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## **GLOBAL 2000 Statement on the Notification on Publication of Basis for the Decision in the Matter of Administrative Proceedings “Nuclear Power Plant Mochovce VVER 4x440 MW 3<sup>rd</sup> construction”**

Dear Sir or Madam,

thank you for the opportunity to comment upon the documents concerning the basis for the decision in the matter of commissioning of Mochovce unit 3.

Three documents were published as a basis for the decision Nr. Xxx/2021<sup>1</sup> – the “Amended/New Draft of the Decision” Document already being one of three documents the public is invited to comment on.

### **General considerations**

#### **“Amended/New Draft of the Decision”<sup>2</sup>**

Compared to the previous Draft Decision of March 2020, several aspects have been improved in our view. Several text passages that had been left in a pre-final form and thus not presented to the public in the final and actually valid version of the decision were updated and uncertainties eliminated.

However, it has to be noted that while the “Amended/New Draft of the Decision” includes in detail a summary of our statement of 15.4.2020 on the previous Draft Decision (p 40—41), there are no replies to our comments included in this document, but only the statement

“ÚJD SR answers to comments of administrative proceedings participants will be added here of the envisaged future decision on the case” [sic], p 41.

Therefore, we have to repeat our comments on some parts of the documents in this statement.

Furthermore, even this “Amended/New Draft of the Decision” states at several points that still not all tests of equipments have been accomplished. The list of vital equipment of unit 3 still contains items and programs unfit to be tested in section s, p 14–21, namely:

<sup>1</sup> [www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/En-xx-06-08-37](http://www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/En-xx-06-08-37)

<sup>2</sup> [www.ujd.gov.sk/ujd/WebStore.nsf/viewKey/Aktualizovany\\_draft/\\$FILE/\(01\\_21\\_2021\)%20MO34%20n%C3%A1vrh%20R\\_rev1\\_%C4%8Distopis\\_draft.pdf](http://www.ujd.gov.sk/ujd/WebStore.nsf/viewKey/Aktualizovany_draft/$FILE/(01_21_2021)%20MO34%20n%C3%A1vrh%20R_rev1_%C4%8Distopis_draft.pdf)

3P059	Functional Test Program for ASFES Unit 3	Incomplete program implementation, missing verification of communication with the turbine control system will be completed before start of commissioning.
8P116C	Program of functional tests of fixed fire extinguisher for water mist seismically not resistant – Unit 3	Program implementation not completed. Additional modifications are being done on the system. Will be complete before fuel loading.
8P117A	Program of functional tests of fixed fire extinguisher for water mist seismically resistant – Unit 3	Program implementation not completed. Additional modifications are being done on the system. Will be complete before fuel loading.

While several repairs of safety-relevant equipment and instrumentation have been done and programs completed compared to the draft basis of decision of March 2020, in particular program 8P116 (“Fire water system seismically not reinforced”) has still not been completed at this stage.

Again, this still precludes the Right of the Public from Access to Information and for Public Participation in Decision-making.

**We strongly propose to review the Draft Decision once all relevant components of the nuclear unit under construction are available at all for testing, and gradual testing can begin on all equipments.**

Furthermore, Slovenské elektrárne, the owner of the plant, had to perform extensive quality inspections of previously installed pipeline components at Unit 3 of the Mochovce nuclear project after a criminal investigation related to poor quality construction work and forgery of documentation, including a raid of the National Criminal Agency (NAKA) at the Mochovce site on 3.3.2020.<sup>3</sup> A material mismatch was identified in two T-pieces of DN15 pipelines installed at unit 4.<sup>4</sup>

The time-consuming, thorough checks of 2960 pipeline components following this criminal investigation resulted in the findings of deviations in the chemical composition of components in 288 cases, and 52 cases in which a material trade mark other than that declared in the documentation (in the certificates) was found. Worse, eight pipeline components of low-alloy carbon steel were identified that were either not certified for use in this highly safety-relevant

<sup>3</sup> <https://spravy.pravda.sk/domace/clanok/544383-policia-zasahuje-v-jadrovej-elektrarne-mochovce/> and [www.topky.sk/cl/10/1866065/MIMORIADNE-Zasah-NAKA-v-elektrarni-Mochovce--Autenticke-FOTO-z-akcie-Atom](http://www.topky.sk/cl/10/1866065/MIMORIADNE-Zasah-NAKA-v-elektrarni-Mochovce--Autenticke-FOTO-z-akcie-Atom)

