NGO Statement on the National Report of the Republic of Belarus on the Belarusian NPP Objective Safety Reassessment (Stress tests)

22 January 2018

In November 2017, the National Report of the Republic of Belarus on the Belarusian NPP Objective Safety Reassessment was published on the web-site of the Belarusian nuclear regulatory agency Gosatomnadzor. This is the draft national report in the European post-Fukushima stress tests, which were performed on the Astravets nuclear power plant (NPP) in Belarus in 2016-2017. The report was sent to the European Commission and to the European Nuclear Safety Regulators Group (ENSREG) for information and peer-review. Up to 13 January 2018, ENSREG was collecting questions, concerns and observations from all interested, which will be taken into account in the peer-review.

Among others, the Belarusian NGO "Ecohome" and Greenpeace Central and Eastern Europe submitted a catalogue of questions concerning this stress test report of the Belarusian Nuclear Power Plant (further - Belarusian NPP).

We hope that the licensee, the Republican Unitary Enterprise "Belarusian Nuclear Power Plant", responsible for the implementation and operation of the Belarusian NPP, will present comprehensive responses to these observations and will take into account the suggestions.

- 1) We note that the National Report of the Republic of Belarus on the Belarusian NPP Objective Safety Reassessment (Stress tests) is **not a document that proves the safety of the Belarusian NPP**, as Belarusian officials, in particular representatives of the Belarusian nuclear regulator Gosatomnadzor, claim. The European stress test specifications were developed after the Fukushima disaster by the association of nuclear regulators WENRA on request of ENSREG and the European Commission as guidelines for the assessment of the risks of external influences to the NPP caused by floods and fires, earthquakes, extreme weather and the other extreme circumstances. The European stress-tests are aimed to reduce these risks by means of an adequate and truthful assessment, and the implementation of a resulting national action plan. Statements by Belarusian officials claiming there is no need for adjustments to the Belarusian NPP are misleading the stress tests have not finished and feedback from European nuclear regulators and the European Commission is still outstanding. Moreover such statements create the additional danger that adequate risk reduction measures for the Belarusian NPP (among others those suggested by the stress tests) will not be implemented because the NPP is already deemed "safe enough".
- 2) We note that although the National Report is supposed to be developed on the basis of a report from the operator / constructor, such a report was not made public, nor was there any public consultation or involvement of interested parties in the compilation of both reports, nor was independent expert critique solicited. The European stress test specifications prescribe for the stress tests process **transparency and inclusion of the public**. We express our hope that Belarus will submit the resulting national action plan to public consultation as foreseen under, among others, the Aarhus Convention.
- 3) We note that the National Report does not contain **essential information** that is necessary for a full-scale expert assessment and peer-review. The report does not contain links to open, published documentation on which the stress-tests outcomes are based, including to the results of calculations and modelling; there is no information about methodology and scenarios based on a deterministic approach (as was recommended in the EU stress-tests specifications). The

information in the chapter "Management of severe accidents" is not sufficient because of the absence of key documents, which have been not developed yet. This includes among others the Emergency Operation Procedure (EOP), the Beyond Design Basis Accident Management Guidelines (BDBAMG) and the Severe Accident Management Guidelines (SAMG), which are all still under development.

- 4) We notice that the National Report lists **technical and organisational measures** that could be undertaken to reduce the risk of conditions as blackout, loss of the ultimate heat sink and others; but it does not assess the sufficiency or effectiveness of these measures on the basis of an analysis of probability and conditions of failure of equipment, including passive safety systems, and grounding them on the results of practice or modelling;
- 5) We have the impression, on the basis of the form and content, that the National Report as a document has been produced in a hurry and was **not entirely completed**. Links to some of the documentation as well as explanation of a lot of abbreviations are missing; in many cases, large pieces of the content of different chapters consists of copy-paste from other chapters for example, the chapter describing measures to be undertaken is a duplication of the chapter with recommendations on improvement. Because of that, it is not clear which measures are already developed and which are recommended to be developed.
- 6) We notice that the National Report demonstrates a **lack of safety in some of the equipment**, relevant for radiation risk. It will be difficult if not impossible to implement certain risk reduction recommendations during ongoing NPP construction. As an example, spent fuel pools are not sufficiently protected for the conditions of blackout or earthquake. Taking into account the current stage of NPP construction, it is not clear how, for instance, the proposed measures of increasing seismic robustness of the spent nuclear fuel pools still can be implemented.

We therefore demand

- 7) that the National Report of the Republic of Belarus on the Belarusian NPP Objective Safety Reassessment (Stress tests) will be seriously refined, and that our questions, suggestions and observations, as well as all the provisions of the EU stress-test specifications will be taken into account. The stress tests should adequately assess the risks of the Belarusian NPP project, including those by external impacts such as earthquakes, floods, extreme weather, and/or malevolent attack (sabotage, terrorist attack, acts of war).
- 8) Belarus should, beyond this, also seriously assess the implementation of all additional risk reduction measures for its NPP as well as costs of impacts of severe accidents, including accidents with a substantial emission of radioactive material, to get a realistic overview of all involved costs. This will enable a more rational choice for the energy future of Belarus: whether to invest in additional and very expensive risk reduction measures, which at the same time do not completely eliminate the risk of a severe radiation accident, or cancel the Astravets nuclear power station project in favour of safe and cheaper options including energy efficiency measures and renewable energy sources. We want to highlight that this latter path enjoys a wide public support in Belarus and surrounding countries.

NGO "Ecohome" Belarusian Green Party Greenpeace Central and Eastern European

The submission in the stress test by EcoDom can be found here (in Russian).

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