

July, 2009

ÚJD SR - DECISION no. 246/2008 - Number: 684/320-231/2008 - Trnava, August 14, 2008

ANNEX 0.5

A world of capabilities delivered locally



Nuclear Regulatory Authority of the Slovak Republic, Bajkalská 27, P.O.Box 24, 820 07 Bratislava 27, Trnava workplace, Okružná 5, 918 64 Trnava

Number: 684/320-231/2008

Slovenské Elektrárne, a.s. Units 3 and 4 of NPP Mochovce 935 39 Mochovce

DECISION no. 246/2008

The Nuclear Regulatory Authority of the Slovak Republic (hereinafter as "authority") as factually administrative body according to § 4 par. Letter j) of the Act no. 541/2004 Coll. about use of nuclear energy for peaceful purposes (Atomic Act) and about change and completion of some Acts according to Act no. 238/2006 Coll., Act no.21/2007 Coll., Act no.94/2007 Coll. and Act no. 335/2007 Coll. and according to § 121 par. 2 letter e) of the Act no. 50/1976 Coll. about landscape planning and building regulations (hereinafter as "building act") as amended negotiated the builder application according to § 39a par. 3 letter d), §55, §62, §68 of building act and decided as follows:

Change of construction before finishing "Nuclear Power Plant Mochovce VVER **4x440 MW 3rd construction**" in the area of Slovenské Elektrárne a.s. NPP Mochovce Units 3 and 4 is being

permitted

within the scope of UJV Řež a.s. design – EGP Prague division, Vyskočilova 3/741, P.O.Box 158, Praha in compliance with § 66 of the building act.

The change of construction before finishing will be performed in following scope:

Buildings of 3rd construction and related buildings of the 2nd construction:

320/1-08 External barrier – demolition of a part of the fencing in the area of leading-in and side lodge

320/1-09 External barrier – establishment of the new entrance for the building vehicles.

320/1-10 Basement of the internal barrier – new open-pit points of line.

320/1-12 Fencing of ventilation towers of the 2nd MPB - new open-pit points of line.

320/1-18 Temporary fencing, **320/1-19 temporary fencing** (between units 3 and 4) – Change of the technical solution of the fence, location of the open-pit points and structure of founding.

320/1-20 Temporary fencing – new building that will be used for separation of the part of operated power plant and the part under construction Building 599/1-01 and after its finishing

it will be dismantled and final modification of the landscape will be done by spreading the topsoil to the level of 237.100 m over the sea level. It is an over-ground line building that once crosses already existing road. On the line of the fence there will be 2 pieces of double-wing gates 4000/2500mm. Total length of fencing is 315.300 m, the fence height over the landscape is 500 mm plinth + 2000 mm mesh + 500 mm bracing with stressing wire. The fencing consists of 12 sections among 14 open-pit points. The fence structure is from steel thin-wall columns, mesh and rod beams in "V" shape with three hangers for stressing wire. The whole line of the fence is equipped by the cameras of industrial TV. The cameras are located on independent columns, power supply and data technological cabling is located in the gaps anchored on the fencing columns, lightening devices are located on original columns. Location of temporary construction see drawing no. **SO41601A02V.**

350/1-02 Cuts and channels of power cables 2nd part – Removal of channels EK 328S and EK 428, construction and seismic reinforcement of the new channels of EK 328S, EK 459EK 361, EK 362, EK 363, EK 460.

352/1-02 - Cuts and channels of light-current lines – cancelled

360/1-04 – Rain water sewerage – Changes of spill way lines and shafts, new smaller lines.

361/1-04 – Sanitary sewerage – Change of materials and small parts of the lines.

362/1-04 – Industrial sewerage - Change of materials and small parts of the lines.

371/1-03 – Drinking water system - Change of materials, shafts and small parts of the lines.

372/1-03 – **Fire and utility water system** - Change of materials of all the lines.

383/1-02 – Thermal network in the area of the power plant – 2^{nd} part – new seismic-resistant pipeline channel PKS 91(90) with the line of heating water and cool form the channel TK 21 (32) and changes in channels TK21, TK32 and TK42.

400/1-04 – Foundations of the pipeline bridge between building 801/1-02 and 801/1-01 – new building for transport of liquid radioactive wastes from building 801/1-02 Reactors building of the 2nd MPB to 801/1-01 FS KRAO, along building 442/1-02 DGS of the MPB. There will be a steel pipeline bridge based on foundation of reinforced concrete that will carry three pipelines for sorbent, concentrate and one pipeline will be a reserve one. According to the transport the building is connected to communication system of the 3rd construction. The built-up area is 42 m², total length of the line is 192 m. The steel structure of the bridge is along building 801/1-01 and 1-02 fixed on brackets anchored into reinforced concrete wall of the auxiliary nuclear buildings. In the free area between the buildings there is a pipeline located on the bridge with steel columns mounted into reinforced concrete footings. The steel structure (hereinafter as "SS") of the bridge is elaborated in DPS 3.54.04. The foundation footings are from reinforced concrete, they are monolithic from the concrete of C16/20-B20 class, reinforced by the steel of 10335 (J). 22 pieces of footings will be with dimensions of 1.0 x 1.3 m and height of 1.5 m. One footing as a fixed point will have dimensions of 1.3 x 2.2 m and height of 1.85 m. For location of the foundation see drawing no. SO41620A02V and fro ground plan and footings cross-section see drawing no. SO41620A03V.

