Nuclear Safety Council Instruction IS-10, of 25th July 2006, Establishing the Criteria for reporting events to the Nuclear Safety Council by the nuclear power plants

Published in the Official State Gazette (BOE OF 3rd November 2006)

Article 2 a) of the Act 15/1980, dated 22 April, on the Creation of the Spanish Nuclear Safety Council, as amended by the 1st Additional Provision to the Act 14/1999, dated 4th May, on the Public Prices and Fees rendered by the Nuclear Safety Council, grants this national organization the authority 'to develop and approve all required Instructions, Circular Letters, and Technical Guides with regard to nuclear and radioactive facilities and to any activities relating to nuclear safety and radiation protection'.

On the other hand, the revision currently in force of the CSN Safety Guide GS 1.06, issued in January 1990, contains some guidelines for the operators of Spanish nuclear power plants relating to the types of incidents to be reported to CSN. Such guidelines, however, have not always been systematically drawn up in the section on Administrative Standards of the various Technical Specifications of the Spanish nuclear power plants. In view of the time elapsed since their publication, of the problems detected in their specific application over the years, and of the various communications issued by the Nuclear Safety Council with the purpose to amend or clarify the reporting criteria, and, also, bearing in mind the doubts arisen during the implementation of the improved technical Specifications at Cofrentes nuclear power plant (as it was remarked that part of the safety systems traditionally in use had been left outside the framework of the specifications), it has been deemed necessary to initiate a recapitulation and discussion process on which reporting requirements should currently apply to these facilities.

In order to facilitate the reporting process of incidents occurred in nuclear power plants the Nuclear Safety Council herein establishes and lists both the reporting criteria and the reportable incidents and sets forth a maximum period for the reporting of each of such incidents to the Nuclear Safety Council.

By virtue of the foregoing, in accordance with the legal authorisation provided by Article 2 a) of the Act 15/1980, dated 22^{nd} April, on the creation of the Spanish Nuclear Safety Council, as amended by the 1st Additional Provision to the Act 14/1999, of 4th May, in consultation with all affected sectors, and after receiving all appropriate technical reports,

This Nuclear Safety Council, in its meeting on 25th July 2006, has agreed upon the following provisions:

One. Objective and Scope of Application.

The purpose of this Instruction is defining the criteria applied by the Nuclear Safety Council in order to require the operators of nuclear power plants to report any incident occurred in their facilities that may affect the nuclear safety or radiation protection corresponding to a nuclear power plant

Two. Definitions.

The definitions of the terms and concepts used in this Nuclear Safety Council Instruction shall correspond to those set forth by the legal and regulatory documentation below:

Act 25/1964, dated 29 April, on Nuclear Energy (Official State Gazette No. 107, dated 4th May 1964).

Act 15/1980, dated 22 April, on the Creation of the Spanish Nuclear Safety Council (Official State Gazette No. 100, dated 25th April 1980).

Royal Decree 1836/1999, dated 3 December, approving the Regulations on Nuclear and Radioactive Facilities (Official State Gazette No. 313, dated 31st December 1999).

Royal Decree 783/2001, dated 6th July, approving the Regulation on Health Protection against Ionising Radiation (Official State Gazette No. 178, dated 26th July 2001).

Royal Legislative Decree 1/1994, dated 20 June, approving the revised text of Spain's General Law on Social Security (Official State Gazette dated 29th June 1994).

Furthermore, the following definitions shall apply to the context of this Instruction:

'Safety barriers': Any structures, systems, or components associated with:

- a) Nuclear fuel cladding and ceramic matrix
- b) Pressurised vessel of the reactor cooling system
- c) Containment
- d) Fuel elements pool

'Safety structures, systems, or components': Any structures, systems, or components necessary to:

- a) Achieve a safe shutdown of the plant
- b) Remove residual heat
- c) Confine and control the release of radioactive material
- d) Mitigate the consequences of any accident described in the Safety Study or in the Probabilistic Safety Assessment

'Loss': Any situation where something cannot be found on its usual place or where its actual location is ignored.

