Extension of the Environmental Impact Assessment Statement issued under Ref. No.: 2561/ENV/13, 2562/ENV/13 on 18 January 2013 (hereinafter the "EIA Statement")

pursuant to Section 9a paragraph 4 Act No. 100/2001 Coll., on Environmental Impact Assessment and Amending Some Related Acts (Act on Environmental Impact Assessment), as amended (hereinafter "EIAA")

Identification information:

Project name:

A New Nuclear Source at Temelín, including routing of the output power into the Kočín Substation (hereinafter "**NNS**")

Project Capacity (extent):

The project is to construct a new nuclear source including all buildings and facilities housing related technology. From the perspective of the original design concept for the Temelín Nuclear Power Plant, this is an extension of the existing plant by two new modern blocks (reactors of the III.+ generation), including strengthening of power lines routing electricity output to the Kočín Substation and anticipated increase in raw water intake into the power plant from the Hněvkovice pumping station. The project envisions operation of two new blocks with power output not exceeding 1 700 MW_e with PWR III.+ generation-type reactors. The net installed power output will thus not exceed 3 400 MW_e.

Location:

Region:	South Bohemia
Municipalities:	Temelín, Dříteň
Cadastral areas:	Březí u Týna nad Vltavou, Křtěnov, Temelín, Temelínec, Litoradlice, Kočín, and Chvalešovice

Identification of the Applicant / Commercial Name:

Elektrárna [*Power Station*] Temelín II, a.s. Duhová 1444/2, 140 00 Praha 4 Corporate ID No.: 04669134

The original EIA Statement was issued to ČEZ a.s. with its registered address at Duhová 2/1444, 140 53 Praha 4, ID No. 45274649 as the Applicant. The current identification of the Applicant arises due to organizational changes within the ČEZ group, whereby the project for building the new nuclear source at the Temelín site has been spunoff into an independent subsidiary.

The project for the "**New Nuclear Source at Temelín, including routing of the output power into the Kočín Substation**" met the wording of point 3.2 (Nuclear reactor facilities (including their dismantling or decommissioning) except research installations whose maximum power does not exceed 1 kilowatt continuous thermal load), category I, Annex No. 1 to the EIAA (in the wording effective as of the EIA Statement issue date). The EIA Statement was issued under Ref. No. 2561/ENV/13, 2562/ENV/13 on 18 January 2013 with a 5-year validity, i.e. until 18 January 2018. With reference to Article II point 6 (transitional provisions) of Act No. 326/2017 Coll., amending Act No. 100/2001 Coll., on Environmental Impact Assessment and Amending Some Related Acts (Act on Environmental Impact Assessment), as amended, the validity of an EIA Statement is evaluated pursuant to Act No. 100/2001 Coll., in the wording effective as of the date when Act No. 326/2017 Coll. came into force. The EIA Statement therefore remains valid until and expires on 18 January 2020 unless the Applicant applies for its extension. The Applicant's application to extend the EIA Statement pursuant to Section 9a paragraph 4 EIAA had been delivered to the Ministry of the Environment, via its EIA and Integrated Prevention Department (hereinafter the "**MoE**"), on 11 December 2019, i.e. within the original term of the EIA Statement's validity. The application for extension has been complemented by additional documents between 30 October 2020 and 14 December 2020.

Considering the submitted application, the **MoE has arrived**, as the competent authority pursuant to Section 21 EIAA, **at the conclusion that with respect to the project for the**

"New Nuclear Source at Temelín, including routing of the output power into the Kočín Substation"

there have been no changes of conditions prevailing in the affected territory or current knowledge and methods of assessment due to which the project would have significant, and not previously assessed, effects on the environment, and therefore the validity of the EIA Statement issued under Ref. No. 2561/ENV/13, 2562/ENV/13 on 18 January 2013 is hereby extended, in accordance with Section 9a paragraph 4 EIAA, by additional 5 years, until 18 January 2025.

Justification:

The application for extension of the EIA Statement's term of validity included a document with a title "New Nuclear Source at Temelín, including routing of the output power into the Kočín Substation – documentation for the extension of the Statement's term of validity" elaborated by Ing. Petr Mynář in cooperation with Ing. Jiří Řibřid (holders of proper authorization according to Section 19 EIAA) in November 2019 (hereinafter the "Supplement"). Between 30 October 2020 and 14 December 2020, the MoE received additional requested information to the application. The Supplement contains description of the conditions within the affected territory (in all segments of the environment there) at the time when the original EIA Statement was issued, and the current conditions in that same territory (in all segments of the environment), and a comparison of these two states, including summary of the changes between these two periods, and an evaluation of these changes from the perspective of potential emergence of new, not previously assessed significant impacts that could arise due to these changes, as well as an evaluation of biotopes by a competent expert (who reviewed existing documentation and who carried out an actual survey of the site), with a description of actual changes within the territory and the concluding summary. The Supplement also contains a description of changes in the knowledge and methods of assessment vis-à-vis the original EIA process. The Supplement is accompanied by maps and situational drawings as well as by a statement issued by the Regional Authority for Southern Bohemia, respectively its Department of the Environment, Agriculture and Forestry from the perspective of Section 45i Act No. 114/1992 Coll., on the Conservation of Nature and Landscape, as amended. Within the process of reviewing the application for extension of the EIA Statement, the MoE considered changes of conditions prevailing within the affected territory and changes in the applicable knowledge and methods of assessment, due to which the project could have significant, and not previously assessed, effects on the environment. The specific changes in the project will be also verified and reviewed within the framework of follow-up proceedings concerning the project (the so-called "coherence stamp" approach) pursuant to Section 9a paragraph 6 EIAA.

Description of changes within the affected territory:

The "affected territory" is understood, within the meaning of EIAA, as an area "whose environment and residents could be significantly affected by the project, if implemented." This covers an area where significant impacts of the project could be identified and had been formerly identified in the NNS project environmental impact documentation as the area limited by the project area and its immediate vicinity. The affected territory is defined as the areas designated for construction of the project and the related buildings and facilities housing technology, including the construction site's installations. This area is already impacted by the existing 2×1000 MW_e power station (respectively, its construction in the past), given the original design intending to erect a power station with a capacity of 4×1000 MW_e and given the commencement of that construction in the past. This means, from the perspective of the Supplement, which describes the condition of and development of the environment, and not the actual impacts, that the definition of the affected territory is only of an accessory nature.

The 'area of interest' is therefore understood, in the Supplement, as areas where surveys were carried out and where the Supplement describes the condition and development of various segments of the environment. Definition of this area does not follow any legislative or methodological regulation. It had been defined in order to allow relevant description of conditions and developments in the individual segments of the environment. In the Supplement, this is the decisive definition. For practical reasons, the area of interest (see map provided below) had been divided into two sections:

- the *broader area of interest* which describes conditions and developments in the environment in a broader context,
- the *narrower area of interest* which describes conditions and developments in the environment in the area where the project will be actually implemented and within its immediate vicinity.

As a general principle, those segments of the environment which may be affected in terms of distance (typically, for example, due to dispersion of pollutants) are described in the broader context, while those segments, which are directly affected by the project's presence (typically, for example, all direct annexation of land), are described within the narrower extent.



Population

The submitted documentation shows that there have been no changes within the affected territory in terms of increases in built-up areas, demographic characteristics, protection of the population or in relation to public health concerns, due to which the project would have significant, and not previously assessed, effects on the environment. Comparing the current conditions in relation to "population and public health" with conclusions that were taken into consideration in elaborating documentation concerning environmental impacts (hereinafter the "**EIA Documentation**") and the expert report on environmental impact of the project (hereinafter the "**EIA Report**"), which simultaneously form a part of the EIA Statement, and the affirmative binding opinion verifying compliance of the European Parliament and of the Council as issued by the Ministry of the Environment under Ref. No. 80896/ENV/15 on 24 February 2016 (hereinafter "**OZS**" [translators' note: original Czech abbreviation will be used throughout the text for clarity]), it is apparent that there were no changes in these areas which could be classified from the environmental standpoint as significant.

There have been no changes in the number of residential builds/properties within the affected territory between 2008 and 2018. There have been no extensions/additions/ demolitions of any properties that would lie within the borders of the affected territory. There are no builds/facilities within the affected territory whose hygienic protection requirements (in relation to noise, air pollution, and other factors, respectively) would make implementation of the project impossible. On the contrary, the situation relating to new builds has been handled, on the level of zoning and construction proceedings, in a manner that ensures there are no conflicts with hygienic requirements in the first place.

Within the narrower area of interest, there have been several new builds since 2008. The most significant new built-up area lies within the cadastral area of 'Dříteň', in the municipality of Dříteň (the number of new builds reaching several dozen new properties) and also in cadastral area of 'Zvěrkovice u Týna nad Vltavou,' municipality of Zvěrkovice u Týna nad Vltavou (3 new properties). Another cadastral area, where new builds were erected are Hněvkovice (1 house) and cadastral area 'Třitim' (1 house). The zoning plans *[for these cadastral areas]* designate larger areas for future development which currently remain undeveloped. In the municipalities within the narrower area of interest, large numbers of reconstructions of existing properties are under way, including demolitions of old properties.

During the monitored period, i.e. between 2009 and 2018, respectively based on the 2011 census data, there had been no significant changes within the area of interest in the extent of monitored indicators in comparison with indicators that had been already evaluated and which included data valid as of 2008, respectively available data from the 2001 census.