<sup>4</sup> [www.ujd.gov.sk/ujd/WebStore.nsf/viewKey/Opinion\\_of\\_UJD\\_SR/\\$FILE/TS\\_materialy\\_4maj2020%20EN1.pdf](http://www.ujd.gov.sk/ujd/WebStore.nsf/viewKey/Opinion_of_UJD_SR/$FILE/TS_materialy_4maj2020%20EN1.pdf)

environment or were of downright “inappropriate material type”.<sup>5</sup>

**The thorough approach prescribed by ÚJD thus uncovered a substantial amount of incorrect documentation and certificates, as well as some components of inferior or inappropriate material.**

**However, it is not acceptable that the “Amended/New Draft of the Decision” was submitted for consultation to the public at a time (22.1.21) where only “Preliminary results of quality inspections of pipeline components at Unit 3 of Mochovce NPP”<sup>6</sup> were published by ÚJD (26.1.21) and thus the final results of the inspections could not be included in the Draft Decision.**

What is more, there have so far already been numerous criminal investigations by the National Criminal Agency (NAKA), including a raid already on 20.7.2016 to one of the main suppliers Inžinierské stavby Košice offices in Mochovce and Košice,<sup>7</sup> related to poor quality construction work at the Mochovce nuclear project site.

Inžinierské stavby Košice was involved in drillings for seismic updates and the installation of new equipment in the Mochovce unit 3 and 4 project. ÚJD provided in a mail to GLOBAL 2000 the detailed information on the process as prescribed by the nuclear regulator:

“Drilling in reactor building is following very strict design and verification process that has multiple steps of verification (involving also basic design BD author supervision).

The design and verification process consisted on several steps:

- **DESIGN**
- **PRE-ERECTION**

During erection activities, the relevant contractor has to indicate the positions of existing rebars by following ways (supervised by basic design author)

- Concrete struct.-without steel liner: to use scan of rebar
- **Concrete struct.-with steel liner: to use drilling test (using small diameter of borehole).**
- **ERECTION**

If rebars were cut-following methodology was used (developed by author of BD, agreed by regulator -ÚJD):

- <5% MINOR damage: Damage recorded in register. Without substitution of rebars,
- >5% MAJOR damage: Non Conformity Record - NCR issued, recorded in register, Substitution of rebars,

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<sup>5</sup> [www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/En-xx-06-08-36](http://www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/En-xx-06-08-36)

<sup>6</sup> “The final Summary Report ‘Verification of the quality of specific deliveries of pipeline components used on classified equipment at Unit 3 of Mochovce NPP’ will be made available to the public after the full completion of all inspections at Unit 3 of Mochovce NPP.” [www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/En-xx-06-08-36](http://www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/En-xx-06-08-36)

<sup>7</sup> <https://ekonomika.sme.sk/c/20219759/policaiti-zasahuju-v-mochovciach-dotykat-sa-ma-byvaleho-dodavateľa.html>,  
<https://e.dennikn.sk/2051074/razie-v-mochovciach-su-uz-bezna-vec-ako-dopadli-tie-predosle/>,  
<https://kosicednes.sk/udalosti/policajna-razia-inzinierskych-stavbach/>

- Follow-up of installation of plates:

During erection works is mandatory for contractor to fill up „follow-up protocol“ and „record of cores“ on construction signed by all involved workers (drilling, grouting, welding, quality control, painting) + designer on site responsible to avoid cutting rebar's (shifting core drills after scanning structure)."<sup>8</sup> [our emphasis]

ÚJD also informed GLOBAL 2000 that 22 NCR were issued and recorded in the register which exceeded the allowed limits of 5% (as of 2018).<sup>9</sup>

During the site visit to the Mochovce project site on 27.11.2019, Slovenske elektrárne representatives confirmed that in three cases even large equipment parts were damaged during the extensive drilling program, including two cases of damages to the special canalisation and one case of air conditioning,<sup>10</sup> i. e. where the prescribed drilling tests were apparently insufficient, could not prevent severe damage or potentially were not implemented.