'Flood': Any unforeseen spill of liquid into any cubicle of the plant exceeding the design capacity of normal drainage or evacuation systems. Also, the incapacity of the drainage or evacuation systems to perform their intended functions resulting in any of the following circumstances:

- 1. The spill extends outside the cubicle where it started
- 2. The spill level reaches the metallic components of an electrical system
- 3. The spill level exceeds 50 percent of the height of the mounting support of any mechanical components
- 4. The spill level exceeds 50 percent of the height where any instruments are located

'Release of radioactive materials or substances': Any dispersion of radioactive materials or substances over the established limits, either through a planned way or not.

'Unplanned release': Any unexpected or non-documented dispersion of radioactive materials or substances.

'Uncontrolled release': Any dispersion of radioactive materials or substances outside the expected and documented limits.

'Unscheduled shutdown': Any shutdown of the power plant (i.e., its disambly from the electric power system) taking place within 72 hours from the time when the cause or condition originating the shutdown is first detected.

'Nominal thermal power': Thermal power as defined in the Technical Specifications of nuclear power plants.

'Operational dose restriction': Dose value that, when exceeded during the operation of the facility, implies specific action and decision taking. This value is below both the legal public dose limit and the maximum level established by the Administration, in accordance with Article 6 of the Spanish Regulation on Health Protection against Ionising Radiation, in the optimisation process of radioactive effluents in a nuclear power plant

'Invalid signal': Any signal generating a request for action according to the following reasons:

a) If automatic, because it does not match the actual values of the plant parameters requiring the corresponding safety function.

b) If manual, because it was not originated by a voluntary action from the plant personnel.

'Unscheduled power variation': Any power variation taking place within 72 hours from the time when the cause or condition originating the change is first detected. This includes any unexpected power variation occurring during a scheduled evolution or test. Any power reductions requested by the load dispatch centre in order to meet specific grid control requirements shall, however, be excluded.

'Dumping of radioactive materials or substances': Any release of radioactive materials or substances outside their confinement limits performed through an appropriate way, i.e., one described in the plant procedures.

Three. Responsibility of Operators.

Nuclear power plant operators shall be responsible for meeting the requirements of this Instruction within the deadlines and according to the procedures herein set forth.

Four. Reporting Criteria.

Nuclear power plant operators shall adhere to the following criteria when notifying incidents to the Nuclear Safety Council:

Reportable incidents shall be those specified in Section Five hereof, provided that they had not been previously reported to the Nuclear Safety Council as a consequence of the declaration of an emergency situation under the station's Internal Emergency Plan (PEI). For this reason, some of the criteria herein included may be declared under any of the categories of the plants' PEIs depending on the specific conditions in which they occur. In case an incident fails to reach the corresponding thresholds, it shall be reported through these criteria.

Where required, and provided a definition is possible, the criteria herein included shall be completed with quantitative, qualitative, or numerical criteria specific to each station. This shall be done at the time of inclusion of the criteria in the station's procedures, which shall be then submitted to the Nuclear Safety Council for evaluation in order to ensure necessary uniformity in the reporting system.

In addition to the above, any incidents that, in the operators' opinion, may affect safety shall always be reported.

Incidents are to be reported to the Nuclear Safety Council in accordance with the formats established in Appendices I and II hereto, as soon as possible and always within the maximum period stated for each type of format (1 hour or 24 hours); all preliminary information available at that time shall be included. In the event of incidents to be reported within 1 hour, a second notification shall always be sent within the subsequent 24 hours; this report shall include all available information on the incident up to that time.

In all cases, emergency situations included, a complete and detailed report on the incident shall be submitted to the Nuclear Safety Council within a maximum period of 30 days. The report shall follow the format set out in Appendix III and shall include all information obtained from the time of occurrence of such incident, highlighting the errors found and the corrective actions taken. In the particular event that a root cause analysis (RCA) of the incident is to be performed but fails to be available within one month after the time of occurrence, the 30-day report shall state a commitment date for the submission of a revised report including the findings of the RCA.

All reporting periods shall be calculated from the moment when the occurrence of the incident is first discovered.

Incidents shall be reported to the Nuclear Safety Council through a reliable method, preferably in this order– by online registration, fax, or simple registration. On the other hand, the plants' Internal Inspectorate shall be informed as soon as possible.