From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

Air quality and climate

According to the Supplement, imission concentrations of monitored polluting substances were described, at the time of EIA Documentation preparation, in terms of five-year averages covering the period 2007 – 2011 (i.e. the first five-year averages published in 2013). The current air pollution levels were assessed in the Supplement in accordance with the 2013 – 2017 five-year averages. The background air pollution situation is and remains, both at the time of elaboration of the original EIA Documentation and during the elaboration of the Supplement, satisfactory and the imission limits for all relevant polluting substances are being observed. The imission limit for average annual concentration of suspended PM_{2.5} particles, which was tightened in the meantime from 25 μ g/m³ to 20 μ g/m³, is being observed within the narrower area of interest with sufficient reserve. As the MoE itself verified on the basis of publicly available information, the background air pollution situation within the affected territory remains satisfactory also on the basis of five-year averages published for 2015 and 2019, with the imission limits for all relevant polluting substances being observed with reserve.

After comparing five-year averages from 2007 – 2011 and 2013 – 2017, it was found that the average annual concentration of NO₂ has increased slightly within the narrower area of interest (max. increase by 1.8 μ g/m³ from the previous value of 7.5 – 7.8 μ g/m³ to 9.3 – 9.6 μ g/m³ with the prescribed imission limit of 40 μ g/m³).

After comparing five-year averages from 2007 – 2011 and 2013 – 2017, it was found that the average annual concentration PM_{10} has slightly increased within the narrower area of interest (max. increase by 1.4 µg/m³ from the previous value of 18.5 µg/m³ to 19.9 µg/m³ with the prescribed imission limit of 40 µg/m³).

After comparing five-year averages from 2007 – 2011 and 2013 – 2017, it was found that the average 24-hour concentrations of PM_{10} , the 36. value has decreased slightly within the narrower area of interest (a decrease between 2.6 – 3.3 µg/m³ from previous values of 32 - 35 µg/m³ to 30 – 31.9 µg/m³ with the prescribed imission limit of 50 µg/m³).

After comparing five-year averages from 2007 - 2011 and 2013 - 2017, it was found that the average annual concentration of PM_{2.5} has decreased in the most of the area within the narrower area of interest (a decrease of $1.0 - 1.2 \ \mu g/m^3$ from previous values of $13,8 - 14,2 \ \mu g/m^3$ with the exception of the Dříteň municipality, which saw an increase by 1.4 $\mu g/m^3$ from 14.2 $\mu g/m^3$ to 15.6 $\mu g/m^3$ with the current imission limit set at 20 $\mu g/m^3$).

After comparing five-year averages from 2007 - 2011 and 2013 - 2017, it was found that the average annual concentration of benzene has increased slightly within the narrower area of interest (max. increase by $0.1 - 0.2 \ \mu g/m^3$ from $0.6 - 0.7 \ \mu g/m^3$ to $0.8 - 0.9 \ \mu g/m^3$ with the prescribed imission limit of $5 \ \mu g/m^3$).

After comparing five-year averages from 2007 - 2011 and 2013 - 2017, it was found that the average annual concentration of benzo(a)pyrene has increased slightly within the most of the area in the narrower area of interest (max. increase by 0.3 - 0.39 ng/m³ to 0.4 - 0.5 ng/m³ with the exception of the Dříteň municipality, which saw an increase by 0.34 ng/m³ to 0.8 ng/m³, with the prescribed imission limit of 1 ng/m³).

After comparing five-year averages from 2007 - 2011 and 2013 - 2017, it was found that the average 24-hour concentrations of SO₂, the 4. value has decreased slightly within the narrower area of interest (a decrease from $10.6 - 11 \ \mu g/m^3$ to $8.9 - 9.3 \ \mu g/m^3$ with the prescribed imission limit of $125 \ \mu g/m^3$).

After comparing five-year averages from 2007 - 2011 and 2013 - 2017, it was found that the average annual concentration of arsenic has decreased slightly within the narrower area of interest (a decrease from $1.25 - 1.31 \text{ ng/m}^3$ to $1.0 - 1.2 \text{ ng/m}^3$ with the exception of the Dříteň municipality, which saw an increase from 1.42 ng/m^3 to 1.5 ng/m^3 , with the prescribed imission limit of 6 ng/m³ (content within PM₁₀ particles)).

After comparing five-year averages from 2007 - 2011 and 2013 - 2017, it was found that the average annual concentration of lead has decreased within the narrower area of interest (a decrease from $5.9 - 6.8 \text{ ng/m}^3$ to $2.5 - 3.4 \text{ ng/m}^3$ with the exception of the Dříteň municipality, which saw a decrease from 6.5 ng/m^3 to 3.7 ng/m^3 , with the prescribed imission limit set at 500 ng/m³).

After comparing five-year averages from 2007 - 2011 and 2013 - 2017, it was found that the average annual concentration of nickel has decreased within the narrower area of interest (a decrease from $1.2 - 1.3 \text{ ng/m}^3$ to 0.6 ng/m^3 with the prescribed imission limit set at 20 ng/m³ (content within PM₁₀ particles)).

After comparing five-year averages from 2007 - 2011 and 2013 - 2017, it was found that the average annual concentration of cadmium has decreased within the narrower area of interest (a decrease from 0.35 - 0.41 ng/m³ to 0.2 ng/m³ with the prescribed imission limit set at 5 ng/m³ (content within PM₁₀ particles)).

Comparison of data gathered by climate monitoring station operated by the Czech Hydrometeorological Institute between 2011 - 2018 and 2001 - 2010 is provided in the table below:

	2011-2018 vs. 2001 - 2010
Average annual air temperature	+0.7 °C
Average annual maximum air temperature	+0.9 °C
Absolute annual maximum air temperature	-1.0 °C
Average annual minimum air temperature	+0,7 °C
Absolute annual minimum air temperature	+0.1 °C
Average annual rainfall	-84.4 mm

Number of days with rainfall	-13.6				
Seasonal sum of new snow height	-13 cm				
Average seasonal maximums of total snow cover	-5 cm				
Number of days with thunderstorms	-2.4				
Number of days with fog	+11.5				
Number of days with frost, hoarfrost and rime	+0.4				
	0 m/s: +0.44 %				
	0-1 m/s: +1.35 %				
Relative frequencies of wind speed	1-4 m/s: +2.13 %				
	4-9 m/s: -3.18 %				
	>9 m/s: -0.75 %				

The above changes in air temperature and rainfall regime characteristics as recorded at the Temelín weather station are the result of ordinary climate fluctuations and ongoing climate change. The anticipated developments in air temperature and rainfall regime with forecast to 2030 have been estimated in the Czech Hydrometeorological Institute's Report (Květoň, V. and collective: Selected meteorological data form Nuclear Power Station Temelín, May 2009), which was used for elaboration of the EIA Documentation. Taking into consideration climate models' uncertainties and the short lengths of evaluated periods, the changes in air temperature and rainfall regime characteristics remain in line with anticipated developments. There have been no changes in the fundamental climatic structure within the given territory.

There have been no changes of conditions prevailing in the affected territory due to which the project would have significant, and not previously assessed, effects on the environment.

The current project design solution does reflect anticipated climate change, with the project fundamentals counting on ensuring potential climate change resistance at two levels. The initial design solution is already resistant against potential climate change circumstances at the NNS site and the regular updates of NNS safety assessments will reflect continuous impacts of climate change at the NNS site on the basis of actual developments in climate indicators. The project is therefore prepared to reflect principles of the so-called adaptive management, i.e. preparedness for continuous reflection of newly acquired knowledge.

From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

<u>Noise</u>

The current noise situation in the closest, respectively potentially most affected, protected outdoor space of buildings was verified by measurements. The results are provided below in the following table.

Measuremen t point	Location description	L _{Aeq,T} [dB], 2019
MB01	Outskirts of Litoradlice municipality	30.6
MB02	Former settlement outside the former municipality of Knín	33.6
MB03	North-eastern part of Kočín municipality	32.1
MB04	North-eastern outskirts of Kočín municipality	31.7

MB05	South-western outskirts of Kočín municipality	35.8
MB06	Outskirts of Malešice municipality	24.2
MB07	Outskirts of Sedlec municipality	32.6
MB08	Outskirts of Temelín municipality	30.6

The hygienic limit ($L_{Aeq,T} = 50/40 \text{ dB day/night}$) had not been exceeded in any case.

Comparison between the current noise measurements within the affected territory (2019) and the measurements taken / documented in the EIA Documentation is provided in the following table:

Measuremen	Location description	Δ L Aeq,T [dB]
t point		
MB01	Outskirts of Litoradlice municipality	-3.3
MB02	Former settlement outside the former municipality of Knín	-0.8
MB03	North-eastern part of Kočín municipality	-2.3
MB04	North-eastern outskirts of Kočín municipality	-3.8
MB05	South-western outskirts of Kočín municipality	-0.4
MB06	Outskirts of Malešice municipality	-1.3
MB07	Outskirts of Sedlec municipality	+0.6
MB08	Outskirts of Temelín municipality	-3.6

The above-mentioned differences show that there has not been any significant change in the noise situation within the affected territory.

