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The Secretary of State
Department for Energy Security and Net Zero
55 Whitehall
London
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18 July 2024

Dear Rt Hon Ed Miliband MP

Cc - The Rt Hon. the Lord Hunt of Kings Heath OBE

Congratulations on your recent appointment as Secretary of State at the Department for Energy Security and Net Zero.

As President of the Nuclear Institute, the UK's learned body of nuclear scientists and engineers, I am writing to provide our support to you and the Government in the accelerated pursuit of new nuclear build within the UK to help achieve long-term energy security for the UK in a net zero world.

On behalf of the Institute, I am asking you to:

- Continue to support large-scale nuclear and its deployment,
- Continue to support Great British Nuclear and the associated Small Modular Reactor competition to rapidly deploy SMRs in the UK,
- Continue to support Research, Development and Innovation to enable further decarbonisation of UK energy, supporting industry and transport in achieving Net Zero through Advanced Modular Reactors, Advanced Fuels and Fuel Cycles,

To ensure that nuclear can make a significant contribution to clean, firm and low-cost power and help the UK meet its Net Zero targets by 2050.

Nuclear is a sustainable technology, with:

- the lowest lifecycle greenhouse gas emissions of any electricity generating source, calculated to be in the range of 5.1 - 6.4g CO₂ equivalent/kWh of electricity,
- the lowest land footprint of any technology,
- the lowest lifecycle impacts on ecosystems of any technology,
- the lowest material requirements of any clean technology,
- high-capacity factors thus reducing reliance on gas generation and ensuring lower whole system prices,
- an increasingly cheaper cost of electricity as new units are produced,

- a huge potential for the UK to become world leaders in a technology we pioneered in the late 1950s, leading to crucial exports and a re-development of our manufacturing capability.

Comprised of many thousands of nuclear engineers and professionals with experience from across the decades in all aspects of nuclear technology and across prior new build programmes, the Nuclear Institute can provide assistance in learning lessons from the past and advising on the future.

Our regional branches, including the Young Generation Network, are advocates of nuclear energy and are active in promoting and developing the next generation of nuclear skills that will be required to support such a programme.

If there is any information or assistance we can provide you with, please do not hesitate to contact me.

Yours sincerely,



Dr Fiona Rayment OBE FREng CEng CChem FRSC FNucl
President, Nuclear Institute