



Programme Area: Nuclear

Project: Power Plant Siting Study

Title: Request for Proposal

Context:

The aim of the Power Plant Siting Study project is to explore the different opportunities and constraints involved in developing sites in England and Wales for new low carbon power plants. The study will consider new nuclear as well as fossil fueled power stations using carbon capture and storage technologies. The study is important to understand the different features which could either make a potential site suitable or, alternatively, prevent its viability. This study is intended to inform whether there is likely to be competition for development sites between low carbon technologies, which could be a future constraint in the low carbon replacement of the UK's ageing power plants. It will help inform the ETI's technology strategy development work, which is looking at how to accelerate the development of new energy technologies for a UK transition to a low carbon economy.

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Title of Services for which Proposals are Requested

Low Carbon Electricity Generation Technologies

Power Plant Siting Study Project

Request Issue Date

17th March 2014

Deadline for Notification of Intention to Submit a Proposal

31st March 2014

Closing Date

Proposals must be received before 12:00 noon on the 11th April 2014

Contact for Enquiries

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SUMMARY OF KEY PROJECT INFORMATION

New nuclear power is assumed to play a role in reducing the UK's carbon emissions by 2050 through 3 potential deployment scenarios of 16 GW replacement capacity by 2030 with subsequent options of no further nuclear, or expansion up to 40 GW or 75 GW by 2050.

The UK Government has previously committed significant effort to ensuring that suitable and sufficient sites for new nuclear power stations are accessible by potential developers within the new build market to deliver 16 GW of replacement capacity.

Beyond the replacement phase, ETI's scenario modelling consistently identifies nuclear expansion as a preferred long term energy solution and the capacity is frequently capped at 40 GW. One of the potential constraints which is not yet well understood is the availability of suitable and sufficient sites for new nuclear power stations and potential changes to the criteria which may be used to select them.

The potential siting constraint is also aggravated by the fact that new thermal plants with CCS may be competing with new nuclear for some potential development sites. The ETI's scenario modelling, through its Energy System Modelling Environment (ESME), has also identified the importance of recovering waste heat from thermal and nuclear plants to power future district heating systems; this introduces a further siting constraint if excessive length and cost of piping systems is to be avoided.

The purpose of the Power Plant Siting Study Project is to examine siting criteria and siting constraints against the nuclear expansion scenarios, and explore opportunities to enable the inclusion of additional sites should the expansion scenario(s) be constrained.

A glossary of terms used in this RfP is provided at Appendix H.

Project - Financing	Anticipated Value
ETI Investment	Full cost of the Project (to be proposed by the Respondent in its Proposal).

Request for Proposal and Selection	Dates
Issue of RfP	17 th March 2014
Deadline for (i) notifying the ETI of an intention to submit a Proposal (Appendix F); and (ii) return of a signed Non-Disclosure Agreement (Appendix G). (See Section 5.1.1)	31 st March 2014
Closing date for submission of Proposals	11 th April 2014
Preferred Respondent(s) notified	02 nd May 2014 (Anticipated Date)

Timescales	Anticipated Dates
Contract signature target date	23 rd May 2014
Project start target date	27 th May 2014
Project finish target date	28 th November 2014

Respondents shall be wholly responsible for the costs they incur in the preparation and submission of their Proposals in response to the RfP. The ETI shall not be responsible for, and shall not pay, any costs and expenses which may be incurred by Respondents in connection with participation in the Project Commissioning Process, including any costs or expenses incurred up to and including the execution of the Project Contract.

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1. ETI INTRODUCTION

1.1. Introduction to the Energy Technologies Institute

The Energy Technologies Institute (ETI) is a public-private partnership between global energy and engineering companies – BP, Caterpillar, EDF, E.ON, Rolls-Royce and Shell – and the UK Government.

Public sector representation is through the administration of the Department for Business, Innovation and Skills, with funding channelled through the Technology Strategy Board and the Engineering and Physical Sciences Research Council. The Department of Energy and Climate Change are observers on the ETI Board.

The ETI's role is to bring together and invest in engineering projects that accelerate the development, demonstration and eventual commercial deployment of a focussed portfolio of affordable, secure and sustainable energy technologies that helps the UK address its long term emissions reductions targets as well as delivering nearer term benefits.

The ETI is not a grant-giving body. The ETI is a commercial organisation and makes targeted commercial investments in technology projects, which can involve the ETI funding entire projects or working with third parties to co-fund project activity.

Further information can be found on our web-site at www.eti.co.uk.

1.2. ETI Approach to Health, Safety and Environment (HSE)

The health and safety of those who may be affected by ETI projects and the protection of the environment that may be impacted by ETI projects are of paramount importance to the ETI and the ETI Members. The ETI therefore expects those who receive ETI funding to demonstrate a commitment to delivering excellence in health, safety and environmental management as well as demonstrating that all applicable legal requirements are met.

The ETI requires certain HSE-related information as part of a Proposal. See Section 4.7 and Appendix E (Section 6.4) of this RfP.

2. THE PROJECT

2.1. Background to the Power Plant Siting Study Project

New nuclear power is assumed to play a role in reducing the UK's carbon emissions by 2050 through 3 potential deployment scenarios:

- Nuclear replacement of 16 GW capacity by 2030.
- Nuclear expansion to 40 GW by 2050.
- Nuclear expansion to 75 GW by 2050.

Inevitably experience in delivering the first scenario will inform selection of the second or third scenarios or potentially neither.

The UK Government has committed significant effort to ensuring that suitable and sufficient sites for new nuclear power stations are accessible by potential developers within the new build market. There is confidence that, subject to detailed scrutiny through due process, that these proposed developments and locations have a reasonable chance of securing the required approvals regarding planning, safety, security and the environment, to deliver sufficient new capacity to underpin the nuclear replacement phase.

No recent work has been uncovered regarding the likely availability of potential sites to support the two expansion scenarios. Previous work on site availability for the replacement scenario suggests that this issue will be a potential constraint on the deployment of new nuclear beyond 16GW, but the extent of the constraint is unknown. This constraint is expected to be further aggravated by the competing requirement to identify sites for new thermal plants, including those to be fitted with CCS technology. Recent ESME scenario evaluation has identified that nuclear and thermal plants also offer the potential to reduce CO₂ emissions associated with space and hot water heating in domestic and commercial buildings through waste heat recovery and re-use in district heating systems. This introduces an additional siting constraint if the excessive length and cost of steam or hot water piping systems from new thermal or nuclear power stations are to be avoided.

Current Nuclear Replacement Policy

The current UK Government Policy is to enable private sector investment to deliver up to 16GW of new nuclear generation capacity by 2030. Without any targets or commitments beyond 2030, the Government has identified two future options to expand nuclear to 40GW or 75GW between 2030 and 2050. Decision making will inevitably be influenced by the experience gained in delivering the first 16 GW of replacement capacity, and a further scenario could be no additional nuclear beyond the first 16 GW.

The siting of nuclear plants has always been seen to be controversial. Operational, safety and ecological considerations exclude many potential locations; others can be excluded on more subjective environmental criteria. Eight potential sites have been identified with potential to support 16 GW replacement phase and individual developers have announced programmes at 5 of these sites to connect around 16 GW of new nuclear generation by 2030.

Further detail on the identification of sites for the replacement phase is at Appendix A.

Approach To Identifying Sites To Support The Nuclear Expansion Scenario(s)

Based on current information and current selection criteria there are likely to be insufficient suitable sites to deliver the 40 GW expansion scenario. This in turn suggests that:

- the siting of future large power plants is a national strategic issue to be considered from an overall energy system perspective, taking account of the mix of generation technologies, rather than market led by individual development projects at incrementally selected locations;
- there would be insufficient sites suitable for the level of nuclear power development in the UK consistent with the lowest cost pathway for achieving the 2050 CO₂ reduction targets;

- nuclear licensed sites in England and Wales previously used for reactor test and operations activities remain strategically important and should be retained as preferred sites for future nuclear power reactors or prototype reactor demonstration;
- sensitivity analyses should be performed to identify options for realising the number of sites required to deliver the expansion scenarios; and
- alternative energy technologies should be identified which comply with current siting criteria and which have the potential to make good the shortfall in capacity from Gen III+ nuclear.

