AUTORITÉ DE SÛRETÉ NUCLÉAIRE

Decision No. 2008-DC-0114 of 26 September 2008 by the French Nuclear Safety Authority Setting Forth Specific Requirements to Be Met by *Électricité de France – Société anonyme* (EDF-SA) at the Flamanville Nuclear site Regarding the Design and Construction of the Flamanville-3 (INB No. 167) NPP and the Operation of Flamanville-1 (INB No. 108) and Flamanville-2 (INB No. 109) NPPs

RÉPUBLIQUE FRANÇAISE

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The French Nuclear Safety Authority (*Autorité de sûreté nucléaire* – ASN),

Having regard to *Law No. 2006-686 of 13 June 2006 on Transparency and Security in the Nuclear Field*, notably its Article 29;

Having regard to Decree No. 2007-1557 of 2 November 2007 concerning Basic Nuclear Installations and the Control of Nuclear Safety and the Transport of Radioactive Substances;

Having regard to Decree No. 2007-534 of 10 April 2007 authorising EDF-SA to create Basic Nuclear Installation No. 167, called Flamanville 3, including an EPR-type reactor on the Flamanville Site, Manche Department;

Having regard to the Decree of 21 December 1979 authorising EDF-SA to create two basic nuclear installations at the Flamanville Nuclear Power Plant, Manche Department.

Enacts the following:

Article 1

This decision sets forth the requirements to be met by *Électricité de France* (EDF-SA), hereinafter designated as the operator, whose head office is located at 22-30, avenue de Wagram, 75008 Paris, regarding the design and construction of Basic Nuclear Installation (*installation nucléaire de base* – INB) No. 167 and the operation of INBs Nos. 108 and 109 on the Flamanville Site, Manche Department.

The specific requirements applicable to INB No. 167 (Flamanvbille-3) are described in Annex 1.

Common requirements applicable to INBs Nos. 167 (Flamanville 3), 108 (Flamanville 1) and 109 (Flamanville 2) are described in Annex 2.

Article 2

The Director-General of the French Nuclear Safety Authority (*Autorité de sûreté nucléaire* – ASN) shall be responsible for enforcing this decision, which shall be notified to the operator and published in the *Bulletin officiel* of the French Nuclear Safety Authority.

Signed in Paris, on 26 September 2008.

The ASN Commission,

Mis en forme : Français (France)

Marie-Pierre COMETS — Jean-Rémi GOUZE

Michel BOURGUIGNON — Marc SANSON

Annex 1 to

Decision No. 2008-DC-0114 of 26 September 2008 by the French Nuclear Safety Authority Setting Forth Specific Requirements to Be Met by *Électricité de France – Société anonyme* (EDF-SA)

at the Flamanville Nuclear site Regarding
the Design and Construction of the Flamanville-3 (INB No. 167) NPP
and the Operation of Flamanville-1 (INB No. 108)
and Flamanville-2 (INB No. 109) NPPs

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Requirements applicable to INB No. 167 (Flamanville-3)

Title II

Organisation and management

Chapter 2. Organisation and management

[INB167-1] In a written document, EDF shall describe its safety policy concerning the design and construction of the basic nuclear installation (*installation nucléaire de base* – INB), called Flamanville-3, and agree to its implementation. Such policy shall include the priority level to be given to the protection of the interests referred to in I of Article 28 of *Law No. 2006-686 of 13 June 2006 on Transparency and Security in the Nuclear Field.*

EDF shall ensure that any person involved in the design and construction of the installation is aware of and implement the aforementioned safety policy.

EDF shall submit the above-mentioned document to the French Nuclear Safety Authority (*Autorité de sûreté nucléaire* – ASN) within three months after the publication of this requirement, and subsequently, after every further revision.

Chapter 3. Operations to be declared to or approved by ASN

[INB167-2] Except for the cases referred to in Articles 34 and 35 of Decree No. 2007-1557 of 2 November 2007 and upon a decision by ASN following any severe or repeated malfunction of the quality-management system or a non compliance or a significant incident relating to safety with regard to the design or construction of the installation, EDF shall suspend any safety-related activity within the meaning assigned by the Order of 10 August 1984.

