DECLARATION ON THE ECOLOGICAL CONSEQUENCES OF THE SCHEDULED ACTIVITY

The regulations provide for the development of unified "Declaration on the ecological consequences of the planned activity" in the assessment of impacts on the environment. According to document SIP-N-KP-22-B_-RPT-002-02 "Structure and content of design documents at LP5/LP6 stages" the design effort of construction stage-1 (CS-1) of the New Safe Confinement (NSC) is a two- phase (LP5, LP6) process, at this the complete design of NSC CS-1 will be the result of LP6.

Data on the Scheduled Activity, Purpose and Ways of its Realization

In accordance with Articles 8, and 10 of the Law of Ukraine “On Ecological Expert Review”, State Specialized Enterprise Chernobyl Nuclear Power Plant (SSE ChNPP) which is designated and licensed as the operating organization of the Shelter object declares the performance of the ecological expertise of the design of the New Safe Confinement (NSC) – Construction Stage 1 (CS-1) (Design of CS-1 NSC) and guarantees the credibility of the presented environmental impact assessment (EIA) within the design of CS-1 NSC by this Declaration.

State significance of overcoming the consequences of the 1986 accident at the Chernobyl nuclear power plant is defined in the Constitution of Ukraine, international agreements ratified by Ukraine, as well as a number of legal acts of nuclear and environmental legislation of Ukraine. The conversion of the destroyed Unit 4 of Chernobyl NPP into ecologically safe system is one of the most important aspects of overcoming of the consequences of the accident.

Strategic decisions to converse the "Shelter" object (SO) into the ecologically safe system are determined by the Law of Ukraine "On the general basis for further operation and the decommissioning of Chernobyl NPP and the conversion of the destroyed Power Unit 4 of this NPP into ecologically safe system" and are detailed in the “Strategies for the conversion of the Shelter object” dated 12.03.2001, the National Program for decommissioning the Chernobyl NPP and conversion the Shelter into the ecologically safe system" dated 15.01.2009 and other documents.

“Shelter” Object conversion into environmentally safe system envisages the following:

- reduction of ionizing exposure impact risks;
- creation of additional protective barriers, in particular those providing respective conditions for works implementation at the next stage;
- removal from the “Shelter” Object of fuel containing materials, high level and long lived waste, their transformation into safe condition, interim controlled storage and disposal in deep geological formations), if before their removal (in about 30 – 50 years) no alternative is proposed to provide for safe storage of materials in the “Shelter” Object.

The Law of Ukraine "On the general basis for further operation and the decommissioning of Chernobyl NPP and the conversion of the destroyed Power Unit 4 of this NPP into ecologically safe system" defines confinement (new safe confinement – NSC) as the protective facility. The creation of this confinement shall facilitate the achievement of the following goals:

- To protect personnel, population and environment from exposure by the sources of nuclear and radiation hazards associated with the existence of SO;
- To provide for conditions for performing of activity on SO conversion into the ecologically safe system, in particular for dismantling / strengthening of unstable SO structures, removal of fuel containing materials, and handling of the radioactive waste.

In accordance with document SIP K 00 21 000 001 01 «Conceptual Design (FS) of the new safe confinement» (NSC CD (FS)), the arch structure (Arch), being the main facility of the

NSC, shall be preliminarily assembled on the erection site removed from the SO, and then slid to the design position (over the SO). The design period of NSC operation shall constitute 100 years with the possibility of extension.

In accordance with document SIP-P-PM-21-330-EXN-004-01 “Strategy for further implementation of the NSC project”, the NSC project is divided into three phases. The first stage provides for the implementation of preparatory work, which should facilitate the safe and efficient construction of the NSC directly. The second phase is the construction and commissioning of the NSC. The second phase provides for two start-up complexes. The scope of the first commissioning stage (CS-1) includes the construction of protective facility with the technological life-support systems and the necessary infrastructure. The scope of the second commissioning stage (CS-2) will include the creation of infrastructure to carry out the dismantling of the SO unstable structures. The third phase will involve the implementation of early removal of SO unstable structures.

The first commissioning stage (CS-1) this Declaration on the ecological consequences of the planned activity is dedicated to foreseeing the following:

- • Construction of the foundations of the NSC;
- • Assembly and sliding of the NSC arch structure, including the western and eastern end walls, cranes;
- • Construction of Technological Building (rooms, areas, etc., providing life support systems, maintenance and control of the NSC);
- • Arrangement of the rooms, zones, areas, sites, systems, access ways, evacuation, emergency exits inside the NSC arch, sanitary locks, including sites and areas for the performance of dismantling of unstable structures;
- • Construction (installation) and commissioning of technological life-support systems and control of the NSC state;
- • Construction of auxiliary buildings and facilities for placement and operation of NSC life support systems, which are not included in the Technological Building;
- • Construction of NSC external utilities (up to tie-in points to the systems of ChNPP).

NSC CS-1 Design has been developed within the frames of two licensing packages (LP):

- LP5 – Arch (permanent foundations, arch, western and eastern end walls, crane, abutment to the existing structures, main cranes, internal and external cladding), Technological building, facilities inside NSC arch structure, including the sites and areas for work performance on dismantling of the unstable structures;
- LP6 – documents on LP5 plus technological systems of NSC life-support and state control, auxiliary buildings and facilities for placement and operation of the systems, offsite engineering communications of NSC,

On this basis, the complete NSC CS-1 design is the result of LP6 stage.

NSC CS-1 Licensing Package 5 has been developed in 2009-2011 per order of SSE ChNPP on the account of the International Chernobyl Shelter Fund by the Joint Venture NOVARKA which performed the works involving the Ukrainian enterprises (Kyiv Scientific, Research and Design Institute "ENERGOPROEKT", National Technical Institute of Ukraine «Kyiv Polytechnic Institute», Scientific and Research Institute of Radiation Medicine Ltd of Academy of Technical Sciences of Ukraine, State Scientific and Engineering Center of Control Systems and Emergency Response, Licensing Consortium Ltd).

Significant Factors which Impact or may Impact the State of Natural Environment Considering the Possibility of Occurrence of the Ecological Emergencies

In the EIA, as a part of the NSC CS-1 design radiation and non-radiation effects during construction, commissioning and operation of the NSC CS-1 were reviewed. The document also represents a description of the effects on environmental components under existing conditions of the OS operation. In the Environmental Impact Assessment all components of environment were analyzed including the natural, social and technogenic environments.