Further detail on the approach to identifying sites to deliver the expansion scenario(s) is at Appendix B.

The purpose of the Power Plant Siting Study Project is to explore siting criteria and siting constraints against the nuclear expansion scenarios, and to identify and consider opportunities to enable the inclusion of additional sites should the expansion scenario(s) be constrained.

2.2. Project Objectives

The objectives of the Project are to:

- indicate the capacity of nuclear power likely to be generated from anticipated Gen III+ nuclear plant designs developed at existing nuclear sites, anticipated thermal power station brownfield sites, and new greenfield sites;
- indicate the number of sites likely to be suitable for CCS and identify where there is likely to be a conflict of sites suitable for both technologies (CCS and nuclear);
- identify the individual siting constraints which have greatest impact on the three nuclear expansion scenarios identified;
- through a range of sensitivity studies, identify potential changes in site selection criteria which would be necessary to deliver sufficient sites for the nuclear expansion scenarios;
- make recommendations for the siting characteristics of alternative technologies to make good the shortfall from Gen III+ nuclear; these are expected to include a reduced requirement for cooling water;
- identify other issues, constraints or assumptions which may change over the next 35 years to make more sites available for Gen III+ nuclear capacity; and
- identify preferred locations for nuclear power technology demonstrator sites.

2.3. Project Structure

The ETI anticipates that this Project will be commissioned and delivered in a single phase with sequenced outputs and deliverables through the course of the Project execution.

There is a parallel second ETI project, which will be the subject of a separate RfP, entitled the “System Requirements for Alternative Nuclear Technologies Project”. For reasons of efficiency and economy, there are some outputs from this Power Plant Siting Study Project that will be used as inputs to the parallel second project. This interface is important and the timely delivery of these dependencies will be critical in enabling the parallel second project to progress to schedule.

2.4. Qualification Of Respondents For The Power Plant Siting Study Project

This procurement is for engineering and environmental consultancy work. There is no scope related to field work, manufacturing, trials, or the operation of prototype technology.

Respondents submitting Proposals for this Project should provide simple evidence of their qualification, experience and capability to deliver the required scope of the Project. This evidence must be provided within the Proposal, but should be limited to no more than 10 pages setting out relevant experience, in the UK and elsewhere, in the last 10 years of:

- conduct of environmental impact assessments for energy or transport infrastructure projects of national or international significance;
- preparation, or support to preparation, of planning applications for UK energy or transport infrastructure projects of national significance;
- specification for, or management of, ground investigation works to inform site development of UK or European Energy or Transport infrastructure projects of national significance;
- cooling water system appraisal or design for large thermal or nuclear power plant; and
- siting appraisal to inform the potential development of new nuclear stations.

The Proposal must also include an indication of the number of people employed by the Respondent with experience in the appraisal of potential development sites and the associated preparation of environmental impact assessments. These numbers are to be compared against the numbers required to deliver the Project.

Proposals which exceed the stated page count regarding relevant experience or capability, or which include other extraneous case studies or marketing literature, may be considered non-compliant by ETI and excluded from further evaluation.

To maintain the integrity of the report and ETI's engagement with its stakeholders, it will be necessary to understand potential conflicts of interest associated with organisations who may be undertaking siting appraisal work for clients examining UK sites beyond those already identified by Government for potential nuclear development before 2025 in its National Policy Statement for Nuclear Power Generation (EN-6).

Respondents are required to confirm in their Proposals whether they (or any of their proposed Project Team members) are involved with any third party in relation to any site(s) for future power generation development (including advising any third party on the evaluation, suitability and/or acquisition of a site for the purpose of future power generation development).

2.5. Project Team – Critical Roles

The ETI places great emphasis, in particular, on two critical roles in the delivery of its projects – the Project Manager and the Chief Technologist – who together lead the relevant project on behalf of the project participant organisation(s).

In this Project, a Respondent's proposed Project Team is expected to include, but not be limited to, individuals with the qualifications, experience and capability to perform the following roles on behalf of the preferred Respondent:

- Project Manager:
 - resource and activity co-ordination;
 - risk management and co-ordination;
 - Project delivery to the requirements of the relevant Project Contract(s); and
 - Project reporting.
- Chief Technologist (or Senior Technical Specialist):
 - specification of scope necessary to deliver contract requirements;
 - selection of technical specialists engaged in delivering the project;
 - technical review and acceptance of work performed by others; and
 - technical review of contract deliverables.

- Technical specialists as required.

Respondents are required in their Proposals to nominate individuals for each role. The ETI will assess the qualifications, experience, competence and authority of these individuals as critical to the success of the Project.

Whilst each Respondent's Project Team is expected to include each of these roles, the ETI's expectation is that certainly the Project Manager and (unless there is a compelling case to the contrary) the Chief Technologist should each be an employee of the Respondent; it is, however, likely to be acceptable for a Respondent to appoint a suitably qualified, experienced and capable individual within the Respondent's organisation to more than one role.

Additionally, Respondents are expected to provide the necessary, and appropriately authorised, commercial and legal resources to negotiate the Contract within the ETI's required timescales (see Section 5.3) and to manage any issues that may arise during the performance of the Project.

3. POWER PLANT SITING STUDY PROJECT

3.1. Project Introduction

Delivery of this Project will inform answers to the following questions:

- What are the site challenges associated with developing new nuclear power stations at each of the existing nuclear reactor licensed sites in England and Wales? What is the likely maximum additional nuclear power plant electricity generating capacity for new deployment next to existing nuclear power station sites before 2050, including and beyond plans already announced by developers?
- Which existing brownfield power generation sites could be considered for nuclear power development and what is the likely maximum generating capacity for new nuclear deployment at brownfield sites by 2050?
- Which greenfield sites could be considered for nuclear power development and what is the likely maximum capacity for new nuclear deployment at greenfield sites by 2050?
- Which sites (brownfield and greenfield), and what total potential capacity, is suitable for nuclear power development but would be preferentially allocated to thermal CCS plant consistent with the above assumptions?
- What are the dominant criteria which exclude sites from nuclear power deployment at existing brownfield and new greenfield sites, and what changes would need to be made to these criteria to significantly increase the number of sites available for nuclear power deployment?
- What changes should be considered to supporting assumptions used in the analysis, and why, in order to increase the number of sites available for the potential deployment of nuclear?
- What additional assumptions or opportunities would increase the number of potential sites and capacity for new nuclear by 2050?
- From siting considerations, what are the likely site requirements for technology demonstrator plants such as UK preferred SMR(s) or a 1200 MW Sodium Cooled Fast Breeder Reactor? Given the overall constraints on site availability, what are the most likely locations for siting these demonstrator plants?

This Project will address these questions from a siting perspective without addressing the issues of:

- local acceptability;
- supply chain capability and capacity; or
- economic attractiveness and access to project finance.

3.2. Project Timeline

It is anticipated that the Project Contract (see Section 4.2) will be awarded in May 2014 with final deliverables (see Section 3.4) due by the end of November 2014.

3.3. Project Objectives

The Project Objectives are set out in Section 2.2, above.

