

IF FENCES MAKE GOOD NEIGHBOURS, WHAT ABOUT NUCLEAR ENERGY?

How Ukraine's nuclear future ties into Europe's energy security strategy

In 2010 Ukraine joined the European Energy Community to integrate into the European electricity and gas markets. With this agreement Ukraine, already a net electricity exporter, can generate revenues from sales to the EU. For its part the EU will benefit by securing a steady supply of energy imports from Ukraine.

But this seemingly benign arrangement between neighbours poses a series of significant risks to both people and planet, because the Ukrainian government is looking to the EU and international financial institutions to sponsor a warily nuclear-intensive, export-oriented energy program.

At a time when the world reels from catastrophic events unfolding in Japan after natural disasters seriously compromised the safety and security of nuclear reactors at Fukushima, considering a massive increase in the use of nuclear energy has never seemed more misguided. Yet that is exactly what the Ukrainian government has outlined in its draft Energy Strategy till 2030.

Currently under redevelopment by the government, the Strategy predicts that 20 years from now, Ukraine can produce 25 terawatts of excess electricity - that's close to the total annual electricity generation of Slovakia. But that scenario counts on extending the lifetime of 11 existing operational nuclear reactors and wholly constructing another 22 reactors.

INTERNATIONAL FINANCIAL INSTITUTIONS AT THE DOORSTEP

If the current Ukrainian Energy Strategy till 2030 is realised, up to 4 gigawatts of electricity could go for sale to the EU, but only if the necessary transmission infrastructure is first in place. This is where the EU and international financial institutions enter the picture.

Both the European Investment Bank (EIB) and European Bank for Reconstruction and Development (EBRD) have over the last five years invested approximately EUR 1 billion in the Ukrainian energy sector. In 2005 Ukraine signed an agreement with the EIB to prioritise "Trans-European Network projects connecting Ukraine and the EU" i.e. transmission lines. The EU's Neighbourhood Investment Facility (NIF) has already granted two transmission line projects EUR 2.8 million in technical assistance. According to the draft EBRD country strategy for Ukraine, all new public infrastructure and energy projects are to be prepared together with the EIB and benefit from grant cofinancing and technical assistance from the NIF.

Three transmission line projects have already been financed by the EBRD and EIB, and these lines will form an integral part of an ultra high-voltage corridor stretching from east to west across Ukraine. Also the IFIs are currently considering another major section of this corridor – the so-called "second backbone" – which will connect three Ukrainian nuclear power plants and two hydro pumped storage plants at whopping cost of nearly EUR 1.2 billion.

Ukraine and its nuclear legacy

Nuclear energy and Ukraine are most notoriously synonymous with the meltdown at Chernobyl a quarter of a century ago. But the Ukrainian nuclear industry continues to be beleaguered by a slew of other dangerous issues:

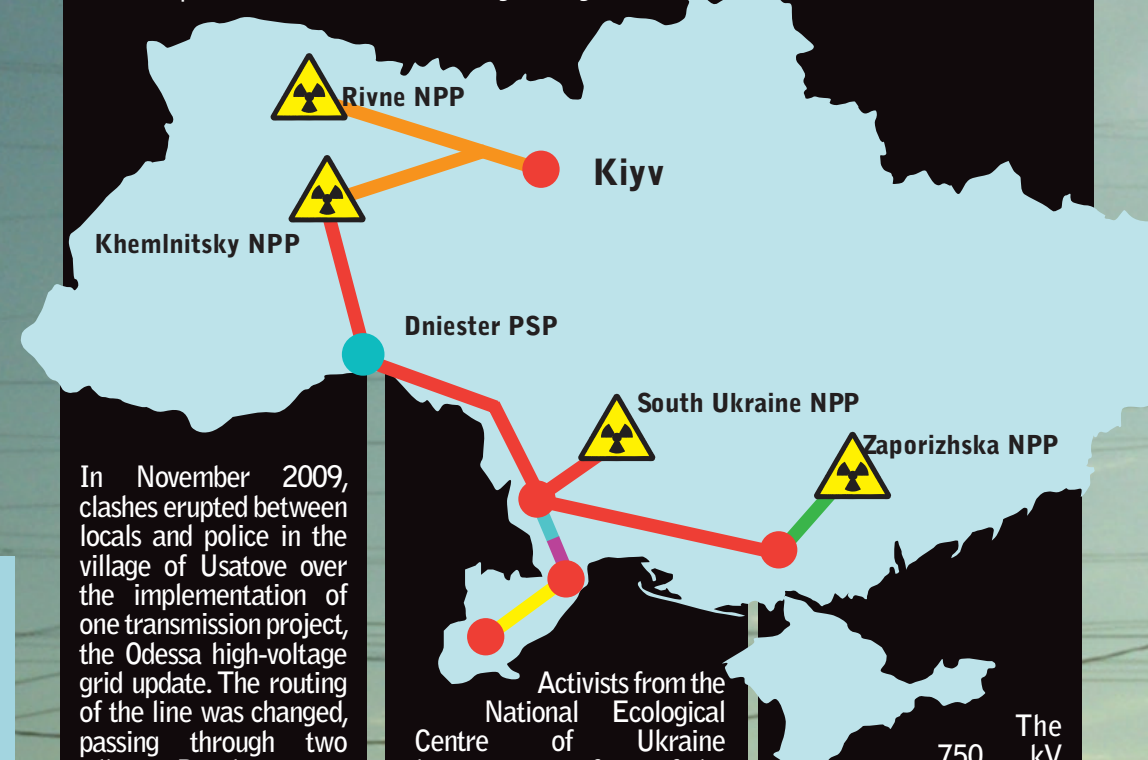
- Under the design of the Energy Strategy until 2030, the total amount of spent nuclear fuel and radioactive waste in Ukraine could increase to as much as 200 million tons annual.