400/1-05 Foundation for dry riser – building permitted by Regional authority for the environment Nitra, division of state water management no. 2008/00375 from April 21^{st} , 2008. **401/1-02 Pipeline channels 2^{nd} part A, E, F, H** – removal of the pipeline channel TK32 and building of the new channels PKS90 and PKS91.

442/1-02 Diesel generator station of the 2^{nd} MPB – Exchange of the roof coat, reinforcement of partition walls and exchange of fire-resistant doors.

442/1-04 High-pressure compression station -2^{nd} MPB - Exchange of the roof coat and exchange of fire-resistant doors.

442/1-06 Oil management of DG station of 2^{nd} MPB – Exchange of aisle roof by saddle roof, exchange of fire-resistant doors and covers and addition of firewalls.

442/1-07 Common diesel generator station of the 2^{nd} MPB – New building standing independently with dimensions of 19 x 14.90 m, located next to building 568/1-02 and 566/1-02 connected by the channel. The building specifies the area fro foundation for placement of the container with DGS and strengthened area for service. Next to the foundation there is the underground part of the building divided into area of the tank with diesel oil of 30m³ and turbine hall. The foundation for DGS has dimensions of 15.00 x 3.00 x 0.85 m, it is designed from reinforced concrete from concrete of C16/20 – B20 class. The manipulation area is (except the roof of the underground part) is made of reinforced concrete paving bricks set into the cement bedding. The underground part of the building – the tank, will be located on the concrete foundations. The tank structure is monolithic reinforced concrete bath insulated against oil products leakages. The tank bottom is on the level of approximately –4.80 m. Vertical bearing walls and ceiling bearing structures are monolithic reinforced concrete of 400 mm thickness. The roof over the underground area is ascendable with concrete pavement. Built-up area is 272.30 m². Extension area: 886 m². Maximum depth of foundation is –5.900 m. For location of the building see drawing no. **SO41689A03V.**

490/1-02 Turbine hall of the 2^{nd} MPB – Units 3 and 4 – Exchange of the roof coating, reinforcement of roof SS, reinforcement of external cladding bracing, exchange of 2 pieces of gates, new outbuildings of the turbine hall extinguishing device, new building of the switch room, roofing of the aeration channel, completed gallery of visitors, exchange of fire-resistant doors, new hydrazine tank. Seismic reinforcement of the roof – horizontal bracing of the roof girders Z2, Z4, diagonal D2 of the nogging piece, girder V1 – lower band, horizontal bracing of the roof girders – middle band, vertical noggin piece in row A.

510/1-02 Foundations of transformers with oil tanks of the 2^{nd} MPB – new standings including connection to oil pits and two new baths for fire water collection.

522/1-02 External switchyard 110 kV and 400 kV $- 2^{nd}$ MPB - removal of the footings and their new location, new cable channels.

566/1-02 Racking of the diesel oil and oil of the 2^{nd} MPB – consolidation of the building 566/1-04 and 566/1-02 – new racking place , channel and emergency tank.

580/1-04 Ventilation cooling tower II-1, 580/1-05, Ventilation cooling tower II-2, 580/1-06 Ventilation cooling tower II-3 – Exchange of asbestos, massive reinforcement in SS, reinforcement of concrete structures of the intermediate bracing walls. Seismic reinforcement means addition of vertical steel bracings, reinforcement of reinforced concrete vertical walls in longitudinal axis of the tower over the edge of the vessel up to +4.20m.

581/1-05 Draft cooling tower 31, 581/1-06 Draft cooling tower 32, 581/1-07 Draft cooling tower 41, 581/1-08 Draft cooling tower 42 – Exchange of asbestos material of cooling tower internal by new one – plastic.

584/1-02 Central pumping station of non-essential service water and non-system fire water of the 2^{nd} MPB – reinforcement of the roof beams, reinforcement of SS by exchange of bracings, disassembly of the roof coating and assembly of the new one, exchange of fire-resistant doors.

584/1-04 Pumping station of the essential service water, utility and system fire water of 2^{nd} MPB – reinforcement of SS by exchange of the bracings, reinforcement of roof beams, exchange of fire-resistant doors. Seismic reinforcement means exchange of longitudinal bracings in row A and C, reinforcement of the lower band of beams and reinforcement of boundary diagonal of the beams.

622/1-02 Foundation of the transversal rail fro transformers of the 2^{nd} MPB – new lining of the railways.