Comparison of the current noise-emission parameters on roads within the affected territory (the last available records, recalculated to reflect 2020) with noise-emission parameters on the roads that were taken into consideration at the time when the EIA Documentation was being prepared, respectively at the EIA Statement issue date (prognosis for 2015) is given in the following table:

Road	Profile (profile location is apparent from the Supplement, page 106)	L _{Aeq,T,7,5m} [dB] (day 6:00- 22:00)	L _{Aeq,T,7,5m} [dB] (night 22:00- 6:00)
II/105	2-0630	-1.2	-1.5
	2-1215	-1.6	-1.6
	2-1223	-2.4	-2.8
	2-0640	-0.3	-0.1
	2-0656	-1.5	-1.7
	2-0657	-1.6	-2.1
	2-0650	-1.0	-1.1
	2-0660	-0.2	-0.1
II/138	2-4680	-0.1	-1.5
	2-4200	-0.5	-0.1
	2-4209	-2.3	-2.8
II/141	2-2020	-2.3	-3.0
	2-2018	-2.6	-3.0
II/159	2-1200	-1.4	-1.4
	2-1220	-0.5	-0.5
	2-3078	+0.8	+1.5
	2-3060	+0.9	+1.2
II/122	2-2399	-3.0	-3.8
	2-2050	-2.5	-2.8
	2-2040	+0.4	-0.4

II/147	2-2380	-1.2	-0.7
	2-3250	-2.5	-2.5
I/20	2-0369	-1.4	-1.6
	2-0370	-1.4	-1.6
I/3 (D3)	2-0106	-0.6	-0.7

The results clearly show that noise-emission parameters on roads have improved in the interim. This also resulted in improved traffic noise situation within the affected territory, which is directly proportional to noise-emission parameters on the roads. The reason for this result is principally the fact that the traffic intensity prognosis for most of the roads within the affected territory had not been met, as stipulated in the EIA Documentation (2009). The direct consequence is the fact that the traffic noise situation within the affected territory, as it was analysed in the EIA Documentation, was based on an excessive assessment and the resulting traffic prognosis which in turn lead to excessively evaluated noise pollution levels. Subsequent development in traffic did not converge with the original prognosis and the prognosis based on current measurement results leads to lower noise pollution levels.

This fact makes it apparent that all assumptions relating to noise pollution levels, which were used for elaboration of the EIA Documentation, remain valid and are sufficiently conservative. There have been no changes of conditions in the affected territory due to which the project would have significant, and not previously assessed, effects on the environment.

From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

Ionising radiation

Within the framework of territorial, state-sponsored monitoring there have not been any significant changes or circumstances which could have any impact on the processes and results of the radiation situation monitoring.

The situation and developments relating to artificial radionuclides remain, thanks to the fallout from atmospheric nuclear weapons testing as well as Chernobyl/Fukushima fallout, and the deviations in measurement of other radioactive substances, including subsequent development in the content of selected radionuclides in foodstuffs, population, air (aerosols, fall-out), rainfall, comparable between 2008 and 2018.

Annual release of individual types of radionuclides into the atmosphere from the Nuclear Power Station Temelín between 2009 and 2018 never exceeded 1 % of the authorized annual limit value (40 μ Sv); H-3 activities and activation, corrosion and fission products released from control vessels into watercourses never exceeded 20 % of the authorized annual limit value (3 μ Sv). The obtained results are identical to 2008.

The monitoring results of individual segments between 2008 and 2018 are comparable, without significant deviations. The results of independent monitoring of radiation situation at the Temelín Power Station (hereinafter "**TPS**") and the operator's own monitoring results clearly show that there have not been any significant leaks of radionuclides from the nuclear power station into the environment. None of the measuring stations recorded any excesses in predefined intervention levels, which would require any measures for the protection of the population or the environment to be put in place. Variations in measurements of external dose rates are caused by fluctuations in natural

levels of radiation (seasonal influences, meteorological conditions). Measured activities in watercourses do not exceed anticipated interference. Values recorded in 2001-2008 are comparable to 2009-2018 and well below examined levels of monitoring programmes.

Segments of the environment, segments of food-chains and human bodies still register a measurable, albeit very low Cs-137 activity, which had entered the environment chiefly after the Chernobyl disaster and in connection with nuclear weapons testing in the atmosphere. These dose rates are currently almost unchangeable.

Comparing the current situation in the area of ionising radiation with the situation as it was described during preparation of the EIA Documentation and the EIA Report, which both form a part of the EIA Statement and the binding standpoint for compliance verification, shows that there have not been any changes in this area which would be significant from the environmental perspective.

From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

Other physical and biological factors

Issues related to vibrations, non-ionising radiation and other factors correspond in the current circumstances to the situation described in the EIA Documentation.

From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

Groundwater and surface water

There had been a partial change in relation to groundwater relating to the definition/delimitation of groundwater segments – there now exists a new requirement to evaluate bodies of surface water and groundwater.

Evaluation of surface waters was originally elaborated for 2 planning periods. The first planning period was prepared on the basis of a monitoring programme that commenced in 2006 and its results. These evaluation results were reflected in the Vltava Watershed plans only in 2009 and as such represented a background material for draft measures which were supposed to improve the overall quality of water in the Vltava Watershed. Evaluation results from the second planning period are based on data from 2010-2015 monitoring period and these were reflected into the partial watershed management plans (Upper Vltava and Lower Vltava) in 2016.

There are 6 surface water bodies within the evaluated area, in both planning periods. Except for certain slight changes in the names of these water bodies and their code denominations, these bodies are in essence identical in both planning periods. One exception relating to the size of one body of water lies in a shift of the end of the Vltava body profile after a rise in Kořensko reservoir level and the associated shortening of that body by about 4.5 km upstream. This segment was equally extended by the connecting lower part of the Kořensko Reservoir. The table below shows water bodies as defined for the evaluated area in the second planning period.

Water Body ID	Water body (WB) name	WB category	Heavily influenced or artificial WB
HVL_3030	Vltava River from Hněvkovice Reservoir causeway to Kořensko Reservoir backwater	River	NO
HVL_1035_J	Kořensko Reservoir on the Vltava River	Lake	YES
HVL_1055_J	Orlík Reservoir I on the Vltava River	Lake	YES
DVL_0015_J	Orlík Reservoir III on the Vltava River (from the confluence with Otava River to causeway)	Lake	YES
DVL_0030	Vltava River from Orlík Reservoir causeway to Slapy Reservoir backwater	River	YES
HVL_1010	Lužnice River from Košínský Stream to Kořensko Reservoir backwater	River	NO

With regard to chemical evaluation of water, four bodies out of six within the area of interest were evaluated in both planning periods as 'good.' The exception in the first planning period is the Kořensko Reservoir, which was evaluated as potentially unsatisfactory (due to the presence of metals), same as the segment from Lužnice River-Košínský Stream to Kořensko Reservoir backwater (due to metals and synthetic substances). Compared with the first planning period, the Kořensko Reservoir on the Vltava River segment was evaluated in the second planning period as chemically 'good.' A certain deterioration in evaluation was recorded in the Lužnice River from Košínský Stream to Kořensko Reservoir backwater segment, where the chemical situation was 'less than good' in the second planning period. The reason for this negative evaluation was presence of over-the-limit values for substances from the Polycyclic Aromatic Hydrocarbon family (PAHs), brominated diphenyl ethers and mercury.

With regard to ecological potential of all three water bodies categorized as a lake, the verdict is 'failure to achieve (a good) ecological potential,' despite the second planning period using a multi-stage evaluation scale. The ecological potential of the river-category segments 'VItava River from Orlík Reservoir causeway to Slapy Reservoir backwater' (DVL_0030) / 'Vltava River to Slapy backwater' (12378000) has also been evaluated as unsatisfactory (and medium in the second planning period) with the reason for worse evaluation being biological components in the first period and general pollutants in the second period, while the biological components were not being evaluated in the second period. The ecological situation of the Lužnice River from Košínský Stream to Kořensko Reservoir backwater (HVL_1010) segment / Lužnice River to Kořensko Reservoir backwater (11938000) had been evaluated in both periods as unsatisfactory (and as 'decimated' in the second period), in both period the reason being biological components and general physically-chemical substances, and in the second period also other specific polluting substances. The only body of water where the ecological situation was evaluated as 'good' in the second period was the 'Vltava River from Hněvkovice Reservoir causeway to Kořensko Reservoir backwater' (HVL_3030) segment, and in the first period, a similar segment - Vltava River to Kořensko Reservoir backwater (11689000), which was evaluated as unsatisfactory due to biological components. Biological components were however not being evaluated in the second period for this body (due to changes in evaluation methodology), so the better evaluation of its ecological situation cannot be considered to constitute a real and actual improvement.

The overall condition of the bodies of water in question was evaluated as unsatisfactory in both periods. The only exception is the "Vltava River from Hněvkovice Reservoir causeway to Kořensko Reservoir backwater' (HVL_3030) segment, whose condition was evaluated as 'good' in the second period.

The quality of raw water drawn off from Hněvkovice Reservoir has not changed since 2001 in any significant manner, the increased average content of undissolved substance between 2009 and 2013 was caused by intensive rainfall and by extraordinary lowering of autumn water levels which was complemented by rainy weather. Evaluating changes in the surface water quality within the Vltava Hněvkovice, Kořensko (left and right bank), Hladná, Solenice and Lužnice-Koloděje river segments between the two reference periods, i.e. 2001 - 2008 and the currently evaluated period 2009 - 2018 clearly shows that in relation to certain indicators (solutes, dissolved inorganic salts, suspended solids, pH, C10substances, C40 hydrocarbons, non-polar extractable ammoniacal nitrogen and temperature) some of the statistically significant changes had not been properly evaluated between 2001 - 2008 and 2009 - 2018 (or that these changes are impossible to evaluate given the nature of the existing data). Changes occurred in relation to the 'sulphates' indicator where there was a statistically significant improvement in all evaluated river segments. In relation to other indicators (nitrate nitrogen, phosphor (primarily phosphates), chemical oxygen demand [COD - using the Kubela method], CODCr, BOD 5 and anionic tensides [surfactants]) the evaluation shows a statistically significant decrease in concentrations only in certain river segments, while in other segments the changes were not statistically significant to allow the trend being unequivocally evaluated as an improvement or a deterioration. These observed surface water quality changes are related partly to the continued decrease in atmospheric deposition, specifically in sulphates and nitrogen compounds over the entire 2001-2018 period, and also to improved control of pollution released from points sources (both municipal or industrial) achieved in connection with installations of new waste-water treatment plants and in curbing use of phosphate washing detergents and cleaning products since 2006 and, in case of anionic tensides [surfactants], their gradual replacement with biodegradable tensides.

