

Insights

HOW TO BECOME A NUCLEAR COMPANY

May 23, 2022

SUMMARY

As we discussed in our [earlier Article](#), the Nuclear Energy (Financing) Act, 2022 (the “**Nuclear Act**”) enacted by the UK Government on 31 March 2022 aims to promote the regulated asset base (“**RAB**”) model as a method of funding investments in new nuclear energy projects in the UK.

The Nuclear Act enables the Secretary of State to designate a ‘nuclear company’ to qualify it to potentially benefit from a RAB model with respect to its proposed power station, provided that certain criteria are satisfied.

The Nuclear Act requires the Secretary of State to issue a statement setting out the procedure and criteria that they expect to follow in determining whether to designate a nuclear company under the Nuclear Act and the factors that they would take into account when assessing whether the designation criteria have been met such that it can receive funding under the RAB model.

This note summarises the designation procedure and criteria statement issued by the Secretary of State on 11 April 2022 (the “**Designation Statement**”).

EXECUTIVE SUMMARY AND COMMENTS

The procedure for designation of a nuclear company under the Nuclear Act entails a detailed application by the nuclear company followed by an extensive assessment and consultation on such application by the Government.

To be able be designate a nuclear company:

- a. the nuclear project must be at an advance stage of various regulatory approvals and consents;
- b. the Secretary of State must be convinced that the nuclear project possesses, among others, robust design, business plan, financing arrangement, project management and supply chain contracting strategy; and

c. the nuclear project must provide value for money to taxpayers and consumers.

The designation criteria are such that it would require a nuclear company to expend a substantial amount of money for reaching an advance stage of the project. This would also entail a long time period for obtaining of various regulatory approvals. For example, as discussed in the [earlier BCLP Article](#), because of the current planning regime in the UK, 'development and deployment of energy projects currently takes years, and often decades'.

Hence, obtaining of a designation under the Nuclear Act would be a high-risk, high-reward proposition for any nuclear company.

PROCEDURE TO DETERMINE DESIGNATION

STEP 1. NOTIFICATION OF INTENTION

A nuclear company is required first to notify the Department of Business, Energy & Industrial Strategy ("**BEIS**") of its intention to apply in advance of submitting a designation application to the Secretary of State.

STEP 2. APPLICATION

Following an intention to notify, the nuclear company is required to make an application to the Secretary of State detailing its proposals for a new nuclear power station. Such application must include all necessary evidence in relation to each of the designation criteria set out in Section 3 of the Designation Statement and any additional information which may be relevant for the application.

STEP 3. ASSESSMENT

Once an application is made, BEIS will undertake an assessment of the application. As part of the assessment, BEIS may, at its discretion, request additional evidence to substantiate any claims, arguments or assumptions made by the nuclear company in its application.

STEP 4. CONSULTATION ON PROPOSED DESIGNATION AND DRAFT REASONS

Before designating a nuclear company under section 2(1) of the Nuclear Act, the Secretary of State is required to prepare draft reasons for the designation of the nuclear company and consult with listed consultees in accordance with section 3(2) of the Nuclear Act.

The consultees include:

- the nuclear company that the Secretary of State proposes to designate;
- the Gas and Electricity Markets Authority;

- the Office for Nuclear Regulation (“**ONR**”);
- where any part of the site for the power station is in England, the Environment Agency;
- where any part of the site for the power station is in Wales, the Welsh Ministers and Natural Resources Wales;
- where any part of the site for the power station is in Scotland, the Scottish Ministers, and the Scottish Environment Protection Agency; and
- such other persons as the Secretary of State considers appropriate.

The Secretary of State will consider and take account of the views of the consultees before reaching a decision on whether to designate a nuclear company.

STEP 5. DECISION

The decision whether to designate a nuclear company for the purposes of the RAB model will be taken by the Secretary of State, informed by the outcome of the detailed assessment and the consultation process set out above.