652/1-01 Side lodge – the new building functionally replaces the temporary side lodge made from UNIMO cell and it will be used as entrance and exit lodge including all securing and check functions. The side lodge is located in north-west part of EMO area, west from existing

building of 881/1-01. Location corresponds with original lodge. Ground plan dimensions of the building on the level of ± 0.000 are 20.900 x 17.600 m, the height of attic is 4.920 m over the modified landscape, level of footing base -1.300 m and -1.600 m. There are connections of drinking water system, fire water system, sanitary sewerage, rain water sewerage, hot water connection, return cooled water, cable channel (heavy current, telephone connection, EPS) in the building. The control area for vehicles together with pavements is 19.75 m wide and 23.00 m long. Between the traffic lanes there is a steel ramp with steps to the lodge and main entrance. The area for control activities is covered by light structure with headroom height of 5.30 m. The bearing structure is made of columns and steel tubes, horizontal beams and polycarbonate boards. The covered area of the drive-in is 223.380 m². The building will be accessible from the road by the pavement that within the framework of building 690/1-03 connects to an area reinforced by inter-pavers before entrance to ledger. For location of the building see drawing no. **SO41660A04V**.

670/1-03 Interplant train part 3 – building was permitted by the Authority for regulation of the railway transport with no. $1987/08 - \tilde{S}SU/J-Vg$ from June 16, 2008.

670/1-06 Drainage of interplant train part 3 – new draining shaft.

800/1-02 Reactor hall of the 2^{nd} MPB – reinforcement of cellular concrete panels, reinforcement of bricked walls, reinforcement of SS roof, reinforcement of SS columns, civil modifications for solution of beyond design accidents, exchange of the lifts, new gallery for visitors, exchange of fire doors, disassembly of the old and assembly of the new roof coating. Seismic reinforcement of the gable walls, roof, columns in row G axis 218 and 220 and horizontal elements of the profile I.

800/1-02 Building of active auxiliary operations for 2^{nd} MPB – additional building for the transport area, reinforcement of peripheral siporex panels, reinforcement of bricked walls, new reinforced concrete wall, exchange of fire doors, exchange of the lifts, disassembly of the old and assembly of the new roof coating. Seismic reinforcement means reinforcement of the transversal bracing in row 1, reinforcement of the staircase stringer, reinforcement of the beams in row 7, reinforcement of longitudinal bracings in V 4-5, G 11-12 V1 11-12, reinforcement of columns anchoring in part 01-7 and A-G in part 7-17 and V-G, improvement of peripheral panels fixation.

802/1-03 Connection bridge between 2nd MPB and building 801/1-02 –Disassembly of the old and assembly of the new roof coating.

802/1-04 Connection bridge between 1^{st} MPB and 2^{nd} MPB - Disassembly of the old and assembly of the new roof coating.

804/1-02 Air duct to ventilation stack of the 2^{nd} MPB - Disassembly of the old and assembly of the new roof coating.

805/1-02 Areas of electrical devices longitudinally Units 3and 4 – reinforcement of SS columns and bracings, yoking of the ceiling board and SS, gas-tight modifications of the rooms (main control room), new out-of unit control room, new gallery of visitors, exchange of the lifts, reinforcement of cellular concrete facades, reinforcement of bricked walls, disassembly of the old and assembly of the new roof coating, new fire-resistant doors. Seismic reinforcement of the transversal bracing in row 1, stringers between rows 01 and 1, beams in row 7, longitudinal bracings V4-5, G11-12, V1 11-12, anchoring columns 01-7 and A-G, 7-17 and V-G.

806/1-03 Areas of electric device transversally – **Unit 3** - Yoking of the ceiling board and SS, air-conditioning for the control rooms, reinforcement of SS roof, disassembly of the old and assembly of the new roof coating, exchange of fire-resistant doors. Anchoring into the wall in row 310.

806/1-04 Areas of electric device transversally – Unit 4 - Yoking of the ceiling board and SS , air-conditioning for the control rooms, reinforcement of SS roof, disassembly of the old

and assembly of the new roof coating, exchange of fire-resistant doors. Anchoring into the wall in row 410.

810/1-03 Emergency feed water system Unit 3, 810/1-04 Emergency feed water system Unit 4 – Reinforcement of the ceiling board under the DEMI water tanks by 350 mm, reinforcement of the structure by SS, topping of the peripheral walls of the staircase.

810/1-05 Reserve water source -2^{nd} MPB – A new independent building standing in front of southern frontage of 806/1-03 (Areas of electric devices transversally – Unit 3). According to transport the building is connected to access road led from service road on the southern side of the building 810/1-03. The built-up area is 374 m², extension area is 2526 m². The ground plan dimensions of the building are 38.10 x 8.5 m. lower edge of the tanks +0.200 m, height of the building +4.440/+5.200 m, maximum depth of foundation -3.450 m. The building is cellaraged, partially double-floor. On -2.45 m floor there is a room for pumps and exchangers where there is a new channel and cable area connected into which there are new energy channels connected. On ± 0.00 floor there is light current and heavy current switch room. Three steel tanks are set in the collection bath (on the level of +0.200m) with internal dimensions of 8.20 m x 23.95 m, height 4.00 m that is located next to bricked part of the building. The building structure is designed as reinforced concrete up to level of -0.100, monolithic with reinforced concrete peripheral walls with one over-ground floor. The overground part is bricked. The collection bath is next to bricked part of the building. The bath bottom is made of steel-concrete board with 750 mm thickness. The roof is flat. For location of the building see drawing no. SO41682A03V.