The claim by the supplier and the owner of the project that they have adhered to the prescribed standard procedure for drilling is incorrect in the light of recent photographic evidence (see attachment 1 on page 11 of this statement) provided by a former static engineer who worked on the project for several years: In the documented cases, drilling of anchors and of even larger diameter diamond core drillings was clearly done without drilling tests, i. e. blind. Furthermore, according to the witness, damage to rebars was frequently intentionally not documented in the official documentation, i. e. the documented 22 NCR need to be questioned in light of this evidence.

**As recent criminal investigations by the National Criminal Agency (NAKA) have shown documentation of construction work and materials to be unreliable in hundreds of instances at the Mochovce unit 3 site, a thorough approach by the nuclear regulator ÚJD is needed in order to verify that the actual process of drilling of anchoring plates to existing structures was in fact conforming to the prescribed procedures – credible (photographic) evidence indicates that this was not the case.**

**As several tens of thousands of boreholes were drilled into the walls of the hermetic part of Mochovce unit 3, and as the documentation of these drillings is potentially unreliable, it remains unclear at this point how the potential damage to rebars affected the ability of the structure to resist a potential blast of steam from the primary circuit if the unit were operated and had a severe accident.**

**As this issue is not addressed at all in the “Amended/New Draft of the Decision”, this version of the Draft Decision cannot be approved.**

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<sup>8</sup> Document forwarded by RNDr. Mikulas Turner, Director General, Department of Regulatory Activities and International Relations, ÚJD on 21.1.2020

<sup>9</sup> Email by by RNDr. Mikulas Turner, Director General, Department of Regulatory Activities and International Relations, ÚJD on 28.1.2020

<sup>10</sup> [www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/En-xx-06-08-29](http://www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/En-xx-06-08-29)

## Earlier GLOBAL 2000 statements not taken into consideration

We would like to recall the GLOBAL 2000 statement on the document PN M34481619 (Závěrečné stanovisko 395/2010-3.4/hp)), published on the ÚJD SR website since 17.2.2020, status of implementation as of Dec 12 2019. We already made comments on this document (dated 14.9.2018, and in our statement to the earlier release of the basis for decision on April 15 2020) and conveyed them to ÚJD.

We also received two more documents in this step of the procedure, the “Amended/New Draft of the Decision” and Preoperational Safety Analysis Report (POSAR in the version of 25.7.2019, last publication 2.11.2020 on the ÚJD website<sup>11</sup>) chapter 13 on the environmental impacts.

As we already pointed out in our 2018 and 2020 statements, the public doesn't have information about the nuclear power plant and how it differs from older plants and fulfills higher current safety demands to decrease the environmental impact under normal operation as well as severe accidents. As an example of measures and equipment with direct influence on emissions we already mentioned in our 2018 and 2020 statements (on the fulfillment of three decisions 246/2008, 266/2008 and 267/2008 under **condition 3.1**)

*3.1. After licensing of nuclear installation commissioning, ensure fulfilment of all conditions stated in ÚJD SR Decisions No. 246/2008/, 266/2008 and 267/2008; after issuance of an ÚJD SR licence for MO34 commissioning and operation, ensure fulfilment of all conditions mentioned in related ÚJD SR licences.*

Again we have to recall that this EIA condition No. 1 („Zmeny vybraných zariadení ovplyvňujúcich jadrovú bezpečnosť sa žiadateľ rozhodol vykonať na základe zmenených legislatívnych požiadaviek platných v dobe plánovanej dostavby 3. a 4. bloku jadrovej elektrárne Mochovce.“ (Rozhodnutí 266/2008)) demands fulfillment of legal provisions valid at the time the plant will be completed; this is not the case, as explained earlier, because this would e.g. involve the robustness against impact of large commercial airliners.

**The fact that Mochovce units 3 and 4 by no means fulfill current demands is actually confirmed by the draft decision itself which will not confirm that WENRA complies with the Safety Objectives for New Power Reactors, but only the Safety Reference Level for Existing Reactors.**

This fact is even aggravated by the aging of the old buildings, structures and components from the period the plant construction was started in the eighties of the past century and the extremely poor quality management during construction, as confirmed by WANO, several whistleblowers and sometimes even ÚJD SR.

On **condition 3.4** no information was provided on concrete measures. Quoting the EU Commission's demand to „(...)develop a reference scenario containing a deterministic effect from an external source (e.g. impact of a small aeroplane) in compliance with best international practice“, under **Fulfillment** it reads only that tests were taken and safety proven, however “details on performed safety analyses are not accessible to the public since in the Slovak Republic, they belong to the category of classified information.”