According to results of impact assessment it is defined that non-radiation factors will not lead to considerable impacts on the environment under the ordinary conditions and emergencies during construction and operation of the NSC CS-1. The most significant among such factors during construction are the acoustic impact on the air environment (noise during operation of the construction machinery and equipment, and movement of transportation means), arrangement of the driven piles, locally impacting on the hydro geological conditions, and changing of the local relief. The most significant among the non-radiation factors during NSC CS-1 operation are the the acoustic impact on the air environment (noise during operation of the NSC equipment and transportation means movement), and NSC itself, as large facility changing landscape and influencing microclimate (such change shall take place for one time within the period of NSC construction completion). Excluding the impacts of transport and changing of landscape the influence of the listed factors shall be limited with the NSC construction site and (for the period of construction) with the sites of infrastructure facilities promoting the NSC construction. Beyond the limits of these sites the mentioned non-radiation factors shall not impact the environment.

According to the EIA results in the frame of the NSC CS-1 design, during construction, commissioning and operation of the NSC CS-1 the main initial radiation factor able to impact significantly on the environment is the release of the radioactive substances into the atmosphere. This factor shall determine the radiation impact on all components of the environment. Under the ordinary conditions of the NSC CS-1 construction, this factor is related to the active impact on the radioactively contaminated technogenic layer, under the ordinary conditions of operation – to the design-basis releases of radioactive substances from the NSC volume.

For the stage of NSC CS-1 construction the assessment of the impacts on the environment in the result of the following design-based accident was performed in the scope of NSC CS-1 Design EIA:

- Accidents related to the implementation of the leveling and earth works (in the process of implementation of leveling and earth works the violations from the design decisions took place, namely refusal to perform dust suppression);
- “Collapse of the crane boom into the local zone of SO” (the collapse of the assembly crane boom took place into the contaminated territory of the local zone of the Shelter object);
- “Collapse of the Arch on SO during sliding (during sliding the Arch falls down on SO).

For the stage of NSC operation, the assessment of impact on the environment in the result of the following design-based accidents was performed as part of NSC CS-1 Design EIA:

- Tornado class 3 (Scenarios 1 and 2 are considered with release of 525 and 8000g of radioactive dust accordingly);
- Collapse of Б1 beam during dismantling into the central hall;
- Collapse of Б1 beam and crane bogie during dismantling into the central hall;
- Raise of 8kilos of dust inside the sub-arch space of NSC;
- Fire (roof burning).

Hydrogeological Conditions

No potential source of income of the radioactive substances into the underground waters (infiltration of atmospheric precipitation with dissolved radioactive substances from the contaminated soils, infiltration of radioactively contaminated waters of the open water bodies, infiltration of the radioactively contaminated waters from the facilities of RAW temporary localization and SO, handling of the liquid RAW) shall result in any sufficient additional contamination of them due to operation of NSC under the normal conditions. The positive influence of NSC as relates to the radiation impact on the underground waters lies in the significant decrease of infiltration of radioactively contaminated waters from SO in particular on the account of positive water balance in rooms 001/3, and 018/2. The lowering of the water level in room 001/3 to zero is forecasted after 1,5 years after creation of NSC CS-1. The penetration of the most active radionuclide ^{90}Sr into the ground waters from SO shall not have any significant consequences. The less active radionuclides ^{137}Cs and ^{239}Pu shall not leave SO for the entire period of NSC operation (100 years) on the account of migration with underground waters beyond the limits of NSC construction site.

The liquid radioactive waste (LRW) created during Arch construction shall have the limited volume (1 584 m^3) and shall be in the category of low active LRW. The potential accidents with such LRW shall not result in the significant radiation impact on the hydrogeological environment.

Surface Waters

During construction of NSC CS-1 no significant changes of the existing non-radiation impacts on the surface waters are forecasted. The penetration of effluents of the used during construction solutions of chemical reagents on the adjacent territory and then to the nearest water bodies is practically impossible.

Analysis of non-radioactive effects on the surface waters during the NSC operation included the assessment of changes of inflow to the Pripyat river of rain waters on the account of organized collection from the NSC CS-1 roof. The results of analysis do not demonstrate any noticeable negative impact in comparison with the existing situation.

For the ordinary conditions of NSC CS-1 construction no significant radiation impact on the surface waters is forecasted. On the background of the existing contamination of the water of Pripyat river formed by the consequences of the accident of 1986 at ChNPP (hereinafter referred to as – contamination of Chernobyl origin), the additional contamination for the ordinary conditions of NSC CS-1 construction is negligible. For more distant surface waters of Exclusion Zone the additional radiation impact for the ordinary conditions of NSC CS-1 construction is even less significant that for the nearest part of Pripyat river. The potential accident with the created during construction LRW shall not result in the essential radiation impact on the surface waters.

Under the ordinary conditions of operation the main factors of radiation impact on the surface waters are the wash-out of radioactive substances from the NSC roof to the Pripyat river, and the direct atmospheric fallouts of the releases of radioactive substances from the NSC CS-1 volume on the water surface of the Pripyat river and its floodland close to NSC with the further discharge of radionuclides from the watershed areas. According to the results of the analysis, the mentioned factors shall not make any negative effect and are negligible at the background of the observed and forecasted concentrations of the radionuclides in the water of the Pripyat river. For more distant surface waters of Exclusion Zone the additional radiation impact for the ordinary conditions of NSC operation is even less significant that for the nearest part of Pripyat river.

At the stage of NSC CS-1 construction under the accidents related to the implementation of leveling and earth works, the additional contamination of the water of Pripyat river shall be

negligible on the background of the existing contamination of the Chernobyl origin. The consequences for the surface waters from the accident related to the collapse of the crane boom into the SO local zone during NSC CS-1 construction are negligible. During the critical phase of the design-basis accident "Collapse of the Arch on SO during sliding" the maximum concentrations of the alpha-active nuclides $^{238\text{-}240}$Pu and ^{241}Am in Pripyat river shall not exceed their permitted concentrations in the potable water. The maximum concentrations of ^{90}Sr и ^{137}Cs in Pripyat river within several days shall significantly exceed both observed concentrations related to the radioactive contamination of Chernobyl origin, and their permitted concentrations in the potable water (in 15 and 20 times accordingly). This said, the maximum concentrations of ^{90}Sr and ^{137}Cs already for the first reservoir of the Dnieper cascade (Kyiv reservoir) shall be comparable with the existing contamination of Chernobyl origin and in tens times less than their permissible concentrations.

