



## LLC 'AES-BURAN', RUSSIA

### Key Facts

**Company:** LLC 'AES-Buran'

**Website:** [www.aes-buran.ru](http://www.aes-buran.ru)

**Description:** LLC 'AES-Buran' provides organizational and technological support for projects throughout the EPC cycle, from site selection to commissioning.

**Industry:** Nuclear

**Country:** Russia

**Products Used:**

- Intergraph Smart® 3D
- Intergraph Smart P&ID
- Intergraph Smart Review

### AES-BURAN CREATES HEXAGON EXPERT TEAM

#### IDENTIFYING GOALS

LLC 'AES-Buran' is oriented towards performing a full range of work within the nuclear industry. The company relies on a variety of assets to fulfill its roles, namely proven and recognized solutions, innovative technologies and 60 years of experience in the development of the nuclear industry in Russia. These assets enable LLC 'AES-Buran' to implement unique and ambitious projects in Russia and abroad.

Under a new initiative, AES-Buran decided to create an expert group to develop and execute engineering services in the nuclear sector in Southeast Asia in relatively small periods of time. This was the motivation behind partnering with Bureau ESG – a systems integrator company – to implement Hexagon design technology for nuclear power plant (NPP) units and in turn train employees to work with Hexagon solutions.

#### REALIZING CHALLENGES

The main project challenge was the lack of a pipe elements data base. This was necessary to start working in Intergraph Smart 3D where the NPP unit model was going to be created. With the help of Bureau ESG specialists, this database was completed and the resulting catalogues included information on all types of pipes existing in the Russian Federation.

#### REALIZING RESULTS

In the course creating the Hexagon Expert Team the following tasks were completed:

- Hexagon solutions were set up and implemented
- Thirty AES-Buran employees went through extensive training on Hexagon solutions; training was partially supported by experts from the CAXperts Germany team.
- A single automation system was launched, based on Hexagon components - Smart 3D and Intergraph Smart P&ID



- The information model of the NPP was created
- The equipment catalogues were created

The results of the project:

- In less than a year it was possible to form an expert group trained to issue project documentation in Smart 3D not only for the nuclear sector, but also for the petrochemical industry, amongst others.
- In less than a year the complex model for the NPP was created (including the atomic reactor), consisted of 13 buildings and seven tunnels. The overall number of objects is 1 500 000, the data volume is 23 576MB and the designed pipe diameter is 6 – 2500mm.
- Employees were trained to use Hexagon technologies for design needs
- Rules of coordination between the AES-Buran design team were set, including rules on how to use the database.

## MOVING FORWARD

The CEO of AES-Buran Maksim Elchischev said, "It is known that this project is not unique, but we have been able to succeed due to several reasons:

1. We formed a new expert team with great motivation and the intention to succeed. We prepared everything for the project – the database as well as creating the rules of coordination between team members. This was done both internally and with the help of Bureau ESG employees and the Hexagon partner.
2. When technical support was needed, we always could rely on both Intergraph and Bureau ESG.
3. Hexagon offered us as many temporary licenses (in addition to those purchased) as needed."

## ABOUT HEXAGON

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon's PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at [hexagon.com](https://www.hexagon.com) and follow us @HexagonAB.