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<sup>11</sup> [www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/Sk-xx-06-08-38](http://www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/Sk-xx-06-08-38)

Our demand in the 2018 and 2020 statements to explain what justifies the Slovak approach of excluding large commercial airplanes from flying over the NPP Mochovce and possibly crashing, went unanswered again. No solution was provided on how this plant can be licenced in the year 2021, when this approach towards airplane crashes is clearly outdated (for comparison, the Czech neighbour's legislation in this field requires new nuclear power plants to withstand the impact of a crash of a commercial airliner in regulation 361/2016). This is also in contradiction of condition 3.4 which demanded "best international practice".

The conclusions "Based on risk assessment of an accidental fall of aeroplane according to international methodologies and the current state of air traffic near EMO, endangering of the Mochovce NPP nuclear safety can be considered very low, and not requiring any additional technical and organisational safety measures," put forward on page 20 of the draft decision, are not acceptable either. The reference scenario for an airplane impact has only been developed for a small aircraft. This is in full contrast to reality in particular as the Mochovce nuclear plant is located under several highly-frequented airplane corridors with aircraft of all sizes flying above the plant continuously.

In our 2018 and 2020 statements we already pointed out that the scenario concerning the Hron water temperatures as demanded by the EIA conclusions is missing and the data provided are only up to 1982 (!) instead of providing an outlook for the next at least 60 years.

Concerning the environmental impacts, obviously the emissions are key. The following table was provided to the public in 2.11.2020 (POSAR, chapter 13)<sup>12</sup>

Príloha č. 1 - Limitné hodnoty výpustí z jednotlivých JZ v lokalitách Jaslovské Bohunice a Mochovce [Bq/rok]

Druh (skupina) výpustí	Lokalita Jaslovské Bohunice				spolu	Lokalita Mochovce			spolu
	JAVYS			SE-EBO		SE-EMO	JAVYS		
	JE A-1 <sup>(1)</sup>	MSVP	EBO12	EBO34		EMO12	FS KRAO	RÚ RAO	
ATMOSFÉRA									
Rádioaktívne VP			-	2,0.10 <sup>15</sup>	4,0.10 <sup>16</sup>	4,1.10 <sup>15</sup>			4,10.10 <sup>16</sup>
Aerosóly dlhodobé	9,4.10 <sup>8</sup>	3,0.10 <sup>8</sup>	7,94.10 <sup>10</sup>	7,94.10 <sup>10</sup>	1,6.10 <sup>11</sup>	1,7.10 <sup>11</sup>	8,0.10 <sup>7</sup>		1,70.10 <sup>11</sup>
Aerosóly alfa	8,8.10 <sup>6</sup>		2,06.10 <sup>7</sup>	2,06.10 <sup>7</sup>	5,0.10 <sup>7</sup>		1,0.10 <sup>6</sup>		1,00.10 <sup>8</sup>
Stroncium <sup>89,90</sup> Sr	2,8.10 <sup>7</sup>		1,36.10 <sup>8</sup>	1,36.10 <sup>8</sup>	3,0.10 <sup>8</sup>		2,0.10 <sup>6</sup>		2,00.10 <sup>8</sup>
Jód ( <sup>131</sup> I )			-	6,5.10 <sup>10</sup>	1,3.10 <sup>11</sup>	6,7.10 <sup>10</sup>			6,70.10 <sup>10</sup>
HYDROSFÉRA <sup>(2)</sup>									
recipient Váh						recipient Hron			
Trícium	3,7.10 <sup>12</sup>		2,0.10 <sup>12</sup>	2,0.10 <sup>13</sup>	4,37.10 <sup>13</sup>	1,2.10 <sup>13</sup>	3,0.10 <sup>11</sup>		1,23.10 <sup>13</sup>
Ostatné rádionuklidy (okrem trícia)	1,2.10 <sup>10</sup>		1,3.10 <sup>10</sup>	1,3.10 <sup>10</sup>	3,8.10 <sup>10</sup>	1,1.10 <sup>9</sup>	3,9.10 <sup>9</sup>		5,00.10 <sup>9</sup>
recipient Dudvák						recipient Čifársky rybník			
Trícium	3,7.10 <sup>10</sup>		2,0.10 <sup>10</sup>	2,0.10 <sup>11</sup>	4,37.10 <sup>11</sup>			1,9.10 <sup>10</sup>	1,9.10 <sup>10</sup>
Ostatné rádionuklidy (okrem trícia)	1,2.10 <sup>8</sup>		1,3.10 <sup>8</sup>	1,3.10 <sup>8</sup>	3,8.10 <sup>8</sup>			2,9.10 <sup>8</sup>	2,90.10 <sup>8</sup>