3.4. Project Output and Deliverables

The Project output will be a collection of deliverables which together address the Project Objectives and which satisfy the requirements identified in this Request for Proposals. The timing of the following deliverables is measured from the date of execution of the Project Contract:

Month 1

- Final version of Assumption Set (1) specified by ETI; for ETI approval.
- Final version of Assumption Set (2) selected by the Respondent to enable delivery of the Project; for ETI approval.
- Confirmation of the Long List of sites to be considered for new nuclear power stations including nuclear reactor licensed sites, other UK licensed sites, potential brownfield sites and potential greenfield sites; for ETI approval.

Month 2

- Confirmation of number, scope, and timing of sensitivity analyses to be undertaken; for ETI approval.
- Outcome of analysis of siting availability against Assumption Sets (1) and (2); for ETI to note.
- Outcome of sensitivity analysis into cooling water requirements; for ETI to note.

Month 3

- Development of siting characteristics and site criteria for alternative technologies required reduced cooling water flow. Identification of potential sites to be included in an Addendum to the Long List; for ETI to approve.
- Plan, host, manage and fund a 1 day joint workshop with the organisation selected by ETI to deliver the parallel project on “System Requirements for Alternative Nuclear Technologies”. To be delivered to the satisfaction of the ETI.

Month 4

- Siting requirements, criteria and site availability for large thermal plant with CCS. Identification of potential technology competition for development sites; for ETI to note.

Month 5

- Broad evaluation of the constraints to developing new nuclear capacity at each of the UK’s existing licensed sites and indicative potential future capacity which could be developed at each of these sites by 2050; for ETI to note.
- Outcome of sensitivity studies and options for increasing the total new nuclear capacity to 75 GW by 2050; for ETI to note.
- Conclusions from consideration of other opportunities to increase the number and capacity of development sites by 2050; for ETI to note.
- Identification of options and recommended preferred locations for technology demonstrator sites; for ETI to note.

Month 5.5

- Draft Project Technical Report and draft Project Summary Report; for ETI to review and comment.

Month 6

- Submission of final Project Technical Report and final Project Summary Report; for ETI acceptance.

In addition, the following will be required:

- Submission of a fortnightly two page Project progress report, including:
 - progress since previous report;
 - progress planned by end of next period;
 - Project completion to date (%);
 - opportunities, risks and mitigation; and
 - schedule adherence for the Project critical path and forecast date of Project completion.
- A presentation (to the ETI and, at the ETI's discretion, ETI Member representatives and/or third parties) after delivery of the Project Technical Report and Project Summary Report, with the following presentation content:
 - approach to and conduct of the Project including key assumptions (40 minutes);
 - Project outcomes and conclusions (40 minutes); and
 - questions (40 minutes);(the "Project Presentation").

3.5. Project Scope of Work

This Project is intended to characterise and quantify the site related constraints to developing new nuclear power in the UK by 2050. The Project output will deliver responses to the questions posed in Section 3.1, above (Project Introduction), together with opportunities and choices to address these constraints; the Project Summary Report will identify overall trends and issues.

The purpose of this Project is not to identify which sites should be developed and when, or to underpin an economic appraisal of the relative worth of each potential site. Breadth and clarity of the work undertaken is more important than the precise analytical computation of potential generating capacity at each and every site. A key success factor for the successful Respondent will be the ability to use logical and informed assumptions to bound the total scope of work to be delivered through this study. The use of informed assumptions reduces the potential breadth of skills and budget required to deliver the outputs required for this Project; the use of appropriate and informed assumptions is expected to have a direct impact on the overall of value for money delivered by this Project. The required Project scope of work is described in more detail below.

3.5.1. Literature Review

Undertake a literature review to identify relevant documentation in the public domain regarding site criteria, site constraints, and potential UK location options for the development of new nuclear power stations in the UK.

3.5.2. Review Of Assumption Set (1)

Collation of the assumptions specified by the ETI within this RfP, including those identified in Appendix B. Capture and record these assumptions, together with the reasoning of why they are judged to be significant. The selection and understanding of these assumptions is important in informing the scope and value of subsequent sensitivity analysis.

3.5.3. Compilation Of Assumption Set (2)

Assumption Set (2) is a list of additional assumptions proposed by the successful Respondent in addition to those specified by the ETI in Assumption Set (1). This work scope is to capture and record the final version of the assumptions to be used by the successful Respondent in the delivery of this Project, together with the reasoning of why they are judged to be significant. The selection of these assumptions is important in bounding the scope, budget and breadth of specialist technical skills required by the successful Respondent to complete this Project.

3.5.4. Compilation Of The Long List

Compilation of the Long List of sites to be considered for new nuclear power stations including existing nuclear reactor licensed sites, other UK licensed sites, potential power generation brownfield sites and finally potential greenfield sites. This list will be largely informed by existing literature including potential sites previously considered by the CEGB in conjunction with the list maintained by DECC of current, decommissioned and historic thermal power station sites.

3.5.5. Timely Assembly Of A Multi-Disciplinary Team

The Project Team should be led by the Chief Technologist and supported by the Project Manager. Consideration should be given to including Project Team members with experience including but not limited to the following areas; geotechnical analysis, cooling water systems and cooling water abstraction from the environment, ecology and environmental impact studies, regional development planning and the delivery of planning applications, flooding and coastal processes, consequence and risk associated with natural and man-made hazards, transport of abnormal indivisible loads. Technical governance of deliverables within the Project Team will be important. The overall co-ordination of the compilation of deliverables and reports is expected to be a significant task across such a multi-disciplinary team considering a wide range of potential sites.

3.5.6. Scoping Of Sensitivity Studies

Required sensitivity studies include a minimum of (1) reduced cooling water flow and alternatives sources of cooling water, (2) additional sites introduced as a result of deploying alternative smaller technologies requiring less cooling water per unit, (3) the preferential allocation of sites for thermal with CCS when differing technologies are competing for deployment at particular sites, (4) the potential capacity that may be developable at or adjacent to existing UK nuclear licensed sites, (5) localised expansion beyond the initial ETI mandated assumption that new nuclear construction is to be limited to no more than 2.5 GW to 3.5 GW per site, (6) the approach taken to the full range of ecological designations that may be relevant at sites of potential interest with associated implications under the Habitats Directive.

The successful Respondent will already have proposed the scope and number of individual sensitivity studies in its Proposal. Once the Respondent's Project Team is mobilised and work underway there is an opportunity to review and restate the number and scope of sensitivity studies on the basis of "no better – no worse". The intent is not to provide the opportunity for a net increase or decrease in scope, but provide the opportunity to ensure that the scope actually executed provides the most valuable information to best inform the final conclusions and recommendations from the Project.

3.5.7. Baseline Assessment Of The Long List

The first baseline assessment is to test the Long List of sites against the combination of Assumption Set (1) and Assumption Set (2). It would be surprising if the outcome is significantly different from the conclusions of the UK Government's Strategic Siting Assessment of 2009; the purpose is to capture the range of issues in a baseline assessment which would prevent individual sites from being developed for new nuclear power by 2050.

3.5.8. Sensitivity Analysis (1) – Cooling Water

This first sensitivity is an important early input to the parallel System Requirements for Alternative Nuclear Technologies Project. Some previous reviews used a standardised power

output of 1650 Mwe per reactor; the sensitivity study should identify potential additional sites which may provide sufficient cooling water for reactor outputs of between 1650Mwe and 1150 Mwe. Evaporative cooling is a proven solution for power plant including nuclear; the sensitivity study should identify potential additional sites which may provide sufficient evaporative cooling for reactor outputs of between 1650 Mwe and 1150 Mwe. Previous studies have assumed that new nuclear power plants will be located on the coast or larger estuaries; cooling from inland water bodies is a solution proven elsewhere and the sensitivity study should identify potential additional sites using cooling water from rivers, lakes, reservoirs, ship canals and other inland water bodies.