Apart from the established reports already mentioned, after the occurrence of an incident the following shall also be immediately notified– any further deterioration in the safety level of the station or any worsening of its conditions, the findings of the evaluation of these conditions, the effectiveness of the response or the corrective actions taken, along with any anomalies found by the operator in the plant's behaviour.

All reports submitted to the Nuclear Safety Council shall be further revised in order to cover any of the following circumstances:

1-hour reports:

1. Any significant deterioration in the evolution of the incident substantially affecting the contents of the already submitted report.

24-hour reports:

- 1. Any additional deterioration occurred during the incident that has not been reported.
- 2. Any unfavourable, unexpected, or anomalous evolution of the plant condition as a direct consequence of the incident.

30-day reports:

- 1. RCA findings.
- 2. Any aspects that, in the operator's opinion, were not completely or adequately covered.

The Nuclear Safety Council may require additional information or the revision of any reports on a specific incident at any time and in a reasonable manner as long as this is deemed necessary to fully understand the incident.

Should more than one criterion exist whereby an incident is to be reported to the Nuclear Safety Council, it shall only be necessary to submit one notification or report, which, however, shall state all corresponding criteria. The reporting period shall be the shortest applicable.

Should any controversy arise between the Nuclear Safety Council and the plant's operator regarding the applicability of the reporting criteria of an incident, the opinion of the Nuclear Safety Council shall prevail and the corresponding notification shall be performed in accordance with the guidelines reasonably provided by the Nuclear Safety Council. The operator may express their disagreement in the report itself.

All definitions herein included form an integral part of the reporting criteria during their application.

Five. Reportable criteria

- A. Records
 - 1. Destruction, theft, loss, or unauthorised alteration of any records relevant to the facilitity's safety or security (24-hour report). (The operator shall complete this criterion in accordance with the facility's quality assurance programme.)
- B. Occupational Safety and Health
 - 1. Any event in which somebody could have received –on a preliminary estimation– a dose from external irradiation or internal contamination exceeding, in a single exposure, any of the dose limits established by Spanish regulations (24-hour report).
 - 2. Any event in which, after accumulated exposure, an exposed worker exceeds –or is considered to have exceeded– any of the dose limits established by Spanish regulations (24-hour report).
 - 3. Any event in which, in a single exposure or after accumulated exposure, an exposed worker exceeds an unplanned effective dose of 20 mSv per year during his stay at the nuclear power plant (24-hour report).
 - 4. Any work accident occurred at the facility premises in which somebody dies or needs to be evacuated in serious condition from the facility in order to receive medical treatment. The classification of 'serious condition' shall be ascribed upon the medical diagnosis given to the casualty (24-hour report).
- C. Releases of Radioactive Materials or Substances
 - 1. Any unplanned or uncontrolled release of radioactive materials or substances outside the facility involving a public dose over $1 \mu Sv$ (1-hour report).

- 2. Any unplanned or uncontrolled release of radioactive materials or substances inside the facility but outside its radiological protection area requiring or having required an area reclassification for at least 24 hours in accordance with dose or contamination criteria (24-hour report).
- 3. Any unplanned or uncontrolled radioactive release of materials or substances inside both the facility and its radiological area that:
- 3.1. Produce an increase of the dose area rate by at least 20 mSv/h and, thus, causes:

The reclassification of the affected area, or

A final dose rate over 50 mSv/h within a controlled area of restricted permanence (24-hour report);

- 3.2. Requires or would have required the reclassification of the affected area for contamination as a restricted permanence area or prohibited access area (24-hour report); or
- 3.3. Involves or would have involved the implementation of unplanned special surveillance or protective measurements for a group of 20 or more workers (24-hour report).
- 4. Any release causing that the accumulated dose for the last 12 months exceeds the operational dose limit (24-hour report). (The operator shall complete this criterion with numeric values.)
- Any off-site release exceeding the effluent monitoring systems' limit levels for instantaneous releases, as stated in the Technical Specifications (1-hour report). (The operator shall complete this criterion with the limit levels for instantaneous releases stated in the Technical Specifications.)
- 6. Exit of radioactive materials or substances outside the facility infringing or having infringed any of the radiation intensity or contamination limit level established by the Spanish regulations on the transport of dangerous goods. Detection of non-declassified radioactive materials or substances that had left the facility through the procedure established for non-radioactive materials or substances (24-hour report).
- 7. Disappearance (loss or theft) of any radioactive material or substance whatsoever (1-hour report).
- D. Technical Specifications
 - 1. Initiation of the nuclear power plant shutdown sequence, required by plant's Technical Specifications (1-hour report).

