World Bank outlines priorities for sustainable hydro development

Acknowledging a sharp change in direction from the 1990s, the World Bank is emphasizing a growing role for sustainable hydropower to bring both energy and water resources benefits to the developing world.

In “Directions in Hydropower,” a newly issued exposition of the World Bank Group’s views on the value of hydropower, the bank said hydropower now is viewed as an integral factor in addressing energy security, climate change, water security, and regional cooperation.

World Bank lending for hydropower bottomed out in 1999 due to growing opposition from environmental and other non-governmental organizations.

“There are risks inherent in development and operation of hydropower, many of which were the focus of passionate debate in the 1990s,” the bank said. “These risks cross the range of financial, geological, engineering, and market concerns, with particular attention to environmental protection, resettlement, social inclusion, and sharing of the benefits of development across all stakeholders.”

Three bottom-line policy: social, environmental, economic

As a consequence, the bank said, the definition of acceptable hydropower has shifted to one that recognizes core principles of sustainable development with attention to social and environmental, as well as economic “bottom lines.” It said the shift has been supported by a decade of better understanding and of developing best practices, safeguards, and self-assessment measures from players including the World Bank, Equator Banks, International Hydropower Association, International Energy Agency, the World Commission on Dams, and the United Nations Environment Program.

“The priority is shifting towards development ‘done right’ and comprehensive environmental management and benefits sharing,” the bank said.

In a stark change from a decade ago, World Bank lending now reflects a Water Resources Sector Strategy approved in 2003 that says significant levels of investment in water infrastructure are required throughout the developing world.

The bank said 67 hydropower projects have been approved since fiscal year 2003, amounting to US$3.7 billion in World Bank Group contributions to support a total of US$8.5 billion and nearly 9,700 MW in project investments. Within those numbers, the bank noted, is money for rehabilitation of existing capacity at the 350-MW Inga 1 and 1,424-MW Inga 2 hydro projects in the Democratic Republic of Congo (HydroWorld 4/20/09) and of hydro plants totaling 1,338 MW in Niger. (HydroWorld 2/11/09)

**Bank sees pipeline of US$2 billion in projects**

Major hydro projects have been approved in Africa and Asia, as well as several rehabilitation projects in Eastern Europe. The bank said a range of new projects is under discussion in India, Vietnam, the Nile Equatorial Lakes Region, Ethiopia, Guinea, Brazil, Romania, Turkey, Georgia, and Tajikistan. Bank-backed carbon finance projects are under discussion in Russia, Sri Lanka, and Madagascar.

The bank’s two-track strategy of investment lending, and energy and water sector strengthening, has only just begun. The bank said it has identified a “promising pipeline” of US$2 billion in projects under preparation for the next several years, not including projects that are only under preliminary discussion with clients.

The World Bank report said total economically feasible potential hydro capacity in developing countries exceeds 1,900,000 MW, 70 percent of which, 1,330,000 MW, is not exploited. That is four times the current installed hydro capacity of Europe and North America and nearly double the 740,000 MW installed worldwide. It said significant additional amounts of energy and capacity are available from rehabilitation of existing hydropower and water resources assets.