Without ASN's express approval, EDF shall not resume any suspended activity within two weeks after having submitted to ASN a report describing the implemented corrective and preventive measures. ASN may extend that period if it deems necessary to proceed with a new review.

Title III

Accident-risk management

Chapter 2. Process control

Section 1. Nuclear safety demonstration

1. Compliance of operations

[INB167-3] The summary document referred to in Article 10.2 of the Order of 10 August 1984 concerning the quality of the design, construction and operation of basic nuclear installations shall be referenced in the safety analysis report referred to in Article 20 of Decree No. 2007-1557 of 2 November 2007. Such summary shall present and justify how the safety demonstration takes into account the resulting impact of the actual method to correct the anomalies and significant incidents which could be detected during construction on the theoretical design of the installation.

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2. Analysis of internal and external hasards leading to hostile conditions or damages to structures, systems and components

[INB167-4] Internal hazards to be taken into consideration in the safety analysis report shall include the following:

- emissions of projectiles, notably those induced by the failure of rotating equipment;
- ruptures of high-energy piping, resulting notably from the failure of pressure equipment;
- load drops;
- internal explosions;
- fires, and
- internal floods.

[INB167-5] Except the malevolent events, external hazards induced by the environment of the installation to be taken into consideration in the safety analysis report shall include the following:

- earthquakes;
- any risk induced by industrial activities and traffic pathways, including external explosions and accidental aircraft crashes;
- lightning and electromagnetic interferences;
- extreme weather conditions (temperature, snow, wind, rain, etc.);
- external floods;
- the lowest security low-water level, and
- the clogging of the main heat sink with regard to the marine environment.

[INB167-6] In its safety analysis report, EDF shall justify that the radiological impact of internal and external hazards do not exceed those assessed under the incident and accident conditions of equivalent occurrence frequencies.

3. Analysis of hazards caused by the environment of the installation that may induced hostile conditions or damages to structures, systems and components

[INB167-7] EDF shall identify which activities on the Flamanville-3 worksite are likely to compromise the safety of both nuclear operating nuclear power plants on the site (Flamanville 1 and 2). For each of those activities, EDF shall also carry out a study to assess the hazards generated during the activity making, an analysis of the measures taken to prevent such hazards and a description of appropriate measures to limit such accidents and to mitigate their effects.

If the measures taken to prevent such hazards apply within the perimeter of INB No. 167, EDF shall submit the aforementioned studies to ASN within three months before the expected date of the activity involved.

4. Probabilistic studies

[INB167-8] The safety analysis report shall include a probabilistic safety analysis in order to understand which risks the installation produces in terms of:

- the frequency of core meltdown, associated notably with internal events, such as physical or human deficiencies, explosions, floods and fires, and
- the frequency and nature of radioactive releases outside the containment building during accidents involving core meltdown.

5. Specific studies

[INB167-9] The safety analysis report shall include a study on the drainage scenario of two steam generators resulting from the rupture of steam pipes unprotected against an aircraft crash.

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6. Environmental qualification of systems, equipments, materiel and components

[INB167-10] The qualification of systems, equipments, materiel and components located within the reactor containment building shall take into account notably the conditions resulting from the double-ended circumferential rupture of a main steam pipe within the reactor building.

[INB167-11] The qualification procedure for any active materiel isolating the reactor containment building shall include the verification of the closing and leaktightness functions. The closing function shall be certified for the ambient conditions encountered during the first 12 hours under accident conditions without core meltdown.

[INB167-12] When the qualification demonstration for any system, equipment, materiel or component for the ambient conditions within the reactor building calls for the protective support of a water-condensation film, EDF shall justify the presence of such film.

[INB167-13] In order to implement a qualification by testing a materiel or a family of materiel, EDF shall establish general qualification specifications listing the sequence of the various test phases and specifying the relevant modalities, severities, measurements and criteria involved. Such specifications shall be referenced in the safety analysis report and submitted to ASN upon its request.

7. Controls or tests performed to comply with the hypotheses used in safety demonstration

[INB167-14] In the case of any control or test performed to verify compliance with the hypothesis used for the safety demonstration, a prior control or test-validation criterion shall be specified in writing and brought to the attention of the persons responsible for its application. Such criterion shall take into consideration:

- the trend or ageing phenomena likely to occur between two controls or tests, and
- the expected lifetime of the structure, system, equipment, materiel or component involved, when the control or the test is only performed once.

