Works performed in 2005–2008 on all three competitive sites

Engineering and geodesy survey

The survey included observations of present-day crustal motion.

Engineering and geological surveys

The scope of work at the stage of site selection performed:

- additional collection and study of research and survey materials of the previous years within the territory of the point (points) of the NPP location;
- detailed interpretation of the results;
- structural geological and geomorphological research;
- engineering and geological survey (scale 1:10 000) and related work;
- engineering and geophysical research;
- driving of the key mine workings characterizing typical geological conditions of the sites at a depth of up to 100 m;
- field studies of soil properties;
- laboratory studies of soil properties, groundwater chemical composition and aggressiveness;
- seismic zoning of sites;
- justification of the stationary observation system (in conjunction with environmental and hydrometeorological monitoring).

Engineering and hydrometeorological surveys and research

Engineering and environmental survey

IAEA Safety Standards

for protecting people and the environment

Site Evaluation for Nuclear Installations

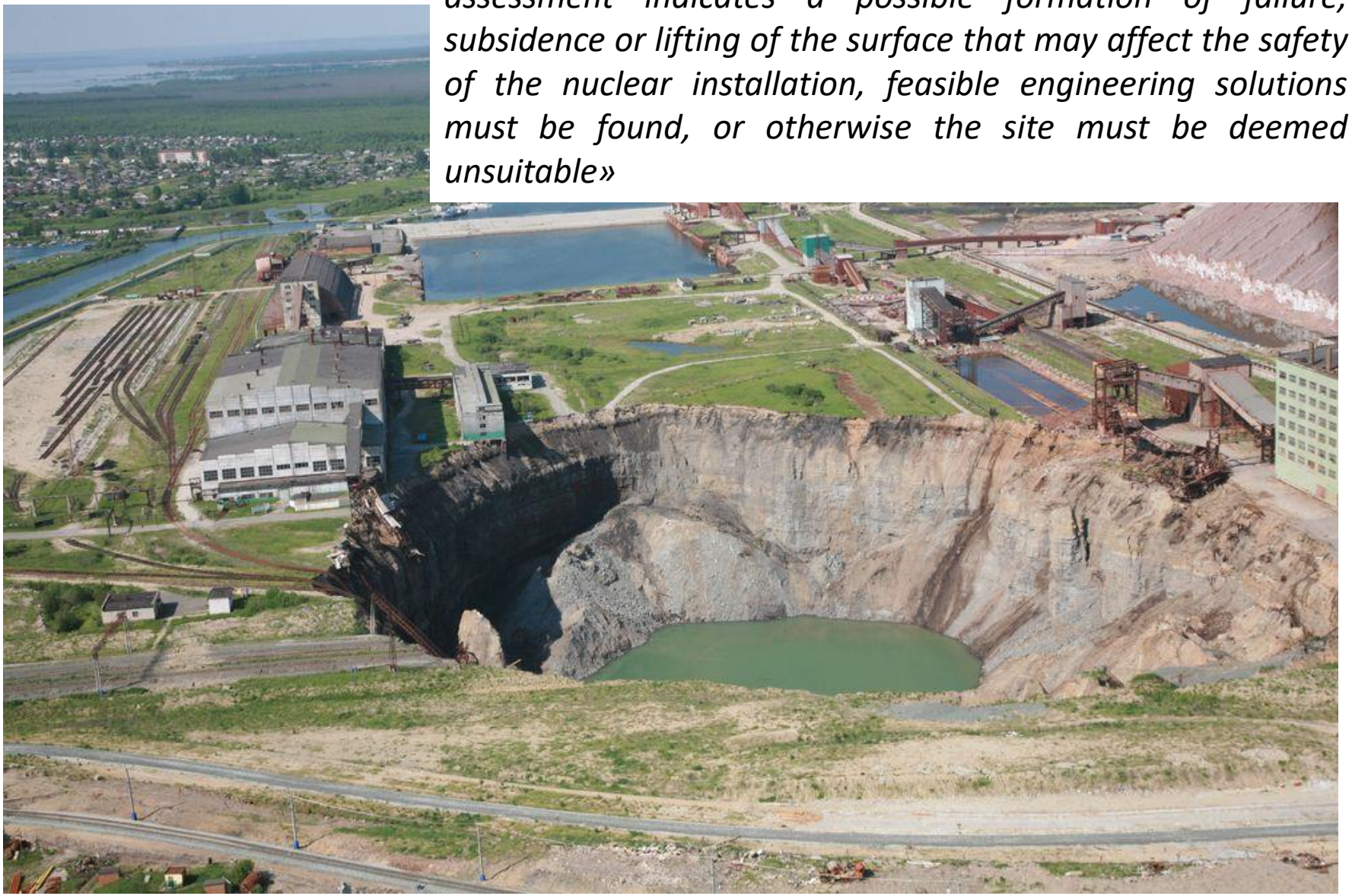
Safety Requirements

No. NS-R-3 (Rev. 1)