(1) limity z ventilačného komína BSC sú započítané do limitov z ventilačného komína JE A1 a predstavujú 10 % z tejto hodnoty.

(2) Pre objemovú aktivitu RN v odpadovej vode (koncentračný limit) platí limit 1,0.10<sup>5</sup> Bq/m<sup>3</sup> pre Trícium a 40.10<sup>3</sup> Bq/m<sup>3</sup> pre KaŠP pre všetky recipienty

<sup>12</sup> [www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/Sk-xx-06-08-38](http://www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/Sk-xx-06-08-38)

Príloha č. 2 - Reálne hodnoty výpustí z jednotlivých JZ v lokalitách Jaslovské Bohunice a Mochovce (priemery za r. 1999 až 2002), [Bq/rok / %]

Druh (skupina) výpustí	Lokalita Jaslovské Bohunice				Lokalita Mochovce		
	JE A-1	JAVYS MSVP	EBO12	SE-EBO EBO34	spolu	SE-EMO EMO12	JAVYS RÚ RAO
ATMOSFÉRA							
Rádioaktívne VP / % z limitu			1,4.10 <sup>13</sup>	8,14.10 <sup>12</sup>	2,22.10 <sup>13</sup> / 0,55	1,28.10 <sup>13</sup> / 0,31	
Aerosóly dlhodobé / % z limitu	2,23.10 <sup>7</sup>	2,88.10 <sup>7</sup>	3,07.10 <sup>8</sup>	9,46.10 <sup>8</sup>	3,26.10 <sup>8</sup> / 0,20	1,53.10 <sup>7</sup> / 0,009	
Jód ( <sup>131</sup> I ) / % z limitu			9,57.10 <sup>8</sup>	2,03.10 <sup>7</sup>	9,77.10 <sup>8</sup> / 0,75	4,87.10 <sup>7</sup> / 0,073	
HYDROSFÉRA							
recipient Váh					recipient Hron		
Trícium	1,37.10 <sup>12</sup>		6,12.10 <sup>12</sup>	7,57.10 <sup>12</sup>	1,48.10 <sup>13</sup> / 33,8	8,66.10 <sup>12</sup> / 72,15	
Ostatné rádionuklidy (okrem trícia)	1,04.10 <sup>8</sup>		5,92.10 <sup>7</sup>	2,63.10 <sup>7</sup>	1,89.10 <sup>8</sup> / 0,50	5,76.10 <sup>7</sup> / 5,23	
recipient Dudvák					recipient Číľarský rybník		
Trícium	9,24.10 <sup>5</sup>				9,24.10 <sup>5</sup> / 0,0002		6,27.10 <sup>6</sup> / 0,03
Ostatné rádionuklidy (okrem trícia)	3,16.10 <sup>5</sup>				3,16.10 <sup>5</sup> / 0,08		1,36.10 <sup>6</sup> / 0,47

These tables are not usable for the following reasons:

The values are averaged over four years, for unclear reasons 1999–2002, whereby EBO12 was closed in 2000. In general, data is almost 20 years old for no reason. Maximum real values until the present time would be more useful.

- Why are the limit values so high, when they are hardly used up to a very low percentage? Wouldn't it make more sense to have lower limit values or were the higher values necessary in other years?
- How come that some values for EMO12 are higher than for EBO34 (tritium into the hydrosphere?) It is unclear whether EMO12 was operating more in this period or whether standstill times were taken into account, since there is no explanation for this data.
- The allowed values for EMO34 seem to be simply 50% of those established in 1997 for four units, see following table from the POSAR chapter 13.



