Information for the attention of Implementation Committee, Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991)

To be sent through the Secretary to the Convention:

Ms. Tea Aulavuo United Nations Economic Commission for Europe Office 319, Palais des Nations, 8-14 Avenue de la Paix, 1211 Genève 10, Switzerland Tel.: +41 22 917 17 23 Fax: +41 22 917 01 07 E-mail: eia.conv@unece.org Website: www.unece.org/env/eia

Date sent to the	27.03.13
Secretary	

Sent by ("the source"):

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Concerning:	
Party or Parties	United Kingdom
(States) of origin,	
under whose jurisdiction	
envisaged to take place	
Affected Party or	Republic of Ireland
Parties (States), likely	
to be affected by the	
transboundary impact of	
Activity (project)	Item 2 of Appendix 1 to the Convention [Thermal power stations and
identified in the list of	other compustion installations with a heat output of 300 megawatts or
activities in Appendix I to	more and nuclear power stations and other nuclear reactors]
the Convention	
Likely significant	A severe accident may cause transboundary impacts (e.g. radioactive
adverse trans-	contamination) if necessary measures are not implemented.
the estivity (project)	
Brovisions of the	Article 2 (6) failure to provide an appartunity to the public in grade likely
Convention (Articles)	to be affected to participate in the relevant EIA procedures equivalent to
compliance with which is	to be anected to participate in the relevant LIA procedures equivalent to that provided to the public of the Party of origin
being contested	
	Article 3 (1) failed to provide, through the secretariat, a notification to its
	neighbouring States

	 Article 3 (2) failure to provide the information on the planned activity, technical information, tables with calculated data and EIA submitted by the developer Article 5 failure to enter into consultations with the affected Party concerning after completion of the environmental impact assessment documentation Article 6.
Description of issue – please attach supporting information	See also attached Submission of Concerned Party The concerns relate to the planned building of a nuclear power station at Hinkley Point, Somerset, England, which is an activity of the type listed in Appendix 1 to the Convention which could cause significant transboundary impact. Although unlikely, a severe accident may cause transboundary impacts (e.g. radioactive contamination) if necessary measures are not implemented. The Convention requires that the Party of origin shall provide an opportunity to the public in areas likely to be affected to participate in the relevant EIA procedures regarding proposed activities and shall ensure that the opportunity provided to the public of the affected Party is equivalent to that provided to the public of the Party of origin. The United Kingdom government failed to provide, through the Secretariat, a notification to the Republic of Ireland, documentation on and EIA submitted by the developer and, after completion of the environmental impact assessment documentation, without undue delay to enter into consultations with Ireland concerning, inter alia, the potential transboundary impact of the proposed activity and measures to reduce or eliminate its impact. A suspension of the development of the project is

For use by secretariat:

Reference number	EIA / IC / INFO /
Date received	
Original language of	
information	
Translation into	
English by	
Date forwarded to	
Committee	
Date forwarded to	
Party or Parties	
Remarks by	
secretariat	
Date first discussed	
by the Committee	
(possibly including	
preliminary determination	
A delition of	
Additional	
information	
requested of source	

For use by the Committee:

The source of the information is known and not anonymous	
The information relates to an activity listed in Appendix I to the	
Convention likely to have a significant adverse transboundary impact	
The information is the basis for a profound suspicion of non-compliance	
The information relates to the implementation of Convention provisions	
Committee time and resources are available	



Kilcatherine, Eyeries, County Cork http://www.friendsoftheirishenvironment.org

Ms. Tea Aulavuo United Nations Economic Commission for Europe, Office 319, Palais des Nations, 8-14 Avenue de la Paix, 1211 Geneve 10, Switzerland

By email only: eia.conv@unece.org

Date: March 27, 2013

United Nations Economic Commission for Europe Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991)

SUBMISSION BY FRIENDS OF THE IRISH ENVIRONMENT HAVING CONCERNS ABOUT THE COMPLIANCE BY THE UNITED KINGDOM WITH ITS OBLIGATIONS UNDER THE ESPOO CONVENTION WITH RESPECT TO THE CONSTRUCTION OF A NUCLEAR POWER PLANT IN THE UNITED KINGDOM

Submission of concerned party

In accordance with paragraph 5(a) of the Appendix to decision III/2 of the Meeting of the Parties to the Convention on Environmental Impact Assessment in a transboundary Context (Espoo, 1991), hereafter 'The Convention', Friends of the Irish Environment being a Non-Governmental Organisation [NGO] registered in the Republic of Ireland, a member of the Irish Environmental Network and the European Environmental Bureau, wishes to bring before the Convention's Implementation Committee a submission expressing concerns about the failure in compliance of the United Kingdom with its obligations under the Convention.