3.5.9. Sensitivity Analysis (2) – Additional Site Capacity From Introducing Alternative Smaller Plants

A step change reduction in reactor output to 300 Mwe is to be considered. Assuming typical thermal efficiencies of modern PWRs, this 75% reduction in electrical power output compared with the smaller Gen III+ plant is also associated with a 75% reduction in requirement for cooling water. This 300 Mwe output for smaller technologies is another ETI assumption derived from Assumption Set (1). Whilst remaining silent on the specific technologies which could each provide a delivery solution, the remainder of the site evaluation and selection criteria are to be reviewed to consider whether they should remain unchanged or should be varied as a result of the reduced power output. One example of a new discretionary criterion could be the proximity of the site within a specified distance to areas of conurbation, commercial premises and light industrial premises which could benefit from access to a distributed heat network supported by a low carbon energy source. The application of these criteria, together with the results from Sensitivity Analysis (1) (Section 3.5.8 above), is expected to result in a range of additional sites which will form an addendum to the Long List. This represents potential sites not accessible to current Gen III+ reactor designs delivering 1150 Mwe and above.

3.5.10. Workshop

The successful Respondent is responsible for the early completion of Sensitivity Analysis (2) (described at Section 3.5.9) to the satisfaction of the ETI; this part of the Project scope of work is an important input to the parallel System Requirements for Alternative Nuclear Technologies Project. After issue of the scope at 3.5.9 to the parallel project by the ETI, the successful Respondent for this Project will host, manage and fund a 1 day workshop involving technical specialists from this Project and up to 6 representatives from the parallel project. The purpose of this workshop is twofold. Firstly it allows the system requirements team to extract knowledge and understanding from a site appraisal and selection perspective on how to optimise project execution from the consideration of cost, schedule and risk. Secondly it allows the system requirements team to feed back to the site appraisal team any additional features or constraints for potential development sites which will help optimise project execution. The workshop will be jointly planned by the chief or senior technologists on each project. Costs associated with travel and time for attendance will fall to the respective projects. The System Requirements for Alternative Nuclear Technologies Project will be responsible for capturing and assimilating the product and outputs of the workshop. Allowance should be made for the attendance of up to 3 additional observers from the ETI, ETI Members and/or other organisations (at the ETI's discretion).

3.5.11. Sensitivity Analysis (3) – Siting requirements, criteria and site availability for large thermal plant_with CCS

The site selection criteria for a nuclear plant represents selection criteria for the highest hazard thermal plant. By considering these criteria in conjunction with information from literature survey and ETI's report on CCS opportunities in the UK,¹ a basic set of site selection and evaluation criteria for large thermal plants fitted with CCS are to be derived. These criteria are to be used together with a range of forecasts for new electrical generating capacity from thermal with CCS to be deployed by 2050 to identify a likely range of sites of interest for thermal power generation with CCS. The potential for development overlap with sites also suitable for nuclear

¹ A picture of CO2 storage in the UK. Learning from the ETI's UKSAP and derived projects.

is to be identified. Consistent with the assumption in Assumption Set (1), sites suitable for large thermal with CCS are to be preferentially allocated with this technology over nuclear.

3.5.12. Sensitivity Analysis (4) – Potential Capacity At Existing UK Nuclear Licensed Sites

It is assumed that new nuclear capacity is deployed at between 2.5 GW to 3.5 GW as described in Appendix B. If site availability is ultimately constrained, and existing reactor and other UK nuclear licensed sites are to be most favoured through the planning application system, then this sensitivity analysis is to appraise the potential capacity that may be developable adjacent to existing UK nuclear licensed sites by 2050. This represents a simple appraisal rather than a full site evaluation and is intended to be indicative rather than definitive. For each of the sites one or more specific constraints are identified which are to be included within the high level appraisal for each site:

- Torness (size of site);
- Hartlepool (ground conditions and access to bedrock for foundations);
- Sizewell (size of site as constrained by ecological designations);
- Bradwell (flooding, number and length of cooling water pipes necessary to separate intakes from heat plume dispersal in relatively shallow water);
- Dungeness (ecological designations and sustainability of the current flood protection solution)
- Harwell (access to cooling water);
- Winfrith (access to cooling water);
- Hinkley Point;
- Oldbury (ground conditions, flood protection, access to cooling water through the full tidal cycle, and size of site);
- Berkeley (access to cooling water);
- Trawsfynydd (access to cooling water; this appraisal is to include a more detailed evaluation of the cooling capacity of a hybrid solution combining the existing lake with low profile forced draught cooling towers using air pre-heating to suppress condensation formation in the plume;)
- Wylfa;
- Capenhurst (cooling water and size of site);
- Springfields (cooling water and size of site);
- Heysham (size of site and dispersal of the heat plume from cooling water discharged);
- Moorside (access to bedrock for foundations);
- Chapelcross (access to cooling water);
- Hunterston; and
- Dounreay.

3.5.13. Sensitivity Analysis (5) – Deployment Of New Nuclear Power Stations At More Than 2.5 GW to 3.5 GW per Site

This builds on Sensitivity Analysis (4) (Section 3.5.12 above) to vary the assumption that development is limited to 2.5 GW to 3.5 GW per site. Where sites are capable of deploying more capacity, then this is unconstrained to the full potential of individual sites.

3.5.14. Sensitivity Analysis (6) – Approach To Sites With Ecological Designations

The purpose and range of ecological designations is summarised in Appendix C. Along with access to sufficient cooling water, the extent of ecological designations associated with potential development sites is expected to be another dominant constraint in realising sufficient sites for up to 75 GW of new nuclear capacity. This sensitivity study is intended to develop a strategy which minimises environmental impact associated with the development of the required number of sites.

3.5.15. Other Sensitivity Studies

A minimum number and scope of sensitivity studies have been specified. Respondents are invited to consider and propose further studies within their Proposals in order to inform the responses to the questions at set out at Section 3.1, above (Project Introduction). Such studies may consider alternative assumptions to those in Assumption Set (1) or Assumption Set (2) as appropriate. The reasoning behind and the value of these additional studies should be addressed in Respondents' Proposals.

3.5.16. Other Opportunities

The scope of work described in Sections 3.5.6 to 3.5.15, above, is largely associated with the application of sensitivity studies to understand the range of options and choices involved in realising sufficient sites to deploy up to 75 GW of new nuclear power by 2050. It should be acknowledged that much can change in 35 years. EDF built France's fleet of 58 power reactors in an equivalent period. The purpose of this section of the Project scope of work is to identify other areas of opportunity which may arise to contribute to the group of potential sites for new nuclear, noting that this project is about sites and not technologies. Such examples include:

- the deployment on new nuclear power stations adjacent to current, decommissioning or historic MoD nuclear sites; and
- given that MoD activities such as flying, firing ranges, or missile ranges are hazardous activities which preclude the adjacent development of nuclear power stations, the future rationalisation of the location of MoD land intensive activities and the consequent release of surplus MoD land may create new development sites for nuclear.

3.5.17. Preferred Locations For Technology Demonstrator Sites

The last element of the Project scope of work acknowledges that the future nuclear expansion scenarios are likely to be associated with one or more technology demonstrator projects associated with Small Modular Reactors or large Gen IV plant. Historically the UKAEA developed reactor technology demonstrators or prototypes at its sites at Harwell, Windscale, Winfrith and Dounreay. The programme of decommissioning of these sites is now being managed by the Nuclear Decommissioning Authority. Given the anticipated difficulty in realising sufficient sites for the nuclear expansion scenarios, one of the UK's choices is to consider further nuclear development at one or more of these sites for nuclear power purposes; this is considered within Section 3.5.12, above. The purpose of this Section 3.5.17 is to consider from a siting perspective the potential preferred location(s) for one or more SMRs and additionally a Gen IV power plant derivative of the ASTRID liquid metal fast breeder reactor design.