- 2. Change to a condition under the Tecnhical Specifications requiring the initiation of the shutdown sentence, as long as this is eventually not performed (24-hour report).
- 3. Non-compliance with a technical specification operating condition and its associated action (1-hour report).
- 4. Non-compliance with one of the technical specification surveillance under the Technical Specifications; i.e., failure to fulfil this requirement in due time or in the correct way, unless a declaration for non-compliance with the corresponding limit operating condition is issued before the established period expires (24-hour report).
- 5. Infringement of the maximum parameter value of a technical specification operating condition that may affect the safety barriers or the systems necessary for controlling reactivity or power distribution in the reactor core (24-hour report).
- E. Operation
 - 1. Unplanned shutdown and unplanned thermal power variation over 20 percent of the maximum thermal power authorised (1-hour report).
 - 2. Unexpected response in the station that may have resulted in unscheduled reductions in the safety margins, including situations of unnoticed criticality, uncontrolled depressurisation, abnormal pressure transients in the reactor cooling system, or unexpected transients for reasons of design (1-hour report).
 - 3. Any incident or condition affecting the nuclear power plant internally and involving a potential impact on its safety that may affect the safety barriers or produce a decrease on the operating personnel's capacity to run the plant safely. Some examples include developing incidents with detection of probable damages in the fuel, leaks in the pressure barriers, loss of containment integrity, or abnormal transients in coolant pressure or temperature; release of toxic or flammable substances; explosions on the premises; strikes affecting the plant's operating conditions or safety; and the crash of an airplane or other type or aircraft on the premises (1-hour report).
 - 4. Confirmed fire incidents lasting less than 10 minutes and fire outbreaks capable to trigger the corresponding detection systems, provided that they occur in cubicles, zones, or fire areas where safety structures, systems, or components are located. Should the detection systems be out of order, the fires or fire outbreaks to be notified shall be those that would have triggered the fire detectors if they were operating or those that require the use of fire extinguishing equipment (1-hour report).
 - 5. Internal flooders, provided that may occur in areas where safety structures, systems, or components could have been affected (1-hour report).

- 6. Any other events not listed before that, in the operator's criteria, could have a significant impact on safety (24-hour report).
- F. Safety Systems
 - 1. Unplanned automatic or manual activation of the reactor protection system (1-hour report when critical reactor in PWR or when any of the control rods is not fully inserted into BWR; 24-hour report when sub-critical reactor in PWR or when all control rods are fully inserted in BWR).
 - 2. Any request for an unplanned action, either manual or automatic, in the safety systems, even if such request occurs in an operation mode where safety systems are not required. Requests arising from an invalid signal generated when the system has gone out of service correctly do not need to be notified (24-hour report).
 - 3. Failure of a safety valve or a group of safety valves of the safety systems –steam generators included– to open at their corresponding opening pressure during a transient, thus preventing compliance with the system's design bases. System tests are excluded (1-hour report).
 - 4. Total loss of the ordinary cooling systems used for the spent fuel elements stored in the plant (1-hour report). (The operator shall complete this criterion by listing the systems affected, both in run and stop conditions.)
 - 5. Unplanned reduction of shield water around stored fuel elements (including temporal storages in off load charging state) below the minimum level required (1-hour report). (The operator shall complete this criterion by providing numeric values in terms of measured level.)
 - 6. Loss of safety systems redundancy over 25 percent of its total capacity during a transient (including situations when relief or safety valves remain open at a pressure below closing limit setting) (24-hour report).
 - 7. Any event or condition (including the identification of deficiencies in the plant's design, construction, assembly, operation, maintenance, safety analysis, analytical methods, personnel performance, or operation procedures) that, as deemed reasonable at the time of notification, might have prevented safety structures or systems from performing their safety function correctly (24-hour report).
 - 8. Any event where a single cause or condition results in, at least, either the inoperability of an independent train or channel in multiple safety systems or the inoperability of two independent trains or channels in a single safety system (24-hour report).
 - 9. Any event or condition that, as a consequence of a single cause, might have prevented two or more trains or channels within different safety systems from performing their security function correctly. This includes procedural errors,