Friends of the Irish Environment is a non-profit company limited by guarantee registered in Ireland. It is a member of the European Environmental Bureau and the Irish Environmental Network. Registered Office: Kilcatherine, Eyeries, Co Cork, Ireland. Company No. 326985. Tel & Fax: 353 (0)27 74771 Email: admin@friendsoftheirishenvironment.org Directors: Caroline Lewis, Tony Lowes These concerns relate to the planned building of a nuclear power station at Hinkley Point, Somerset, England, which is an activity of the type listed in Item 2 of Appendix 1 to the Convention [Thermal power stations and other combustion installations with a heat output of 300 megawatts or more and nuclear power stations and other nuclear reactors] which could cause significant transboundary impact.

Nuclear power plants (listed in Appendix I to the Convention) automatically require application of the Convention if significant transboundary impact is likely. 'Although unlikely, a severe accident may cause transboundary impacts (e.g. radioactive contamination) if necessary measures are not implemented', as stated in UNECE Environmental Policy, Treaties, EIA, Outputs, Case Study, 'Nuclear Power Plants in Finland', dated March 2009. [See Annex II to this submission for historic precedent.]

This organisation made representations to the Irish Minister for the Environment in relation to this matter which remains unanswered as does our request to the Irish Contact Point of Contact for Formal Notification and our telephone enquiries to the Radiological Protection Institute of Ireland (RPII) [Annex I to this submission].

The open submissions by Azerbaijan having concerns about Armenia's compliance with its obligations under the Convention with respect to the planned building of a nuclear power station in Metsamor, Armenia [EIA/IC/S/3] and by Lithuania having concerns about Belarus's compliance with its obligations under the Convention with respect to the planned building of a nuclear power station in Belarus [EIA/IC/S/4] support the recognition of these concerns, as does the submission by Ecoclub, a Ukrainian non-governmental organization, to the Committee regarding the proposed nuclear power plant in Belarus.

Article 2 (6) requires that the Party of origin shall provide an opportunity to the public in areas likely to be affected to participate in the relevant EIA procedures regarding proposed activities and shall ensure that the opportunity provided to the public of the affected Party is 'equivalent to that provided to the public of the Party of origin'.

The United Kingdom government failed to provide, through the Secretariat, a notification to its neighbouring States, including the Republic of Ireland, required under Article 3 (1) of the Convention.

Under Article 3 (2) of the Convention, documentation on notification should have contained the information on the planned activity, technical information, tables with calculated data and EIA submitted by the developer.

Under Article 5 of the Convention, the United Kingdom Government failed, after completion of the environmental impact assessment documentation, without undue delay to enter into consultations with the affected Party concerning, *inter alia*, the potential transboundary impact of the proposed activity and measures to reduce or eliminate its impact.

On these grounds the United Kingdom failed in its obligations to the Republic of Ireland and its citizens and should be required to suspend its project development and EIA procedures until appropriate trans-boundary assessment takes place.

Yours, etc.,

Tony Lowes, Director

ANNEX I: Letter to the Irish Minister for the Environment

Phil Hogan, TD, Minister for the Environment, Customs House, Dublin 1 15 March 2013

Re: Transboundary consultation on UK Hinkley C Nuclear power plant

Dear Phil;

I hope you are well and your work meets the expectations you outlined to me at the outset of your tenure. I am taking up your invitation to contact you on a matter of great concern to ourselves and the Irish public.

We have recently learnt that the proposed new nuclear power plant at Hinkley C in Somerset has not been subject to trans-boundary assessment as the 'likely impacts determined through a thorough EIA do not extend beyond the county of Somerset and the Severn Estuary', according to the Environmental Impact Assessment.

We understand from informal conversations with the Radiological Protection Institute that Ireland was not formally notified under the trans boundary requirements of the Espoo Convention or otherwise; we assume this is because the UK authorities contend there are no trans boundary impacts.