DESIGNATION CRITERIA

The Secretary of State may only designate a nuclear company when the designation criteria in section 2(3) of the Nuclear Act are met. The designation criteria are:

- the development of the power station is sufficiently advanced; and
- the nuclear project is likely to result in value for money.

PROJECT MATURITY ASSESSMENT

The status of various regulatory approvals that the Secretary of State may consider in the assessment are set out in Sections 3.1(a) of the Designation Statement. Other project delivery enablers that the Secretary of State may consider are set out in Section 3.1(b) of the Designation Statement.

Regulatory Approvals

Having obtained or being in the later stages of the regulatory approval processes for most of the areas listed below would show that the development of the power station is sufficiently advanced to justify designation of the relevant nuclear company.

A. Planning Consents

Under the Planning Act 2008, a new power station with a capacity of over 50MW in England or over 350MW in Wales requires a development consent order from the Planning Inspectorate.

For new power station at or under 50MW capacity in England, planning approval is required from the relevant local authority. In Wales, a new power station between 10MW and 350MW requires a planning consent from the Welsh Government.

Any new power station below 10MW in Wales requires a planning approval from the relevant local authority.

The Secretary of State may require that the nuclear project is an appropriately advanced stage of the development consent or a planning approval such as being in or having completed the examination stage.

B. Nuclear Site Licence

The Nuclear Site Licence (“**NSL**”) is the principal instrument for regulating the safety of nuclear sites in the UK. A NSL may be granted by the ONR to a nuclear company to install and operate a power station in a defined location. It is granted for the full life cycle of the power station.

Prior to being granted a NSL, a nuclear company must submit an application to the ONR and undergo extensive assessment by the ONR on the suitability of the site, the organisation and the technology to meet the requirements of a NSL and the accompanying licence conditions.

The nuclear company would be expected to demonstrate to the Secretary of State that its plan for securing a NSL is well advanced, including plans for development of the power station’s safety case. The Secretary of State will consult with the ONR to confirm the status of the NSL application and assessment.

C. Environmental Permits

In parallel with the requirement to obtain a NSL, a number of environmental consents and permits are required which regulate a nuclear power station’s impact on its environment.

These permits include, for example (but are not limited to), authorisations under the Radioactive Substances Act 1993 to discharge effluent to the marine and air environments, authorisations and permits related to site construction activities, permits and licences to relocate protected species and habitats, and permits and approvals related to the impact of construction site dewatering on the local groundwater environment.

The Secretary of State would expect that the nuclear company has a comprehensive plan in place to identify and obtain the necessary environmental permits for its new power station and that there is a well-developed and timely progress for obtaining those permits.

D. Regulatory Design Assessment

The Generic Design Assessment (“**GDA**”) process was developed by the ONR and the Environment Agency to assess new nuclear power station designs.

The non-mandatory process allows the regulators to assess the safety, security, and environmental implications of new reactor designs, separately from applications to build them at specific sites.

Upon successful completion of a GDA, the regulators would want to be confident that the design is capable of being built and operated on a site bounded by the generic site envelope, in a way that is acceptably safe and secure.

This is subject to site-specific assessment and licensing.

Obtaining a Design Acceptance Certificate from ONR and a Statement of Design Acceptability from the Environment Agency at the end of GDA indicates regulatory risk associated with the design has been reduced. Therefore, completion of, or significant progress through, the GDA would support demonstration that the development of the power station is sufficiently advanced for designation.

E. Regulatory Justification

Regulatory justification is a legal requirement and is based on the internationally accepted principles of radiological protection. This states that no practice involving exposure to ionising radiation should be adopted unless it produces sufficient benefits to the exposed individuals or to society, to outweigh the health and environmental detriment it may cause.

In the UK, this principle is set out in the Justification of Practices Involving Ionising Radiation Regulations 2004. These regulations require any new class or type of practice involving ionising radiation (such as nuclear power stations) to undergo a generic, high-level pre-optimisation assessment of whether the social, economic, or other benefits outweigh the health and environmental detriment.

