Construction Cost Management Method

In 2012 the Integrated Company carried out activities on improvement and introduction of the construction cost management method applied for construction of NPP generating units. This method is elaborated to perform tasks assigned by State Corporation ROSATOM and OJSC Rosenergoatom Concern in respect of reduction in investment costs of projects on construction of generating units.

In 2012 the marginal cost determination and control model for construction of NPP generating units was elaborated in the Company. This model was approved by the OJSC Rosenergoatom Concern and submitted to State Corporation ROSATOM for consideration of the opportunity of industrial introduction thereof (see Fig. 5.3). The model permits to calculate the cost of NPP generating unit construction at each stage of NPP construction (concept design stage, project approval stage, detailed design documentation elaboration stage, construction stage, and commissioning stage), control compliance with the fixed limits, and elaborate compensating measures.

In accordance with this model it is possible to track the cost of construction of Rostov NPP generating units 3 and 4, and Baltic NPP generating units 1 and 2. Due to the model application in 2011 and 2012 during construction of Rostov NPP generating units 3 and 4 the saving was achieved in the amount of 107.5 million rubles relative to the fixed marginal cost of 164.4 billion rubles; during construction of Baltic NPP generating units 1 and 2 in 2012 the saving amounted to 654.08 billion rubles relative to the fixed marginal cost of 249.6 billion rubles.

Fig. 5.3. Scheme of Marginal Cost Determination and Control Model for Construction of NPP Generating Units

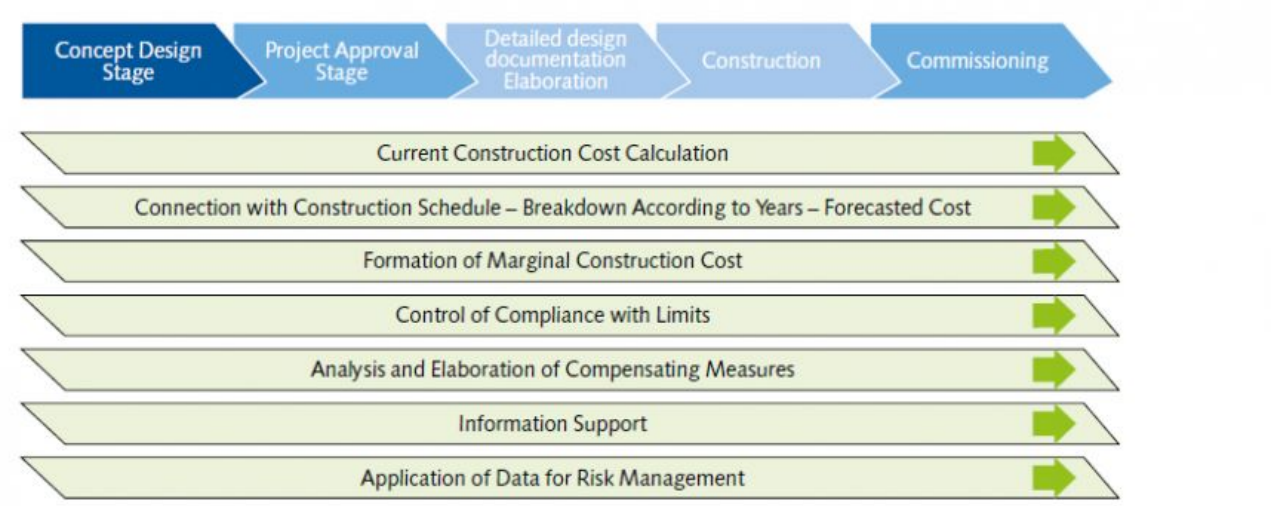

Fig. 5.3. Scheme of Marginal Cost Determination and Control Model for Construction of NPP Generating Units

The model was applied for calculation of NPP construction cost in Russia and abroad. In 2012 the following operations were performed with application of the model:

Calculation of cost of the Nizhny Novgorod NPP and Kursk NPP;
Calculation of construction cost of the Belarusian NPP;
Formation of tender documentation and submission of technical and commercial proposals on construction of the Temelin NPP (Czech) and the Majdal NPP (Jordan);
Correction of construction costs calculated for the Kudankulam NPP (India) and the Tianwan NPP (China).

Information on relevant purchases made during execution of construction projects of the Integrated Company, Atomenergoproekt and SPbAEP was used in calculations.

The technology of construction cost management with consideration of changes was presented during the 2nd International Scientific and Research Forum “Multi-D Project: Development of Competitive Technologies of Complex Engineering Facilities Construction”.

In 2012 the database was provided on cost of material and labor resources applied during NPP construction on the basis of VVER-TOI platform. Relevant information on current cost of resources with supporting materials was included in the database.

In 2012 during execution of orders of State Corporation ROSATOM management the package of primary documentation was elaborated including substantiating calculations on cancellation of reduction factors applied to overhead and profit. On the basis of the presented documents the Ministry of Regional Development of the Russian Federation made a decision on cancellation of reduction factors applied to operations on NPP construction.

The following activities on cost management are scheduled for 2013:

Development of the marginal cost determination and control model for construction of NPP generating units at the level of State Corporation ROSATOM;
Commissioning of extended module of the Automated Cost Management System (ACMC CCMS NIAEP);
Further application of the model to foreign construction projects;
Finalization of materials Catalogue with consideration of industry practices.