

## Environmental and Social Data Sheet

### Overview

Project Name:	ELERING EMERGENCY RESERVE POWER PLANT
Project Number:	2013-0623
Country:	ESTONIA
Project Description:	The project consists of an expansion of a dual-fuel (gas with light fuel oil as backup) reserve power plant in Kiisa, northern Estonia from 110 MW to 250 MW. The promoter is Elering, the transmission system operator (TSO) of Estonia. The purpose of this power plant is to provide electricity system ancillary services (demand response, secondary response, reactive power, black start capability) that TSOs are required to arrange.
EIA required:	yes
Project included in Carbon Footprint Exercise <sup>1</sup> :	no
(details for projects included are provided in section: "EIB Carbon Footprint Exercise")	

### Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project falls under Annex 1 of the EU EIA Directive 2011/92/EU and thereby has been subject to a full EIA. The competent authority, Keskkonnaamet, has issued the environmental permit based on this assessment and the public consultation carried out.

The EIA was carried out on the full 250 MW power plant, and covers as well the common works (access roads and gas pipeline) that were implemented in the context of the earlier 110 MW phase of the project that is already operational.

The main impacts of the plant are the construction effects and nuisance, and at operational stage the noise and gaseous pollution emissions (notably NOx).

The EIA included assessments of adjacent Natura 2000 areas, protected habitats and species. One Natura 2000 site (Kurtina-Vilivere hoiuala) was not covered by the EIA. This protected area is a section of Kelia River that is protecting otter, river mussel and river vegetation. The distance to this protected area is 2.2 km from the project, and it is situated upstream from the project site. The project is therefore not expected to affect this area negatively; however confirmation by the competent environmental authority on this is still required as a loan condition.

**Condition:** The competent authority confirming, following an appropriate assessment, that the project is not likely to have any significant negative effects on the protected area of Kurtina-Vilivere hoiuala.

<sup>1</sup> Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

## Environmental and Social Assessment

### Environmental Assessment

- The project complies with national and EU Environmental Legislation.
- Main environmental impacts during operation are the NO<sub>x</sub> emissions. The pollutant concentrations remain under applicable limits of Air Quality Directive 2008/50/EC, and the emissions do not exceed the amounts of Industrial Emission Directive 2010/75/EU. The other operational effects of the plant include noise, which has been mitigated with efficient silencers. The construction phase of the project is largely past, with remaining assembly works done inside to the engine halls. The nuisance during the construction has been typical to any major construction site; traffic, noise dust.
- The project gensets have guaranteed efficiencies over 42%, corresponding to Emission Performance Standard (EPS) value (when using gas fuel) below 475 gCO<sub>2</sub>/kWh. The power plant is expected to be operated on average 200 hours annually, on 50 occasions.
- The project emits during average operation year some 13,000 tons of CO<sub>2</sub>. The majority of Estonian generation is much more polluting oil-shale based generation and the project thereby provides this emergency generation with less emissions than available alternatives.

### Social Assessment

- The project will not require any land expropriation; the site is agricultural land, adjacent to an existing large electricity substation. The gas pipeline follows the right-of-way of the existing electricity transmission lines
- Labour Standards – the promoter and EPC-contractor are large long-established European companies that follow acceptable labour standards and have appropriate Occupational Health and Safety procedures.

### Public Consultation and Stakeholder Engagement

- Consultations carried out under the EIA process.
- Consultation did give rise to three remarks (all related to gas pipeline). Two of these remarks could be accommodated in the design, and the third was rejected with justifications.