

High voltage power lines, Ukraine



CEE Bankwatch Network's mission is to prevent the environmentally and socially harmful impacts of international development finance, and to promote alternative solutions and public participation

EBRD Annual Meeting, London, May 2009

Introduction

In April 2009 the National Energy Company of Ukraine – Ukrenergo – announced plans to construct two new high voltage transmission lines with hoped for financial support from the EBRD. One of the lines is a 330 kV transmission line to connect the remote southern part of the Odessa region to Ukraine's joint power grid and bypassing the territory of Moldova. The second is a 750 kV transmission line from the Zaporizhska Nuclear Power Plant (NPP) to a substation in the Khersonska oblast in southern Ukraine. The project sponsor has started an environmental impact assessment (EIA) process and conducted a series of scoping meetings in Ukraine between April 27 and May 13. The estimated total cost of the two projects may amount to EUR 350 million, with EBRD financing up to EUR 160 million. Co-financing is also expected to be provided by the European Investment Bank.

Transmission line through Ramsar wetlands

The 330 kV Novoodeska – Artsyz transmission line is designed to connect the southern part of the Odessa region to Ukraine's joint power grid and therefore has to cross the lower part of the River Dniester. The project aims to reduce dependence on a thermo power plant (TPP) in Moldova which is currently providing a rather unstable electricity supply to this 12.590 km² area (roughly 2 percent of Ukraine's total territory). In order to provide an alternative source of electricity for this rather small area, Ukrenergo appears set on damaging a natural protected area of international importance.

Even at the stage of scoping, the project promoter is focusing on only one option for the route of the power line – through the heart of the Dniester estuary's water meadows. These meadows are protected under the Ramsar Convention as site 3UA007 - Northern Part of Dniester Liman (estuary). The area forms a significant part of the wetland ecosystems of the Pan-European Ecological Network. It supports a rich diversity of natural habitats, is crucial for a great number of migrant birds and other species, many of which are included in the Red Data Book (RDB) of Ukraine and some on the IUCN Red List. Part of this territory also belongs to the Lower Dniester National Nature Park, established by a decree of the President of Ukraine on November 13, 2008.

Among the alternatives briefly mentioned in the scoping papers, there is one possible route over the narrowest part of the Lower Dniester outside the Ramsar site, as well as an option to lay an underground cable instead of an overhead line. No detailed information about these options, including their exact routing, was presented during the scoping. Such poor and selective disclosure of information deprives the concerned public and independent scientists of necessary input data, making it much more complicated for these parties to perform their own analysis and to prepare well-grounded comments. These opportunities should be allowed to the public during the scoping process, as per the EBRD's Environmental and Social Policy.

Alternatives such as laying the underground cable under the narrowest part of the Lower Dniester may indeed prove to be a far better option. It is not clear why no more details were provided about this option, and why it was not put forward for discussion during the scoping.

According to the Ukrainian President's Decree N 1863/2005 from December 27 2005, "On the decision of the Committee on the National Security and Defense from 5 December, 2005 about the state of energy security of Ukraine and the key issues of national policy in the area of its provision", the 330 kV Novoodeska – Artsyz transmission line ought to be constructed with a section of underground cable under the Dniester estuary. Ukrenergo claims that this route is 39 kilometres longer, and therefore more expensive. However, the economic feasibility calculations are not available to the public and therefore it is not clear how the project promoter has calculated the losses to be caused by the destruction of protected wetlands and whether these irreplaceable losses were at all taken into consideration during the preparation of the comparative budgets for different alternatives.

The project sponsor has also failed to provide estimates for other types of alternatives, such as the diversification of supply using local resources or improved cooperation with Moldova regarding the stabilisation of electricity supply from Moldova's TPP.

New output capacity for Zaporizhska NPP

The other power line project is planned to connect the Zaporizhska nuclear power plant (NPP) – installed capacity of 5700 MW – with the Kakhovska substation. According to the project sponsor this power line is needed to utilise the full generation capacity of the Zaporizhska NPP. Currently the project sponsor claims that it is able to provide 5,300 of the possible 5700 MW because of the insufficient capacity of the grid connection.

However, such argumentation does not appear convincing:

- Zaporizhska NPP, just like any other NPP of this type, is not able to work at full load throughout the year. The average capacity factor at Ukrainian NPPs is about 80 percent, and 85 percent is an ideal level that has never been exceeded. The first reactor of the Zaporizhska NPP was commissioned in 1984 and its lifetime will be over in 2014, when closure and decommissioning should start. When this happens the total capacity of Zaporizhska NPP will decrease.
- Zaporizhska NPP has been operating at its current capacity level for the last 15 years, since the sixth reactor was completed and connected to the grid. Until now no problem with capacity utilisation has been reported.
- Furthermore, as a part of the project, construction of a new 2000 MW substation is planned, with more than double capacity surplus. Such an intention fits perfectly with the plan to further expand the Zaporizhska NPP with two more units, as laid out in the national Energy Strategy of Ukraine up to 2030 – and it thus constitutes support for new nuclear reactors.