Any measurement uncertainty shall be added to the measurement before verifying compliance with the criterion.

Chapter 2. Process control

Section 2. Prevention of accident conditions that may lead to large early releases

1. Core-meltdown situations occurring while the primary circuit is at high pressure

[INB167-15] An ultimate-depressurisation system of the main primary circuit, different from that protecting it from overpressure, shall ensure that, in case of an accident, the pressure in the primary circuit shall remain below 20 bars absolute before the rupture of the reactor vessel.

2. Fuel-meltdown situations in the spent-fuel cooling pool

[INB167-16] The cooling system of the spent-fuel poold shall consist of:

- two independent main trains, and
- a third independent train characterised, in comparison to the main trains, by a diversification requirement for its cooling system and its cooling water.

[INB167-17] Before shutting down either two main trains of the cooling system of the spent-fuel pool for maintenance purposes, the pump of the third train of the cooling system shall be functioning and it shall be maintained functioning throughout the maintenance period of time.

3. Reactivity accidents resulting from the rapid introduction in the primary circuit of cold water or of water with an insufficient concentration of soluble neutron absorber

[INB167-18] A F1A station for measuring the concentration of soluble neutron absorber in water shall detect any uncontrolled heterogeneous or homogeneous dilutions occurring in the chemical and volume control system of the water in the primary circuit. Such station shall be installed at the discharge nozzle of the charging pumps, on a common section of the feed line and of the injection line at the first seals of the reactor coolant pumps.

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The station shall be able to generate an F1A signal capable of switching-over automatically the suction of the charging pumps of the chemical and volume control system to the to the in-containment refuelling water storage tank (IRWST) and of isolating the suction line ***of*** the volume control tank of the chemical and volume control system.

4. Core-meltdown situations with containment bypass

[INB167-19] The reliable closure of the equipment hatch of the reactor building shall be ensured during all accident situations, including any supply losses for its operation, before any significant radioactive releases may occur within the reactor containment.

5. Global hydrogen detonations and steam explosions likely to compromise the integrity of the reactor containment

[INB167-20] Considering the volume of the reactor containment building, the number and layout of hydrogen recombiners in the reactor building shall be designed in order to prevent any potential global hydrogen detonation.

[INB167-21] The design and implementation of the reactor pit and of the corium spreading room shall ensure that no water likely to be present in them during the corium discharge from the vessel induces a steam explosion likely to compromise the integrity of the reactor containment building.

Chapter 2. Process control

Section 3. Basic nuclear safety functions of the installation

1. Common provisions

[INB167-22] The installation shall be equipped with the required instrumentation in order to verify its prescribed safety-related behaviour during commissioning tests. The sufficiency of this instrumentation shall be justified in a report notably with regard to any required needs due the first-off status of Flamanville 3.

[INB167-23] For every alarm and action threshold of protection and safeguard systems used in the safety demonstration, the safety analysis report shall specify which incident or accident scenarios justify the value filled in the protection or safeguard system.

2. Reactivity control

[INB167-24] The design and implementation of the spent fuel storage rack in the spent-fuel pool shall ensure that the Keff multiplication factor remains inferior or equal to:

- 0.95 during normal operation, and
- 0.98 in case of accident.

3. Cooling of nuclear fuel

[INB167-25] Any selected product or material to be used in the reactor building shall prevent as reasonably as possible any factor that may induce the sump clogging of emergency core cooling system and of the EVU ultimate heat removal system in the in-containment refuelling water storage tank. In that regard, EDF shall justify, in its safety analysis report, the use and quantity of any product or material likely to induce clogging directly or by chemical reaction.

4. Containment of radioactive substances

[INB167-26] The reactor containment shall be designed and implemented in order to withstand:

- a temperature of 170°C and a gas pressure of 5.5 bars absolute in the reactor building for 12 hours without inducing any functional or structural impact.