That such is not the case is a matter of simple reason.

Under certain meteorological conditions a nuclear release from Hinkley Point could cause widespread contamination in Ireland. Such releases are not impossible. A conservative worst case release scenario should have been included in the EIA because of its relevance for impacts at greater distances.

These concerns are highlighted because costs associated with new safety features (in part caused by the Fukushima Daiichi nuclear disaster) have led to an increase in the output of the plant by an unprecedented higher burn-up of fuels and for the use of MOX, increasing the potential of danger in comparison with the latest Generation II plants.

There is a manifest risk of a nuclear release and certainly, it cannot be proven beyond doubt that a large release cannot occur. In that context the EIA must consider the consequences of such a release and what preparations should be considered for such an event.

If contamination of ground (and air) beyond certain thresholds can be expected, a set of agricultural intervention measures is triggered, including earlier harvesting, closing of greenhouses and covering of plants, putting livestock in stables etc. Preparation of these measures relies on an accurate assessment of the potential impacts of worst case scenarios.

Scenarios of nuclear releases and their contamination impacts have been developed and explored by the FlexRisk project¹. This analysis demonstrates

¹ http://flexrisk.boku.ac.at/en/index.html

the potential for severe impacts on Ireland. Below is one of the contamination scenarios based on meteorological conditions.



This example results in deposition in the south of Ireland higher than 10 000 Bq/m^2 (Depositions higher than ca. 650 Bq/m^2 trigger radiological protection measures.)

The Austrian Federal Environmental Agency has made an Expert Statement² on the risks to Austria they have identified from this new nuclear power plant, referring to the analysis in the FlexRisk project as well as detailing other concerns.

Manifestly, under certain meteorological conditions, the risk to Ireland would be much higher than the risk to Austria.

As you are aware, the Espoo Convention on Environmental Impact Assessment in a Transboundary Context provides that any neighbouring country may submit the question of whether a project may have transboundary impacts to an inquiry commission which will advise on the likelihood of significant adverse transboundary impact.

In the circumstances which are that confirmation of the UK development consent is due on 19 March, 2013, we would urge you to make a formal request under this convention without delay.

Kind regards,

Tony

Tony Lowes, Director, Friends of the Irish Environement

² http://www.umweltbundesamt.at/fileadmin/site/publikationen/REP0413.pdf

ANNEX II: Email to Irish Point of Contact

Convention on Environmental Impact Assessment in a Transboundary Context / Hinkley C

Mr. Philip NUGENT Principal Officer Department of Environment, Community & Local Government Custom House, Dublin 1

Dear Mr. Nugent;

We understand that Ireland was not formally notified under this Convention by the United Kingdom authorities of the Hinkley C nuclear plant proposal and that Ireland did not invoke this convention with a formal request to the United Kingdom.

Could you confirm this to us?

Thank you very much.

Tony Lowes

Director, Friends of the Irish Environment

Friends of the Irish Environment is a non-profit company limited by guarantee registered in Ireland.

It is a member of the European Environmental Bureau and the Irish Environmental Network.

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Directors: Caroline Lewis, Tony Lowes

ANNEX III:

Description of Issue

The United Kingdom has issued on March 20, 2013, a Development consent order (DCO) for the construction of Hinkley Point C, the first new nuclear station to be constructed in the UK since 1995.

The 3.2GW nuclear power plant will feature two EPR reactors, each of 1.6GW capacity. The power plant will generate 7% of UK's electricity once fully operational.

'Although unlikely, a severe accident may cause transboundary impacts (e.g. radioactive contamination) if necessary measures are not implemented', as stated in UNECE Environmental Policy, Treaties, EIA, Outputs, Case Study, 'Nuclear Power Plants in Finland', dated March 2009.

Previous nuclear power plant accidents having potential trans-boundary impacts³

Scale 7 Major Accident

Major release of radioactive material with widespread health and environmental effects requiring implementation of planned and extended countermeasures

Scale 6 Serious Accident

Significant release of radioactive material likely to require implementation of planned countermeasures

Scale 5 Accident with wider consequences

Limited release of radioactive material likely to require implementation of some planned countermeasures.

