for reactor fuel to provide to eligible countries as a fallback mechanism. Only states that do not operate enrichment or reprocessing facilities “on any scale,” are in compliance with their safeguards obligations, and have an additional protocol to their safeguards agreements in force would be eligible to receive services from the fuel bank.

The Senate Foreign Relations Committee June 27 endorsed somewhat similar legislation by Sen. Richard Lugar (R-Ind). In addition, the House Appropriations Committee June 11 approved an energy and water spending bill that would provide $100 million in fiscal year 2008 for the fuel bank, if an additional $50 million were pledged by other IAEA member-states.

Unlike the Lantos legislation, the IAEA report says that a future nuclear fuel bank could be either a physical entity or a virtual one providing guarantees that appropriate fuel is forthcoming. It outlines the advantages and disadvantages of each approach. The report also argues that supply assurances should be tailored narrowly to convince states that their nuclear fuel supply will not be cut off for purely political reasons, that is, reasons other than a failure to pay for nuclear fuel or to meet their nonproliferation commitments under their safeguards agreement with the IAEA. Such safeguards are intended to prevent the diversion of peaceful nuclear material or technology to weapons purposes.

Because the member states had not seen the more than 90-page report before it was presented to the board, initial reactions were guarded. Several developing states of the Nonaligned Movement, including Iran, apparently repeated their concerns that any multilateral mechanism must not infringe on their right to use nuclear energy for peaceful purposes. Germany, acting in its current capacity as EU president, said in a June 14 press release that the report “comes at the right time” and that the European Union is “eager to find a solution which takes sufficient account of the current proliferation concerns regarding sensitive components in the nuclear fuel cycle.”

A Department of State official said June 19 that the United States believes that the IAEA report provides the basis for moving forward with debates on the board on the issue and that Washington “looks forward to discussion of the question of establishing a fuel assurance mechanism and to early action by the board to approve an IAEA role in a mechanism.” Still, substantive discussions are not expected before the next board meeting in September. They could also be postponed until the subsequent session in November.