The sole indicator demonstrating significant increase in concentrations in a number of river segments were the chlorides. We can assume that this is due to increased use of NaCl [sodium chloride] in the form of, for instance, road salts and for the purposes of water softening, for example in households in relation to increased use of dishwashers. Increased chloride concentrations are also related to increased concentrations of Na [sodium] (in Solenice segment). Deterioration (i.e., a decrease in concentrations in this specific reference) in several river segments was observed in relation to the 'oxygen' indicator, which may be related to the total nutrient content (nitrogen and phosphorus compounds and their degradation) and also, in part, to a slight increase in temperature (which however was not statistically significant). These changes were evaluated in the Vltava-Solenice river segment, which demonstrated statistically significant increase in conductivity values. It is assumed that this is influenced by the Orlík water reservoir and activities within its watershed, which have an effect on runoffs, nutrient supply and suspended solids.

Decreases were also observed in radioactive indicators such as Sr-90 and Cs-137 (in all segments) and tritium in segments that are unaffected by the current TPS operations, due to decay of residual environmental contamination by these radionuclides which, as we can assume, will continue in the future. There has been an increase in tritium content in

the Vltava-Solenice segment which is related to gradual increases in total tritium discharges from the current TPS. If we would compare the 2009 - 2018 period with 2005 - 2008 when the tritium discharges were comparable with discharges in the evaluated period, we would see that this increase is not statistically significant. This is compliant with the EIA Statement conclusions where, due to a statistically insignificant difference between the values of discharges in the reference and evaluated periods, it cannot be stated that there have been changes in the conditions within the affected territory.

With regard to quantities, Vltava River was monitored between the Hněvkovice Reservoir (offtake) and the Kořensko Reservoir (discharges of waste water) segments. The figures below show average inflow into the Hněvkovice Reservoir and the through-flow just below the Kořensko Reservoir between 2003 - 2018, 2003 - 2009 and 2010 - 2018 which are then compared to the long-term averages observed between 1941 and 2002. The average inflow into the Hněvkovice Reservoir between 2003 and 2009 is almost identical to the long-term average, the 2010 - 2018 average is lower than the 1941 - 2002 average by about 18.1 %. It is assumed that this can be linked to occurrence of extraordinary hydrological drought between 2003 - 2009 and throughout 1941 - 2002, the 2010 - 2018 averages are 17.9 % lower than the 1941 – 2002 averages. This is apparently again linked to the extraordinary hydrological drought between 2015 and 2015 and 2015.



[Legend: Figure on the left, bottom: Prumerne prutoky...Hněvkovice – average through-flow above Hněvkovice causeway; Figure on the right, bottom: Prumerne prutoky...Kořensko – average through-flow below Krnov causeway]

Comparisons between 2003 - 2009 and 2010 - 2018 with the long-term fluctuations in flow rates may be evaluated in relation to the seven-year moving averages in Vltava River flow rates at Hněvkovice, as shown in the figure below. It is apparent that the average flow-rates during evaluated periods had not, in any respect, deviated from the characteristic fluctuations observed throughout 1941 - 2018. The course of the seven-year moving averages shows a link between precipitation and flows and the long-term fluctuation component. The decrease in multi-year average flow rates within the 2003 - 2018 period and the relation to the 2003 - 2009 and 2010 - 2018 averages are the result of long-term precipitation fluctuations. In the period after 1980, the difference between precipitation and runoff levels gradually increases which corresponds to increases in territorial evaporation compounded by average temperature increase in the entire basin.



[Legend: Figure on the left, bottom, blue line: prutoky – through-flow; Figure on the right, middle: teplota – temperature]

Generally, it can be said that flow rates within the Vltava River, even if somewhat improved by discharges from the Lipno Reservoir, were sufficiently large, despite the extraordinary hydrological drought between 2015 and 2018, to ensure sufficient offtake for the needs of TPS while retaining minimum residual through-flow under the Hněvkovice Reservoir, with surplus (with the exception of one month) of more than approximately 4.46 m³.s⁻¹. The average monthly inflow into the Hněvkovice Reservoir between 2003 and 2018 never fell below 10.5 m³/s. The figure directly below shows the Vltava River inflow rates into the Hněvkovice Reservoir minus the TPS offtake and the minimum residual through-flow of 5.365 m³/s. *Note: The red line corresponds to the minimum residual water volume for the NNS in the amount of 4.46 m³/s.* The NNS water consumption needs will require, according to the maximum variant defined in the EIA Documentation, a total of 67 000 000 m³/year, i.e., the maximum (envelope) water demand for the NNS is approximately 2.1 m³/s. The actual water consumption of the NNS will be probably lower (due to smaller blocks) than the envelope value. The volume of water for the NNS is sufficient, with reserve, even during the dry years.



Comparisons of groundwater regimes during the relevant years is provided below:

- Range of maximum levels in monitoring wells: 2001 2008: 439.94-503.14 MAMSL (metres above sea level) / 2009 - 2018: 439.64-504.67 MAMSL
- Range of minimum levels in monitoring wells: 2001 2008: 439.14-500.83 MAMSL / 2009 2018: 438.40-499.72 MAMSL
- Range of average levels in monitoring wells: 2001 2008: 439.76-502.26 MAMSL / 2009
- 2018: 439.27-502.43 MAMSL
- Amplitude (fluctuations in levels) in meters: 2001 2008: 0.46 m 6.78 m / 2009 2018: 0.52 m 9.03 m

Ranges given above demonstrate steady groundwater levels in monitoring wells when comparing 2001 - 2008 and 2009 – 2018 periods, both with regard to their maximums, minimums, averages and fluctuations in levels. The differences observed remain within the natural hydrological fluctuation levels depending on developments in precipitation and climate. Despite this, certain climate change impacts may be discerned – between 2008 and 2018, higher values were recorded in the initial years while lower values (and larger instability) were recorded in years closer to the present date.

With regard to all qualitative indicators (water quality), the conclusions point out to the fact that the hydro-geological conditions at the site are steady and there have been, during all evaluated periods (2001 - 2008 and 2009 - 2018), no significant changes, whether due to natural conditions or due to TPS operations. All eventual differences are caused by long-term fluctuations of monitored parameters (primarily caused by precipitation fluctuations and other climate-related parameters) and it is impossible to identify, within period under evaluation, any unequivocal trends.

These facts do not therefore constitute changes in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

<u>Soil</u>

Comparing fresh data with the original evaluation demonstrates the following facts:

Soil type occurrence corresponds to the data presented in the original EIA Documentation, with cambisols prevailing and pseudogleys and gleys closely following. New classes of evaluated soil ecological units [a type of an 'agro-ecological evaluation of soil;' the Czech abbreviation of this concept is "BPEJ" and for the sake of simplicity it will be used hereinafter [translator's note]] were introduced within the area, the existing 10 classes were expanded to 27 classes. The higher number of classes is the result, in part, of the chosen overlap of 100m in contrast with the original delimitation of areas where the project was to be located and constructed, respectively by their "encasement," but more importantly by a more precise and detailed methods of describing and evaluating soil types and their quality, which are based on more precise measurements and surveys and additional requirements for methodologically uniform interpretation of their results. Expansion of evaluated soil ecological units' classes is always identified within the framework of individual main soil types and the updates/additional data concern only inclination and exposure of given sites (the fourth number in the BPEJ code) and data concerning soil skeleton stress and soil depths (the fifth number in the BPEJ code). The comparison demonstrates that despite higher number of newly defined BPEJ, there has not been any significant change in the character and/or type of evaluated soil ecological units in contrast with the original evaluation. There also has not been any significant change in the classification of affected agricultural land fund protection classes [the Czech abbreviation for this concept is "ZPF" and will be used hereinafter for clarity [translator's note]]. None of the affected land parcels falls within the 1st class of protection of agricultural land fund (ZPF), i.e. there are no prime quality soils within the affected territory. Some areas falling within the 2nd class of protection, as recorded in the soil registry, occur within the existing TPS complex, i.e. on land parcels which do not however enjoy 'ZPF' protection according cadastral (land) register. The largest portion of the designated land consists of 3rd class of protection soils (approximately 51 %), which can be used for potential construction and development. Areas, where the main part of the construction will take place, i.e. location and erection of the NNS, fall mostly within the 4th and 5th classes of protection.

The threat of soil erosion is assessed as increased, with the risk of surface leaching, and occasional possibility of groove erosion formations. This is a condition that has been found as stable in the long-term, in both monitored periods, i.e. before 2009 and after 2009 until present there have not been any significant changes in this respect. The decisive factors for the occurrence of erosion include nature of land cultivation and type of vegetation. Terrain work (exposure of the soil profile in areas with increased erosion risk), which is an integral part of any considered construction work, represents a potential risk which will be taken into account during further project preparation stages. Permissible values of soil removal or loss by erosion, for which the limit of long-term average soil loss of 4 t / ha / year applies, are exceeded in some localities. It cannot be ruled out that this trend is related to the nature of the weather in the last approximately five years (dry periods alternating with heavy local precipitation). The question is whether this is a development trend or whether the increased attention that has recently been paid to soil protection also plays a role in the evaluation, which is also related to more detailed analyses undertaken within the area. Soils in areas that are potentially threatened by water erosion are mostly grassed over.

