Nováky power plant
Nováky Power Plant

History

- 1949: Beginning of construction
- 1953: Launching the first boiler and turbogenerator into operation
- 1964: Launching Units 1 and 2 of ENO B into operation
- 1965: Accident of ash disposal site barrier
- 1976: Launching Units 3 and 4 of ENO B into operation
- 1987: Launching thermal feeder to Prievidza into operation
- 1994: Completion of refurbishment and upgrade of Unit 1 and 2 of ENO B
- 1996: Launching TG 11 of ENO A into operation
- 1996: Launching FK 1 of ENO A into operation
- 1999: Launching desulphurisation of Units 1 and 2 of ENO B into operation
- 2003: Launching of heat supply from ENO B to ENO A into operation
- 2003: Launching TG 12 of ENO A into operation
- 2007: Launching reverse osmosis on DEMI station into operation
- 2008: Launching sewage water treatment plant into operation
- 2008: Gypsum suspension dewatering
- 2009: Interconnection of Units 3 and of ENO B to ENO A in 2.1 MPa steam
- 2010: Replacement of Unit 2 of ENO B control system
Novaky Power Plant (ENO) is a thermal plant using brown coal mined in Slovakia, mainly in the Upper Nitra region, for electricity generation. Coal combustion as a chemical process generating heat, providing, in dry bottom boilers and in case of ENO also in a fluidised bed boiler, for steam generation having high parameters. The steam generated in boilers is brought to turbine blades using its kinetic energy for turning the blades. Connection of the turbine with a generator enables to transfer rotation to the generator where mechanical energy is converted into electric energy. Electricity from the generator is supplied to the grid via a transformer. Main production equipment of ENO B consists of four units, 110 MW each. A power unit represents an independent operation unit consisting of a boiler, turbine, generator and their accessories. Separators of ashes form combustion gases, a cooling tower, a unit transformer and, at the moment also, a desulphurisation equipment and a denitrification system are a part of the unit. Equipment which is common for several units or operations is a coal handling, water management (penstocks, filtration and water chemical treatment, pumps and distribution), stack, auxiliary equipment for removal of ash and substances from desulphurisation processes.
An important part of ENO power plant is also ENO A operation. At the moment, in ENO A, there are installed two dry bottom boilers 2 x 110 t/h and a fluidised bed boiler FK1 125 t/h of steam. In a turbine hall there are three turbogenerators: TG 3 with the output of 32 MW, TG 11 with the output of 28 MW and TG 12 with the output of 18 MW. Except for electricity generation, heat in a form of steam is generated in ENO A for neighbouring plants. Heat in a form of the hot steam is generated for Prievidza as well as for other customers situated on the path of the thermal feeder. Currently, the unit operations are also connected to a heat supply system.
All activities in Nováky Power Plant are executed in line with the environmental management system pursuant to ISO 14 001 standard which is proven by an obtained certificate.

Aimed at minimizing negative impacts of resources operation on environment and on health of the Upper Nitra region population, there was implemented an extensive programme with a view to achieve a high efficiency of energy transformation and greening.

The examples supporting the above-mentioned ideas are projects aimed at refurbishment of an obsolescent production technology and installation of new environmentally friendly equipment, e.g. Units 1 and 2 of ENO B desulphurisation, fluidised bed boiler FK1, TG 11 and TG 12 turbogenerators in ENO A operation or lately implemented heat connection in the form of steam.

Introduction of the gypsum suspension dewatering technology, reverse osmosis for water treatment and construction of the treatment plant for sewage and oiled water are also positive steps regarding the environment.

Additional preventive measurements leading to environment protection consist of construction of collective tanks during discharge of chemical substances and gas oil, replacement of switching and measuring equipment with oil filling in 110 kV substations by non-oil ones, monitoring systems installations and many others smaller actions and measurements.

In order to achieve the highest possible level in all areas of activity in both Slovenské elektrárne and in Nováky Power Plant, there is a project of the integrated management system certification including environmental management, quality and safety system and occupational health and protection.
A complex refurbishment of the power plant started in 1990. Gradually, Units 1 and 2 of ENO B, construction of the desulphurisation system to these units was executed and the fluidised bed boiler FK1 in ENO A was installed. Priority is paid to refurbishment of the source and to construction of new technologies, processing and safe storage of unused side products from the coal combustion and from the desulphurisation process with the attention paid to environment improvement. In near future, the aim of Slovenské elektrárne in Nováky Power Plant is to replace the obsolete Units 3 and 4 in ENO B and old-fashioned technology in ENO A by a new source using also alternative fuels, to extend life time and up grade systems in Units 1 and 2 of ENO B with addition of DENOX in order to achieve required level of nitrogen oxides reduction.

Nováky Power Plant with an installed capacity of 518 MW plays an important role in the energy grid of the Slovak Republic in terms of ensuring regulation energy and in a regional level, it ensures heat both for industry and population of the Upper Nitra region. Slovenské elektrárne, a.s. member of the Enel group, i.e. also ENO Power Plant in Zemianske Kostoľany pays a lot of attention to safety and occupational health and protection as well as to safety in relation to a region. It is not a coincidence that a motto of our company is: “Safety first”.

Bojnice Castle The castle was declared a National cultural monument. It stands on a travertine hill above the town. The first written information about the castle existence is from 1113 and comes from the Zobor abbey document. In 13th century, the castle was owned by Matúš Čák Trenčiansky (count Matthew of Trencin) until 1321. Subsequently, the castle was owned by several noble families, e.g. the Goleths, Leustachs, Noffryovs, the last owner was the Count Ján Palffy.

The Castle and the estate in Bojnice always belonged to a royal property. A king assigned them as a rent or hereditary ownership to loyal aristocracy.

Nowadays, there is one of the most beautiful ZOO parks close to the castle.

Bojnice Spa The Spa is situated in Bojnice town, 3 km north-west from Prievidza town. They offer curative, weekend or wellness stays.

Open-air Mining Museum A newly built Open-air Mining Museum is situated close to Cigiel Mine. It provides an opportunity to have a look into the underground mine shafts and at coal mining which is for a long time connected to the Upper Nitra Region and to our power plant as well.
For more information, please, contact:

Nováky Power Plant
Communication and Public Relations
Telephone/fax: +421/46/560 317
e-mail: infoseas@enel.com
www.seas.sk