  At that temperature and pressure, the maximum leakage rate of the inner wall shall be 0.3%/day of the gaseous mass contained in the reactor building. An initial acceptance containment building pressure test shall be carried out at a pressure of 6 bars absolute. After this initial pressure test, compliance with such leakage-rate criterion shall be the subject of a containment building pressure test performed at ambient temperature and at a pressure of 5.5 bars absolute at least every 10 years, except if ASN authorises a maximum respite of one year in light of valid arguments, and

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– a temperature of 170°C and a gas pressure of 6.5 bars absolute in the reactor building for 12 hours without inducing any functional impact on its leaktightness.

[INB167-27] The safeguard auxiliary buildings and the fuel building shall be designed and implemented in order to prevent any leakage rate exceeding 0.5% of the volume per day.

[INB167-28] The building containing the nuclear auxiliary systems shall be designed and implemented in order to prevent:

– any leak rate exceeding 0.5% of the volume per day, except in case of earthquakes, and

– in case of earthquakes up to the design level, a maximum leak rate of 0.5% of the volume per day.

[INB167-29] The system being used to collect and cool any molten core (corium) over the long term referred to in III-3.3 of Article 2 of Decree No. 2007-534 shall include the following characteristics:

– the vessel-supporting device and the closing device of the corium-transfer channel towards the spreading room shall be designed and implemented in order to withstand any load resulting from the rupture of the vessel under a pressure of 20 bars absolute;

– the temporary retention of the corium in the reactor pit since the reactor vessel breakthrough shall ensure the full discharge of the corium before opening the transfer channel towards the spreading room; during the retention of the corium in the reactor pit, the stability of the reactor pit and the integrity of the vessel-supporting devices shall be guaranteed;

– corium transfer into the spreading room may only occur before the submersion of the chamber by the cooling water has begun, and

– the layer of sacrificial concrete of the spreading room and the water-inlet time in the channels of the cooling plates of the spreading room shall ensure that, when the corium comes into contact with those plates, the heat-removal capability of the cooling mechanism is sufficient to fulfil its purpose.

[INB167-30] Suitable instrumentation shall be implemented in order :

– to signal in the control room any reactor vessel breakthrough by the corium and to inform the crisis teams of the operator and of public authorities, and

– to monitor the evolution of the corium outside the reactor vessel and to assess the behaviour of the system being used to recover and cool any molten core over the long term referred to in III-3.3 of Article 2 of Decree No. 2007-534.

Chapter 2. Process control

Section 4. Internal hazards that may lead to hostile conditions or damages to structures, systems and components

1. Fires

[INB167-31] The limits of all fire sections designed to protect the safety functions of the installation or any radioactive substance likely to be dispersed during a fire shall be qualified as fire breaks for at least 2 hours.

All large fire sections designed to protect the safety functions of the installation or any radioactive substance likely to be dispersed during a fire shall be subdivided into smaller fire sectors in order to facilitate the work of the fire-fighting units and to ensure their security. The fire-break criterion of such smaller sectors shall be of at least 1 hour.

[INB167-32] Any explosion in any recognised explosion-prone location and located in any fire section designed to protect the safety functions of the installation or any radioactive substance likely to be dispersed during a fire shall not compromise the stability and the integrity of the fire section involved.

2. Internal explosions

[INB167-33] The leak reference for hydrogen lines with a larger diameter than 5 cm and potentially vulnerable, notably to vibrations, or involving manual operations shall be a double-ended circumferential rupture.

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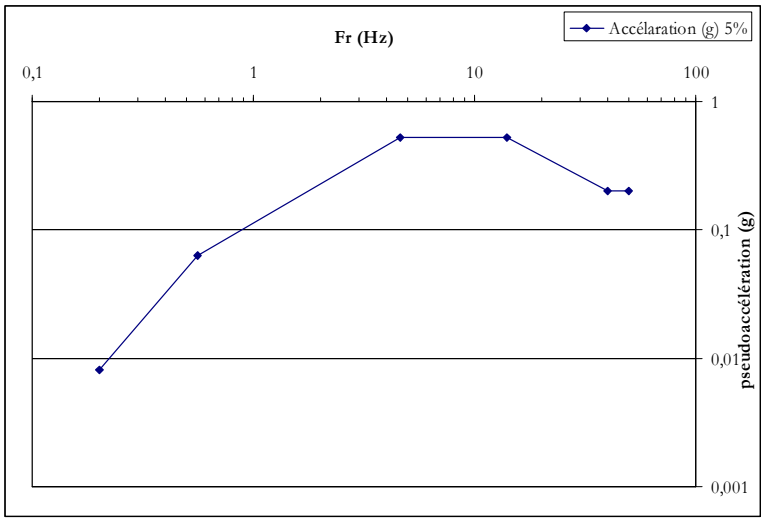
Chapter 2. Process control