Data from the regular annual monitoring of agricultural and forest land condition in the vicinity of the Temelín power plant do not indicate any possible occurrence of contamination in connection with the power plant's operations. Currently, a comprehensive data series from the period 2000 - 2018 are available. Since 2009, the numbers and locations of sampling points and/or the range of monitored indicators have not changed. None of the groups of monitored parameters were found to be impacted, throughout the monitored period, respectively within the monitored period of 2009 - 2018, or linked to any changes in direct or indirect connection with operation of the Temelín nuclear power plant. The results are influenced by macroclimatic indicators rather than by operation of the power plant, or by changes in the nature of agro-management (use of industrial fertilizers).

During the monitored period, there have not been any significant changes to legal regulations concerning ZPF protection and/or forestry management practices, especially with respect to potential changes in the classification of affected soil types, changes in BPEJ definitions (there has not been any changes in the main soil unit types, expansions of BPEJ number is always defined within its own framework), re-classification of ZPF protection classes and/or requirements for permanent/temporary removals [from ZPF protection], which would require a different type of evaluation other than that undertaken within the scope of original EIA Documentation. Comparing information about the [affected] area and the anticipated development trends, it may be said that there have not been any significant changes within the affected territory that would influence evaluation of its condition in relation to soils and/or new knowledge in relation to information presented in the original EIA Documentation. There have been no changes of conditions due to which the project would have significant, and not previously assessed, effects on the environment.

From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

Rock environment and natural resources

There has been no interference with active deposits of natural resources within the affected territory, or with protected deposit territories and mining areas, as recorded on the deposit protection maps. No geological or paleontological monuments are expected to

be present in the area. There has been no occurrence, between the original EIA Statement issue date and the present, of new interference with natural resources.

From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

Biodiversity (fauna, flora and ecosystems)

With respect to fauna and flora, there have been natural developments in the area, during the monitored period (2009 - 2019), which manifested themselves in partial changes in biological communities (changes in the representation of individual biotopes). Differences between the compared periods demonstrate variability of flora and fauna more often for species having lower populations, which may not be registered by annual surveys. Surveys that were undertaken however unambiguously manifest that changes in flora and fauna community structures and ecosystem functions in this area are not significant and correspond to the expected condition. Rescue transfers of specially protected animal species (transfers to suitable substitute locations) took place in the area where the project is to be directly developed in compliance with the EIA Statement and the area underwent a remediation process leaving no suitable biotopes for reproduction of specially protected animal species. Botanical survey shows, in contrast with the original zero presence, presence of one specially protected plant species (southern adders-tongue, Ophioglossum vulgatum), which grows within an atypical biotope on a small area (along the fence of the existing pumping station at the Hněvkovice Reservoir). Given that no construction work is planned in this very area, this species will not be affected in any way by the project. Hydrobiological monitoring of the original locations (selected segments of the Vltava River) had not been undertaken given the minimum level of risk and absence of specially protected or rare species. Water conductivity test (indicator expresses the degree of pollution by solutes and thus the impact of this environment on, inter alia, invertebrate fauna) undertaken within the framework of hydro-biological monitoring demonstrates favourable conditions (values are below 200 µS/cm). Entomofauna within the surveyed area continues to correspond to the character of the region. There has not been any change to the species spectrum (the expected development of the investigated localities is reflected in the representation of common species), the list of identified specially protected species is more or less the same in both compared periods. Any identified representatives of aquatic and terrestrial molluscs do not fall within the category of specially protected species, same as in the original evaluation. When comparing results of herpetological surveys, it is apparent that there has not been any change in the structure or species of amphibians and/or reptiles (identical species were observed), the landscape structure is very favourable for reptile habitats. Rescue transfers were completed directly in the area where the project will be located, in full compliance with conditions defined in the EIA Statement, respectively in OZS (transfers to suitable substitute locations) as well as remediation, which resulted in non-existence of suitable biotopes for reproduction of specially protected species of amphibians and/or reptiles. Survey of fish stock composition in the Vltava River was not undertaken as there have not been any changes in environmental conditions; it can be reasonably expected that a similar stock composition continues to prevail within the territory. Fish stock composition in standing water includes common and grass carp, tench and common bream. None of these species enjoy special protection as they constitute common fishery stock with relatively simple demands as to their living environment. Ornithological survey shows a similar structure of ornithocenosis. There were no significant changes within the monitored period in this area. Update surveys discovered new presence

of certain rare bird species at Karlovec and Hůrecký ponds. Improvement in the ornithofauna was probably triggered by transition to more extensive fish farming methods after 2010. Surveys confirmed presence of Eurasian river otter (Lutra lutra) habitats. This presence (besides the formerly merely assumed presence along the course of the Vltava River) can be probably linked to general increase of otter populations in the Czech Republic and to competition pressures which forces otters to seek nurture in relatively remote areas and in the vicinity of small watercourses' springs. A significant factor in the survey results (apart from natural development of the monitored ecosystems) are the apparent differences caused by year-to-year changes in weather patterns. Due to prolonged dry periods, sources of surface waters were quantitatively affected and in most of the ponds (with the exception of Dvorčice pond) the water levels fell. The water levels in ephemeral and permanent wetlands decreased significantly in all evaluated areas. Habitats around the power plant respond to changes in hydrological, hydrogeological and general climatic conditions, so it can be assumed that this trend will be reflected in increasing populations (and migration of new) thermophilic and drought-loving species of plants and animals. At the same time, there may be a decrease in water and wetland species, which will lack water here.

It can be concluded that the ecosystems in the vicinity of the planned NNS are naturally evolving and this corresponds to several new findings of new species in the surveyed area in 2017 and 2019 compared to 2006-2009, including specially protected species. Implementation and operation of the project will however not have liquidating consequences for any of them.

From the perspective of specially protected areas (hereinafter "SPA(s)") the comparison found out that while the 'Dvorčice' site has been registered as a potential candidate SPA for a considerable period of time, there are also two new candidate sites the 'Hradní strouha' and 'Podhorský rybník' sites; the 'Lužnice' natural monument was declared by Regulation of Regional Authority for the Southern Bohemian Region No. 14/2013 which came into effect on 2 January 2014; the 'Zelendárky' natural monument, which had not been listed in the EIA Documentation has been declared a protected site for a long time; the 'Žďárské louky' site was de-listed without replacement along with the entire Žďárské louky site of community importance (SCI) from the National List. Evaluating these changes leads to the conclusion that within the framework of the affected territory and within the narrower area of interest no new SPAs were delineated (declared). Both candidate SPAs under consideration (Dvorčice and Hradní strouha) had not been declared as such as of date hereof. Other SPAs outside the narrower area of interest had already been, at the time of EIA Documentation completion, either registered as such or subject to pending administrative proceedings for their declaration in connection with Natura 2000 network implementation process ensuring protection on national level. The proposed candidate SPA Podhorský rybník had not been declared as protected site yet.

Delimitation of component parts of the Territorial System of Ecological Stability (TSES) had seen practically no change in the interim and continues to correspond to the situation when the original EIA Documentation was prepared, while the delimitation of the supra-regional *[NR-R]* TSES in the Temelín Zoning Plan corresponds to the TSES delimitation in the updated version of the Southern Bohemia Region's Principles of Territorial Development. Some of the slight deviations arose by a more detailed delimitation on the level of municipal zoning plans, which operates on a more detailed and specific territorial level. A certain change is represented by the current delimitation of the supra-regional bio-corridor *[NBK]* 176 route, which now lies more to the south, in contrast

to its original route, crossing the north-western corner of the Temelín cadastral area, which remains outside the narrower area of interest, with ample reserve.

From the perspective of changes within the narrower area of interest, it may be said that the situation in relation to significant landscape elements has not changed in the interim. With regard to protected trees within the narrower area of interest, there has not been any change between 2010 and 2019, with the exception of one protected tree listed in Hněvkovice u Týna nad Vltavou (105662 - European ash), which stands well outside the affected territory.

Although the number of specially protected plant species listed in the biological assessment has increased, the newly found occurrence of southern adders-tongue (Ophioglossum vulgatum) will not be affected by the project, as no construction work will take place near it. Also, ornithologically significant localities on adjacent ponds (Dvorčice, Karlovec and Hůrecký pond) will not be directly disturbed by construction, albeit there may be temporary disturbance of birds during nesting periods on ponds closest to construction site (Dvorčice and possibly Hůrecký pond) by noise from the construction site and related movements of mechanization. The laying of the raw water supply line around Hůrecký pond could, in the spring months, directly disturbance created on waterlogged terrain by the movement of technology will rather help both species by helping to create suitable habitats. The presence of otter was identified on the basis of residential traces around the Dvorčice and Karlovec ponds. Construction work and subsequent operation will not affect these sites.

Condition No. 32 defined in the EIA Statement, respectively Condition No. 30 defined in OZS remains valid, stipulating that certain allowances will be made in relation to changes in the structure of ecological communities during commencement of the construction. This condition stipulates that additional zoological surveys are to be undertaken in the vicinity of the NNS complex, no later than one vegetation season prior to construction actually commencing and measures are to be adopted on the basis of those survey results.