3.5.18. Summary Of Outcomes From Sensitivity Analyses.

The purpose of this element of the Project scope of work is the effective collation and evaluation of the range of sensitivity studies and options considered. The links must be transparent and auditable between the detailed findings, initial processing, final conclusions and recommended options for further consideration.

3.5.19. Suggested Options For Realising Site Capacity Necessary To Deliver 75 GW Of New Nuclear By 2050

The outcomes from the sensitivity analysis shall address the following questions repeated from Section 3.1, above:

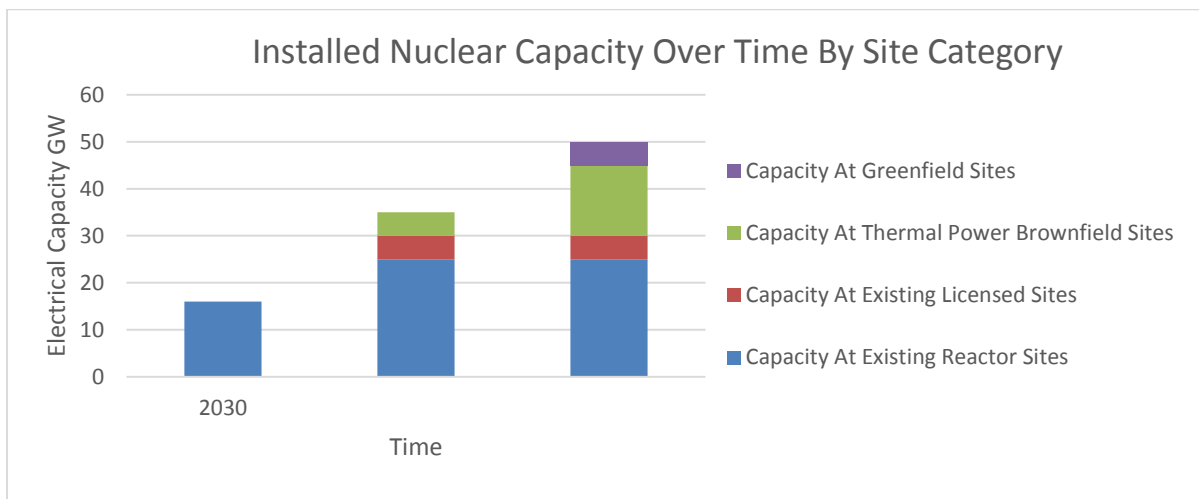
- What are the site challenges associated with developing new nuclear power stations at each of the existing nuclear reactor licensed sites in England and Wales? What is the likely maximum additional nuclear power plant electricity generating capacity for new deployment next to existing nuclear power station sites before 2050, including and beyond plans already announced by developers?
- Which existing brownfield power generation sites could be considered for nuclear power development and what is the likely maximum generating capacity for new nuclear deployment at brownfield sites by 2050?
- Which greenfield sites could be considered for nuclear power development and what is the likely maximum capacity for new nuclear deployment at greenfield sites by 2050?
- Which sites (brownfield and greenfield), and what total potential capacity, is suitable for nuclear power development but would be preferentially allocated to thermal CCS plant consistent with the above assumptions?
- What are the dominant criteria which exclude sites from nuclear power deployment at existing brownfield and new greenfield sites, and what changes would need to be made to these criteria to significantly increase the number of sites available for nuclear power deployment?
- What changes should be considered to supporting assumptions used in the analysis, and why, in order to increase the number of sites available for the potential deployment of nuclear?
- What additional assumptions or opportunities would increase the number of potential sites and capacity for new nuclear by 2050?
- From siting considerations, what are the likely site requirements for technology demonstrator plants such as UK preferred SMR(s) or a 1200 MW Sodium Cooled Fast Breeder Reactor. Given the overall constraints on site availability, what are the most likely locations for siting these demonstrator plants.

It is anticipated that siting constraints may prevent the realisation of sufficient sites for 75 GW of new nuclear with the following consequences:

- siting criteria are progressively eased to allow increasing nuclear deployment beyond 40 GW within defined boundaries of safety and acceptability of environmental impact;
- alternative nuclear technologies are sought, where cost effective, to deliver energy alongside and in addition to large nuclear plants providing a range of energy system solutions within defined boundaries of safety and acceptability of environmental impact; and
- any remaining shortfall in preferred nuclear generation is made good by other low carbon alternatives with the inference that overall energy system cost will increase.

This area of the Project scope of work will draw on the sensitivity studies and the analysis at Section 3.5.18 to identify a number of pathway options to realising sufficient sites for the deployment of 75 GW of new nuclear. Each pathway will be accompanied by the descriptions of barriers, opportunities, risks and mitigating actions.

The outcomes of the baseline and sensitivity analyses should be reported in the following form, or alternate format provided this is approved by the ETI:



This format is delivered by applying judgement to the sequence in which sites are developed based on their ease of development, economic attractiveness, planning application challenge and other local factors which may influence the time of development. This is a matter of exercising judgement; for the purpose of these reports it does not need to be explained or justified, but merely visible. The site development dates are grouped into decades and individual sites categorised as:

- adjacent to existing reactor sites;
- adjacent to other UK nuclear licensed sites;
- at brownfield sites created by decommissioned thermal power stations; or
- at undeveloped or greenfield sites.

The same consistent format should be used to show the outcome of the different option pathways for creating sufficient site capacity to deploy 75 GW of new nuclear power stations.

3.5.20. Detailed Project Technical Report

A full Project Technical Report is required to deliver the underpinning detail to support the analysis, conclusions and recommendations regarding future pathway options. The report must be sufficiently complete and standalone that it could be exposed to future peer review, should ETI decide to procure this to further underpin the conclusions and recommendations. This re-emphasises the importance of the scope and clarity of the assumptions captured in Assumption Sets (1) and (2). It is not currently intended that the ETI publish this underpinning technical report. Accordingly, the successful Respondent shall be required to maintain the confidentiality of this detailed report and associated data in compliance with the Project Contract and associated contractual agreements.

3.5.21. Project Summary Report Identifying Issues, Trends and Choices

To realise the benefits from this Project, the ETI shall publish a report or reports to inform the development of policy and further work by ETI and others. For this purpose, the successful Respondent will produce a summary report which describes issues, trends, limits and options without identifying any postulated locations for new nuclear power plant beyond those locations (currently Hinkley Point, Sizewell, Wylfa, Oldbury and Moorside) at which specific new nuclear development plans have already been announced. This Project Summary Report shall summarise the approach used to deliver the Project but will not include the technical underpinning detail.

3.5.22. Project Presentation

After submission of the detailed Project Technical Report and the Project Summary Report, the successful Respondent shall prepare and deliver the final Project Presentation at the ETI's premises, in 3 parts:

- approach to and conduct of the Project including key assumptions (40 minutes);
- Project outcomes and conclusions (40 minutes); and
- questions (40 minutes).

The purpose of this presentation is not for ETI to evaluate the technical delivery of the Project scope. The purpose is to communicate to a broader non-nuclear ETI and ETI Member representation how the Project scope has been approached and the outcomes and conclusions that have been learned. Of particular importance is the explanation of the choices regarding future pathways to realising more nuclear site capacity, and the actionable steps which could be required to deliver these pathways. Sufficient attendance is required from amongst Project Team key personnel involved in the delivery of the Project to provide a good prospect of satisfactorily addressing each question during the presentation session.

4. COMMERCIAL AND LEGAL REQUIREMENTS

4.1. ETI Investment

The ETI is an investor in technology, not a grant awarding body. In commissioning the Project, the ETI anticipates that it will be the sole or predominant source of investment funding.

For this Project, the ETI's investment will be on a fixed price basis (see definition of ETI Investment at Appendix H – Glossary).

Each Respondent must in its Proposal clearly identify the proposed ETI Investment and (where relevant) the source and amounts of any additional funding (whether from the Respondent and/or third parties) proposed to be made available by the Respondent.