A nuclear company will be expected to demonstrate that the nuclear technology it wishes to deploy has either already successfully completed the regulatory justification process or that its application for Regulatory Justification is in its final stages of approval.

F. Funded Decommissioning Programme

The Energy Act 2008 requires a nuclear company to prepare the funded decommissioning programme (“**FDP**”) setting out the projected cost of decommissioning, underpinned by technical justification and a funding plan to meet these costs. It is obliged to submit a FDP to the Secretary of State for approval. This must set out the nuclear company’s costed plans for appropriately managing its future liabilities in relation to decommissioning, waste management and waste

disposal, and how it will make financial provision to meet those liabilities. The programme must be approved by the Secretary of State before construction for the power station can start.

While deciding on a designation, the Secretary of State is expected to consider the maturity of the draft FDP documentation if available or a plan to obtain approval of FDP documentation prepared by the nuclear company.

Some of the key project delivery indicators a nuclear company would likely need to address, in order to demonstrate that the development of the power station was sufficiently advanced, include those set out below:

G. Delivery and Governance

The Secretary of State would expect to see that the nuclear company has reached a level of maturity in respect of its governance processes, which may include clarity on the governance and decision-making structure across the delivery model and how it will exercise oversight and decision-making powers as an intelligent client.

The Secretary of State would wish to be satisfied that the delivery strategy, plan and financing strategy, together substantiate a credible business case for the power station with a focus on the achievement of specified project outcomes and benefits.

H. Cost and Schedule estimates

The nuclear company would be required to set out the estimated cost and schedule for delivery of project with an appropriate level of contingency for risk and estimating uncertainty.

For designation, the Secretary of State would expect cost estimates to be aligned with the design maturity, organisational delivery strategy, supply chain contracting strategy and should be prepared using a controlled process of estimating governance.

I. Design Maturity

The nuclear company should be able to demonstrate how the maturity of its design would give confidence to the Secretary of State in overall project deliverability.

J. Organisational Design and Development

The Secretary of State would expect that the nuclear company has a well-established organisational development plan which sets out robust plans for the development of its people and systems by reference to the changing requirements of the project's delivery phases.

K. Project Management

The nuclear company would be expected to demonstrate how it would lead and manage project delivery (across all life cycle phases), integrate delivery disciplines, and ensure implementation of best practice from major infrastructure project management.

L. Commercial / Supply Chain

The nuclear company would be expected to demonstrate a well-developed supply chain and contracting strategy for the power station, in line with all relevant BEIS supply chain guidance.

The Secretary of State would wish to also be satisfied that the nuclear company has a clear strategy and plan to secure necessary wider project agreements (e.g., grid connection, cooperation agreements etc.) that enable the overall delivery model.

M. Operational strategy and plans

The Secretary of State may want that appropriate arrangements have been made for the operational phase and plans for the transition into operations to underpin confidence in assumptions related to the future operational performance of the power station and the cost estimates associated with the operational period.

VALUE FOR MONEY DETERMINATION

As set out in section 2(3)(b) of the Nuclear Act, the second criterion for designation of a nuclear company is that the Secretary of State is of the opinion that designating the nuclear company in relation to its planned power station is likely to result in value for money.

BEIS would carry out an assessment of the power station's likely value for money in line with The Green Book which sets out the Government's approach for appraisal and evaluation.

This would involve assessing both the monetised and non-monetised costs and benefits of the power station to society as a whole.

BEIS will also consider the impact of the power station on consumers and taxpayers specifically.

The main monetised impact is expected to be the difference between the cost of the electricity system if the planned nuclear power project goes ahead and the cost of the electricity system if alternative projects or generation technologies were adopted instead.

Potential non-monetised benefits include security benefits derived from generating electricity in the UK, and the additional jobs benefits derived from the value of jobs created during the construction and operation of the power station.

RELATED PRACTICE AREAS

- Finance
- Energy & Natural Resources
- Nuclear

MEET THE TEAM



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