equipment failure, and the identification of inadequate procedures and deficiencies in design, analysis, manufacture, or construction. This excludes, however, normal or foreseeable design dependencies between system trains and channels, as well as normal and foreseeable degradation or wear and tear (24-hour report).

- G. Other risk situations not included in the licensing documents:
 - 1. Identification of unanalysed conditions in the plant that may reduce its safety levels significantly (24-hour report).
 - 2. Significant loss of the plant's (Control Room and Technical Support Centre, TSC) communication capability with SALEM (Incident & Emergency Centre –IEC– of the Spanish Nuclear Safety & Security Council), i.e., loss of the following communication means for over six hours (1-hour report):

All redundancies in the 'dedicated' data transmission system (safety parameter transmitter system)

All redundancies in the 'dedicated' voice communication system (IP thelephony)

- 3. Any event or condition requiring safety-related actions not included in the nuclear power plant's procedures (1-hour report).
- H. External Treat
 - 1. Any natural phenomena or external conditions that could pose a potential treat to the plant's safety or that could diminish the operating personnel's capacity to run the plant safely. Some examples include damages in dams threatening the integrity of their structure, wind or rainfall exceeding those registered for a 10-year return period, uncontrolled fires at a distance of less than 5 km from the perimeter and heading towards the station, release of explosive, toxic, or dangerous substances, explosions near the premises, earthquakes detected by the station's instruments, crash of airplanes or other types or aircrafts near the premises, and abnormal air traffic conditions (1-hour report). (The operator shall complete this criterion by specifying all necessary values, if any.)

Six. Exemptions.

The operators being the subject of this Instruction may apply for a temporary exemption from fulfilment of any of the requirements herein as long as that they furnish adequate justification for such request, together with a description of their alternative procedure to comply with the established criteria.

Seven. Infranctions and Sanctions

Without prejudice to the civil, pernal or other reposnabilities that may be incurred, the failure to comply with the provisions of this Instruction, shall be sanctiones according to

what is established in articles 91 to 95, both inclusive, of Law 25/1964, of 29^{th} April, on Nuclear Energy

Single Final Provision

This present Instruction shall enter in force on the day following its publication in the Spanish Official Gazette.

Single Repeal Provision

Any provision of equal or inferior rank that is contrary to this present Instruction shall be repealed.

In Madrid, on this 25th July 2006

Signed by the President of the Nuclear Safety Council, Ms. María Teresa Estevan Bolea.