371/1-02 Drinking water system, 372/1-02 Fire and utility water system – relocation

510/1-01 Foundations of transformers with oil tanks of the 1^{st} MPB – Removal of the old foundations, construction of the new cable channels and foundations.

522/1-01 External switchyard 110 kV and 400 kV – 1^{st} MPB – Removal of the old foundations, construction of the new cable channels and foundations.

593/1-01 Decarbonisation of the chemical water treatment – 2^{nd} construction – Disassembly of the original and implementation of the new tanks, change of staircase in the building of lime silos.

599/1-01 Sludge treatment of the chemical water treatment – new structures (tanks, building, sludge presses)

690/1-01 Interplant roads part 1 – Change of the line next to 881/1-01 Metrology station.

801/1-01 Building of active auxiliary operations 1st MPB – New room of the sorbent tank – change of usage purpose.

808/1-01 Radioactive waste liquidation – is not going to be realised, it is replaced by the building of final processing of liquid radioactive wastes.

840/1-01 Operational building – The subject of the solution is the new monitoring system of contaminated persons control and related building modifications on floors +10.500, +18.900 and 23.100m.

882/1-01 Low-pressure compressor station and cool source station -2^{nd} construction - New concrete collection tanks, modifications of the concrete columns.

Buildings with small building modifications:

350/1-01 Cuts and channels of the power cables, **351/1-02** Heavy current line 2^{nd} part, **353/1-02** Main grounding network, **376/1-02** Control probes of bleeding, 2^{nd} part, **400/1-03** Putting the pipeline to $\pm 0.00 \ 2^{nd}$ part, **568/1-02** Diesel oil management 2^{nd} MPB, **582/1-04** Cooling water pipeline in the towers circuit of 2^{nd} MPB, **583/1-02** Cooling water channels in the towers circuit of 2^{nd} MPB, **585/1-02** Sludge pipeline of the cooling towers of 2^{nd} MPB, Cooling water pipeline in the towers circuit of 2^{nd} MPB, **682/1-01** Modification of the road before building finishing, **690/1-02** Interplant road 2^{nd} part, **690/1-03** Interplant road 3^{rd} part,

690/1-06 Interplant road drainage 3rd part, **780/1-02** Civil defence shelter under 655/1-01, **803/1-02** Ventilation stack.

The authority in compliance with § 66 of the building act determines following binding conditions of the construction finishing:

- 1. To perform the change of construction before finishing according to design documentation verified by the authority in building proceedings.
- 2. The builder is obliged to fulfil the regulation related to work safety technical equipment and at the same time to pay attention to health protection and personal protection on site while performing building activities.
- 3. To maintain provisions of the building act, Decrees of the Ministry of Environment of the Slovak Republic no. 532/2002 Coll. about general technical requirements for buildings and corresponding technical standards while performing the building activities.
- 4. The builder is responsible for compliance of the buildings with the documentation verified in the building proceeding.
- 5. The builder is obliged to announce the beginning of the building change to the authority.
- 6. To finish the construction till **December 31st, 2013**.
- 7. To inform the authority about the building supplier in 15 days after the tendering results declaration.
- 8. To fulfil following conditions according to § 66 par. 2 letter b) and e) of the building act from binding standpoints of involved bodies:
 - 8.1 To provide removal of the shortcomings in the design documentation to assure safety and protection of personal health in compliance with § 7 par. 3 letter c) of the Slovak Republic Government Act no. 125/2006 Coll. about work inspection and about change and amendment of the Act no. 82/2005 Coll.:
 - a) In the technical report or design documentation there is not a solution of evaluated residual threads and dangers arising from proposed technical solutions, which is contrary to § 4 of the act no. 124/2006 Coll. about labour safety and health protection during the work and about change and amendment of some of the acts as amended (hereinafter as act no. 124/2006 Coll.)
 - b) In the text of WP 04.1Revision and completion of Basic design for MO 34, B

 Summarising technical report, there is mentioned the Act no. 124/2006 Coll. about labour safety and health protection and about change and completion of some of the acts according to amendment of the act no. 309/2007 Coll. and act no. 140/2008 Coll. is missing or listed only as amended.
 - c) In the document of WP 04.1 in the table of the act no. 264/1999 Coll. as amended there are cancelled legal regulations e.g. Decree of the Government no. 29/2001 Coll. and it should be Decree of the Government no. 35/2008 Coll. that is contrary to § 4 par. 1, § 6 par. 1 letter a), n) and § 13 par.1 and 2 of the Act no. 124/2006 Coll. and §10 par. 4, §13 of the Act no. 264/1999 Coll. as amended.

Deadline: In two months after this decision comes into force. The removal of shortcomings should be announced in written for to corresponding Labour Authority.