Respondents may wish to include an element of financial profit in their proposed costs, noting that it is not anticipated that the selected Respondent(s) will be granted rights to Arising IP.

4.2. Project Contract

Following selection, the preferred Respondent will be invited to enter into a contract with the ETI for delivery of the Project.

The Project Contract will be substantially in the terms of the ETI's standard Consultancy Agreement template, subject to the inclusion of provisions specific to the delivery by the preferred Respondent of the Project (including typically the agreed ETI Investment, identification of the Project Team personnel and, in an Annex, details of the specific Tasks and activities to be undertaken by the Prime Contractor in delivering the Project).

A draft of the Project Contract will be made available to Respondents following receipt by the ETI of a signed Non-Disclosure Agreement in accordance with Section 5.1.1 and Appendix G.

The Project Contract will be finalised following selection of the preferred Respondent(s) (Sections 5.1.3, 5.1.4 and 5.1.5), during the Project Detailing and Contract Finalisation Stage of the Project Commissioning Process (Section 5.2).

Any issues that a Respondent has with the terms of the Project Contract must be set out in the Statement of Compliance to be provided as part of the Proposal (see Section 7 (Statement of Compliance) and Annex E3). Respondents are also required to provide a compliance table (see Annex E4).

Please note that the extent to which a Respondent accepts the terms of the ETI's draft Project Contract is one of the Selection Criteria against which that Respondent's Proposal will be evaluated (Section 5.1.4).

4.3. Participant Contracting Structure

The ETI requires Respondents to make a Proposal as either a Sole or Prime Contractor, such that only the selected Respondent will enter into the Project Contract with the ETI and undertake the Project either as:

- i. Sole Contractor, where the Respondent has satisfied the ETI that it has the skills, capability and capacity to undertake the Project entirely within its organisation (ie the contracting legal entity); or
- ii. Prime Contractor, with specified parts of the Project being performed by Subcontractors (but note the paragraph in bold, below). The ETI will require that there are Subcontracts in place between the Prime Contractor and its Subcontractors that are consistent in all material respects with the Project Contract. The appointment and use of Subcontractors by the Prime Contractor will be subject to prior ETI approval and the ETUI reserves the right to require its approval of the terms of Subcontracts.

The ETI considers that the complexity of the inter-disciplinary scope across contractual boundaries introduces additional risk to the timely delivery of the Project. The ETI

considers that sufficient capability exists within the market for a number of organisations (companies and other legal entities) within the same group to deliver the total scope of the Project ie using only employees of the contracting legal entity and its existing group companies. For these reasons, the ETI anticipates that it will not accept Proposals from consortia, or from a Prime Contractor supported by one or more Subcontractors outwith the same group of companies. The ETI's preferred "Prime Contractor" model is, therefore, that of a Respondent organisation (as the legal entity contracting with the ETI) having Subcontracts (subject to ETI approval) with other companies within the same group of companies (ie having the same ultimate holding company).

In either case, the Sole/Prime Contractor legal entity (only) will enter into the Project Contract with the ETI and act as primary interface with the ETI.

4.4. Project Payment Structure

The ETI will invest in the Project on a fixed price basis (see Section 4.1) up to the amount of the ETI Investment agreed with the successful Respondent.

Payments will be made by the ETI against agreed Milestones. Payment for a Milestone will be subject to (for example) the constituent deliverables for that Milestone meeting agreed acceptance criteria and to the Sole/Prime Contractor complying with the ETI's reporting requirements in relation to that Milestone. (See also Appendix E, Section 6.2.)

Details of the Project payment structure and related requirements will be agreed during finalisation of the Project Contract (Section 5.2, Project Detailing and Contract Finalisation Stage).

4.5. State Aid

A proportion of the ETI Investment may constitute state aid. The ETI has a specific state aid clearance from the European Commission. A copy is available on request. Respondents should note:

- a) Respondents may be required to provide further information during the Project Commissioning Process to support any specific state aid requirements of the Project;
- b) Participant(s) are required to provide full transparency of costs throughout the Project to ensure both the Participant(s) and the ETI comply with EU state aid law;
- c) Participant(s) are required to agree to certain obligations in the Project Contract related to the state aid requirements including the duration of the retention of records, and obligations to return ETI Investment monies in certain exceptional circumstances (including in the event the European Commission adopts a decision that there has been a grant of illegal state aid or misuse of state aid); and
- d) each Respondent is required to confirm in its Proposal that there are no potential, threatened, pending or outstanding recovery orders by the European Commission in respect of any funding received by that Respondent (Appendix E, Annex E1, Section 1.1).

4.6. Intellectual Property

4.6.1. Arising IP – Ownership

For this Project, the ETI will own all Arising IP and may use, exploit (including by licensing ETI Members and other third parties) and publish the results as it thinks fit.

4.6.2. Arising IP – Sole/Prime Contractor's Rights

The ETI does not anticipate granting rights to the Sole/Prime Contractor (whether by licence or sub-licence) to use or exploit Arising IP or other results.

In the event that a Respondent proposes to request a licence of the (or any) Arising IP, this should be discussed with the ETI prior to submission of a Proposal. Any licence for commercial use would not be expected to be royalty free.

The ETI does not generally grant Arising IP rights to Subcontractors.

4.6.3. Academic Organisations

Generally, if requested, the ETI will grant rights to Sole/Prime Contractors who are academic institutions for the purposes of academic teaching and academic research only. Academic publication of appropriate parts of the Project results will generally be permitted subject to an approval process. Any Respondent requesting such rights should set out the relevant details in its Proposal.

4.6.4. Background IP

Where a licence of Background IP is required to carry out the Project and/or for the subsequent exploitation of any Arising IP / Project results, the Sole/Prime Contractor (and Subcontractor(s), where appropriate) are expected to make this Background IP available on a non-exclusive, royalty-free basis.

If Respondents (or their proposed Subcontractors) fail to meet this expectation, the attractiveness to the ETI of the relevant Proposal may be adversely affected.

The proposed terms for Background IP required to enable the ETI, the ETI Members and other licensees of the ETI to use and exploit the outputs of the Project must be identified in any Proposal, agreed and included in the Project Contract.

4.7. Project Health, Safety and Environmental (HSE) Management

The ETI's approach to the management of HSE in projects is based on three key elements:

- competency assessment;
- performance assurance; and
- the ETI's Project Incident Protocol.

How the ETI applies this approach to a specific project depends upon the nature and content of the project. For this Project, this will depend upon whether any work to be undertaken is not entirely desk-based (eg site visits, field trials, experimental or laboratory work). The ETI's requirements for Respondents' Proposals are set out in Appendix E, Section 6.4.

4.8. Due Diligence (General, State aid, Insurance, IP and HSE)

The ETI requires Respondents to provide due diligence information at two stages of the Project Commissioning Process: (i) as part of a Proposal and (ii) during the Project Detailing and Contract Finalisation Stage (Section 5.2).

The ETI's requirements for IP due diligence as part of a Proposal are set out in Section 9 of Appendix E. The ETI's requirements for IP due diligence during the Project Detailing and Contract Finalisation Stage are set out in Appendix E, Annex E1, Section 2b.

Further details of the ETI's wider due diligence requirements are set out in Section 10 of Appendix E and at Annex E1.

Please note that successful completion of all elements of the required due diligence is a pre-requisite for selection of a Proposal. Failure to meet due diligence requirements at any stage may result in exclusion of a Proposal from the ETI's Project Commissioning Process.

5. PROJECT COMMISSIONING PROCESS AND ESTIMATED TIME SCALES

The ETI is using a two-stage approach to commission the Project:

Stage 1 – RfP Issue, Response to RfP and Selection of Preferred Respondent(s); and

Stage 2 – Project Detailing and Contract Finalisation.