At the stage of NSC construction under the design-basis accident "Tornado class 3.o" under Scenario 1 during the critical phase the maximum concentrations in Pripyat river of ^{90}Sr, ^{137}Cs will be comparable, and $^{238\text{-}240}$Pu и ^{241}Am – two orders of magnitude less than their permissible concentrations in the potable water. For Scenario 2 the maximum concentrations in Pripyat river of ^{90}Sr, ^{137}Cs will exceed correspondingly in 12 and 17 times, and $^{238\text{-}240}$Pu и ^{241}Am concentrations shall be less than their permissible concentrations. During the critical phase of the design-basis accident "Raise of 8 kilos of dust inside the sub-arch space of NSC" the maximum concentrations in Pripyat river of ^{90}Sr, ^{137}Cs will not exceed, and $^{238\text{-}240}$Pu and ^{241}Am concentrations will be two orders of magnitude less than their permissible concentrations in the potable water. For the other accidents ("Collapse of Б1 beam during dismantling into the central hall", "Collapse of Б1 beam and crane bogie during dismantling into the central hall", and "Fire (roof burning)" the maximum concentrations in Pripyat river of ^{90}Sr, ^{137}Cs, $^{238\text{-}240}$Pu and ^{241}Am shall be several orders of magnitudes less than their permissible concentrations in the potable water. For more distant surface waters of Exclusion Zone the additional radiation impact for the accidents is even less significant that for the nearest part of Pripyat river.

Air Environment

During construction of NSC CS-1 no significant changes of the existing non-radiation impacts on the air environment are forecasted. The acoustic effects during NSC CS-1 construction (noise of pile driving equipment, excavators, cranes, vehicles, etc.) beyond the limits of the work area (at the distances of more than 500 m) will not exceed the maximum permitted levels. The design foresees the measures on reduction of noise and vibrations from the operated ventilation units which shall provide for the non-exceeding of the permitted levels of the sound pressure. Significant releases of CO_2 and other harmful substances into the atmosphere from the diesel installations of the reserve support to NSC which shall be used only during performance of the repair operations, under the failures of the main supply systems, and during the regular examinations of these units are not casted.

During NSC operation non-radiation impacts on the air environment shall become apparent as changes of the reflected and absorbed solar radiation, air flows on the adjacent to NSC part of ChNPP Industrial Site, temperature and humidity of the environment in the direct vicinity to NSC, wind loads on the nearest facilities of SSE ChNPP. However, such influence shall be of local nature and shall not result in additional impacts beyond the limits of ChNPP Industrial Site.

For the normal conditions of NSC CS-1 construction no significant radiation impact on the air environment is forecasted. Maximum volumetric activity of the air at distance of 100 m from NSC for normal conditions of construction will be comparable with existing contamination of the air at ChNPP industrial site and will be considerably less than the established at SSE ChNPP reference levels of atmospheric air contamination for the territory of free access (in ~260 and ~100 times for the mixture of β-emitting and α- emitting nuclides correspondingly). The

maximum additional radioactive contamination of the air for normal conditions of construction at the boundary of 1st radiation – regime zone (10 km from the release source) and at the boundary of EZ (30 km from the release source) will make correspondingly less than 10% and 5% of average values of the existing background contamination related to the dust resuspension of radioactivity of Chernobyl origin.

Under the normal conditions of NSC operation the total activity of the authorized and unauthorized releases from NSC on the account of releases from SO and DS taking place nowadays shall constitute about 1,6% from the activity of the latter. During performing under NSC of the works on SO conversion into the ecologically safe facility, the release of radioactive substances into the main volume of NSC may turn to be significantly higher than the existing as of today authorized and unauthorized releases from SO and DS. In hypothetical case of short-term (within two shifts) achievement of the monthly limit of the release exceeding the annual release of SO and DS on an order, the maximum activity of the air on ChNPP Industrial Site shall not exceed the established in SSE ChNPP reference levels of contamination of the atmospheric air for the territory of free access.

Under the accidents related to performance of leveling and excavation works during NSC construction, maximum volumetric activity of the air at distance of 100 m will be lower than the established at SSE ChNPP reference levels of atmospheric air contamination for the territory of free access (in ~2,6 and ~1,1 times for the mixture of β-emitting and α- emitting nuclides correspondingly). The maximum additional air radioactive contamination at the boundary of 1st radiation – regime zone (10 km from the release source) and at the boundary of EZ (30 km from the release source) under such accidents is short-term (less than 2 days), will exceed in several times observed average values of the existing background contamination related to the dust resuspension of radioactivity of Chernobyl origin. Under the accident related to collapse of the crane boom in SO local zone, value of volumetric activity of the air at distance of 100 m is short-term (to 0,5 hours) will exceed considerably established at SSE ChNPP reference levels of atmospheric air contamination for the territory of free access (in 60 and ~250 times for the mixture of β-emitting and α- emitting nuclides correspondingly). The maximum additional air radioactive contamination at the boundary of 1st radiation – regime zone (10 km from the release source) and at the boundary of EZ (30 km from the release source) under such accident will exceed by order of magnitude observed average values of the existing background contamination related to the dust resuspension of radioactivity of Chernobyl origin. The analysis of non-radiation impacts on the air environment during NSC CS-1 operation demonstrated significant changes of the atmospheric characteristics (temperature, pressure, humidity, air flows at low altitudes) in direct vicinity of NSC CS-1 roof which shall result in local changes of microclimate in vicinity of the facility (tens-hundreds of meters). Beyond the limits of NSC CS-1 site no negative non-radiation impacts on the air environment are forecasted.

The main factor of radiation impact on the air environment during NSC CS-1 construction is the release of radioactive substance during arrangement of the boxes of main power cable of the Arch. Under the ordinary conditions of construction the total volume of the release shall constitute $1 \cdot 10^7$ Bq. This said, the value of volumetric activity of the radionuclides in the air at the distance of 0,2 and 0,5 km does not exceed correspondingly 0,05 and 0,01 Bq/m^3, which is significantly lower than the established at SSE ChNPP reference levels of contamination of the atmospheric air for the territory of free access (1,5 Bq/m^3). In case of accident the total volume of release shall constitute $1 \cdot 10^9$ Bq, due to this the short-term (up to 30 hours) increase of volumetric activity (up to 5 and 1 Bq/m^3 correspondingly at the distance of 0,2 and 0,5 km) is forecasted. During critical phase of design accident “Collapse of the Arch on SO during sliding” the maximum additional air radioactive contamination at the boundary of 1st radiation – regime zone (10 km from the release source) and at the boundary of EZ (30 km from the release source) will exceed by several orders of magnitude observed average values of the

existing background contamination related to the dust resuspension of radioactivity of Chernobyl origin.