- 8.2 To maintain following conditions in compliance with §16 par. 1 letter b) point 2 of the Act no. 223/2001Coll. about wastes:
 - a) Arisen wastes will be separated and collected in compliance with §19 of the act no, 223/2001 Coll. about wastes (in case of contaminates wastes, category "N", separately from wastes of category "O")
 - b) Collection of wastes arisen during the building works before their further handling will be provided in compliance with §22 par.1 of the Ministry of Environment Decree no. 283/2001 Coll. as amended.
 - c) For substantial inspection the investor will submit the document about disposal of unusable wastes that have arisen during the building works, including the material balance.
 - d) When handling the wastes from building works, the originator is obliged to respect provisions of § 40cof the act no. 223/2001 Coll. about wastes as amended.
 - e) In case the arisen amount of dangerous waste crosses the limit defined in the decision by which the consent for dangerous waste handling was given to the originator, SE, a.s. NPP Mochovce Units 3 and 4 according to §7 par.1 letter g) of the act no. 223/2001 Coll. about wastes as amended, the waste keeper is obliged to ask for the change of subjected consent according to §75 par. 1 letter a) point 2 of the act about wastes.
- 8.3 To keep the provisions of §3 par.1 and §4 par.1 of the act no. 543/2002 Coll. about protection of nature and landscape as amended and in case that in relation to the construction it is necessary to chop down wood or bush growing out of the forest, it is necessary to continue in compliance with § 47 of the act no. 543/2002 Coll. and they will enclose to the application for building permit also the consent of Kalná nad Hronom for chopping down the wood. In case of necessity of excavation works near existing woods, it is necessary to perform these works manually to avoid damaging of the root system.
- 8.4 To maintain the location and height parameter till 100 m over the landscape according to §30 par.1 letter a) of the act no. 143/1998 Coll. about civil aviation and about the change and amendment of some acts as amended. In other case it is necessary to ask the Air transport authority of the Slovak Republic for reassessment.
- 8.5 In compliance with §12 par.1 letter e) of the act no. 42/1994 Coll. about civil protection of the citizens as amended, it is necessary to submit the design of communication and data network as well as radio network and VYRVAR for approval to the Ministry of Interior of the Slovak Republic.

Deadline: December 31, 2010

- 8.6 To maintain binding conditions of the building performance in compliance with §26 par.1 letter b) of the act no. 314/2001 Coll. about fire protection as amended, §40 and §40b of the Decree of the Ministry of Interior of the Slovak Republic no. 121/2002 Coll. about fire prevention according to Decree of the Ministry of Interior of the Slovak Republic no. 591/2005 Coll.
 - a) To fill each gap in connection of two civil structures or more civil structures isolating a formed fire section from other construction spaces or free site so to respect an integrity and isolation of this structure, and thus to meet its function of a fire isolating structure only with material with the required fire resistance and fire reaction class A1 or A2

- b) To install only electric switchboards and electric panels with fire resistance declared by the subject product manufacturer to an escape route and a cable corridor in the civil structure "Reactor Building" where electric switchboards and electric panels are designed; additional enhancement of fire resistance of the electric switchboard and the electric panel by its lining with bricks, panelling or spraying is not considered to be fulfilment of the requirement for installation of the electric switchboard and the electric panel with fire resistance;
- c) To install only ceiling with fire resistance to an escape route where the ceiling is designed in order to isolate wiring that goes through the escape route and does not meet the function for this escape route

d) To design and implement a water curtain in order to respect the requirement for fire hazardous area between the outer side of the civil structure SO 490/1-02 "Turbine Hall II. of the Main Power Block" and the adjacent group of external transformers, while

a) the water curtain substituting a fire isolating structure in the area of each window will prevent spread of fire from the Turbine Hall to free space between the Turbine Hall wall and transformers in the same manner as the civil structure where the window is installed during 30 minutes by water supply;

b) Depending on the EPS (fire detection system) signal, nozzles installed from the outside of all windows that are situated in front of the entire turbine set load with fire, at least before windows installed in quarter of the wall height behind which the turbine set with the aforementioned failure - fire will be activated;

c) Water to the water curtain system will be supplied by a pump backed up with a pump of the same power and start-up characteristics to full power within the time of at least 10 seconds;

d) An option of the water curtain manual start-up is not excluded, but this start-up will not have a retarding function with regard to the start-up from the EPS;

e)A proposed design will be delivered to the Presidium of Fire and Rescue Corps at least 60 days before inspection of the completed Turbine Hall

e) To design and implement technical measures in the civil structure "Turbine Hall" so to prevent an uncontrolled spread of released flammable liquid from lubrication and cooling oil system of the steam turbine so that released liquid

- a) contacting the Turbine Hall floor at the level of ± 0.0 m is accumulated in a trap on the Turbine Hall floor and drained by a continuous pipeline to an emergency tank,
- b) contacting the walking grid at the level of ± 0.0 m isolating the Turbine Hall floor from the area with the floor at the level of -5.5 m is accumulated in a trap below the grid and drained by a continuous pipeline to an emergency tank, while this requirement relates only to the grid the pipeline is not going through,
 - d) flowing around the outside of a pipeline penetrating the turbine hall floor to the area under the Turbine Hall ending at the level of -5.5 m has a limited contact with free space, namely installed protective sleeve around the pipeline flown around by released oil, while the protective sleeve will start immediately under the grid in the floor at the level of \pm 0.0 m and will run into the continuous pipeline draining released flammable liquid to an emergency tank.