### 13.1.1.2 Ročné referenčné úrovne pre uvoľňovanie rádionuklidov do ŽP za normálnej prevádzky

Aby bola splnená vyššie uvedená podmienka 250  $\mu\text{Sv/rok}$  boli pôvodne v r. 1997 pred uvedením do prevádzky EMO12 [I.2] stanovené ročné referenčné úrovne pre aktivitu RN v plynných exhalátoch a kvapalných výpustiach, ktoré sa vzťahovali na prevádzku všetkých štyroch blokov. Po uvedení do prevádzky EMO12 boli tieto úrovne aktualizované pre prevádzku dvoch blokov EMO12, naposledy v r. 2011 - Rozhodnutím ÚVZ SR v Bratislave č. OOZPŽ/6773/2011 [I.3], kde základný rádiologický limit bol stanovený na 50  $\mu\text{Sv/rok}$ . V nasledujúcich tabuľkách sú uvedené pôvodné limity pre 4 bloky a pre porovnanie tiež limity pre prevádzku MO34 (LaP pre 3. blok a 4. blok [I.4], [I.5]), ktoré sú totožné s limitmi pre EMO12.

Tab. 13-1 Ročné referenčné úrovne aktivity ročných výpustí

Výpuste z ventilačného komína:	Pôvodné ročné referenčné úrovne pre 4 bloky z r. 1997	Aktuálne ročné referenčné úrovne pre EMO12
	[Bq/rok]	
- vzácne plyny (ľubovoľná zmes)	$8,2 \cdot 10^{15}$	$4,1 \cdot 10^{15}$
- jód ( $^{131}\text{I}$ )	$2,4 \cdot 10^{11}$	$6,7 \cdot 10^{10}$
- DŽA (dlho žijúce aerosóly)	$3,5 \cdot 10^{11}$	$1,7 \cdot 10^{11}$ (1)
- KŽA (krátko žijúce aerosóly)	$4,8 \cdot 10^{12}$	-
- $^{89}\text{Sr} + ^{90}\text{Sr}$	$1,2 \cdot 10^9$	-
<b>kvapalné výpuste (do rieky Hron):</b>		
- trícium	$2,4 \cdot 10^{13}$	$1,2 \cdot 10^{13}$
- ostatné rádionuklidy (okrem trícia)	$2,2 \cdot 10^9$	$1,1 \cdot 10^9$

(1) – limitované sú RN s polčasom rozpadu dlhším ako 8 dní (okrem  $^{131}\text{I}$ , ktorý je limitovaný samostatne). RN s polčasom rozpadu kratším ako 8 dní nie sú limitované.

### 13.1.4 Hodnotenie dopadov doterajšej prevádzky EMO12 na životné prostredie

#### 13.1.4.1 Výpuste RAL z doterajšej prevádzky EMO12 a ich porovnanie s limitmi

Prevádzka MO34 bude riadená tak, aby neboli prekračované ročné referenčné úrovne výpustí do atmosféry a do hydrosféry, stanovené Hlavným hygienikom SR v rozhodnutí číslo OOZPŽ/6773/2011 [I.3] pre uvoľňovanie rádioaktívnych látok do ŽP ich vypúšťaním v exhalátoch ventilačným komínom a vypúšťaním v odpadových vodách potrubím z areálu EMO do rieky Hron - pozri Kap.0. Toto konštatovanie je možné doložiť doterajšími poznatkami z vypúšťania RAL do životného prostredia v lokalite EMO - pozri Tab. 13-6 a Tab. 13-7.

Porovnanie limitov pre JZ v lokalite Mochovce s limitmi výpustí z JZ v lokalite Bohunice je v Príloha č. 1. V Príloha č. 2 sú uvedené reálne hodnoty výpustí z jednotlivých JZ v lokalitách Jaslovské Bohunice a Mochovce (priemery za roky 1999 až 2002) a percentuálne vyjadrenie pomeru výpustí k limitu. Vidieť, že okrem, kvapalných výpustí do Váhu a Hrona podiel ostatných výpustí neprekračuje 1 % z limitu.

Part name / Označenie časti:	PNM3436176517_S_C01_V	Page No. / Strana č.: 44/112
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MO34-002r00

Also not helpful and misleading information is provided in the last sentence, when most people reading it might not understand that tritium is emitted with water and makes use of almost the entire permitted value.



As in 2018, still no information on the bilateral seminars (**condition 3.2**) was made available to the public.

