

Europe

Finnish Parliament Approves Construction of Fifth Nuclear Unit

Finland's parliament approved plans for the construction of the country's fifth nuclear power plant on May, 24, 2002.

The vote, as a formal ratification, follows the decision of the Finland's government in favour of an application by the Finnish utility TVO.

TVO, the power company seeking the go-ahead for the new plant, argued it was needed because:

- Electricity consumption is on the increase.
- The price of nuclear electricity is stable and predictable.
- Maintaining diversity in electricity generation helps security of supply and promotes competition between different sources, and this results in price advantages.
- Finland imports 72% of its energy, and there is no willingness to increase that level of dependence.
- Nuclear power plants emit virtually no carbon dioxide and therefore help Finland meet its targets for reducing greenhouse gas emissions.

The vote is seen as very significant in that it is the first such decision to build a new nuclear power plant in Europe/Scandinavia for some 15 years. It reflects the growing awareness in Europe that nuclear power is necessarily a vital part of the energy future of most countries, particularly in the light of constraints on emissions of greenhouse gases.

Nuclear Power Increases Share in EU Electricity Production

The amount of electricity produced by nuclear power plants in the EU increased by 3% (from 821.1 terawatt-hours to 846 TWh) last year according to the International Energy Agency (IEA). Eight of the 15 EU member states have nuclear power programmes, accounting for a total of more than 140 operating nuclear power units. Total indigenous EU electricity production rose from 2422.6 TWh in 2000 to 2490.7 TWh last year - a rise of 2.8%. The nuclear share in total indigenous electricity production rose from 33.9% in 2000 to 34% in 2001.

Italy to Reconsider the Nuclear Option

The Italian industry minister Antonio Marzano is due to present an energy reform package, which is believed to call for the adoption of a new Italian energy policy that includes a "fundamental role" for both nuclear power and clean coal technologies.

However, a spokesman for the minister pointed out that the government was not yet ready to make any move to overturn the 1987 referendum, which, at that time, banned nuclear power in the country.

The country's leading financial newspaper, *Il Sole 24 Ore*, reported that the legislation would encourage Italian nuclear companies to dedicate substantially more resources to research and to become more active in nuclear operations abroad – particularly in countries such as Slovenia, Croatia and the Czech Republic.

Sweden with two possible sites for high level radioactive waste disposal

The Swedish council of Tierp has voted against a site investigation aimed at determining the suitability of the site as a potential location for a national spent fuel final repository. The rejection follows acceptance of site investigations in the municipalities of Ostharnmar and Oskarshamn. Those investigations are expected to take around 5 years. The Swedish nuclear fuel and waste management company SKB estimates that a

license application for the repository at the site finally chosen will be submitted in 2007 at the earliest.

Common EU Safety Standards

The EU energy commissioner, Loyola de Palacio, in a speech to the industry committee of the European Parliament, said the "time had come" for common Europe-wide nuclear standards to be developed, particularly in light of the coming expansion of the EU from 15 to 27 member states.

USA

New record

US nuclear power plants generated a record total of 767.3TWh of electricity in 2001, which is 1.8% up from 2000, according to the Nuclear Energy Institute. The increase represents the equivalent of adding two large nuclear power plants.

The average load factor of US plants in 2001 was 90.7%. Nuclear electricity production increased by 138.7TWh between 1997 and 2001.

Large US reactor to be re-commissioned.

The Tennessee Valley Authority decided to re-commission a large nuclear reactor that had been laid up for 17 years (after running for 11 years). The 1055 MWe Browns Ferry-1 unit will take five years to refurbish, with its power being increased to 1280 MWe, at a cost of US\$ 1.7-1.8 billion. It will be the first 'new' US reactor start-up since Watts Bar in 1996. TVA will also apply for 20-year license extensions for all three Browns Ferry units. The three were shut down in 1985 due to poor performance. Unit 2

returned to service in 1991, followed by unit 3 in 1995.

Three major US utilities have announced that they will apply for permits to build new reactors at existing nuclear power plant sites: Dominion Resources at North Anna, Entergy at Grand Gulf, and Exelon at Clinton.

NRC agrees to 20% increase

The NRC says it has approved a request by AmerGen to increase the generating capacity of the Clinton plant by about 20%, or 186 MWe, bringing it up to 1116 MWe.

The Commission determined that the plant's output could be safely increased primarily by using new fuel and making some plant modifications.

It has also approved an application from Entergy to increase the generating capacity of Waterford 3 by 1.5%, boosting it to 1169MWe.

In addition, the NRC has prepared a draft environmental assessment of a request by Carolina Power and Light for a license amendment to increase the maximum thermal power capacity at Brunswick 1 and 2 by 14.3%.

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