To submit drawings and a text report documenting the proposal of measured mentioned in clauses a) to c) immediately after being elaborated to the Presidium of Fire and Rescue Corps, while the subject measures will be proposed and applied for the each turbine set individually

f) To install EPS and cables with properties relevant for fire protection in civil structures

- a) 584/1-02 "Central Non-essential Service Water and Non-system Fire Water Pumping Station", and
- b) 584/1-04 "Essential Service Water and System Fire Water of the II. Main Power Block Pumping Station"

and so to reduce an accidental fire load in these structures considering an absence of protected escape routes of B type from the subject structures, and make a possibility of quick escape of people from the construction by timely identification of fire by the aforementioned fire technological installation

g) To isolate the room 101c/3, namely a staircase belonging to the fire section 80P02.01/N02 from the room 01c, namely from the essential service water pumps belonging to the fire section 80P02.01/N02C in the civil structure SO 584/1-04 "Essential Service Water and System Fire Water of the II. Main Power Block Pumping Station" with a civil structure with the required fire resistance

h) To isolate rooms 06/31 and 06/32, namely staircases from rooms 05/31 and 05/32, namely assembling shaft in the civil structure 810/1-03 "Emergency Feed water Supply in Unit 3" with a civil structure with the required fire resistance

i) To isolate a drainpipe intended for transport of flammable liquid from the trap to the emergency tank from the adjacent fire sections it goes through in the civil structure SO 442/1-02 "Diesel Generator Station of the II. Main Power Block" with an isolation structure with fire resistance of at least EI 90

j) To install a drain pipe in the civil structure SO 442/1-02 "Diesel Generator Station of the II. Main Power Block" in order to assure transport of flammable liquids from the trap situated below the each diesel generator to the emergency tank, and to fit the drain pipe with a hydraulic closure in compliance with Regulation of the Ministry of Interior of the Slovak Republic No. 96/2004 Coll

k) To install a lift in the civil structure SO 800/1-02 "Reactor Building of the II. Main Power Block" to an individual fire section; the lift will fulfil a function of a fire lift, and if two adjacent lifts fulfil the function of fire lifts, these can be in a common fire section, and to assure a redundant power supply for each lift with the fire lift function; a fire cell proposed in design documentation for isolation of the lift from other construction parts is not considered to be fulfilment of the requirement for formation of an independent fire section 1) To install fire closures isolating a load lift shaft belonging to the fire section 80N01.03/N05 at individual floors from adjacent fire sections in the civil structure SO 801/1-02 "Auxiliary Building for the II. Main Power Block"

m) To install a fire closure with the fire resistance of EI 90/D1 to the horizontal fire isolating structure separating the cable channel from the electric area in the civil structure SO 442/1-04 "High-pressure Compressor Station for the II. Main Power Block";

n) To design and make ventilation of protected escape route lobbies in civil structures 805/1-02 "Longitudinal Electrical Building - Units 3&4", 806/1-03 "Cross-wide Electrical Building - Unit 3" and 806/1-04 "Longitudinal Electrical Building – Unit 4" in compliance with Annex 7 of Regulation of the Ministry of Interior of the Slovak Republic No. 94/2004 Coll

o) To propose measures and assure their implementation in order to enhance fire resistance of vertical support structures at least to the level the highest required fire resistance has the supported structure that depends on the support structure; if obtained fire resistance of the structure fulfilling, in addition to the fire spread function, also the function of radiation protection is higher than its required fire resistance and this enhancement would be reached as a secondary phenomenon at fulfilment of the radiation protection requirements, than the fire resistance of the support structure supporting the structure fulfilling a dual function of radiation protection and fire spread protection shall be at least so as the supporting structure should have the fire resistance only at fulfilment of the fire spread prevention function

p) To propose and install control elements of equipment limiting fire spreading and helping to control fire in internal rescue routes in compliance with the requirement laid down in Article 84 subsection 5 of Regulation of the Ministry of Interior of the Slovak Republic No. 94/2004 Coll

q) To respect requirements of Regulation of the Ministry of Interior of the Slovak Republic No. 401/2007 Coll. at designing and execution of the construction heating

r) To make a fire band from the structural element of D1 type with the required fire resistance in compliance with provisions of subsection 3 of Article 44 of Regulation of the Ministry of Interior of the Slovak Republic No. 94/2004 Coll. in the civil structure SO 801/1-02 "Auxiliary Building for the II. Main Power Block" where the external wall connects the fire isolating structure

s) To inform the Presidium of Fire and Rescue Corps of any spraying or application of paint on steel structures in order to enhance their fire resistance at least 10 working days before commencement of works; to inform by fax using the fax number 02/44637535 and to attach an identification of the civil structure and localisation of the civil structure whose fire resistance should be enhanced and also a certificate of conformance of the applied product, including a written report of a notified person proving that all procedures of the compliance assessment related to the subject product have been fulfilled