At the stage of NSC operation under the design-basis accident «Tornado class 3.0» the current activity in the near area of fallouts (15-20 km from NSC) shall significantly exceed the established reference levels within the entire critical phase of the accident. Under the design-basis accidents «Collapse of Б1 beam during dismantling into the central hall» and « Fire (roof burning)» the maximum value of volumetric activity of the air on the CHNPP Industrial site shall not exceed the established at SSE CHNPP reference levels of contamination of the atmospheric air for the territory of free access, at the boundary of 1st radiation – regime zone (10 km from the release source) and at the boundary of EZ (30 km from the release source) may in several tens times exceed the observed average values of the existing background contamination related to the dust resuspension of radioactivity of Chernobyl origin. Under the accident «Collapse of Б1 beam and crane bogie during dismantling into the central hall» the maximum value of volumetric activity of the air on the ChNPP Industrial site shall exceed the established at SSE ChNPP reference levels of contamination of the atmospheric air for the territory of free access, at the boundary of 1st radiation – regime zone (10 km from the release source) and at the boundary of EZ (30 km from the release source) may in hundreds times exceed the observed average values of the existing background contamination related to the dust resuspension of radioactivity of Chernobyl origin. Under the accident «Raise of 8kilos of dust inside the sub-arch space of NSC» the maximum value of volumetric activity of the air on the ChNPP Industrial site shall for two and more orders of magnitude exceed the established at SSE ChNPP reference levels of contamination of the atmospheric air for the territory of free access, at the boundary of 1st radiation – regime zone (10 km from the release source) and at the boundary of EZ (30 km from the release source) may for short time period exceed in 10^5 and more times the observed average values of the existing background contamination related to the dust resuspension of radioactivity of Chernobyl origin.

Soils

During NSC CS-1 construction non-radiation impacts on soils will be limited by NSC construction site and the sites of NSC construction infrastructure facilities and outside these sites are not forecasted.

Additional non-radiation impacts on soils during NSC operation are not forecasted.

For normal conditions of NSC CS-1 construction any significant radiation impact on the air is not forecasted. Additional radioactive contamination of soil at distance of 100 m will make 0, 0045% of reference level of surface contamination of SSE ChNPP free access territory. At the boundary of 1st radiation-regime zone (10 km from release source) and at the boundary of EZ (30 km from release source) additional contamination for normal conditions of construction will be by many orders of magnitude less than existing background contamination of Chernobyl origin.

Under normal conditions of NSC operation potential maximum levels of additional soil contamination corresponding to release limits up to 5 x 10^{10} Bq/year considering relatively uniform wind rose within NSC construction site can result in additional soil contamination at distance of 1 km from NSC – at level of up to 22 Bq/(m^2 year), at the boundary of 1st radiation-regime zone (10 km from NSC) – up to 1,1 Bq/(m^2 year), at the boundary of EZ – up to 0,25 Bq/(m^2 year). Such values even considering accumulation during the whole design period of NSC operation (100 years) will be negligible on the background of existing contamination of Chernobyl origin.

At the stage of NSC CS-1 construction under the accidents related to performance of leveling and excavation works maximum additional radioactive soil contamination at distance of 100 m will make less than 0,5% of reference level of surface contamination of SSE ChNPP free access territory. At the boundary of 1st radiation-regime zone (10 km from release source) and at

the boundary of EZ (30 km from release source) additional contamination under such accidents will be by many orders of magnitude less than existing background contamination of Chernobyl origin. Under the accident related to collapse of the crane boom in SP local zone, radiation impact on soil will be negligible on the background of existing contamination of Chernobyl origin. Under design accident "Collapse of the Arch on SO during sliding" maximum contamination at ChNPP industrial site can exceed in hundred times reference level of surface contamination of SSE ChNPP free access territory. At the boundary of 1st radiation-regime zone (10 km from release source) and at the boundary of EZ (30 km from release source) maximum additional radioactive soil contamination under collapse of the Arch on SO will be by several orders of magnitude less than existing background contamination of Chernobyl origin.

At the stage of NSC operation under design accident "Tornado of class 3.0" under Scenario 2 in the epicenter of close area of fallouts (15-20 km from NSC) maximum soil contamination will make several tens of kBq/m^2 that by order of magnitude less than existing contamination of Chernobyl origin. Maximum contamination in the epicenter of distant area (up to 80-90km from NSC depending on lifetime and speed of tornado) for Scenario 2 is comparable on order of magnitude, and for Scenario 1 – by order of magnitude less than existing contamination outside EZ. Under design accidents "Collapse of beam Б1 into central hall during dismantling", "Collapse of beam Б1 and crane bogie into central hall during dismantling" and "Fire (roof burning)" maximum additional radioactive soil contamination at ChNPP industrial site will be considerably less than reference level of surface contamination of SSE ChNPP free access territory, and at the boundary of 1st radiation-regime zone (10 km from release source) and at the boundary of EZ (30 km from release source) will be by several orders of magnitude less than existing background contamination of Chernobyl origin. Under design accident "8 kg of dust resuspension inside NSC sub-arch space" maximum additional radioactive soil contamination at ChNPP industrial site will not exceed reference level of surface contamination of SSE ChNPP free access territory, and at the boundary of 1st radiation-regime zone (10 km from release source) and at the boundary of EZ (30 km from release source) will be by several orders of magnitude less than existing background contamination of Chernobyl origin.

Flora and Fauna, and Natural Reserve Fund Objects

Non-radiation impacts on flora are limited by NSC construction site.

For normal conditions of construction under the accidents related to performance of leveling and excavation works, as well as under the accident related to collapse of the crane boom in SO local zone, any possible source of radioactive substances flux into flora (external exposure, direct deposition of the radioactive substances from the air and entry through the root system from soils) will not result in any significant additional contamination, radiation impact will be negligible on the background of existing impacts of Chernobyl origin. Under design accident "Collapse of the Arch on SO during sliding" above sources will have insignificant influence on flora on the background of existing impacts of Chernobyl origin.

Under normal operation of NSC any possible source of radioactive substances flux into flora (direct deposition of the radioactive substances from the air and entry through the root system from soils) will not result in any significant additional contamination. Generally, radiation impact on flora due to NSC operation for normal conditions of operation is negligible on the background of existing impacts of Chernobyl origin. Under accident "Tornado of class 3.0" expected absorbed doses during critical phase of the accident will make less than 0,1 mGy and negligible for flora. Additional exposure from radioactivity on the soil surface, deposition of the radioactive substances on flora from dust resuspension and entry through the root system from soils related to the accident "Tornado of class 3.0" under any scenario will have insignificant influence on flora on the background of existing impacts of Chernobyl origin. Radiation impact on flora under all other design accidents is negligible on the background of existing impacts of Chernobyl origin.