5.1. Stage 1: Response to RfP and Selection of Preferred Respondent(s)

5.1.1. Non-Disclosure Agreement and Notification of Intention to Submit a Proposal

Prior to submitting a Proposal in response to this RfP, Respondents are required to provide to the ETI (i) a formal notification of their intention to submit a Proposal, in the form set out at Appendix F, and (ii) a Non-Disclosure Agreement (NDA) in the form provided at Appendix G, signed and returned to the ETI in accordance with the instructions at Appendix G. Respondents should take care to follow these instructions precisely, in order to avoid unnecessary delays.

Both documents must be received by the ETI no later than the deadline specified on the front page and at Section 5.3 of the RfP (electronic copies of each document are available on the ETI website). Respondents are encouraged to return both the notification form and the NDA as soon as possible (rather than waiting until the deadline), as following return of the properly executed NDA the ETI will send out the draft Project Contract (and Respondents are required to confirm acceptance of the detailed terms therein and/or provide specific comments on them in their Proposals).

5.1.2. Submission of Proposals

Respondents are required to submit Proposals to the ETI no later than the closing date specified on the front page and at Section 5.3 of the RfP. To ensure that all Proposals are treated equitably, extensions to this closing date will not normally be granted.

The required form and contents of Proposals are set out in Section 6 of the RfP and in Appendix E.

5.1.3. Selection Process

Following the closing date for Proposals, the ETI will convene a Selection Panel as part of its evaluation process to recommend which Respondent(s) should proceed to the Project Detailing and Contract Finalisation Stage. In addition to ETI staff, this panel may include experts selected by the ETI (typically including individuals drawn from ETI Member organisations and third parties) to provide the necessary expertise to consider the technical, commercial, legal and financial aspects of each Proposal.

It is intended that Proposals should provide all necessary information to enable the Selection Panel to select a preferred Respondent. However, the Selection Panel may request further clarifications from Respondents following the meeting.

In the event that the ETI receives a large number of Proposals, the ETI may make an assessment to select a manageable shortlist of Respondents / Proposals for consideration by the Selection Panel.

In any event, the ETI may in its discretion decide to negotiate with more than one Respondent or group of Respondents (as appropriate) to ensure that all key issues are resolved fully and promptly, before making a final selection decision.

Recommendations of the Selection Panel are made to the ETI's executive management team for consideration and ratification. All Respondents will be notified of the final ETI decision once it is confirmed. Prior to this notification, no information will normally be provided to Respondents concerning the Selection Panel recommendations, (except to the extent that further information may be requested by the ETI to clarify certain aspects of some or all of the Proposals, as outlined above).

5.1.4. Selection Criteria

The following principal high level drivers in selecting the preferred Respondent for this Project will be evaluated from Respondents' Proposals:

- Demonstrated relevant capability and experience.
- Technical excellence in the Proposal and those engaged in its delivery.
- Credibility in delivery of the full scope of the Project to schedule.
- Value for money.
- Compliance with ETI's draft Project Contract and requirements regarding IP.

Proposals will be reviewed and judged primarily against the criteria listed below and the supporting evidence supplied. Failure to meet minimum standards in any criterion may result in the ETI rejecting a Proposal.

The ETI expects that the capabilities and experience listed below will be critical to the successful delivery of the Project. Respondents are free to identify additional capabilities and experience which they consider to be critical or important to success provided that these are delivered within the allocated page count. The ETI's experience evaluating Proposals has shown that specific and objective evidence of capabilities and experience is more convincing than general statements about previous projects executed by the organisation.

Evidence should be provided of capability and experience to deliver the Project Objectives (Section 2.2) through Project execution, including in relation to the following;

- conduct of environmental impact assessments for energy or transport infrastructure projects of national or international significance;
- preparation, or support to preparation, of planning applications for UK energy or transport infrastructure projects of national significance;
- specification for, or management of, ground investigation works to inform site development of UK or European Energy or Transport infrastructure projects of national significance;
- cooling water system appraisal or design for large thermal or nuclear power plant; and
- siting appraisal to inform the potential development of new nuclear power stations.

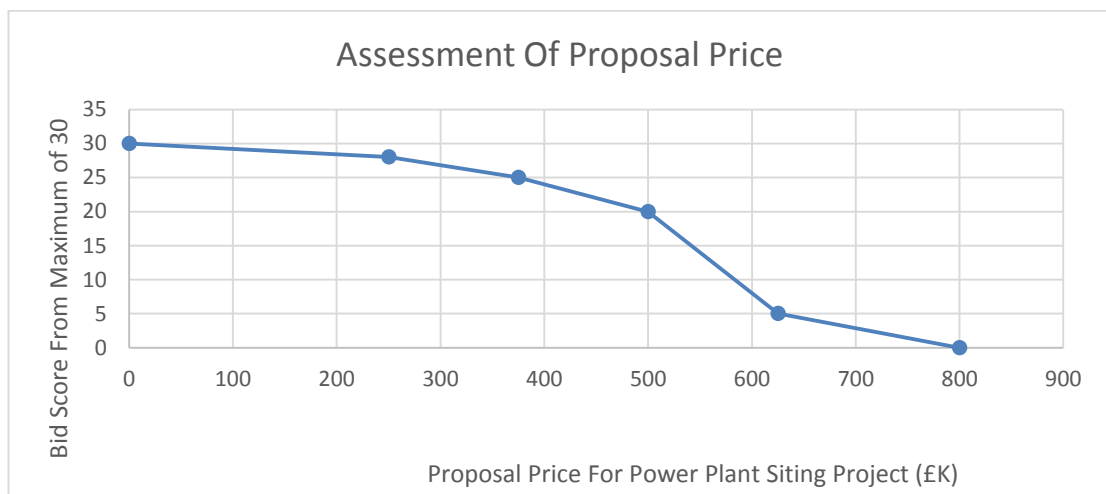
The Proposal must also include an indication of the number of people employed by the Respondent with experience in the appraisal of potential development sites and the associated preparation of environmental impact assessments and compare these numbers with the resource levels required to deliver this Project.

Completeness of information content, structure and quality of the Proposal (against the areas listed in Appendix E); compliance with the scope and technical requirements set out in Section 3; Project approach, structure and plan, (including methodologies for generating innovative potential solutions). These will be assessed by relevance to:

- clarity and relevance of Assumption Set (2) and the lack of technical exclusions which materially weaken technical delivery at the proposed price (10/100);
- value and relevance of proposed range of sensitivity studies in informing the project conclusions and recommendations (10/100);
- clarity and comprehensiveness of proposed structure of the Project Technical Reports and Project Summary Reports (10/100);

- clarity and breadth of delivery organisation (5/100);
- clarity of the project management plan describing activities, durations, and the identity of individuals delivering significant activities. Experience and capability of the Project Manager against the requirements of the role (5/100);
- experience of the Technical Specialists with a significant delivery role in the Project, as recorded against the activities shown in the project management plan (15/100); and
- proposed approach to the workshop involving the organisation engaged to deliver the parallel System Requirements for Alternative Nuclear Technologies Project (5/100).

Value for money. The scope and quality of work proposed by the Respondent will be balanced, against the proposed fixed price of the ETI Investment, excluding VAT, through the scoring mechanism below noting that a lower proposal price attracts a higher score and a higher proposal price attract a lower score:



Willingness to comply with the terms and conditions of the proposed Project Contract (see Section 4.2); willingness to support the contracting process (including as set out in Section 5.2) and the contracting timeline (as set out in Section 5.3); the extent to which there may be Background IP which would prevent the Project proceeding or the Arising IP being exploited; including:

- confirmation of lack of exceptions, deviations and other variations from the draft Project Contract, IP requirements, and terms and conditions identified by ETI in the RfP (10/100).

