UNIFICATION OF TECHNOLOGICAL SOLUTIONS AND SUPPLY CHAINS IN NUCLEAR POWER PLANT DESIGN, CONSTRUCTION AND OPERATION

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on behalf of

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ASE WORLDWIDE PRESENCE

- 2 Headquarters based in Moscow and Nizhny Novgorod
- 24 Branches: 20 - in Russia and 4 - abroad
- Representative Offices in 10 countries worldwide

Own operating assets:

- Design Institutes (ASE EC JSC, AEP JSC, ATOMPROEKT JSC)
- Engineering Core Group in the area of RAW and SNF – NUKEM Technologies GmbH (Germany)
- Construction and Installation: SMU-№1, VDMU, TrustRossem, NIKIMT-Atomstroy, Energospetsmontazh

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NUCLEAR INDUSTRY UNIFORM CATALOGUE

Main objectives of the project:

• Simplification of design and procurement processes.
• Establishing of a centralized database for equipment and materials based on data from manufacturing plants and suppliers of equipment and materials.

Main principles:

• Independent suppliers access and data input for their products.
• The comprehensive description of every units of equipment.
• No limitations for the assortment and the nomenclature list of equipment.

Main tasks of the project:

• Creation of a single information database for the accumulation of structured and formalized information on produced and used samples of products for NPPs in one place.
• Creation of unified templates and rules for the technical description of different nomenclature groups and products for the transition of engineering companies of the industry and producers of products to unified "language" of communication.
• Interactivity of the once-entered data on the products for their repeated reuse by various users in their IP.
• Ensuring the convertibility in various formats of all input data for the organization of customized technical integration with IS of third-party.
SUPPLY CHAIN MANAGEMENT

- Concept documentation
- Design documentation, Layouts
- Rev Design documentation
- Construction & installation of equipment
- Operation

Equipment purchase, supply chain management

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The Nuclear Industry Uniform Catalogue of the equipment and materials (E-Catalogue) as the electronic database of products, which is one of the basic elements of the MULTI-D complex objects construction management technologies has elaborated in ASE Engineering company for the construction of Nuclear Power Plants (NPP).

The main objectives of the E-Catalogue are:

- the generation of product classification on the principle of hierarchical evolution of characteristics and features;
- uniform and structured description of each product class features;
- development of the E-Catalogue’s modules and tools for introduction, storage and instantiation of objects to ensure business processes and interfaces of all types for the E-Catalogue users;
- filling-in and updating information about product in E-Catalogue’s database;
- provision the policy of access to information in the E-Catalogue database depending on the assigned user role.
One of the key advantages of the E-Catalogue is the accumulation of 3D adapted models ready to be transmitted into design project systems. Competence of the E-Catalogue’s experts allow to create compound 3D models to ensure 3D-modelling of installation and repair according to MULTI-D technology.
THANK YOU FOR ATTENTION!

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