



## FERMI ENERGIA LICENSING ADVISORY GROUP

### SMR LICENSING PRINCIPLES

Fermi Energia's Licensing Advisory Group:

RECOGNISES that successful deployment of small modular nuclear reactors ("**SMRs**") in Estonia, and more widely, is determined to a significant degree by the applicable licensing process and regulatory basis;

BELIEVES that a proactive and constructive approach to addressing licensing and regulatory challenges should be embraced by all stakeholders; and

SUPPORTS the following principles with respect to the potential future licensing of SMRs in Estonia:

1. **Legislative and regulatory framework:** As an important component of the national infrastructure needed for a nuclear energy programme, the Estonian legislative and regulatory framework should be established as a matter of priority. It should implement the EU Nuclear Safety Directives and be based on the International Atomic Energy Agency ("**IAEA**") Safety Standards, as applicable to the relevant SMR(s).
2. **Nuclear regulatory body:** The Estonian nuclear regulatory body should be established as soon as possible.
3. **Regulatory harmonisation:** In developing the regulatory framework, the Estonian nuclear regulatory body should seek to facilitate regulatory harmonisation, giving due consideration to compatibility with the relevant vendor/reference plant country-of-origin regulatory regime(s), which will also assist in enabling SMR design standardisation.
4. **Licensing timeline:** The Estonian nuclear regulatory body and the licence applicant should establish a proposed licensing timeline which will facilitate predictable project deployment, including proactively undertaking preparatory work, to the extent possible, prior to submission of the construction licence application.
5. **Applicant utilisation of existing safety case:** The Estonian licence applicant should seek maximum utilisation of the existing safety case prepared for a standard SMR or reference plant design. The licence applicant will need to be an intelligent customer, competent to undertake an independent assessment of the safety case and prepare the licensing documentation prior to its submission to the Estonian nuclear regulatory body. Ultimately, the licensee will have prime responsibility for the safety of the SMR plant.



6. **Regulator utilisation of existing safety assessment:** The licensing process should enable the Estonian nuclear regulatory body to achieve maximum utilisation of the safety assessment of the standard SMR or reference plant design conducted by an experienced foreign regulatory body from the vendor/reference plant country of origin or from another experienced nuclear country, thereby making effective use of experienced global human resources in licensing and continuously building upon the safety case for the relevant SMR(s).
7. **Independent safety assessment:** The Estonian nuclear regulatory body should conduct an independent safety assessment (which may be undertaken together with technical support organisations) based on a graded approach that prioritises safety significant items, deviations from the standard SMR or reference plant design and site-specific and licence applicant-specific matters.
8. **Regulatory cooperation:** Cooperation between the Estonian nuclear regulatory body and foreign nuclear regulatory bodies is encouraged. Close cooperation between the Estonian nuclear regulatory body and the nuclear regulatory body of the relevant vendor/reference plant country-of-origin or other experienced nuclear country is essential and cooperation mechanisms should be pursued as early as possible.
9. **International engagement:** Estonia should monitor and seek active involvement in relevant international activities, such as the ongoing work of the IAEA, the OECD Nuclear Energy Agency and the Western European Nuclear Regulators' Association, particularly where significant SMR licensing activities are being undertaken.

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