
NUCLEAR SAFETY

An energy source that does not create greenhouse gases or contribute to global warming, nuclear power will be increasingly important in the future. In Canada, nuclear power plants supply 16 per cent of the nation's electricity needs, with Ontario relying on nuclear power for 50 per cent of its needs.

In the former Soviet Union and Central and Eastern Europe, nuclear power also plays an important role in producing energy. The countries of the former Soviet Union rely on nuclear power for about 12 per cent of their electricity requirements, while those of Central and Eastern Europe use nuclear energy to supply 25 to 50 per cent of their electricity needs.

Since the 1986 disaster at Chernobyl, there have been rising concerns about the safety of Soviet-designed RBMK and older VVER nuclear reactors. These power plants continue to operate in the former Soviet Union and Central and Eastern Europe. As the Chernobyl accident illustrated, the potential risks posed by these plants affect many nations in Europe and beyond.

Concerns over reactor design, safety and operating procedures, and lack of effective regulation pointed to the need for co-ordinated action by the G-7 countries. At the 1992 Munich Summit, Germany spearheaded efforts to improve reactor safety. The Group of 24 was chosen as the nuclear safety assistance co-ordinating body for Central and Eastern Europe and the former Soviet Union.

Nuclear safety and control measures are a top priority for Canada. Canada's Candu reactor technology, with its pressurized fuel channels, has significant applications to the Soviet-designed RBMK reactors. For this reason, Canada is uniquely placed to help improve the safety of these reactors until replacement electrical power is available.

The focus of Canada's efforts has been the \$30 million Canadian Nuclear Safety Initiative announced by Prime Minister Mulroney in 1992 during the visit to Canada by Russian President Yeltsin. The funds are being used for both bilateral and multilateral activities.

The bilateral funds will be spent in three areas: nuclear safety, regulatory assistance, and utility management. Atomic Energy of Canada Ltd. has prepared a nuclear safety and engineering program, which will see Canadian nuclear experts in Moscow and Sosnovy Bor working directly with employees and management. AECB officials recently went to Russia and Ukraine to find out what kind of assistance program is needed to help create effective nuclear regulatory agencies there.

G-7 multilateral efforts include establishment of the Nuclear Safety Account being administered by the European Bank for Reconstruction and Development. Canada has contributed \$7.5 million to the account, which will fund projects not covered by various bilateral programs. The account is expected to begin funding projects in mid-1993.

In response to a request by the G-7 leaders, the World Bank and the International Atomic Energy Agency have collaborated on a report on electricity supply and demand issues facing countries of the former Soviet Union and Central and Eastern Europe. The study, which will be reviewed by G-7 leaders, outlines options for closing and replacing higher-risk reactors.

The Tokyo Summit will give leaders an opportunity to review progress made over the past year, and recommend further steps to improve the safety of the higher-risk Soviet-designed nuclear power reactors.