- Currently the Ukrainian government does not invest in infrastructure for the long-term, safe isolation of spent fuel and radioactive waste.

- As Ukrainian nuclear power plants continue to age, the number of fails has increased, like minor emissions and leaks of radiation, the appearance of cracks in the covers of reactor vessels and short circuits. This was the case at the Rivne nuclear plant in January, whose lifetime had just been extended a month earlier in December 2010.

UKRAINIAN TRANSMISSION LINE PROJECTS FUNDED OR PLANNED TO BE FUNDED WITH EU PUBLIC FINANCES

- Odessa high-voltage grid update approved by the EBRD in 2005 - up to EUR 25 mln
- 330 kV Novoodesskaya - Arstyz transmission line - EUR 0.7 mln from NIF
- Ukrenergo power transmission project (Rivne NPP - Kyiv) approved by EIB and EBRD in 2008 - up to EUR 150 mln each
- South Ukraine transmission line approved by EBRD 2010 - EUR 175 mln
- Zaporizhska - Kahkovska line approved by the EIB in 2010 - up to EUR 150 mln
- Proposed 'second backbone' ultra high-voltage corridor



In November 2009, clashes erupted between locals and police in the village of Usatove over the implementation of one transmission project, the Odessa high-voltage grid update. The routing of the line was changed, passing through two villages. Residents were neither consulted prior to the construction nor was any compensation was given to those affected.

Activists from the National Ecological Centre of Ukraine demonstrate in front of the Ministry of Energy and Fuel in Kiev on the anniversary of the Chernobyl disaster. Ukrainian civil society is using the action to protest the Energy Strategy until 2030 and call for a strategy that duly considers alternative energy futures.

The 750 kV transmission line from the Zaporizhska nuclear plant to the Kahkovska substation will cross the Lower Dnieper national nature park, an area designated under the global Important Bird Areas initiative.



WHAT ARE THE ALTERNATIVES?

Ukrainian civil society and international organisations are calling on both the EU and the Ukrainian government to put an end to these plans and instead consider the readily available alternatives.

Studies show that the possibilities to apply energy-saving technologies (after all the Ukrainian economy's energy intensity is three times higher than Poland), coupled with alternative and renewable energy sources, can provide an alternative to the nuclear option for the development of the Ukrainian power industry.

Joint efforts are needed by both the Ukrainian government and the EU to target aspects of the Ukrainian nuclear industry that until now have been completely overlooked - preparation for closure and decommission of old reactors that are approaching the end of their lifetime.

At the same time, power-exporting infrastructure should not receive financing from EU financial institutions unless Ukraine can demonstrate safe and sustainable electricity generation that is in compliance with Ukraine's commitment to the Energy Community Treaty.

Find out more information at <http://bankwatch.org/transmissionlines>



This publication has been produced with the financial assistance of the European Union. The content of this publication is the sole responsibility of CEE Bankwatch Network and can under no circumstances be regarded as reflecting the position of the European Union.