With regard to the above, From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

Natura 2000 network sites

From the perspective of the Natura 2000 network sites, the comparison found that the "Českobudějovické rybníky" bird area (hereinafter "BA"), which the EIA Documentation does not list or refer to, had already been, at the date of its issue, duly declared by Government Decree No. 405/2009 Coll.; the site of community importance (hereinafter "SCI") 'Lužnice and Nežárka' was included in a proposal for the European List already before the EIA Documentation was prepared (Government Decree No. 132/2005 Coll.) and its full declaration within the framework of implementing the Natura 2000 network took place in 2012 (Government Decree No. 208/2012 Coll.); SCI 'Radomilická mokřina' was included in a proposal for the European List already before the EIA Documentation was prepared (Government Decree No. 132/2005 Coll.) and its full declaration within the framework of implementing the Natura 2000 network took place in 2012 (Government Decree No. 132/2005 Coll.) and its full declaration within the framework of implementing the Natura 2000 network took place in 2012 (Government Decree No. 132/2005 Coll.) and its full declaration within the framework of implementing the Natura 2000 network took place in 2012 (Government Decree No. 208/2012 Coll.); SCI 'Velký and Malý Kamýk', which the EIA Documentation does not list or refer to, was during the period of its preparation already included in the National List update (Government Decree No. 371/2009 Coll.) and its full declaration within the framework of implementing the Natura 2000 network took place in 2012 (Government

Decree No. 208/2012 Coll.); SCI 'Zelendárky,' which the EIA Documentation does not list or refer to, was during the period of its preparation already included in the National List update (Government Decree No. 371/2009 Coll.) and its full declaration within the framework of implementing the Natura 2000 network took place in 2012 (Government Decree No. 208/2012 Coll.).

Within the framework of the narrower area of interest, there was no new delimitation or declaration of any new Natura 2000 network site. Within the narrower area of interest, there have not been any changes between 2010 and 2019. Natura 2000 network sites lying outside the narrower area of interest (SCI 'Lužnice and Nežárka,' SCI 'Vysoký and Malý Kamýk,' SCI 'Zelendárky'), were already registered / listed as SPAs during the period when the original EIA Documentation was being prepared, or subject to administrative proceedings to be declared as such within the framework of implementing the Natura 2000 network.

The Regional Authority for the Southern Bohemian Region issued a Statement on 15 October 2019 under Ref. No. KUJCK 118314/2019 concluding that the intended project cannot have, by itself or in connection with other projects of concepts, any significant impact on the favourable environment in relation to subjects of protection or integrity of the SCI and BA sites that lie within the jurisdiction of the Regional Authority for the Southern Bohemian Region.

From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

Character of the landscape

Between 2009 and 2019, there were no changes in the morphology and the use of the landscape that would require a new visual analysis to be undertaken. The project for the new nuclear source also remains the same from its visual perspective. Similarly, there have been no changes to methodologies regulating evaluation of impacts on the character of the landscape, respectively for evaluation of shading of residential areas due to water vapour clouding above the cooling towers.

In the interim, a new protected landscape area (hereinafter "PLA") called 'Brdy' was established, as of 1 January 2016 (Government Order No. 292/2015 Coll.). This new PLA overlaps with the outer margins of the NNS visibility area as delineated within the framework of the landscape character impact study (annexed to the original EIA Documentation). This study delineates and evaluates impact on the affected landscape character within the area of Brdy, including also Brdy and Třemšín natural parks, which form a part of PLA Brdy. By establishment of PLA Brdy, a new element of nature protection came into existence. This is however a merely administrative element, a new special instrument of territorial protection, which does not create a new impact of the project per se. Within the framework of the newly established PLA Brdy, the area that could be actually visually affected by the NNS project, considering the high afforestation of the entire area, would be only at the western slope of the 'Tok' peak, which is not covered by trees, and within a small section of the 'Skelná Huť' area which lies approximately 68 km from the NNS, i.e. at the border of visibility by naked eye without allowing distinction to be made between the existing TPS and the NNS. The above-mentioned facts imply that there is no new visual impact of a quantitative character and considering the scope of impact within PLA Brdy, there is also no increased impact on the landscape character from the qualitative perspective in relation to establishment of a new category of protection for this area.

With regard to impacts related to potential shading, which were previously analysed in the EIA Documentation, the comparison analysis addressing changes in the extent of new builds within the individual reference locations that are subject to NNS impact evaluation of shading in residential areas according to aerial photographs from 2006 and current aerial photographs (www.mapy.cz) shows that none of the reference locations have seen significant changes in the extent of newly developed land (new builds) since the EIA Statement issue date (year), which would trigger the need for a new analysis with respect to shading.

Comparison of the current situation with documentation that was used in preparing the EIA Documentation, and which also form a part of the EIA Statement, demonstrates that there have been no changes, in the area of morphology and use of the landscape, that would be significant from the environmental perspective. This means that there have been no changes of conditions due to which the project would have significant, and not previously assessed, effects on the environment.

From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

<u>Physical assets and cultural heritage sites including architectural and archaeological</u> <u>aspects</u>

There are no physical assets / properties belonging to third parties within the affected territory, meaning there has not been any changes in this respect, due to which the project would have significant, and not previously assessed, effects on the environment. Similarly, there have not been any changes in the affected territory in relation to protection of immovable cultural heritage sites and archaeological locations, due to which the project would have significant, and not previously assessed, effects on the environment. Comparison of the current situation with the conclusions that were formulated during the preparation of the EIA Documentation and the EIA Report, which also form a part of the EIA Statement and the binding opinion verifying compliance, demonstrates that there have been no changes within area of physical assets and cultural heritage sites that could be classified as significant from an environmental perspective. A summary of partial changes and the resulting conclusion, which rather represent a more precise and detailed information, is provided below. Several landmarks and archaeological sites were merely administratively transferred from one part of a municipality to another or, in other cases, from a municipality, which was originally within the area of interest, into another municipality outside this area. Protection of these individual sites remains identical, without creating additional impact.

Within the broader area of interest, four new immovable cultural heritage sites were identified. In the municipality of Olešník it is the Chapel of St. Rosalia (Reg. No. 5263) – the original EIA Documentation does not list this chapel and given the its distance (approximately 6.8 km south-east from the border of the existing power plant complex) it does not have any impact on the conclusion on the original evaluation. In the municipality of Týn nad Vltavou, there is a new monument / wayside cross ("Boží Muka") (Reg. No. 201) – the original EIA Documentation does not list this cross, and despite being on the list of heritage sites of the Czech Republic, it could not be physically found in the countryside even by National Heritage Institute officers. Given its distance (approximately 8 km north-east from the border of the existing power plant complex) it does not have any impact on the original evaluation. In the municipality of the and weir (building No. 221, Reg. No. 105633) – the original EIA

Documentation does not list this property, it was first registered in the registry in 2015, and given its distance (approximately 4.6 km east of the border of the existing power plant complex) it does not have any impact on the conclusion on the original evaluation. In the municipality of Týn nad Vltavou it is a public fountain (Reg. No. 103753) - the original EIA Documentation does not list this property and given its distance (approximately 6 km north-east from the border of the existing power plant complex) it does not have any impact on the original evaluation.

With regard to monuments/landmarks which no longer enjoy special protection, respectively they were not registered on the list of immovable heritage sites as separate assets, there are three such immovable cultural monuments, from which one is not protected, and for the two others no individual registry number could be found, and neither do they enjoy legal protection, while forming a part of another heritage asset. These changes again have no impact on the conclusion of the original evaluation. These three 'monuments' are - a country homestead (Reg. No. 457) in Temelín. This homestead no longer enjoys special protection, since 2010. In Týn nad Vltavou, it is the statue of the Holy Virgin Mary, which does not have a separate registry entry No. or legal protection and forms a part of monument Reg. No. 508, and the statue of St. Alois and statue of St. Francis Xavier – both these statues have no separate registry entry No. and form a part of the monument registered under No. 508.

From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

Transport and other infrastructure

In the interim, there were no significant changes in the layout and structure of the road network within the broader or the narrower area of interest. There were certain partial modifications within this road network improving its safety (modifications and remodelling of certain crossroads, extension of pavements, partial broadening of roads within the framework of repairs undertaken thereon, respectively their reconstructions). In addition, there were instances of routine repairs and maintenance of road surfaces and replacements and extensions of safety elements over the past several years. No new by-pass roads were built. With the exception of gradual completion of the D3 motorway, none of the implemented modifications have any impacts on traffic routing and intensities within the road network in the affected territory.

Comparison of the current and forecasted traffic intensity with traffic intensity considered and forecasted at the time of the EIA Statement issue is provided in the table below. The forecast in the EIA Documentation considered traffic situation in 2015, and this forecast is compared with intensities ascertained by actual data gathering (counts) in 2016, and with intensities forecasted on the basis of that 2016 data gathering for 2020 and 2030.