Section 5. External hazards that may lead to hostile conditions or damages to structures, systems and components

1. Earthquakes

[INB167-34] For a damping reduced by 5%, the horizontal seismic movement to be taken into account for design shall be set by the following curve anchored at high frequencies of at least 0.20 g:

Fr (Hz)	Acceleration (g) 5%
0.2	0.00808
0.56	0.06312
4.61	0.52
14	0.52
40	0.2
50	0.2



The vertical movement associated with the design spectrum shall correspond to two-thirds of the horizontal movement.

[INB167-35] A reference inspection earthquake shall be determined. It shall represent the seismic level below which no required earthquake-withstanding component for safety purposes needs to be verified or inspected prior to return or to maintain the plant to normal operation.. Such reference inspection earthquake shall also correspond to a maximum free-field horizontal acceleration of 0.05g.

After an earthquake corresponding to a maximal free-field horizontal acceleration above 0.05 g, EDF shall control whether the installation has not been solicited beyond its elastic range and remains under normal operating conditions. The results of EDF's controls and conclusions shall be submitted to ASN as soon as they are available.

[INB167-36] The identification of the equipment referred to in IV.2.2 of Article 2 of Decree No. 2007-534 shall rely notably on on-site inspections during the initial construction of the installation and during any subsequent modification.

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2. Floods

[INB167-37] The anchoring of the nuclear-island platform and the volumetric protection of that island and of its galleries shall prevent any water inlet at any altitude up to +12.40 m NGFN.

[INB167-38] All safety-related equipment of the pumping station shall be:

- either located above +8.54 m NGFN;
- or integrated in protected areas against external floods up to at least +8.54 m NGFN.

3. Lightning

[INB167-39] All active lightning-protection devices of safety-related equipment shall be classified as F2.

4. Extreme weather conditions

[INB167-40] With regard to extreme-heat conditions, the following high-temperature loading cases shall be selected for design purposes:

- for air: equal or higher than the maximum average daily temperature of 36°C and at a maximum instantaneous temperature of 42°C, and
- for the sea water : equal or higher than the maximum daily temperature of 26°C.

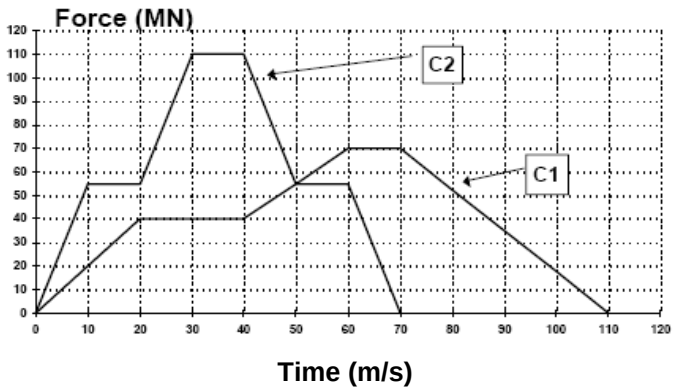
[INB167-41] With regard to extreme-cold conditions, the low temperature loading cases of air to be selected for design purposes shall be equal or lower than:

- -15°C at all times, and
- -19°C, as a minimum instantaneous temperature.

5. Industrial hazards and traffic pathways

5.1. Accidental aircraft crashes

[INB167-42] In all buildings physically protected by an outer shell made of reinforced concrete and referred to in IV-2.1 of Article 2 of Decree No. 2007-534, the loading cases for the accidental crash of a military aircraft shall be at least the C1 and C2 curve envelopes applied to a 7-m² circular area, as follows:



The C1 loading diagram shall be used for the dimensioning of:

- the inner structures of these buildings against induced vibrations, and
- the outer shell made of reinforced concrete against any loading resulting from a direct impact.