Damage to fauna habitat due to exclusion of NSC construction site and existing and newly constructed facilities of infrastructure of construction will be localized at 0,006% of EZ territory. Share of animals that can be potentially killed by transport is assessed at level of up to 0,5% a year of total population in EZ. Such small part is easily replaced during reproduction and migration of animals. Acoustical effect during NSC construction and operation will be limited directly by adjacent territories. Generally non-radiation impacts on fauna during NSC construction and operation are forecasted insignificant, their considerable part will be temporary and stop upon completion of construction.

The change of landscape related to the origin of the large – scale facility – Arch, probably with the high reflection capability will be additional factor of non-radiation effect of NSC on the fauna. In accordance with expert evaluations the mentioned change will not result in negative consequences and shall serve only as an additional long-distance land-mark for the representatives of ground and air fauna.

Radiation impact on fauna due to NSC CS-1 construction for normal conditions of construction under the accidents related to performance of leveling and excavation works, as well as under the accident related to collapse of the crane boom in SO local zone is negligible on the background of existing impacts of Chernobyl origin. Design accident "Collapse of the Arch on SO during sliding" will result in significant impacts on fauna at limited square of several km^2 (to 0,5% of total EZ square), besides the main part of effective dose of terrestrial fauna and birds exposure will be formed during critical phase of the accident due to inhalant intake. At the boundary and outside 1st radiation-regime zone (more than 10 km from release source) the value of maximum additional effective doses associated with such accident will be comparable with the doses of animals in EZ due to radioactive contamination of Chernobyl origin. Short-term character of aquatic fauna habitat contamination under such accident even under the most unfavorable scenario of surface waters contamination will not result in considerable damage to biota.

Under normal conditions of NSC operation in the worst hypothetical case of short-term (during 2 shifts) achievement of monthly release limit, additional dose loads on organism of animals will be comparable with contribution to animal exposure annual dose formed by inhalant intake under wind resuspension of radioactivity of Chernobyl origin. Generally, additional radiation impact on fauna under normal conditions of NSC operation is negligible on the background of existing impacts of Chernobyl origin. Under design accident "Tornado of class 3.0" maximum absorbed doses during critical phase of the accident will make less than 0,1 mGy and negligible for animals. The main part of additional effective dose of terrestrial fauna and birds exposure habitant near the epicenter of close area of fallouts (15-20 km from NSC) will be formed during critical phase of the accident due to inhalant intake. Near epicenter of distant area of fallouts (up to 80-90 km from NSC depending on the lifetime and speed of tornado) additional effective doses of terrestrial fauna and birds exposure during critical phase of the accident will be comparable with additional doses formed due to external exposure from radionuclides on soil surface, their inhalant intake under wind resuspension and per-oral intake during the first years after the accident. At the same time, even in the epicenter of close area under the worst Scenario 2, animals external exposure doses will be by many orders less than the limit of significant mortality of small mammals, and consequences will be limited by temporary decrease of reproductive function. Taking into account the fact that square with the highest radiation impact is limited to several km^2, that is does not exceed 0,5% of EZ total square, these consequences for EZ fauna can be considered acceptable. Under the accidents "Collapse of beam Б1 into central hall during dismantling" and "Fire (roof burning) maximum additional effective doses of terrestrial fauna and birds representatives exposure related to the accident are less than annual doses of animals in EZ due to radioactive contamination of Chernobyl origin. For aquatic fauna consequences of these accidents are negligible on the background of impact of existing contamination of Chernobyl origin. Under the accidents "Collapse of beam Б1 and crane bogie

into central hall during dismantling" maximum additional effective doses of terrestrial fauna and birds representatives exposure related to the accident are comparable with annual doses of animals in EZ due to radioactive contamination of Chernobyl origin. For aquatic fauna consequences of these accidents are negligible on the background of impact of existing contamination of Chernobyl origin. Under the accidents "8 kg of dust resuspension inside NSC sub-arch space" maximum additional effective doses of terrestrial fauna and birds representatives exposure related to the accident will exceed in ten times annual doses of animals in EZ due to radioactive contamination of Chernobyl origin. For aquatic fauna consequences of these accidents are insignificant on the background of impact of existing contamination of Chernobyl origin.

Any non-radiation impacts on flora and fauna of NRF objects for normal conditions of NSC CS-1 construction are not forecasted. Radiation impact on NRF objects for normal conditions of construction under the accidents related to performance of leveling and excavation works, as well as under the accident related to collapse of the crane boom in SO local zone will be negligible due to the distance of NRF objects and insignificant volumes of radioactive releases. Under design accident "Collapse of the Arch on SO during sliding" maximum additional radiation impact on NRF objects is forecasted at level of up to 20% of existing impacts of Chernobyl origin.

Radiation impact on NRF objects for normal conditions of NSC operation will be negligible due to their distance and insignificant volumes of releases. Maximum additional density of surface radioactive contamination of soils corresponding to achievement of annual limit of releases from NSC for the nearest to NSC NRF objects (oak and black alder woodland and natural monument "Gorodishche" located at distance of 14-15 km) is by several orders of magnitude less than the existing contamination of Chernobyl origin. Due to distance of NRF objects from NSC direct impacts on their flora and fauna during critical phase of the accident (exposure from cloud, inhalant intake in organism of animals) are insignificant, except for direct impacts on fauna during critical phase of the accident "Tornado of class 3.0" in case of location of the epicenter of close area of fallouts in close vicinity to one of NRF nearest objects to NSC when the main part of additional effective dose of exposure of terrestrial fauna and birds being there will be formed during critical phase of the accident due to inhalant intake. At the same time, even in the epicenter under the worst Scenario 2, animals' external exposure doses will be by many orders less than the limit of significant mortality of small mammals, and consequences will be limited by temporary decrease of reproductive function of animals. Surface contamination of NRF objects territory even for the accident with maximum radiation consequences (design accident "Tornado of class 3.0" under Scenario 2) are by order of magnitude less than existing contamination of Chernobyl origin, and its consequences will be permissible. Consequences of the accident "Tornado of class 3.0" under Scenario 1 and the accident "8 kg of dust resuspension inside NSC sub-arch space" will be insignificant (at level of several percents of existing contamination for all NRF objects), and all other accidents – negligible on the background of existing contamination of Chernobyl origin.