APPENDIX I

| CSN I | LOGO | REPORT O | N AN INCIDEN | NT TO BE NOT | TIFIED TO CSI | N IN 1 HOUR | Sheet 1 of | |
|-----------------|---|-------------------------------------|--|--|---|-----------------------|----------------|--|
| Report No. Rev. | | . DATE Time of occurrence | | | | | | |
| | | DAY | MONTH | YEAR | | (hh:mm) | | |
| Statio | n/Unit | Person repor | ting the incident (r | name/position) | Date/Time of | of notification | Telephone | |
| | | e the incident l electric MW) | | r at the time of not ermal and electric | | Internal Inspec | torate informe | |
| | | | | | | YES Î | NOÍ | |
| | | | , 1 | TYPE OF INCIDE | NT | | • | |
| C1 | | lannedor uncontr dose over 1 μSv | olled release of rac | dioactive materials | s or substances ou | tside the facility in | volving | |
| C5 | | | acility exceeding the s , as stated in the | | ring systems' limit cations | levels | | |
| C7 | Disappe | earance (loss or th | eft) of any radioac | tive material or su | bstance whatsoev | er | | |
| D1 | Initiation | n of a shutdown se | equence, when rec | quired by the Tech | nical Specification | S | | |
| D3 | Non-cor Specific | | nit operating condi | tion and its associ | ated action under t | he Technical | | |
| E1 | Unplanr | ned shutdown of t | ne plant or power v | variation over 20 % | 6 of the max. therm | nal power authorise | ed | |
| E2 | | cted response in t afety margins | he plant that may | have resulted in u | nplanned reductior | าร | | |
| E3 | on its sa | | | | nternally and involv operating personr | | act | |
| E4 | the corre | esponding detecti | | ded that they occu | outbreaks capable r in cubicles, zones | | | |
| E5 | Internal | | | | v structures, system | ns, or components | | |
| F1 | | | nanual activation o / inserted into BWI | | ection system (critic | cal reactor in PWR | | |
| F3 | Failure of a safety valve or a group of safety valves of the safety systems –steam generators included– to open at their corresponding opening pressure during a transient, thus preventing compliance with the system's design bases | | | | | | | |
| F4 | | | | sed for the spent f | uel elements store | d in the station | | |
| F5 | Unexpected reduction of shield water around stored fuel elements (including temporary storage during recharge) below the minimum level required | | | | | | | |
| G2 | Significa | ant loss of the pla | nt's (Control Room | and TSC) commu | unication capability | with SALEM | | |
| G3 | Any inci | dent or condition | requiring safety-re | lated actions not in | ncluded in the plan | t's procedures | | |
| H1 | | | or external conditio | | e a potential impac | t to the plant's safe | ety | |

| CSN LOGO | REPORT ON AN INCIDENT TO BE NOTIFIED TO CSN IN 1 HOUR | Sheet | 1 of N* | | | | | | | | |
|--------------|--|-------|---------|--|--|--|--|--|--|--|--|
| | DESCRIPTION OF THE INCIDENT | | | | | | | | | | |
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| | SITUATION AT THE TIME OF NOTIFICATION | | | | | | | | | | |
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| | MEASURES TAKEN AND PLANNED | | | | | | | | | | |
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| RELEASES OF | RADIOACTIVE MATERIALS OCCURRED (Please state quantity) | | | | | | | | | | |
| ARE RELEASES | S OF RADIOACTIVE MATERIALS EXPECTED? | YES Î | NOĨ | | | | | | | | |

* As many as necessary.

APPENDIX II

| CSN LOGO REPORT ON AN INCIDENT TO BE NOTIFIED TO CSN IN 24 HOURS | | | | | | | | s | heet | 1 of N | | | |
|---|-------------------------------|--------------------|-----------------------|--------------------------|---------|--------|----------|--------|-----------|-----------------|---------|--------|-------|
| Report No. | Rev. | | DATE | | | | | - | | occurre | nce | | |
| | | DAY | MONTH | YE | AR | | (hh:mm) | | | | | | |
| Station/ | Unit | Person repor | ting the incident (na | ame/pos | ition) | | Date/ | Time o | f notific | ation | | Telep | hone |
| | | | | at the tine frmal and | | | | | Inte | rnal Insp | ectorat | e info | ormed |
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| | | | т | YPE OF | INCID | ENT | | | | | | | |
| A. Record | s | | | | A1ĺ | | | | | | | | |
| | | Safety and Health | | | B1ĺ | B2ĺ | B3í | B41 | | | | | |
| | | adioactive Materia | als or Substances | | C1 | C2ĺ | C3ĺ | C4ĺ | C5ĺ | C6ĺ | C7ĺ | | |
| D. Technic | cal Spe | cifications | | | D1ĺ | D2ĺ | D3ĺ | D4ĺ | D5ĺ | | | | |
| E. Operati | on | | | | E1ĺ | E2ĺ | E3ĺ | E4í | E51 | E6ĺ | | | |
| F. Safety | System | S | | | F1 | F21 | F3ĺ | F4í | F5ĺ | F6 ¹ | F7ĺ | F8í | F9í |
| G. Other F | Risk Sit | uations | | | G1ĺ | G2ĺ | G3ĺ | | | | | | |
| H. Externa | al Even | ts | | | H1ĺ | | | | | | | | |
| | DESCRIPTION OF THE INCIDENT | | | | | | | | | | | | |
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| | | | SITUATION A | T THE T | | F NOT | IFICATI | ON | | | | | |
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| | MEASURES TAKEN AND PROGRAMMED | | | | | | | | | | | | |
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| RELEASE | S OF F | RADIOACTIVE MA | ATERIALS OCCUR | RRED (P | lease s | tate q | uantity) | | | | | | |
| ARE RELEASES OF RADIOACTIVE MATERIALS EXPECTED? | | | | | | | | YE | SĨ | NOÎ | | | |