Two pieces of a bigger puzzle

A closer look at the background details reveals information that neither the project sponsor nor the EBRD provided. The Energy Strategy of Ukraine for the period up to 2030 foresees construction of the new, 1050 km long, 750 KV major power line that will connect Khmelnytsky NPP, Dnestr Pumped Storage Plant, two substations: Kakhovska and Prymorska and Zaporizhska NPP. According to the Strategy such line will create conditions for the integration of Ukrainian grid into the European network (UCTE) and significant increase of the electricity export. The link between Kakhovska substation and ZNPP, proposed to be financed by EBRD is just a chain of this line.

Another substation that is part of the line, Prymorska is still planned to be built and will be linked to Novoodeska substation via power line already financed by EBRD in 2005¹. The line from Novoodeska to Artsyz is one from two projects currently looking for EBRD's financing. This line is explained as needed only to provide the remote part of Odessa region with secure supply of electricity. However, according to the statement of Deputy Minister of Energy of Ukraine Volodymyr Luchnikov, made in Odessa on 7 October 2008 the Artsyz substation will serve not only 2 types of local power lines 330 KV and 110 KV but also 440 KV line designed for export.

Therefore it looks like in close cooperation with Ukrenergo EBRD will rather improve Ukraine's capacity to export electricity from its nuclear blocks under the smokescreen of serving the local needs. Furthermore, two projects are not united in one most likely to facilitate their approval by the Board of Directors.

Procedural shortcomings at the scoping stage

The scoping process was not satisfactory and did not comply fully with the requirements set out in the EBRD's Environmental and Social Policy. Information about both projects, including the public consultation plans, appeared on the sponsor's website only in the afternoon on the last working day before the first consultation meetings, and thus can not be regarded as "timely and available".

At the local level, this information was provided only on the day of the meeting, which did not allow for wider active and well-grounded discussions in Odessa and Zaporizhia. There are also doubts about whether the scoping meetings were conducted at the most relevant places. For example, one of the meetings was organised in Zaporizhia which is 65 kilometres away from the Zaporizhska NPP and the proposed line. It would be logical to consult people potentially influenced by the project in some other town closer to the line.

The content of the information proposed for discussion at the scoping meetings also raises serious concerns, especially regarding the Novoodeska – Artsyz line. The document on the project's scope says that the objective of this consultation is only "to inform stakeholders and the public", whereas EBRD involvement should necessitate opportunities for consultation participants to provide comments and proposals for the scope of the EIA, in order to influence the content of the EIA including alternatives to be considered in the EIA documentation.

For both transmission lines the project promoters failed to provide detailed information on alternatives but rather presented one already chosen alternative. Such an approach is completely inappropriate at this stage of scoping and raises serious doubts about the sponsor's intentions of conducting a proper EIA. The lack of a thorough assessment of alternatives is especially egregious in the case of the Novoodeska – Artsyz line where the proposed option involves inevitable damage to a Ramsar site.

Furthermore the scoping documentation presented for both projects did not include the "Draft annotated table of contents for the EIA, outlining workplan, timing, and identifying responsible parties", as is required by the EBRD Consultation and Disclosure Requirements Guidance for Category A Projects on Scoping.

Recommendations

- We call on the EBRD to stop the practice of dividing major infrastructure projects into smaller parts and require the project sponsor National Energy Company Ukrenergo to conduct a feasibility analysis of both projects as components of its plans for integration into the European power network and to disclose it in the framework of the EIA public consultation process. These analyses have to comparatively assess

¹ Odessa High Voltage Grid Upgrade: <http://www.ebrd.com/projects/psd/psd2005/33896.htm>

alternative solutions to provide the population of the Odessa region with electricity and a do-nothing option for the Zaporizhska high voltage line.

- The EBRD should in no scenario support the implementation of the Novoodeska – Artsyz project in natural protected areas of international importance that will undermine the international commitments of Ukraine and significantly damage the environment.
- The EBRD should also ensure thorough oversight of the implementation of its policies by the project sponsor and consultants. The unjustified rush in conducting an EIA and public consultations demonstrated so far is not acceptable.

For more information

Yury Urbansky
National Ecological Centre of Ukraine/CEE Bankwatch Network
Tel: + 38044 353 78 42
Email: urbik@necu.org.ua
www.bankwatch.org

Vladlena Martsynkevych
National Ecological Centre of Ukraine
Tel: + 38044 353 78 42
Email: vladlena@bankwatch.org
www.bankwatch.org