How the French law governs the decommissioning of a nuclear installation

The Fessenheim plant, between disappearance and memory

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Decommissioning is a legal process before it is a technical one

Before the first cut

a decree is required

After the last excavation

easements, records and reporting duties remain

Two questions

1. How does the law bring about the disappearance of a nuclear installation?

2. What does it preserve?

Argument

Decommissioning law does more than regulate an end. It is also a means of transmission: it orders the physical removal of the installation and, in the same act, lays down what must outlast it.

Outline

1 **The end prescribed by law**

Immediate decommissioning as a legal principle; the Fessenheim decree of 1 May 2026

2 **What survives the installation**

Three legal instruments that remain: traceability, easements, information

3 **Conclusion**

Neither an end nor a beginning: one continuous legal life, and what it leaves out

I. The end prescribed by law

How the French law brings a nuclear installation to its end

Two strategies were long accepted

Deferred decommissioning

- Safe enclosure: radioactivity is left to decay for decades before work begins
- Lower doses for workers
- Shifts the burden to a later generation
- Assumes that the operator, the skills and the records will still be there: memory is taken for granted

Immediate decommissioning

- Operations begin soon after final shutdown
- Carried out by those who operated the plant and know it
- Funds and skills available now
- Site released sooner

International practice long accepted both. French law made a choice.

IAEA safety standards on decommissioning (immediate dismantling, deferred dismantling)

French law made a choice: decommissioning became an obligation in 2016

Late 2000s
ASN policy recommends immediate decommissioning (2009)

17 August 2015
The Energy Transition Act lays down the principle

10 February 2016
An ordinance rewrites art. L. 593-25 of the Environmental code

Once an installation has been finally shut down, its operator must decommission it "within a period as short as possible, under economically acceptable conditions".

The end of the installation is no longer just a business decision for the operator: it is a statutory obligation, enforced by the regulator.

Fessenheim: from the 1972 decree to the 2026 decree



54 years from the creation decree to the decommissioning decree; 22 more years to dismantle.

The same decree covers both the creation and the end

Decree of 3 February 1972

“authorises” Électricité de France (EDF) to create the Fessenheim nuclear power plant (units 1 and 2)



amends

Decree of 1 May 2026

“prescribes” the decommissioning of INB no. 75 by Électricité de France (EDF) and amends the decree of 3 February 1972, down to its very title

Not one decree for the creation and another for the demolition: a single decree, amended, now covers both the creation and the end of the plant.

Since the 2016 ordinance, decommissioning is “prescribed by decree” (art. L. 593-28). Fessenheim is the first reactor of the operating power fleet to come under this regime; CEA and Orano installations, Brennilis and the Tricastin BCOT came before it.

What the decree sets: stages, deadline, final state

Four stages, some of which may overlap

1. Electromechanical dismantling: steam generators, vessel head and internals, the vessel itself, fuel and auxiliary buildings
2. Clean-up of structures and soils
3. Demolition of buildings to at least one metre below current ground level
4. Rehabilitation of the site

30 June 2048

deadline for completion of the operations

Final state (art. 5)

No radiation-controlled zone, no zone with possible production of nuclear waste. Buildings and soils at least compatible with industrial use. Conventional installations and administrative buildings may be kept if useful for the future use of the site (art. 2).

Not a return to greenfield: a site handed over for another industrial use, which the decree does not name.

The law also sets the timing: no legal vacuum

2020: final shutdown

Operation is no longer authorised, but the installation remains subject to its 1972 authorisation and to ASN requirements (art. L. 593-26). Preparatory operations: all fuel removed by August 2022.

2026 to 2028: the decree takes effect

The decree takes effect when the ASNR approves the revised general operating rules, and at the latest two years after publication, i.e. by May 2028 (art. R. 593-69.IV).

2028 to 2048: decommissioning

Four stages, each notified to the ASNR before it starts; the Authority may make some of them subject to its approval. Completion by 30 June 2048. Then delicensing (déclassement).

Nuclear law leaves no gap.

The installation never left the law; it only moved from one legal regime to another.

II. What survives the installation

Three legal instruments that remain: traceability, easements, information

Traceability: no record, no removal from the site

1

Waste zoning. The order of 7 February 2012 (the “INB order”) requires each installation to be divided into zones where nuclear waste may be produced and other zones.

Record-keeping duties. Waste study, characterisation, records: every material leaves the site with its own file (origin, zone, characterisation, disposal route).

The point. Regulatory records are not an archive kept afterwards: they are what lets anything leave the site. Without a file, the scrap cannot lawfully leave.

In the decree

The final state is defined by the absence of any “zone with possible production of nuclear waste” (art. 5). Each year, the waste produced and its disposal routes are reported to the local commission (art. 7-1).

The records are what make physical removal lawful.

The easement: the law moves from the installation to the land

2

Art. L. 593-5. Public utility easements restricting the use of land may be created “after delicensing or disappearance of the basic nuclear installation”.

Art. R. 593-73. The ASNR may make delicensing conditional on such easements; the delicensing application must state the future use of the site.

Art. L. 596-5. If the operator defaults, enforcement measures may be taken against the owner of the land, and against later owners who knew of these obligations.

The word “disappearance”

Parliament expressly provides for rules that apply to an installation that no longer exists. The easement runs with the land and binds every future owner: it attaches to the ground, which remains, not to the operator, who may disappear.

The site’s memory in legal form: its industrial past written into property law.

Information: the decree also governs what comes next

3

Art. 7-1 of the amended decree. At least once a year, EDF informs the Fessenheim local commission (CLIS) of:

- progress and safety review of each stage
- oversight of outside contractors
- individual and collective worker doses
- waste produced and its disposal routes
- state of soils and subsoil

Channel. The annual public report required by art. L. 125-15: the record is not only kept, it is addressed to someone.

After decommissioning

The law provides that the decommissioning decree sets, “where appropriate, the operations for which the operator is responsible after decommissioning” (art. L. 593-28). The decree that prescribes the end also has authority over what comes after.

The same decree that ends the plant governs what comes after it.

Neither an end nor a beginning: one continuous legal life

- The same decree, the same zoning: the rules that governed operation become rules of memory.
- As the installation disappears, the law moves onto the land, the records and the persons.
- These forms of transmission are selective: the easement records the risk, not the story; the archive keeps the act, not the experience.

The memory the law produces is a memory of precaution. What it leaves out is for other disciplines to say.

Thank you for your attention