The C2 loading diagram shall be used for verifying the ultimate local perforation resistance of the outer shell made of reinforced concrete.

5.2. External explosions

[INB167-43] For the design, the loading case for the overpressure wave shall be a steep front triangular pressure wave with a maximum overpressure of 100 mbar and a duration of 300 ms on the explosion site.

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The the load-time function at the building walls shall take into account any potential wave reflections on the walls and roofs of the buildings involved.

6. Heat sink clogging risk

[INB167-44] In order to limit any potential loss of the main heat sink, notably due to a common-cause failure relating to the clogging induced by maritime pollutions or by a massive invasion of algae or marine bodies, the pumping station shall have four independent screen lines with a different technology for every pair.

[INB167-45] In case of severe clogging of any screen line of the pumping station, a protection system shall ensure the automatic tripping of the non-safety-related downstream pumps in order to reduce rapidly any pressure drop.

[INB167-46] A network of grids, each equipped with a screen rake, shall protect the screen lines of the pumping station against maritime pollutions or the massive invasion of algae or marine bodies. The pressure drop shall be measured at each grid in order to trigger an alarm in the control room, when too much waste accumulates in front of the grid.

[INB167-47] In order to face any simultaneous clogging of the four screen lines of the pumping station, the required water for the ultimate cooling system (UCWS) may be supplied by pumping water off shore through the discharge tunnel.

Title VII

Information of authorities, territorial communities, associations and the public

Chapter 2. Information of public authorities

[INB167-48] EDF shall submit to ASN a quarterly progress report on the Flamanville-3 Project within a month following the quarter involved. Such quarterly report shall include:

1. a summary of the activities performed during the quarter;
2. the following planning elements:
   - the key steps of the project;
   - the updated master plans of:
     - activities relating to the detailed design of the installation (functional and installation studies);
     - activities relating to procurement, construction, manufacturing (except for nuclear pressure equipment) and installation;
     - qualification tests for systems, equipment, materiel and components involved in the safety demonstration;
     - building activities per building, and
     - activities relating to pre-operational and commissioning tests.
3. the progress of the main activities achieved during the quarter;
4. the main activities scheduled for the following quarter;
5. the list of any non compliances relating to safety or significant for safety with regard to design, construction and fabrication (except for nuclear pressure equipment) and assembly, as well as to the qualification tests for systems, equipment, materiel and components involved in the safety demonstration;
6. the list of the main activities relating to building, manufacturing (except for nuclear pressure equipment) and installation, as well as to the qualification tests for systems, equipments, materiel and components involved in the safety demonstration, scheduled for the following quarter, and
7. a six-month schedule of activities relating to building, fabrication (except for nuclear pressure equipment) or assembly, which are not readily reversible or the control of which would prove impossible once the activity has been achieved, with regard to structures, systems, equipments, materiel or components involved in the fulfilment of the three basic safety functions or ensuring the protection against internal hazards or induced by the environment of the installation.

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Within two weeks after an ASN request, EDF shall organise an exchange meeting at the Flamanville Site concerning the transmitted information.

[INB167-49] Every month, EDF shall submit the list of discrepancies or non compliances it declared concerning the Flamanville-3 building site or of those declared by the contractors and for which corrective and/or preventive measures are submitted to EDF's approval.

[INB167-50] EDF shall submit to ASN an annual report formalising the experience feedback regarding the prescribed measures for preventing or mitigating impact hazards induces by Flamanville-3 worksite on the Flamanville-1 and 2 operating reactors.

[INB167-51] With regard to structures, systems and components involved in the fulfilment of the three basic safety functions or ensuring the protection against internal hazards or induced by the environment of the installation, EDF shall:

- take all appropriate measures, notably with its suppliers, in order to ensure that sufficient time is provided between the provision of the initial execution plans and the beginning of the relevant implementation activities by the suppliers in order to ensure the appropriate control of their quality; such measures shall be detailed in a document to be submitted to ASN within three months after the publication of this requirement, and
- upon request by ASN and no later than 15 days before the scheduled date of an activity relating to building, manufacturing (except for nuclear pressure equipment) or installation, inform ASN of any postponement of the involved activity and provide its new scheduled date at least 3 days in advance. The three-day advance notification may be reduced with ASN's express approval.