Examples of Major, Serious, and other nuclear accidents with wider consequences

Chernobyl, Ukrane, April 1986 [Scale 7]

The worst nuclear accident the world has so far seen occurred at the Chernoybl power plant near the town of Pripyat, in what was then the USSR. The testing of a new voltage regulator led to an explosion in reactor 4 which destroyed the roof, exposing the melting core and emitting radiation into the air.

IAEA and WHO studies revealed that there were 56 direct deaths from the explosion. The 4000 cancer deaths due to exposure to nuclear carcinogens are a part of the expected 100,000 expected fatalities. The radioactive fallout spread throughout Western Europe in one week. Studies say that this nuclear disaster produced radiation that was 400 times more than the radiation release from the Hiroshima bombings. At the scene of the accident, radiation exposure is still 700 times higher than permissible levels, and Pripyat remains uninhabitable.

Fukushima, Japan, March 2011. [Scale 7]

³ Deficiencies in the existing International Nuclear Event Scale (INES) have become clear in the light of comparisons between the 1986 Chernobyl and 2011 Fukushima Daiichi nuclear power plant

accidents. First, the scale is essentially a discrete qualitative ranking, not defined beyond event level 7. Second, it was designed as a public relations tool, not an objective scientific scale. Third, its most serious shortcoming is that it conflates magnitude with intensity.

 $http://www.physicstoday.org/daily_edition/points_of_view/an_objective_nuclear_accident_magnitude_scale_for_quantification_of_severe_and_catastrophic_events$

Following a major earthquake, a 15-metre tsunami disabled the power supply and cooling of three Fukushima Daiichi reactors, causing a nuclear accident in which all three cores largely melted in the first three days.

The accident was rated 7 on the INES scale, due to high radioactive releases in the first few days. A significant problem in tracking radioactive release was that 23 out of the 24 radiation monitoring stations on the plant site were disabled.

Four reactors were written off. Fukushima Prefecture initially issued an evacuation order for people within 2 km of the plant. At 9.23 pm the Prime Minister extended this to 3 km, and at 5.44 am the following day extended this to 10 km and subsequently to 20 km. In May a further 15,000 residents in a contaminated area 20-40 km northwest of the plant were evacuated, making a total of about 100,000 displaced persons. As of February 2013, the plant is not expected to reopen.

Kyshtym, September, 1957 [Scale 6]

On that day, a tank containing 80 tons of highly-radioactive liquid waste exploded at the Mayak plutonium plant in the southern Urals, 15 kilometres east of the Russian city of Kyshtym. The blast produced a radioactive cloud that was about 300 kilometres long and 40 kilometres wide which travelled northeast. The radiation did not reach Europe, but was at the same level of that released during the Chernobyl disaster in 1986. No information was released at the time and the Soviet regime did not admit the accident until 1989. The number of deaths and details of the long-term effects remain unknown. The 150-square-kilometer area over which the radioactive cloud dispersed remains closed off to this day and entry is forbidden.

Three Mile Island, United States, March 1979 [Scale 5]

In March 1979, the area around Three Mile Island in Harrisburg, Pennsylvania was contaminated with radioactivity. Technicians released irradiated gas and water into the environment in order to prevent a full reactor meltdown. Cancer rates in the local population later rose dramatically. In addition, large parts of the reactor and the power plant site were contaminated. The clean-up operation in Harrisburg took 14 years and cost more than \$1 billion. The reactor ruins remain radioactive to this day.

Windscale, now Sellafield, October 1957. [Scale 5]

Oct. 10 1957, a reactor core began to burn. In an attempt to extinguish the fire, a radioactive cloud was released, followed by a second one the next day. The radiation reached as far as Switzerland. The fires were only brought under control after two days. Cow's milk in a radius of 200 miles from the reactor should not be consumed. In reality, the population surrounding the reactor received radiation doses 10 times higher than that seen as permissible for a lifetime. According to official figures, 33 people were killed by the after-effects of the disaster, with more than 200 diagnosed with thyroid cancer. The reactor is now to be dismantled using a robot built exclusively for the project. In all, it is set to cost some 500 million pounds.

First Chalk River accident, December 1952 [Level 5]

Reactor core damage

Lucens , (Switzerland), January 1969 [Level 5] Partial core meltdown

ENDS