- t) To submit to the Presidium of Fire and Rescue Corps the following:
 - a) A declaration of conformity or a certificate issued by an independent third party informing of put of a cable system as a building product on the market in compliance with Act No. 90/1998 Coll. as amended before commencement of the cable system installation;
 - b) A declaration of conformity or a certificate issued by an independent third party informing of put of electric fire alarms, a stabile fire fighting equipment and heat and combustion gases removal equipment as building products on the market in compliance with Act No. 90/1998 Coll. as amended, to submit design documentation prepared by a person with a special certification of professional competence for designing the subject fire technical equipment; the declaration of conformity, the certificate and the design shall be submitted prior the installation;
 - c) an identification of all civil structures in a table form, including reached fire resistance and a method used for reaching the fire resistance, while the submission shall be made at least 60 days before submission of a proposal of the building owner for the final inspection proceedings;
 - d) a detailed design in accordance with the instruction specified in clause c)

u) To seal points of penetration of technical equipment and technological equipment through a fire isolating structure with material with the fire resistance at least the same as the civil structure through which the technical equipment and the technological equipment penetration is made

- v) To make the construction in compliance with
 - a) The submitted and approved documentation of the Ministry of Interior of the Slovak Republic by the Presidium of Fire and Rescue Corps,
 - b) the proposed engineering solutions as intentional substitution approaches applied in case of a conflict resulted from the time that elapsed from the construction execution and requirements laid down in effective general binding legislation that should be applied today at change of the construction before its completion ,
 - c) conditions specified herein.
 - 8.7 To ensure fulfilment of the conditions form NRA SR decision no. 266/2008 and 267/2008.
 - 8.8 Detailed designs of the civil structures listed in proposition part of this decision which seismic resistance is required by basic design should be amended by specified calculations of seismic resistance verified by independent organisation that does not contribute to elaboration of the basic design and its changes. The documents about results of calculation verification should be given to the authority.

Deadline: Together with application for permission to put corresponding unit of the nuclear facility into operation.

8.9 For elaborators of the detailed design of the civil structures to elaborate the guide for calculations of the components anchoring where the seismic qualification is required. The proposal should be given to the authority for assessment.

Deadline: December 31, 2008.

- 8.10 To perform independent inspection of detailed designs of all the civil structures containing seismically qualified components from the point of view of meeting the conditions for their seismic resistance, including mutual interactions between components themselves as well as with the civil structures. Deadline: During elaboration of implementation designs and during assembly
- works.
 8.11 To ensure performance of repeated evaluation of the nuclear safety in other stages of the nuclear facility design in compliance with the requirement of NRA SR Decree no. 50/2006 Coll., Enclosure no.3 part B.I.A letter u) Deadline: During elaboration of the basic design up to the level of implementation designs.
- 8.12 To add independent verification of the design safety evaluation, made by legal entities or natural persons independent from those who made the design in compliance with requirements of NRA SR Decree no. 50/2006 Coll., Enclosure no.3 part B.I.A letter x).

Deadline: December 31, 2008

- 9. The change of construction cannot be started before the permission for the change of construction before finishing comes into force.
- 10. Before finishing the builder is obliged to ask for substantial inspection .
- 11. The builder has to enable the representative of the State Building Inspection and the experts invited by them to access the site and to create the conditions for inspection performance.
- 12. According to § 43f of the building act to perform the construction it is possible to use only such a building product that is based on special regulations (Act no. 90/1998 Coll.) suitable for usage on site for intended purpose.

Given conditions of the decision do not impede the builder to start works according to documentation verified by building authority in this building proceeding.

At the same time the Authority by this decision changes the deadline of construction listed in binding condition no. 5 of the building permit no. 2010/86 from November 12, 1986 issued by Municipal office in Levice, department of construction and landscape planning because it reflects proposed changes, existing status of the construction and it is in full scope transformed into electronic form.

Justification

Based on application of Slovenské Elektrárne, a.s. Bratislava, NPP Mochovce Units 3 and 4 from May 27, 2008 no. SE/2008/065258 on the day of its submitting the authority started to act in the matter of work permit for change of construction before finishing "Nuclear power plant Mochovce VVER 4x440 MW 3rd construction".

The applicant has supported his submitting by letter from June 4, 2008 no. SE/2008/069203 by electronic documentation of the basic design, declaration about completeness of submitted documentation and summary of the fulfilment of requirements listed in § 11 par. 1 letter c) of the Ministry of Environment Decree no. 453/2000 Coll.

The submitted application was viewed from the points of views listed in § 62 of the building act and it was found that by performing of the construction (nor its further usage) the interests of the company are not threatened nor the rights and justified interests of the proceeding participants.

The application for the change of the construction before finishing was completed by design documentation in three copies as well as in digital form, reflecting present status of the construction as well as all the changes the builder asked for. The construction documentation meets general technical requirements for construction. Change of construction before finishing will be performed according to design documentation verified in building preceding that is a part of this decision.