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Annex 2 to
Decision No. 2008-DC-0114 of 26 September 2008 of
the French Nuclear Safety Authority Setting Forth Specific Requirements
to Be Met by *Électricité de France – Société anonyme* (EDF-SA)
at the Flamanville Nuclear Power Generating Station Regarding
the Design and Construction of the Flamanville-3 (INB No. 167) Reactor
and the Operation of Flamanville-1 (INB No. 108) and Flamanville-2 (INB No. 109) Reactors

Common requirements applicable to
INBs Nos. 108 (Flamanville-1), 109 (Flamanville-2) and 167 (Flamanville-3)

Title III

Accident-risk management

Chapter 2. Process control

Section 4. External hazards that may lead to hostile conditions or damages to structures and equipment

7. Management of construction-worksite hazards induced by Flamanville-3 worksite on Flamanville-1 and 2 nuclear installations

7.1. General points

[EDF-FLA-1] The design and implementation of the specific set of countermeasures in place to control any hazards induced by the Flamanville-3 worksite regarding the safety of the two operating reactors in on the Flamanville Site shall be submitted to the applicable requirements for any quality-related activity referred to in the Order of 10 August 1984.

7.2. Blasting activities

[EDF-FLA-2] The storage conditions, the nature and the maximum quantity of any explosive stored on the site shall be specified in such a way as to ensure that any accidental explosion of such explosives:

- generates an overpressure wave, projectiles and a vibrational spectrum within the loading cases mentioned in the safety analysis reports for the Flamanville-1 and 2, and
- does not induce any explosion within the Flamanville-1 ad 2 gas parks.

[EDF-FLA-3] The acceleration levels induced on the Flamanville-1 and 2 installations by any blasting activity within frequencies ranging from 2 to 7 Hz shall be lower by a factor of at least 3 in relation to the acceleration levels of half design-earthquake (*demi-séisme de dimensionnement*, comparable to the operating-basis earthquake [OBE]) used for those installations.

Speed and acceleration sensors shall measure the effective impact of blasts at the level of:

- the step-down and auxiliary main transformers of Flamanville-2, and
- the reactor building, the nuclear-auxiliary building and the pumping station of Flamanville-2.

In addition, EDF shall control all vibrations induced by any blast at the level of the plug located at the bottom of the intake channel in order to ensure that such blasts have no impact on its stability.

7.3. Crane fall

[EDF-FLA-4] In addition to the measures taken to prevent the accidental fall of a tower crane, the implementation and operating conditions of such cranes shall ensure that, if such cranes fell, no safety-related building or materiel is located within the impact zone.

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Speed and acceleration sensors referred to in requirement EDF-FLA-3 shall remain operational as long as any crane is installed on the worksite.

7.4. Worksite dust

[EDF-FLA-5] The supervision and preventive maintenance programme for all Flamanville-1 and 2 systems, equipments, materiel and components shall take into account the dust generated by the Flamanville-3 worksite, in order:

- to prevent any discrepancies in relation to normal operating conditions, and
- to ensure the reliability of safety-related systems.

7.5. Protection of Flamanville-1 and 2 auxiliary transformers

[EDF-FLA-6] EDF shall implement a marking and physical-protection mechanism for all buried 400-kV cables of Flamanville-1 and 2.

EDF shall use suitable building methods in order to ensure the integrity of the Flamanville-2 400-kV cable at all times in the inter-unit gallery of the building site.

Title VI

Management of emergency situations

Chapter 2. On-site emergency plan

[EDF-FLA-7] EDF shall specify a crisis organisation on the Flamanville-3 worksite and the required means for its implementation in association with the on-site emergency plan of the Flamanville-1 and 2 nuclear installations.

The dimensioning of the crisis organisation and of the required means for its implementation shall be compatible with the number of persons present on the Flamanville-3 worksite.

No activity on the Flamanville-3 worksite shall compromise the access of emergency services referred to in the on-site emergency plan of the Flamanville-1 and 2 nuclear installations.

EDF shall conduct at least one annual implementation drill of the on-site emergency plan of Flamanville-1 and 2 nuclear installations involving the crisis organisation for the Flamanville-3 worksite.

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