| CSN LOGO | REPORT ON AN INCIDENT TO BE NOTIFIED TO CSN IN 24 HOURS | Sheet | 1 of N* | | | | | | | |
|-----------------------------|--|-------|---------|--|--|--|--|--|--|--|
| DESCRIPTION OF THE INCIDENT | | | | | | | | | | |
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| | SITUATION AT THE TIME OF NOTIFICATION | | | | | | | | | |
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| | MEASURES TAKEN AND PROGRAMMED | | | | | | | | | |
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| | RADIOACTIVE MATERIALS OCCURRED (Please state quantity) | [| [| | | | | | | |
| ARE RELEASES | OF RADIOACTIVE MATERIALS EXPECTED? | Î YES | NOÎ | | | | | | | |

* As many as necessary.

APPENDIX III

| CSN LOGO REPORT ON AN INCIDENT TO BE NOTIFIED TO CSN IN 30 DAY | | | | | | | 'S | Sheet ' | 1 of N | | | |
|--|---------------------------|--------------|------------|--|---------|-----------|-------|---------|--------|------|-----|-----|
| Report No. Rev. | | | | Time of occurrence | | | | | | | | |
| | DAY | YE | AR (hh:mm) | | | | | | | | | |
| STATION / UNIT | | | | | | | | | | | | |
| TITLE: | | | | | | | | | | | | |
| | | RE | PORTIN | G CRI | ERIA | | | | | | | |
| A. Records | | | | A1ĺ | | | | | | | | |
| B. Occupational | Safety and Health | | | B1í | B2í | B3ĺ | B4ĩ | | | | | |
| | adioactive Materia | | | C1ĺ | C2ĺ | C3ĺ | C4Í | C5ĺ | C6ĺ | C7Ĩ | | |
| D. Technical Sp | ecifications | | | D1ĺ | D2ĺ | D3ĺ | D4آ | D5ĺ | | | | |
| E. Operation | | | | E1 | E21 | E3ĺ | E41 | E5 | E6ĺ | | | |
| F. Safety System | IS | | | F1 | F2Í | F3Í | F4ĺ | F51 | F61 | F71 | F8í | F9í |
| G. Other Risk Sit | | | | G1 | G2ĩ | G3ĺ | | | | | | |
| H. External Even | ts | | | H1 | | | | | | | | |
| | | F | LANT C | ONDIT | ION | | | | | | | |
| | INITIAL | | | | | | | FINAL | | | | |
| | Initial power in t | | | | | | | ower in | | | | |
| (5 | % thermal and ele | ctric power) | | (% thermal and electric power) | | | | | | | | |
| Operation at s | | ot standby | | Operation at steady power I Hot standby | | | | | | | | |
| J Power increas | | ot shutdown | | 1 Power increasing | | | | | | | | |
| 1 Power decrea | | old shutdown | | Power decreasing Cold shutdown Startup (until coupling) Recharge | | | | | | | | |
| Startup (until of a startup) | coupling) Re | echarge | | Star | tup (un | itil coup | ling) | ١F | Rechar | ge | | |
| | | RA | DIATIO | N EFFI | ECTS | | | | | | | |
| | DOSE TO PERS | SONNEL | | | E | EMISSI | ONS T | O THE I | ENVIR | ONME | INT | |
| آ No effec | cts | | | Í No effects | | | | | | | | |
| آ Within a | uthorised limits | | | ¹ Within authorised limits | | | | | | | | |
| ¹ Beyond | the authorised lim | iits | | Description of the authorised limits | | | | | | | | |
| | | CHARACT | ERISTIC | S OF T | HE IN | | г | | | | | |
| DURATION OF | THE INCIDENT O | R CONDITION: | | | | | | | | | | |
| SAFETY SYSTE | SAFETY SYSTEMS ACTIVATED: | | | | | | | | | | | |
| | | | | | | | | | | | | |
| NUMBER OF AN | IOMALIES: | | | | | | | | | | | |

