



PROJECT ON A-PLANT BUILDING AT BALKHASH

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О ПРОЕКТЕ СТРОИТЕЛЬСТВА АЭС НА БАЛХАШЕ

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This report presents basic outcomes of the power market analysis in the Republic of Kazakhstan, gives evaluation to the prospects of its development. Based on the analysis outcomes a conclusion about a necessity of construction of a huge power source at the southern area to provide a stable power supply was made.

According to the decisions of the RK Government and beginning from 1996 year, the activity on construction of a NPP at the southern Kazakhstan on a bank of Balkhash lake is being conducted.

The feasibility study on the NPP construction has been developed. The NPP will consist of three power units with reactors VVER-640. The main features of the NPP are as follows:

Design power:

electric, MWt 1935
heat, Gkal/hour 250

Basic equipment:

Reactor, piece × type 3 × V-407
Turbine, piece × type 3 × K-500-6,9/50
Generator, piece × type 3 × TZV-645
Operating hours at the set power, hour 7000
Annual output of the power from the NPP bus line, 10⁶ kWth 12713,3
Efficiency factor of the unit, % 33,4

When developing the feasibility study, the outcomes of the previous survey activity at the South-Kazakhstan site of the HPP and the library materials were used.

Within 1998-1999 the materials on feasibility study were being examined by the competent bodies of the Republic of Kazakhstan, and the materials on validation of site selection, under a support of the IAEA, were considered by an international group of experts.

Based on the comments of the environmental and sanitary inspection bodies, the feasibility study was complemented with additional materials. Based on recommendations of international experts group, there was revision of the "Program on integrated engineering survey, environmental research and long-term continuous monitoring". This program will last for two years. According to a decision of the RK Ministry of Energy, Industry and Trade Board, the program activity is expected to begin in 2000 year.

Further development of the project on construction of Balkhash NPP involves a consecutive fulfillment of the following steps:

- A decision of the RK Government about construction of Balkhash NPP;
- Establishment of an investment company, under a support of the Government, for implementation of the decision on the construction.

The government program draft on development of the nuclear power engineering in the Republic of Kazakhstan, which includes the Balkhash NPP construction, will be submitted for approval by the Government in the second quarter of 2000 year.

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