Quantitative and Qualitative Indices for the Assessment of the Levels of Ecological Risk and Safety for the Social Environment

Personnel of the Facility

Total man-hours during construction and commissioning of NSC CS-1 would amount to about 2 175,2 thousand man-hours, corresponding to the estimated collective dose under ordinary conditions of construction and commissioning of approximately 163.4 man-Sv. During the arrangement of foundation of service area the labor and the collective dose, respectively, will amount to about 373.2 thousand man-hours and 63.0 man-Sv, during assembly and installation

of the Arch - about 1 582.9 thousand man-hours and 35 1 man-Sv, during the construction of the Technological Building - about 219.0 thousand man-hours and 65.4 man-Sv.

In order to provide for the appropriate level of the radiation safety and health and safety of the personnel within the frames of NSC CS-1 design the adequate design decisions and correspondent complexes of measures are developed to be realized under the ordinary conditions and in case of accidents during construction and operation of NSC CS-1.

Personnel of the Exclusion Zone Enterprises

For normal conditions of NSC CS-1 construction negative radiation impact on EZ enterprises personnel is not forecasted. Additional dose of SSE ChNPP personnel exposure will not exceed 0,05% of reference level of internal exposure annual dose. Additional dose of other EZ enterprises personnel exposure for normal conditions of construction will be negligible.

NSC under normal conditions of operation will not have negative radiation impact on the personnel of EZ enterprises. NSC positive impact consists in improvement of radiation situation in close vicinity to NSC. Individual effective dose of exposure of the personnel working in close vicinity to NSC is assessed at level of up to 0,074 mSv $year^{-1}$ that makes 0,37% of dose limit for category A (20 mSv). For other personnel of EZ enterprises additional individual effective dose will be considerably less.

In case of implementation during NSC CS-1 construction of design accidents related to performance of leveling and excavation works, maximum additional individual effective dose of SSE ChNPP personnel will be in 5 times less than reference level of internal exposure annual dose. Maximum additional individual effective dose of exposure of the personnel being outside 1^{st} radiation-regime zone (more then 10 km from construction site) will be by several orders of magnitude less than reference level of internal exposure dose for EZ personnel of subgroup II.

In case of implementation during NSC CS-1 construction design accident “Collapse of the crane boom in SO local zone”, individual effective doses of the personnel will be less than in case of the accidents related to performance of leveling and excavation works during NSC construction. Design accident “Collapse of the Arch on SO during sliding” is the accident with maximum radiation consequences during NSC construction. In case of implementation of such accident, dose limit for category A can be exceeded both for the personnel working at ChNPP industrial site and the personnel of other EZ enterprises located on axis of fallouts trace up to the boundary of EZ. Probability of very high doses of EZ enterprises personnel exposure under such accident shows the necessity during critical phase of the accident to use compulsorily RPPE by personnel working near NSC construction site and to use immediately RPPE by personnel of other EZ enterprises.

In case of implementation during NSC operation of design accident “Tornado of class 3.0” under scenario with release of 525 g of radioactive waste, the values of individual effective dose of exposure of the personnel working in close vicinity to NSC, for the first year after accident can exceed dose limit for category A (20 mSv) (the dose will be almost completely formed during passage of release cloud (during several hours) mainly due to inhalant intake). In subsequent years after the accident, the effective doses of exposure under such scenario decrease to several hundreds of μSv. For EZ enterprises personnel being outside ChNPP industrial site, maximum values of individual effective dose of exposure due to the accident under such scenario will not exceed dose limit for category A.

Design accident “Tornado of class 3.0” under scenario with release of 8 kg of radioactive dust is the accident with maximum radiation consequences among considered during NSC operation. In case of implementation of such scenario, dose limit for category A can be exceeded both for the personnel working at ChNPP industrial site and the personnel of other EZ enterprises located on axis of fallouts trace up to the boundary of EZ. Similar to scenario with

release of less amount of radioactive dust, the doses will be almost completely formed during passage of release cloud (during several hours) mainly due to inhalant intake. In subsequent years after the accident the effective doses of exposure decrease to several mSv.

In case of implementation during NSC operation of design accident "Collapse of beam Б1 into central hall during dismantling" maximum values of individual effective doses are forecasted at small distances from NSC (several hundreds of meters) during critical phase of the accident that can result in insignificant additional exposure of the personnel being near NSC (up to 2,9% of dose limit). For EZ enterprises personnel being outside this area, radiation impact as a result of this accident is negligible (outside 10 km zone additional dose related to the accident will not exceed 0,02 mSv).

In case of implementation during NSC operation of design accident "Collapse of beam Б1 and crane bogie into central hall during dismantling" maximum values of individual effective doses are forecasted at small distances from NSC (several hundreds of meters) during critical phase of the accident that can result in some additional exposure of the personnel being near NSC (up to 7% of dose limit). For EZ enterprises personnel being outside this area, radiation impact as a result of this accident is insignificant (outside 10 km zone additional dose related to the accident will not exceed 0,04 mSv).

In case of implementation during NSC operation of design accident "8 kg of dust resuspension inside NSC sub-arch space" maximum values of individual effective doses are forecasted at small distances from NSC (several hundreds of meters) during critical phase of the accident that can result in significant additional exposure of the personnel being near NSC (exposure dose will exceed dose limit of 20 mSv, and under high physical load during the accident – maximum limit of annual effective dose of 50 mSv). In subsequent years after the accident maximum additional doses of exposure (formed as a result of fallouts) for the personnel working in close vicinity from NSC will make 0,11 – 0,55 mSv. For EZ enterprises personnel being outside this area, radiation impact as a result of this accident is less significant and will not exceed dose limit. At the boundary of 1st radiation-regime zone (10 km from NSC) maximum individual effective dose of the personnel will not exceed 1,8 mSv, at the boundary of EZ (30 km from NSC) – 0,57 mSv.

In case of implementation during NSC operation of design accident "Fire (roof burning)" maximum values of individual effective doses are forecasted at small distances from NSC (several hundreds of meters) during critical phase of the accident that can result in insignificant additional exposure of the personnel being near NSC (up to 1,9% of dose limit). For EZ enterprises personnel being outside this area, radiation impact as a result of this accident is negligible (outside 10 km zone additional dose related to the accident will not exceed 0,011 mSv).

Population Residing at the Adjacent Territories

According to Cl.12 of Law of Ukraine "On Legal Status of the Territory Suffered from Radioactive Contamination Due to the Accident at the Chernobyl Nuclear Power Plant" permanent residence of people within EZ is prohibited. However, due to social and economic conditions in society civil population re-evacuated at their own discretion after the accident live in 13 places of EZ territory (so called "self-settlers").

NSC under normal conditions of operation will not have negative non-radiation impacts on population, including on living in EZ persons re-evacuated at their own discretion ("self-settlers".