IAEA
International Atomic Energy Agency

Decision on the NPP site

Paragraph 3.36 of IAEA document no. NS-R-3 :" If the assessment indicates a possible formation of failure, subsidence or lifting of the surface that may affect the safety of the nuclear installation, feasible engineering solutions must be found, or otherwise the site must be deemed unsuitable»



Main types and volume of work performed

Type of work	Unit of measurement	Competitive sites		
		Krasnopolyana site	Kukshinovo site	Ostrovets site
Soil testing by static sounding.	Testing	165	213	236
Drilling of wells to determine the geological structure of the sites (up to 120 meters).	well/linear meter	156/6559	170/8936	165/6669
Soil testing with a stamp to determine their deformation properties	Testing	19	20	33

COMPARATIVE INDICATORS OF COMPETITIVE SITES

Indicator, work area	Sites		
	Krasnopolyana site	Kukshinovo site	Ostrovets site
Area	4,0 км^2	4,0 км^2	4,5 км2
Site design earthquake/maximum design earthquake, points according to MSK-64	5/6	5/6	6/7
Active faults	None	None	None
Distance to the nearest source zone	To Mogilev zone	To Orsha zone	To Oshmyany zone
Soil bearing capacity	high	high	high
level depth and characteristics of groundwaters	free-flow 10- and more	Under pressure 1,5 –	Free-flow more than 15 –
Geological structure	complex	complex	simple
hydrogeological conditions	simple	complex	Simple
Foundation condition	favorable, sandy soils are at the base of the main facilities	more complicated. Sandy soils overlie on dolomites, it is necessary to use deep dewatering during construction	Favorable, sandy and clay soils are at the base of the main facilities
Dangerous geological processes:			
* Modern karst	Not detected	Not detected	None
* subsurface erosion	Not detected (requires research	Not detected (requires research	None
* possibility of activating suffosion-karst processes	Potentially exists	Potentially exists	None
* protection of phreatic aquifer	medium	high	high
* length of brunch railway, km	27	4	32
length of motor-car access roads, km	3	4	4
* radioactive contamination	periodic radiation monitoring zone	-	-
technical water supply source, km	28	26	6
availability of potable water supply	Sufficient	Sufficient	Sufficient
construction of high-voltage lines, km	485	503	535
RANKING	RESERVE	RESERVE	**MAIN**

CONFORMITY OF THE BELARUSIAN NPP EIA REPORT TO ADDITION II OF THE ESPO CONVENTION «CONTENTS OF DOCUMENTATION ON ENVIRONMENTAL IMPACT ASSESSMENT»

№	Information to be included in the EIA report	Section of the EIA report of the Belarusian NPP
a)	Description of the planning activity and its purpose	Chapter 5. Possible options for the implementation of design solutions Chapter 6. Description of NPP
b)	A description, as appropriate, of reasonable alternatives to the proposed activity, including the no-action option	Chapter 4. Alternative sites for NPP location. Alternative energy sources
c)	A description of those elements of the environment that are likely to be significantly affected by the proposed activity or its alternatives.	Chapter 13. Environmental Characteristics
d)	A description of the possible types of environmental impact of the proposed activity and its alternatives and an assessment of its scale	Chapter 7. Belarusian NPP environmental impact sources characteristics
e)	Description of precautionary measures designed to minimize harmful effects on the environment	Chapter 17. Environmental Protection Measures
f)	An explicit indication of predictive methods and underlying assumptions as well as environmental data used	Chapter 14. Comprehensive environmental impact assessment during the life cycle of nuclear power plant
g)	Uncovering gaps in knowledge and uncertainties that were found during the preparation of the required information	Thermal effects on the river Vilia. Taken into account in the NPP project
h)	If necessary, a summary of the monitoring and management programs and all plans for post-project analysis.	Chapter 18. Suggestions for the organization of an environmental monitoring program
i)	Non-technical summaries, if necessary, using visual means of presenting materials.	Chapter 19. Non-Technical Summary

Благодарю за внимание!

Thank you for attention!