Ad 11) on the **nuclear liability for accidents** according to law No. 54/2015 Coll. we would like to point out the well-known fact that the sum of 300 million euro of compensation for damages (whereby the operator Slovenské elektrárne has insurance only to a much lower amount) is several orders below what a major accident would cause in damages. For comparison, in 2014 the French IRSN (Technical Support Organisation) calculated that the costs of an accident in Europe would be around 400 billion euros<sup>13</sup>.

Information policy towards the public remains a difficult issue for both Slovenské elektrárne and UJD. What is rather astonishing, is that not even the UN or more precisely member states under the CNS (Convention on Nuclear Safety) of the UN nuclear agency receive correct information, when Slovakia reported in the 2020 ANSWERS TO QUESTIONS ON NATIONAL REPORT OF THE SLOVAK REPUBLIC<sup>14</sup> about information for the public that the Aarhus Convention's requirements are fulfilled. The Aarhus Convention Implementation Committee, however, concluded already earlier several violations; not even in the latest hearing in March 2020 the Slovak representatives hinted that changes would be envisaged.<sup>15</sup>

We listed the most important conditions of the documents (<https://www.ujd.gov.sk/ujd/www1.nsf/viewByKeyMenu/En-xx-06-08-37>) which were not fulfilled and the information not provided.

ad 6) page 9: The Pre-OSART mission report showed that staff and working procedures at the Mochovce unit 3 are not fulfilling the necessary safety culture, thereby mirroring the safety culture deficiency the management of the construction of Mochovce 3 became known for when the WANO 2017 safety report was leaked.

We could not find any information on the situation of the units 3 and 4 concerning the safety level set out by ENSREG and WENRA in response to the 2011 Fukushima accident – WENRA Reference Levels 2014, is there information on how those RL were achieved at Mochovce 3 and 4? The draft decision does not confirm that any of those lessons learned were taken seriously and implemented for the Mochovce units 3 and 4. This concerns the issue of an alternative ultimate heat sink, where it is unclear whether only mobile equipment instead of a bunkered system is used as is the case for Mochovce 1 and 2. Also the issue of multi-unit accidents was not mentioned, it seems, that not even a PSA was undertaken.

This issue should be clarified: whether any measures were taken already or will be part of the operational conditions for the units to be realized in the near future.

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<sup>13</sup> [www.nucnet.org/news/nuclear-accident-in-france-could-cost-more-than-eur-400-billion-says-irsn](http://www.nucnet.org/news/nuclear-accident-in-france-could-cost-more-than-eur-400-billion-says-irsn), accessed February 16, 2021

<sup>14</sup> [www.ujd.gov.sk/ujd/WebStore.nsf/viewKey/Q&Aapril2020/\\$FILE/CNS%20-%20Answers%20to%20Question%20on%20NR%20SR%202020\\_FINAL.pdf](http://www.ujd.gov.sk/ujd/WebStore.nsf/viewKey/Q&Aapril2020/$FILE/CNS%20-%20Answers%20to%20Question%20on%20NR%20SR%202020_FINAL.pdf), p. 25

<sup>15</sup> for more information: [www.unece.org/environmental-policy/conventions/public-participation/aarhus-convention/tfwg/envppcc/implementation-of-decisions-of-the-meeting-of-the-parties-on-compliance-by-individual-parties/sixth-meeting-of-the-parties-2017/decision-vi8i-concerning-slovakia.html](http://www.unece.org/environmental-policy/conventions/public-participation/aarhus-convention/tfwg/envppcc/implementation-of-decisions-of-the-meeting-of-the-parties-on-compliance-by-individual-parties/sixth-meeting-of-the-parties-2017/decision-vi8i-concerning-slovakia.html)

**The documents and reports available to us do not prove that the Mochovce unit 3 would be in line with current safety demands and highest safety cultures, therefore we demand that the NPP Mochovce 3 is not granted a license and not operated.**

Yours sincerely

Mag.<sup>a</sup> Agnes Zauner  
[electronic signature]

**Attachment 1: Drilling in hermetic chambers of Mochovce 3 reactor building, photographic evidence by engineer who previously worked on the project**



Additional anchors set through steel lining before installing an anchoring plate, without test drilling



Diamond core drilling (for Hilti mechanical anchor, drilling of much bigger diameter without test drilling was also common according to the witness) (2011)