For normal conditions of NSC construction negative radiation impact on population is not forecasted. At the boundary of EZ additional individual effective dose of population exposure related to NSC CS-1 construction will make about 2 x 10^{-4} μSv that by many orders of

magnitude less than dose limit quota for referential industrial source allocated for gas and aerosol release (40 μSv year^{-1}). For "self-settlers" living in EZ near the boundary of 1st radiation-regime zone (10 km from construction site) additional individual effective dose will make about 10^{-3} μSv. Additional dose of population exposure including living in EZ persons re-evacuated at their own discretion ("self-settlers") for normal conditions of construction is negligible on the background of doses formed due to contamination of Chernobyl origin.

Under normal operation of NSC individual effective dose of population exposure including living in EZ persons re-evacuated at their own discretion will be also considerably (by orders of magnitude) less than dose limit quota for referential industrial source allocated for gas and aerosol release (40 μSv year^{-1}).

In case of implementation during NSC CS-1 construction of design accidents related to performance of leveling and excavation works, maximum additional individual effective dose of exposure of citizens re-evacuated at their own discretion after the accident, living near the boundary of 1st radiation-regime zone (10 km from construction site) and population at the boundary of EZ will be considerably (in 400 times and more) less than dose limit quota for referential industrial source allocated for gas and aerosol release, and well as considerably less than real dose due to inhalation under wind resuspension of radioactivity of Chernobyl origin and per-oral intake eating local products.

In case of implementation during NSC CS-1 construction of design accidents "Collapse of the crane boom in SO local zone", individual effective doses of population including citizens re-evacuated at their own discretion after the accident will be less than in case of the accidents related to performance of leveling and excavation works during NSC construction.

Design accident "Collapse of the Arch on SO during sliding" is the accident with maximum radiation consequences during NSC construction. In case if implementation of such accident maximum individual effective doses of population at the boundary of 1st radiation-regime zone (10 km from release source) and at the boundary of EZ (30 km from release source) can exceed correspondingly in 24 and 8,8 times dose limit for population (1 mSv year^{-1}) during critical phase of the accident. Besides, this limit can be exceeded also during 2nd year after the accident due to per-oral intake with food contaminated as a result of fallouts.

In the case of realization of the designed accident "Tornado of class 3.0" under the NSC operation on the scenario with the release of 525 g of radioactive dust, the maximum values of the individual effective exposure dose of the population (outside of the EZ boundaries) consist hundreds of μSv, which is comparable with the dose limit for the population (1 mSv). When this is scenario realized the dose limit for the population within the local zone of the distant fallouts may be insignificantly exceeded.

The designed accident "Tornado of class 3.0" on the scenario with the release of 8 kg of radioactive dust is the accident with the greatest radiation consequences among the considered ones under the NSC operation. In the case of this scenario realization, the maximum values of the individual effective exposure dose of the population resided near the EZ boundary for the 1st and 2nd years after the accident may reach 10 mSv, which significantly exceeds the dose limit for Category C (1 mSv). Within the local area of the distant fallouts the total radiation dose for the 1st and 2nd years, may reach 1 - 2.7 mSv.

In the case of realization of the designed accident "Collapse of Б1 beam during dismantling into the Central Hall" under the NSC operation outside the bounds of the Ist radiation regime zone the individual effective dose of the population will consist a few μSv, and will not exceed the dose limit for the population (1 mSv/year^{-1}).

In the case of realization of the designed accident "Collapse of Б1 beam and crane carriage during dismantling into the Central Hall" under the NSC operation outside the bounds of the Ist radiation regime zone the individual effective dose of the population will consist less than

20 μSv, and will not exceed the quota of the dose limit for the reference of the industrial source, allocated for the gas and release (40 μSv / year^{-1}).

In the case of realization of the designed accident "Raise of 8 kg of dust inside the NSC under-arch space" under the NSC operation the maximum values of the individual effective dose for the population will consist several hundreds of μSv, which exceeds the quota of the dose limit for the reference of the industrial source, allocated for the gas and aerosol releases (40 μSv / year^{-1}), and composes the significant contribution of the dose limit for the population (1 mSv / year^{-1}).

In the case of realization of the designed accident "Fire (roof burning)" under the NSC operation outside the bounds of the Ist radiation regime zone the individual effective dose of the population will consist several μSv, and will not exceed the quota limit dose for the reference of the industrial source, allocated for the gas and aerosol releases (40 μSv / Year^{-1}).

Implementation of NSC CS-1 design will have positive impact on social environment in several directions. The basic positive social and economic impact of NSC consists in positive psychological response of society to decrease of risks of SO negative impacts on people and environment. Taking into account long-term existence of SO to completion of its conversion into environmentally safe system, one may state that environmental risk associated with the accidents during NSC construction and operation is considerably less than the risk related to collapse of SO structures without NSC. The second significant positive impact of NSC on population will be creation of additional work places that will partially compensate forecasted during ChNPP decommissioning negative social and economic and demographic consequences for local population.

As a whole the realization of NSC CS-1 project shall result in decrease of the levels of environmental risk and improvement of safety for the social environment.

Qualitative and Quantitative Indices of the Assessment of the Levels of Impacts on the Technogenic Environment

Non-radiation impacts on EZ technogenic objects for normal conditions of NSC CS-1 construction will be limited to modifications in some utilities operated by SSE ChNPP, in particular, power lines and pipelines. Non-radiation impacts under normal conditions of NSC operation will have local character and will not result in additional impacts on technogenic environment outside ChNPP industrial site. Under normal conditions of NSC operation modification of existing conditions of EZ technogenic objects operation is not supposed.

Any possible source of radiation impacts (radioactive contamination of the air and territory as a result of releases, additional exposure of personnel) will not result in any significant additional negative impact on EZ technogenic objects for normal conditions of NSC construction and normal conditions of NSC operation on the background of impacts of Chernobyl origin.

In case of implementation during NSC CS-1 construction of design accidents related to performance of leveling and excavation works, as well as in case of implementation of design accident “Collapse of the crane boom in SO local zone”, radiation impact will be insignificant regarding SSE ChNPP facilities and negligible for other EZ technogenic objects. Design accident “Collapse of the Arch on SO during sliding” is the accident with maximum radiation consequences during NSC construction including regarding EZ technogenic objects. Probability of very high doses of EZ enterprises personnel exposure under such accident shows the necessity during critical phase of the accident to use compulsorily RPPE by personnel working near NSC construction site and to use immediately RPPE by personnel of other EZ enterprises.

Design accident “Tornado of class 3.0” under Scenario 2 is the accident with maximum radiation consequences during NSC operation including regarding EZ technogenic objects. Probability of very high doses of EZ enterprises personnel exposure under the accident “Tornado of class 3.0” shows the necessity during critical phase of the accident to use compulsorily RPPE by personnel working near NSC construction site and to use immediately RPPE by personnel of other EZ enterprises.