Legend: Silnice – Road No.; Profil – Segment; Rocni prumer... - Annual daily intensity averages [vehicles/24 hrs]; Scitani RSD... - Road and Motorway Directorate of the Czech Republic data gathering (count) 2016; Prognoza 2020 - 2020 Forecast; Prognoza 2030 - 2030 Forecast; Tezka – heavy; Osobni – passenger vehicles; Motocykly – motorbikes; Celkem - total

Silnice	Profil		Roční průměr denních intenzit [vozidel/24 h]										
		Sčítání ŘSD 2016				Prognóza 2020				Prognóza 2030			
		Těžká	Osobní	Motocykly	Celkem	Těžká	Osobní	Motocykly	Celkem	Těžká	Osobní	Motocykly	Celkem
II/105	2-0630	-66	-479	-19	-564	-53	-381	-18	-452	-17	-243	-18	-278

	2-1215	-369	-2036	-57	-2462	-320	-1755	-55	-2130	-177	-1362	-53	-1592
	2-1223	-1693	-2226	-26	-3945	-1611	-1656	-19	-3286	-1376	-858	-8	-2242
	2-0640	+22	-736	+46	-668	+80	-435	+51	-304	+244	-13	+57	+288
	2-0656	-400	-733	+23	-1110	-357	-521	+25	-853	-238	-224	+29	-433
	2-0657	-539	-9	+2	-546	-502	+239	+3	-260	-398	+587	+5	+194
	2-0650	-220	-720	-27	-967	-183	-472	-26	-681	-79	-124	-24	-227
	2-0660	-13	+118	-24	+81	+32	+408	-23	+417	+157	+814	-21	+950
II/138	2-4680	-49	+550	+4	+505	-35	+601	+4	+570	+5	+673	+5	+683
	2-4200	-20	+139	-1	+118	-17	+163	-1	+145	-10	+198	-1	+187
	2-4209	-72	+39	-6	-39	-69	+63	-6	-12	-62	+98	-6	+30
II/141	2-2020	-201	-265	+2	-464	-190	-213	+3	-400	-159	-141	+4	-296
	2-2018	-216	-247	-5	-468	-205	-200	-4	-409	-172	-135	-3	-310
II/159	2-1200	-103	-477	-3	-583	-88	-403	-2	-493	-46	-299	-1	-346
	2-1220	-4	-339	-33	-376	+17	-240	-31	-254	+73	-101	-28	-56
	2-3078	+164	-77	-38	+49	+182	-10	-36	+136	+229	+85	-34	+280
	2-3060	+194	-51	-26	+117	+217	+35	-26	+226	+279	+156	-25	+410
II/122	2-2399	-356	+5	-16	-367	-345	+73	-15	-287	-314	+167	-15	-162
	2-2050	-334	+134	+10	-190	-322	+208	+12	-102	-289	+311	+14	+36
	2-2040	+14	+40	+16	+70	+23	+74	+17	+114	+49	+123	+19	+191
II/147	2-2380	-67	-655	-18	-740	-50	-594	-18	-662	-5	-509	-17	-531
	2-3250	-323	-420	-13	-756	-306	-359	-13	-678	-261	-274	-12	-547
I/20	2-0369	-767	-1592	+80	-2279	-663	-1183	+86	-1760	-373	-610	+94	-889
	2-0370	-767	-1592	+80	-2279	-663	-1183	+86	-1760	-373	-610	+94	-889
I/3 (D3)	2-0106	-285	-1063	+29	-1319	-150	-601	+32	-719	+214	+47	+36	+297

Identical values in per cent [with identical legend as above]:

Silnice	Profil	[%]											
		Sčítání ŘSD 2016					Prognó	za 2020		Prognóza 2030			
		Těžká	Osobní	Motocykly	Celkem	Těžká	Osobní	Motocykly	Celkem	Těžká	Osobní	Motocykly	Celkem
II/105	2-0630	-19 %	-20 %	-63 %	-20 %	-15 %	-16 %	-60 %	-16 %	-5 %	-10 %	-60 %	-10 %
	2-1215	-26 %	-27 %	-61 %	-27 %	-23 %	-23 %	-59 %	-23 %	-12 %	-18 %	-57 %	-17 %
	2-1223	-48 %	-16 %	-15 %	-23 %	-45 %	-12 %	-11 %	-19 %	-39 %	-6 %	-5 %	-13 %
	2-0640	+2 %	-11 %	+102 %	-8 %	+6 %	-6 %	+113 %	-4 %	+18 %	±0 %	+127 %	+4 %
	2-0656	-28 %	-15 %	+100 %	-17 %	-25 %	-10 %	+109 %	-13 %	-16 %	-5 %	+126 %	-7 %
	2-0657	-37 %	±0 %	+9 %	-8 %	-35 %	+5 %	+13 %	-4 %	-27 %	+12 %	+22 %	+3 %
	2-0650	-19 %	-13 %	-52 %	-14 %	-16 %	-8 %	-50 %	-10 %	-7 %	-2 %	-46 %	-3 %
	2-0660	-1 %	+2 %	-46 %	1%	+3 %	7 %	-44 %	+6 %	+14 %	+14 %	-40 %	+14 %
II/138	2-4680	-13 %	+116 %	+100 %	+60 %	-9 %	+127 %	+100 %	+67 %	+1 %	+142 %	+125 %	+81 %
	2-4200	-23 %	+40 %	-25 %	+27 %	-20 %	+47 %	-25 %	+33 %	-11 %	+57 %	-25 %	+42 %
	2-4209	-52 %	+9 %	-67 %	-7 %	-50 %	+14 %	-67 %	-2 %	-45 %	+22 %	-67 %	+5 %
II/141	2-2020	-45 %	-20 %	+14 %	-26 %	-42 %	-16 %	+21 %	-23 %	-35 %	-11 %	+29 %	-17 %
	2-2018	-45 %	-21 %	-20 %	-28 %	-43 %	-17 %	-16 %	-24 %	-36 %	-11 %	-12 %	-18 %
II/159	2-1200	-23 %	-24 %	-14 %	-24 %	-20 %	-21 %	-10 %	-20 %	-10 %	-15 %	-5 %	-14 %
	2-1220	-1 %	-15 %	-46 %	-13 %	+3 %	-10 %	-44 %	-9 %	+13 %	-4 %	-39 %	-2 %
	2-3078	+49 %	-5 %	-52 %	+3 %	+54 %	-1 %	-49 %	+7 %	+68 %	+6 %	-47 %	+15 %
	2-3060	+51 %	-3 %	-76 %	+5 %	+57 %	+2 %	-76 %	+10 %	+73 %	+9 %	-74 %	+19 %
II/122	2-2399	-58 %	±0 %	-59 %	-18 %	-56 %	+5 %	-56 %	-14 %	-51 %	+12 %	-56 %	-8 %
	2-2050	-54 %	+10 %	+37 %	-10 %	-52 %	+15 %	+44 %	-5 %	-47 %	+23 %	+52 %	+2 %
	2-2040	+6 %	+6 %	+123 %	+8 %	+11 %	+11 %	+131 %	+13 %	+22 %	+19 %	+146 %	+22 %
II/147	2-2380	-14 %	-35 %	-72 %	-31 %	-10 %	-32 %	-72 %	-28 %	-1 %	-27 %	-68 %	-22 %
	2-3250	-44 %	-26 %	-65 %	-32 %	-41 %	-22 %	-65 %	-28 %	-35 %	-17 %	-60 %	-23 %
1/20	2-0369	-26 %	-16 %	+242 %	-18 %	-23 %	-12 %	+261 %	-14 %	-13 %	-6 %	+285 %	-7 %
	2-0370	-26 %	-16 %	+242 %	-18 %	-23 %	-12 %	+261 %	-14 %	-13 %	-6 %	+285 %	-7 %
I/3 (D3)	2-0106	-9 %	-10 %	+88 %	-10 %	-5 %	-6 %	+97 %	-5 %	+7 %	±0 %	+109 %	2 %

The results imply that as of 2016 (the last available hard data count) the forecasted traffic intensities have not been achieved on the majority of the subject roads as stipulated in the EIA Documentation. Decreases in traffic intensity on roads directly crossing the affected territory (Nos. II/105, II/138 and II/141) relate mostly to heavy vehicles, in the order of several dozen per cent which is a favourable development from the perspective of the environmental impact. Similar trends can be discerned in relation to passenger car traffic, which also shows some decreases in intensity, but in some cases (Road No. II/138) there is also an apparent increase which is, from the perspective of environmental impact,

a less significant fact, which is compensated by the decrease in heavy vehicles traffic. In the context of a broader road network within the affected territory, similar trends occur, i.e. overall decreases in intensity of both heavy and passenger car traffic, but in certain cases there are also apparent increases. A more marked increase in heavy vehicle traffic is shown only on the II/159 road in the vicinity of Albrechtice nad Vltavou, with the actual cause not being readily apparent – it may be related to certain specific activities during the 2016 data gathering or, on the contrary, certain local restrictions during the 2005 data gathering process (the 2010 count however demonstrated further decrease in contrast with 2005, and the situation is probably caused by specific local activities during 2016). As implied by the above facts, the overall assessment of traffic intensity forecasts carried out for the EIA Documentation is generally correct while being sufficiently conservative. Practically the same can be said about long-term forecasts for 2020, respectively 2030. Traffic trends considered in the EIA Documentation are described correctly and can be used for the present forecasts and in the majority of cases they remain sufficiently conservative.

From the perspective of railroads and other transport-related systems and technical infrastructure there have been no significant changes in these areas.

From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

<u>Other environmental characteristics (geological and geomorphological situation and seismicity of the site)</u>

The carried-out terrain and exploratory surveys strengthened the existing knowledge of the condition and character of rock environment within the surveyed areas.

Comparison of condition of the previously evaluated elements of this environment with the current condition shows that there have not been any changes in the properties of previously not assessed elements of this environment which could negatively affect the overall evaluation of the affected territory.

From the perspective of the MoE, this does not constitute change in conditions prevailing in the affected territory which could generate significant, and not previously assessed, effects of the project on the environment and public health.

Change in the current knowledge and methods of assessment:

There have been changes in legislation between the issue of the original EIA Documentation and the present application to extend the EIA Statement. According to the submitted Supplement supporting extension of the EIA Statement, there have been the following updates in the current knowledge and methods of assessment:

 Legislative framework for environmental impact assessment – Act No. 100/2001 Coll., on Environmental Impact Assessment – remained in force throughout the period between preparation of the environmental impact assessment documentation and the issue of the Statement (2008 - 2013). This law continues to remain in force, having been repeatedly amended in the interim, while retaining its original principles and methods of assessment. One of the more significant changes was brought about by Amendment No. 326/2017 Coll., implementing Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment. This amendment puts more emphasis on biodiversity and climate impacts assessments. For these purposes, the ministry issued a "Methodological Guidance for Application of Selected New Terms and Requirements within the Act No. 100/2001 Coll., on Environmental Impact Assessment and Amending Some Related Acts (Act on Environmental Impact Assessment), as amended, specifically in relation to wording of Act No. 326/2017 Coll., (Ref. No.: MZP/2017/710/1985 dated 20 October 2017)." This 'Methodological Guidance' defines new terms such as "biodiversity" and "climate change."