| CSN LC | GO | REPORT ON | N AN INCIDEN | T TO BE NOT | IFIED TO CSN IN 30 DAYS | Sheet 1 of N* | | | |
|------------|---------------|------------------|-------------------|-----------------|-------------------------------|---------------|--|--|--|
| Report No. | Rev. | DAY | DATE MONTH | YEAR | Time of occurrence (hh:mm) | <u>;</u> | | | |
| | _ | | | | () | | | | |
| STATION | / UNIT: | | | | | | | | |
| TITLE: | | | | | | | | | |
| 1 D | ESCR | IPTION OF T | HE INCIDENT | | LIES | | | | |
| 1. | 1 In | cident summa | iry | | | | | | |
| 1. | 2 B | ackground and | d operational e | xperience rela | ted with the incident | | | | |
| 1. | 3 In | itial conditions | 3 | | | | | | |
| 1. | 4 C | hronological d | escription of th | e incident | | | | | |
| 1. | 5 D | etailed descrip | otion of the inci | dent and the a | nomalies occurred | | | | |
| 2 C | AUSE | S OF THE IN | CIDENT | | | | | | |
| 2. | 1 D | irect causes | | | | | | | |
| 2. | 2 D | escription and | findings of the | e root cause an | alysis (when applicable) | | | | |
| 3 C | ORRE | | ONS | | | | | | |
| 3. | 1 In | nmediate corre | ective actions | | | | | | |
| 3. | 2 D | eferred correc | tive actions | | | | | | |
| 4 C | 4 CONCLUSIONS | | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |

* As many as necessary.

| CSN LC |)GO | REPORT ON | AN INCIDEN | T TO BE NOT | IFIED TO CSN IN 30 DAYS | Sheet 1 of N* | | | | |
|------------|------------------------------------|---------------------|---------------|-------------------------|--|---------------|--|--|--|--|
| Report No. | Rev. | DAY | DATE MONTH | YEAR | Time of occurrence | e | | | | |
| | | DAT | MONTH | TEAR | (hh:mm) | | | | | |
| STATION | / UNIT | | | | | | | | | |
| TITLE: | | | | | | | | | | |
| 5 C | ODE I | DESCRIPTION | N OF DAMAGE | S | | | | | | |
| Anomaly | ID | | | | | | | | | |
| | | | | | | | | | | |
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| | | | | | | | | | | |
| Time and | date of | anomaly | | | | | | | | |
| | | | | | | [] | | | | |
| | | DATE | | | Time Rev | | | | | |
| | | Day | Month | Year | hh mm | · | | | | |
| | | | | | | | | | | |
| SYST | ЕМ | TYPE COMPO | | COMPONENT | ID. | | | | | |
| | | EFFECT ON THI | = SYSTEM | | ROOT CAUSE | | | | | |
| | ÍDeere | | | í Lluman aati | | | | | | |
| | í Loss (| ided operation | | | ¹ Human actions (plant's personnel) ¹ Design / assembly or manufacturing / procedural error | | | | | |
| | | of function | | | ¹ Mechanical / hydraulic / pneumatic failure | | | | | |
| | | ous action | | | ¹ Electrical / instrument / monitoring failure | | | | | |
| | | | | | Î Other causes | | | | | |
| | CORRECTIVE ACTIONS | | | | | | | | | |
| | ¹ Adjus | tment, calibration, | cleaning | َ Special sur | veillance | | | | | |
| | ^î Parts replacement | | | ¹ No actions | | | | | | |
| | ¹ Component replacement | | | ົ Other action | ns | | | | | |
| | ¹ Modifi | ication / redesign | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| DESCRIF | TION: | | | | | | | | | |
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