Annex 5
to the SES of Ukraine
letter
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Needs for technical re-equipment of the branch "Separate Subdivision" "Emergency and Technical Centre" of the Joint Stock Company "National Nuclear Energy Generating Company "Energoatom"

# For radiation survey and dosimetric monitoring:

#### Electric aspirator - 2 pcs.

It is necessary for taking air samples by pumping a certain volume of air through filters of the AFA-VP-20 (AFA-VP-10) type. Main characteristics:

- sampling speed (set by the operator) in the range from 5 to 100 l/min;
- sample volume (set by the operator) in the range from 50 to 2000 l;
- built-in battery not less than 48 mAh;
- battery life:
  - at a flow rate of 10 l/min for at least 10 hours;
  - at a flow rate of 100 l/min at least 8 hours;
- number of channels 1 pc;
- power supply (AC/DC) 220V/12V;
- weight no more than 4.5 kg;
- dimensions 300x250x130 mm;
- built-in electronic sample volume counter with a basic relative error of no more than 4 %;
- folding aluminium tripod, case, allongs for AFA-VP-10 and AFA-VP-20 filters.

# Semiconductor detection unit based on especially pure germanium - 1 pcs.

It is necessary for spectrometric analysis of water, air and soil samples with the main characteristics and dimensions of the BDEG-30190 detection unit.

#### For decontamination work:

# **Laser Cleaning Machine – 1 pcs.**

It is necessary for decontamination work at nuclear power plants to remove tar, oil, dirt, rust, paint, etc. This is a new generation of industrial laser systems for surface cleaning. This machine uses an advanced laser source, laser optical scanners and control system to meet the requirements of the metal surface cleaning process.

The Mobile Autonomous Mobile Station for Personnel Sanitation (MASS) is deployed in a non-contaminated area near or directly in the area of operations of the Emergency Group of the ATC branch, which is subject to special treatment in all weather conditions. The PSS is an integral complex that ensures the conduct of:

- complete decontamination (decontamination) of personnel;
- Dosimetric monitoring of personnel before and after decontamination;
- providing personnel with clean clothing and PPE after decontamination;
- separate collection of dirty overalls and PPE by type of material and levels of its radioactive contamination for further treatment or disposal;

- collection of water after personnel decontamination for further transfer to storage facilities.

## For underwater technical works:

#### Rapid deployment diving station (RDDS) - 1 set

It is necessary for high-quality diving operations. Designed for deployment of a diving post during rescue operations and provides air supply in an amount that allows two divers to work simultaneously at depths up to 60 metres with lung ventilation up to 120 l/min (at an inlet pressure of at least 50 kgf/cm2). The use of the VSSR significantly increases the diver's time in the water, which makes it possible to reduce the time of diving operations and improve the quality of their performance during scheduled maintenance and modernisation works. The SCUBA has a significant compressed air supply, which makes it possible to carry out diving operations to search for and recover a container with radioactive waste when it falls into the water and to eliminate an accident at a nuclear power plant in contaminated water.

# **Underwater metal detector type JW FISHERS PULSE 8X** - 1 pcs.

It is necessary for surface or underwater use during search operations. There is a need to use a metal detector to search for metal objects in the aftermath of a nuclear power plant accident and during scheduled repair and modernisation works, as well as to find a container with radioactive waste if it falls into the water.

## **CHASING M2 PRO MAX type remotely operated vehicle** - 1 pcs.

It is necessary to perform underwater reconnaissance and obtain objective visual information about the state of underwater objects in real time in conditions where the participation of a diver is impractical (water contamination with chemical and radioactive substances, at great depths). For searching for objects on the bottom, underwater photo and video recording with the possibility of recording for further detailed analysis, for inspection of underwater communications, internal inspection of underwater tunnels and pipelines.

#### **Mobile barocomplex** - 1 set

It is necessary for training diving descents and treatment of specific diving diseases.

## Dry coveralls with a flange for a helmet - 2 pcs.

It is necessary for operation in particularly difficult conditions of prolonged exposure to aggressive environments during the liquidation of an accident at a nuclear power plant.

# **Aqua Lung G3000SS diving helmet** - 2 pcs.

It is necessary to ensure the performance of a diver underwater when working in conditions of radiation contamination of water.