- In relation to biodiversity, the EIA Documentation, which includes biota impact assessment, evaluated all linkages necessary for ensuring variability of organisms including ecosystems and incorporating diversity within the framework of individual species and between various species and ecosystems. The undertaken evaluation implies that biodiversity-related conditions and their criteria will not be affected and that the diversity of species and habitats, and prospectively also the diversity of various subjects of protection in specially protected areas, will remain unaffected.
- In relation to climate impacts, the EIA Documentation, which includes evaluation of impacts on air and climate, evaluated all relevant climate impacts. The undertaken evaluation addresses impact on local climate (potential impact on local macroclimatic, mesoclimatic and microclimatic characteristics), as well as impacts on global climate (potential impact of the project on climate change, including relevant mitigation and adaptation measures). The project has a significant potential in relation to reducing greenhouse gas emissions. Nuclear power plants produce almost no greenhouse gas emissions during operation. The project is also prepared for anticipated climate developments, especially in terms of its resistance to extreme climatic events, i.e. floods, temperature and precipitation volumes and their distribution over time, and incorporates corresponding technical solutions (dimensions) of respective facilities. The new nuclear source project represents a robust solution, which is resistant to potential climate change. This is ensured on two levels. The initial project design is already resistant against potential climate change at the NNS site, and all future, regular safety measures updates at the NNS will reflect the continuous climate change at its site on the basis of actual development in climate-related indicators. This simultaneously fulfils the requirements stipulated by the 'Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment,' EU 2013 addressing principles of the so-called adaptive management, i.e. preparedness for continuous implementation of newly acquired knowledge.
- There is a new requirement to evaluate condition of surface waters and groundwater in all EU Member States, which is mandated by the Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (hereinafter the "Water Framework Directive"). The intent of the Water Framework Directive is to avert further worsening of surface waters' and groundwater quality and to improve their condition as well as conditions and quality of related ecosystems. In compliance with this Water Framework Directive, certain programmes have been put into place before the end of 2006, which ascertain and assess quality of waters (monitoring programmes). The chief objective of the Water Framework Directive was to achieve, by 2015, a favourable quality of waters subject to certain exceptions extending until 2027. The requirements related to evaluation of surface waters and groundwater were transposed to the Czech legislation by Title III Act No. 254/2001 Coll., on Waters and Amendments to Certain other Acts (the "Water Act"), as amended. The first planning period was executed on the basis of results of monitoring programme that

commenced in 2006. These evaluation results were projected into the Vltava River Watershed Plans only in 2009 and served as the background documentation for proposed measures which were designed to improve the overall quality of waters within the Vltava River basin. Since this first planning period, the methodology regulating evaluation of surface water quality has undergone significant developments. The second planning period used certified methodologies for evaluation of quality/potential of water bodies approved by the Ministry for the Environment of the Czech Republic. Differences between evaluation methodologies used in the first and in the second planning period are also apparent in relation to evaluations of ecologic conditions/potential in terms of their chemical condition. For physical-chemical components of ecological condition/potential, some of the evaluation targets values differ slightly (especially in relation to general physical/chemical substances). These changes are more significant for biological components, where the overall approach to evaluation changed considerably. In contrast with the first planning period, the second period evaluates ecological condition/potential of biological components on the basis of multi-metric indexes (EQR). A different approach is also used in evaluations of chemical conditions. Evaluation results from the second planning period are based on monitoring data acquired between 2010 and 2015, and were projected into segmental river basin plans (Upper Vltava and Lower Vltava) in 2016. These facts have the character of a methodological clarification; within the framework of further preparations of the project, there will be additional evaluations that will take into consideration the final chosen solutions for the new nuclear source.

- Air with regard to air, since the elaboration of the original EIA Documentation there has been a change in legislation – Act No. 201/2012 Coll., on Air Protection, as amended (hereinafter the "APA") came into force in the interim as well as a new MoE Regulation No. 415/2012 Coll., on Permissible Levels of Pollution and Their Discovery and Implementation of Certain Other Provisions of the Air Protection Act, as amended); imission limits however remained the same except for limits applicable to average annual concentrations of suspended particles PM_{2.5}, which currently need to observe stricter permissible values, decreasing from the original 25 μ g/m³ to $20 \ \mu g/m^3$ effective as of 1 January 2020. For evaluations of background air pollution situation within the affected territory, respectively assessment whether any of the imission limits are being exceeded, a new method of assessment is being used, in accordance with Section 11 paragraph 6 APA, based on average concentration values for a square kilometre during the preceding five calendar years. These data are annually published by the Czech Hydrometeorological Institute in the fourth guarter (Q4) of the following year. The five-year average for 2013-2017 was published in Q4 2018 and given the time necessary to prepare the Supplement, the averages used therein can be considered to constitute the most recent available data. The imission situation of the affected territory is currently satisfactory (based on averages reported for 2015 – 2019), imission limits for all relevant pollutants are being observed.
- Noise Government Decree No. 148/2006 Coll., was replaced by Government Decree No. 272/2011 Coll., on Protection of Health against Adverse Effects of Noise and Vibrations, as amended. The hygienic limits for noise remained unchanged. Therefore, there has been no change in reference conditions for these evaluations.

- Ionising radiation when the original EIA Documentation was prepared, it was subject to Act No. 18/1997 Coll., on Act on Peaceful Utilisation of Nuclear Energy and Ionising Radiation (the Atomic Act). Currently, a new Act No. 263/2016 Coll., Atomic Act is in force. Both Acts are based on identical requirements for use of nuclear energy. Therefore, there has been no change in reference conditions for these evaluations.
- Within the framework of the European Union, nuclear safety issues are supervised by Euratom (http://www.euratom.org/). Safety standards are developed and defined by international organizations, specifically by IAEA, WENRA etc., where these standards are developed in collaboration by experts from supervising bodies, nuclear facility operators, research institutions and the industry. The most recent safety standards are always used in drafting/updates or safety reports for new nuclear sources (commissioning safety report, pre-operation safety report etc.), which evaluate nuclear installations from the perspective of operational safety throughout their life-cycle, as required by Act No. 263/2016 Coll., Atomic Act. The requirement for utilization of the most up-to-date safety standards is also included in the tendering documentation for the selection of the New Nuclear Source general contractor for the Dukovany Installation (Call for Offers), which lists the summary of the chief safety standards. The same process was also used in the selection of general contractor/implementation of the New Nuclear Source at Temelín.
- Stress tests in active power stations within the framework of the EU took place after the Fukushima nuclear installation disaster (2011) and their objective was to asses risks and safety (stress tests) in active nuclear installations in Europe. The aim was to verify whether the safety standards in use, which were certified at the time when these installations received their operating permits, are sufficient to respond to unexpected extreme events such as earthquakes, flooding, terrorist attacks or airplane collisions. According to these tests, the safety standards in European nuclear installations are generally high, yet there have been recommendations for further improvements. In the Czech Republic, the knowledge acquired from these stress tests was incorporated into the wording of Act No. 263/2016 Coll., Atomic Act and its implementing regulation.
- As implied by information above, the project evaluation process executed within the framework of the original EIA Documentation materially respects the current methods of environmental impacts' assessment. This also applies to individual sub-areas of the environment, including nuclear safety.

Based on the above, it can be said that there have been changes in the current knowledge and methods of assessment in some areas. However, there exists no conflict between the new findings, current knowledge and methods of assessment and the conclusions formulated in the original EIA Documentation, only the applicable methodologies and computational models become, in the interim, more precise and detailed in general.

From the point of view of the MoE, this does not constitute change in methods of assessment or current knowledge that could generate significant, and not previously assessed, effects of the project on the environment and public health.

In accordance with Section 9a paragraph 4 EIAA, the applicant duly demonstrated in writing, by submitting the application for extension of the EIA Statement's validity along with the expert Supplement for this extension and other additional information, that there

have been no changes of conditions prevailing in the affected territory or current knowledge and methods of assessment due to which the project would have significant, and not previously assessed, effects on the environment. The authors of the Supplement state that there have been no significant changes within the affected territory which would represent an obstacle for the extension of the EIA Statement. Conditions stipulated within the EIA Statement will continue to be observed in the subsequent stages of project documentation for construction, and will be included as prerequisite conditions in decisions taken in future proceedings. With regard to the information provided above, it is apparent that compared to the original EIA process there have not been any changes in the condition of individual segments of the environment or public health within the affected territory which could, with regard to their nature, individually or cumulatively, with respect to all above-described changes, generate any new not previously assessed impacts on individual components of the environment and public health, or on the environment and public health as a whole. On this basis, the MoE concluded that it will extend the validity of the EIA Statement in accordance with Section 9a paragraph 4 EIAA by additional 5 years, i.e. until 18 January 2025.

This statement does not replace the binding standpoints or statements of other concerned administrative authorities or other relevant decisions, permits or consents issued pursuant to special legal regulation. This statement is not a decision issued in administrative proceedings and thus cannot be subject to an appeal.

Upon application, the validity of this EIA Statement may be extended further in accordance with Section 9a paragraph 4 Act No. 100/2001 Coll., on Environmental Impact Assessment and Amending Some Related Acts (Act on Environmental Impact Assessment, EIAA), as amended.