The authority followed by sending the notice about its beginning to the proceeding participants known to it and involved bodies of the state administration from May 30, 2008 and at the same time it invited them to send their standpoint to construction being permitted for the field out of followed interests in 30 days from the notice delivery back to the Authority. In the proceeding following involved bodies replied: Labour inspection Nitra, Regional authority of environment Levice, department of environment items protection (hereinafter as RAE Levice, dep.EIP) – waste management RAE Levice, dep.EIP – state office for nature and landscape protection, Ministry of Interior of the Slovak Republic – Presidium of Fire and rescue brigade of the Slovak Republic, Aviation office of the Slovak Republic Bratislava. Their standpoints were included into conditions of the permission.

Village Nový Tekov, village Kalná nad Hronom, Technical inspection Nitra, Regional authority of the environment Nitra – state water management, RAE Levice, dep. EIP – state administration of air protection, Regional headquarters of Fire and rescue brigade in Nitra, public health service in Levice, Ministry of Economy of the Slovak Republic agreed with the change of construction before finishing without any comments.

Authority for railway transport regulation in Bratislava, Ministry of Health of the Slovak Republic, District authority in Nitra – department of civil protection and crisis management did not send their standpoints in given deadline that is why the building authority understands it that they agree with proposed change of construction before finishing without any comments.

Ministry of Environment SR Bratislava in its standpoint no. 7451/2008-3.4/hp. from August 8, 2008 states that it is not possible to regard the change of construction before finishing as a new activity nor a principal change of original design because administrative proceeding in the matter of permission of given activity according to special regulations was started before the act no. 24/2006 Coll. about assessment of impacts on environment and about change and amendment of some acts came into force and that is why this act cannot have an impact on activity that was permitted

before it came into force. At the same time we point to the fact that before giving the permission to put the nuclear facility into operation and consequent permission for operation it will be necessary to assess the facility according to the act about impacts on environment assessment.

The authority in relation to change of construction before finishing issued its decision no. 266/2008 in compliance with atomic act, by which there was a consent issued to implement changes influencing nuclear safety during the construction and decision no. 267/2008 by which the there was permission given to implement changes in Preliminary safety report.

There were no comments from the proceeding participants.

During the proceeding the building authority did not find any reasons that would impede the permission of the change of construction before finishing.

The change of construction before finishing will not adversely affect the environment and that is why it was decided as it is listed in proposition part of the decision.

Administrative fee in amount of 6000, SKK (six thousand Slovak Crowns) was stated according to act no. 145/1995 Coll. about administrative fees as amended, part V., item no. 60 letter g) and it was paid by duty stamps.

Advice:

According to § 61 par. 1 of the administrative regulations it is possible to lodge and appeal against this decision to Nuclear Regulatory Authority of the Slovak Republic, Okružná 5, 918 64 Trnava in 15 days from this decision delivery. The appeal lodged in time has a dilatory effect.

If this decision after depletion of permissible remedial instrument comes into force, its legality can be evaluated by the Court.

If the builder does not use the legal period to submit the remedial instrument against this decision, he is obliged to ask the authority for confirmation of its validity after expiration of 15-days period from the decision delivery.

In Trnava, on August 14, 2008

Duty stamp Stamp of Nuclear Regulatory Authority of the Slovak Republic

> Ing, Peter Uhrík General director of the Department of Safety Evaluation and Inspection Activities

Will be delivered to:

1. UJV Řež, a.s. – division EGP Prague, Vyskočilova 3/741, P.O.Box 158, 140 21 Praha 4

Copy to:

- 1. Village Nový Tekov, the mayor, 935 33 Nový Tekov 226
- 2. Village Kalná nad Hronom, the mayor, ČA 55, 935 32 Kalná nad Hronom
- 3. TI, Mostná 66, P.O.Box 29 B, 949 01 Nitra
- 4. IP Nitra, jelenecká 49, 949 01 Nitra
- 5. KÚŽP Nitra, ŠVS, J.Kráľa 124, 949 01 Nitra
- 6. ObÚŽP Levice, odb. OZŽP OH, Dopravná 14, 934 03 Levice
- 7. ObÚŽP Levice, odb. OZŽP OO, Dopravná 14, 934 03 Levice
- 8. ÚRŽD, section of special building authority, Miletičova 19, 820 05 Bratislava 25
- 9. MŽP SR, Nám. Ľ. Štúra 1, 812 35 Bratislava
- 10. MV SR P HaZZ SR, Pribinova 2, 812 72 Bratislava
- 11. KR HaZZ in Nitra, Dolnočermánska 64, 949 01 Nitra
- 12. MZ SR, Limbova 2, P.O.Box 52, 837 52 Bratislava 37
- 13. ÚVZ SR, Trnavská cesta52, P.O.Box 45, 826 45 Bratislava
- 14. RÚVZ Levice, Komenského 4, 934 38 Levice
- 15. LÚ SR, Letisko M.R. Štefánika, 823 05 Bratislava
- 16. MH SR, Mierová 19, 827 15 Bratislava 212
- 17. OÚ Nitra, OCOaKR, Štefánikova tr. 69, 949 01 Nitra