Consequences of design accident “8 kg of dust resuspension inside NSC sub-arch space” for all EZ technogenic objects are forecasted as acceptable even without use of RPPE by personnel during critical phase of the accident. Nevertheless, probability of personnel exposure significant doses under such accident shows the necessity to provide for possibility to use immediately RPPE by personnel working near NSC construction site during critical phase of the accident. Consequences of additional contamination of the territory as a result of the accident for all EZ technogenic objects will be insignificant on the background of existing impacts of Chernobyl origin.

In case of implementation of design accidents “Collapse of beam Б1 into central hall during dismantling”, “Collapse of beam Б1 and crane bogie into central hall during dismantling”, “Fire (roof burning)” radiation impact will be insignificant regarding SSE ChNPP facilities and negligible for other EZ technogenic objects.

Measures Guaranteeing the Performance of the Activity in Accordance with the Ecological Requirements for the Exclusion Zone

Resource Saving Measures

Foreseen in the NSC CS-1 design, resource-saving measures cover the following:

- Optimization of the design decisions related to the vertical layout and organization of relief aiming at minimization of the volumes of the earth works;
- Optimization of the General Layout related to the location of the facilities and structures aiming at provision for the shortest technological and transportation relations between them;
- Use of the existing joint engineering networks, unified network of the personnel movement, etc.;
- Rational selection of the foundation structure aiming at saving materials;
- Optimization of the design decisions related to the drilling of bore holes aiming at minimum radiation contamination (radioactive inclusions) of the removed ground;
- Use of clean materials when building in order to avoid additional volumes of RAW;
- Selection of the optimal structural materials of the Arch and its technological systems aiming at provision of durability, low operational costs and power saving;
- Optimization of the design decisions related to the Arch sliding without creation of the huge structure of supports in the local zone;
- Optimization of the design decisions related to the leaning of the western and eastern end-walls aiming at reduction of the scopes of works, and other measures.

Protective Measures

In accordance with the Law of Ukraine "On the general basis for further operation and the decommissioning of Chornobyl NPP and the conversion of the destroyed Power Unit 4 of this NPP into ecologically safe system", the NSC itself is a protective structure that protects personnel, population and environment from nuclear sources and radiation hazards associated with the existence of SO.

In addition, the NSC CS-1 design foresees the following set of design decisions and protective measures during construction, commissioning and operation of the NSC CS-1:

- dust suppression, dust fixation and decontamination;
- the prevention of the removal of radioactive contamination by the personnel and transport means beyond the limits of the site;
- the radiation protection of the personnel, based on the ALARA principle, including the radiation control, organization of shielding of working places, optimization of movement routes, use of PPE, etc.;
- the arrangement of protection from undesired atmospheric phenomena (lightning protection, drainages, shower sewage, etc.);
- the radiation monitoring of the environment;
- emergency response.

In particular, the calculations of efficiency of use of measures on shielding related to the construction and installation of personnel implemented in NSC CS-1 design demonstrated that in the result of their realization the design-based prevented dose may constitute more than 50 man*Sv.

Restoration Measures

Under the ordinary conditions of construction and operation of the NSC CS-1 no impacts on the environment that exceed permissive levels are expected. Therefore, restoration measures for the normalization of the individual components of the environment will not be required.

Decisions related to the arrangement of the territory are taken in NSC CS-1 design considering its existing radiation pollution.

Compensatory Measures

During implementation of works on the NSC CS-1 construction and NSC operation damage to environment is not expected. Therefore implementation of compensatory measures for improvement of condition of environment is not provided.

List of Residual Effects

The EIA in the frame of the NSC CS-1 design considers the potential residual environmental impacts during NSC CS-1 construction and NSC operation including natural, social and technological environment. The evaluation showed that all components of the environment will not suffer the impacts that would require performance of the additional compensatory or remedial actions.

The residual environmental impacts during NSC CS-1 construction and NSC operation will be expressed in design releases of radioactive substances into the atmosphere and consequently in additional radioactive contamination of the adjacent territories of the NSC construction site at the expense of deposit of the design releases of radioactive substances, which will not lead to significant changes in the current level of contamination of Chernobyl origin.

The residual impacts during NSC CS-1 construction will also be expressed in creation of certain amount of RAW and technological materials, handling of which will require additional work performance.

As confirmed by the calculations performed in the EIA, the benefit from NSC CS-1 operation, which is stipulated by the protective functions of the confinement related to the environment and it will significantly exceed the potential damage for the environment related to the construction of NSC CS-1.

Realized Measures Related to the Information of the Public with respect to the Scheduled Activity, Its Purpose and Ways of its Performance

Society was informed on scheduled activity, goals and ways of its implementation within the framework of consultation with public regarding the issues of creation of new safe confinement above "Shelter" Object including public consultations held due to completion of NSC (CD) FS development.

In order to inform public regarding scheduled activity under NSC CS-1 design, its goals and ways of implementation, SSE ChNPP during development of NSC CS-1 EIA continued current work with public, in particular, in the form of activity of SSE ChNPP Information centre, contacts with public organizations of environmental, professional and scientific and engineering profile, contacts with mass media, as well as updated information regarding this and other projects on web-site of Chernobyl NPP.

After revision of NSC CS-1 EIA (LP-6) state administration bodies may decide to seek public consultations if there have been substantive changes in NSC design that affect the conclusions of the NSC Conceptual Design EIA.

Liabilities of the Employer Related to the Implementation of the Design Decisions Meeting the Norms and Rules of the Environmental Protection and Requirements of the Ecological Safety at all Stages of NSC Construction, Commissioning and Operation

Performing the functions of operating organization, the administration and the personnel of SSE ChNPP oblige themselves:

- Follow the legislation, prevent the contamination and permanently improve the system of ecology management;
- Realize the technical, organizational and other decisions foreseen by the NSC CS-1 design considering the comments and proposals of the regulatory and surveillance authorities related to the protection of the personnel, population and environment;
- Correct the forecasted environmental assessments based on the fact of specification of initial data during development of design documentation for the further stages of NSC creation and timely submit the appropriate information to the governmental agencies and public;
- Within the entire period of the operation of Shelter object to follow the technological regulations, bear the raw and material expenditures in facilitation of the safe operation, and by this guarantee the meeting of ecological requirements in environmental protection.

Employer of NSC CS-1 design:

SSE Chernobyl NPP Director General

NSC CS-1 General Designer:

NOVARKA Joint Venture Project Director

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