5.1.5. Proposal Assessment

The Respondents' Proposals will first be examined to evaluate evidence of Respondents' relevant experience and capability necessary to deliver the Project. This is a pass or fail criterion.

Where Proposals have demonstrated the required capability and experience, these Proposals will then be assessed by the Selection Panel. The Selection Panel members' advice will be informed by application of the Selection Criteria in 5.1.4 above and using the following overall weighting:

Area	Score From 100
Experience & capability description	Pass or fail
Technical and delivery	60
Price	30
Lack of exceptions, deviation and other variations from the terms of the ETI's draft Project 1 Contract, including requirements regarding IP	10

Proposals which are incomplete, fail to comply with the requirements of this RfP, and/or indicate significant deviation from the terms of the draft Project Contract may be excluded without further assessment.

5.2. Stage 2: Project Detailing and Contract Finalisation Stage

Following selection, the ETI will invite the preferred Respondent(s) to enter into negotiations with the ETI to finalise the details of the Project and the terms of the Project Contract. See Section 5.3 for further details relating to anticipated dates.

The ETI may decide to negotiate with more than one Respondent or group of Respondents (as appropriate) to ensure that all key issues are resolved fully and promptly, before making a final selection decision.

The Project Detailing and Contract Finalisation Stage will include the following activities (as required and dependent on the level of detail provided in the selected Respondent's Proposal):

- a) finalisation and agreement of the Project Contract;
- b) further due diligence activities as required (see Annex E1 Section 2);
- c) agreement (and approval as required by the ETI) to terms of other key contractual arrangements (eg Subcontracts) as identified in Respondent's Proposal; and
- d) any further information or assessment that may be necessary to meet state aid requirements.

Respondents are required to commit to provide legal, technical, commercial and managerial resources (including where appropriate in face to face meetings) as required to achieve the target Project Contract execution date shown in Section 5.3. The ETI reserves the right to re-open discussions with other parties and/or cancel the commissioning of the Project should it become apparent that this date may not be achieved.

5.3. Estimated Project Commissioning Timeframes

The following tables outline the anticipated schedule for the Project Commissioning Process. They also include anticipated dates when the preferred Respondent will be required to commit the required resources to attend Project Detailing and Contract Finalisation Stage meetings with the ETI.

The timing and the sequence of events resulting from this RfP may vary and shall ultimately be determined by the ETI.

Request for Proposal and Selection	Dates
Issue of RfP	17 th March 2014
Deadline for: (i) notifying the ETI of an intention to submit a Proposal (Appendix F); and (ii) return of signed Non-Disclosure Agreement (Appendix G). See Section 5.1.1	31 st March 2014
Closing date for submission of Proposals	11 th April 2014
Selection Panel	14 th April to 24 th April 2014 (anticipated)
Preferred Respondent(s) notified	02 nd May 2014 (anticipated)

Project Contract Finalisation	Anticipated Dates
Project Contract finalisation meetings (to finalise commercial and legal aspects, any remaining due diligence, etc.)	6 th May to 23 rd May 2014

Project Start and Finish	Anticipated Dates
Project Contract execution target date	23 rd May 2014
Project start target date	27 th May 2014
Project finish target date	28 th November 2014

6. PROPOSAL CONTENT AND FORMAT

The Proposal shall be arranged according to the structure detailed in Appendix E and shall include all required supporting information and appendices detailed therein.

The Proposal must be written in a succinct manner and must not include imprecise statements, generalities or repeated information. It must be easily readable with appropriate font sizes, margins, etc.

The Proposal should not exceed a maximum of 70 pages (excluding the required appendices to the Proposal explicitly excluded from the page count by Appendix E to this RfP - see Section 13 Appendix E).

The Proposal shall consist of one (1) bound hard copy and one (1) electronic copy. The latter shall be provided in both PDF and Microsoft Word formats. The postal and email addresses for submission of hard copies and electronic copies, respectively, are set out on the front page of this RfP.

7. STATEMENT OF COMPLIANCE

The ETI's full requirements for the Statement of Compliance are set out in Appendix E, Annex E3.

Respondents are required to provide a statement confirming that the Proposal is fully compliant with the Request for Proposals, or stating clearly any exceptions, deviations, alternative approaches or additions, with justification.

Additional comments and clarifications should also be listed where appropriate (for example to clarify interpretation of requirements), but these must be differentiated from any deviations / exceptions above.

In relation to the draft Project Contract (Section 4.2 above), Respondents are required to confirm in the Statement of Compliance the extent to which the provisions of the draft Project Contract will be accepted by the Respondents.

The extent of compliance with the RfP and the draft Project Contract is one of the key Selection Criteria against which a Proposal will be assessed (Section 5.1.4).

8. IMPORTANT NOTICES

- a) The ETI at its discretion may request clarification of a Proposal and may reject any Proposal which is unclear.
- b) Neither the issue of any documentation in the Project Commissioning Process nor any of the information presented in it should be regarded as a commitment or representation on the part of the ETI or any other person to enter into a contractual arrangement. The issue of the RfP is not an agreement or offer to purchase goods or services, and the ETI is not bound to enter into any contract with any Respondent. By responding to this Request for Proposals, a Respondent does not commit itself to entering into a contract with the ETI.
- c) All decisions made by the ETI relating to the acceptance, review and selection or otherwise of Proposals are final.
- d) All documents, including Proposals, submitted to the ETI become the property of the ETI. They will be received and held in confidence by the ETI under the terms of the Non-Disclosure Agreement (Appendix G). No part of a Proposal, or other documents provided by Respondents, shall be returned.
- e) The ETI reserves the right at any time to (i) withdraw the RfP and terminate the Project Commissioning Process, (ii) change the basis, timetable and/or requirements of, and/or the procedures for, the Project Commissioning Process, including the timetable or closing date for receipt by the ETI of Proposals, (iii) make modifications to, or alter any of the information within, the RfP, (iv) reject any or all of the Proposals received, and (v) not invite any Respondent(s) to proceed further.
- f) Neither the ETI nor any of its agents or advisers accepts any liability or responsibility for the accuracy, adequacy or completeness of any of the information provided or any opinions contained in this RfP or of any other information made available during the Project Commissioning Process. No representation or warranty, express or implied, is or will be given by the ETI or any of its agents or advisers with respect to such information provided or opinion given therein. Any liability is thereby expressly disclaimed.
- g) Respondents must assess the information and terms contained in this RfP independently, having taken professional advice if necessary. Each Respondent will be deemed to have examined all the documents enclosed with this Request for Proposals and by its own independent observations and enquiries will be held to have fully informed itself as to the nature and extent of the requirements of the RfP. Each Respondent must rely on its own enquiries and on the terms and conditions contained in any agreement, when and if finally executed, subject to such limitations and restrictions as may be specified therein.
- h) Respondents shall be wholly responsible for the costs they incur in the preparation and submission of their responses to the RfP. The ETI shall not be responsible for, and shall not pay, any costs and expenses which may be incurred by the Respondent (or by any third party, including proposed Subcontractors) in connection with its participation in the Project Commissioning Process, including any costs or expenses incurred up to and including the execution of the Project Contract.
- i) The ETI may, at its discretion, shortlist Respondents for the next stage of the Project Commissioning Process. The ETI does not undertake to accept the lowest bid or to accept part or all of any Proposal and the acknowledgement of receipt of any Proposal (and/or any invitation to any Respondent(s) to proceed to the next stage) shall not constitute any actual or implied agreement between the ETI and the Respondent.
- j) The copyright in the documentation and any other materials supplied by the ETI and/or its advisers in the Project Commissioning Process, in whatever format, belongs to the ETI or its appointed advisers. Such documentation and materials may not, either in whole or in part, be copied, reproduced, distributed or otherwise made available to any other third party or used without the prior written consent of the ETI, except in relation to the preparation of the Proposal in the course of the Project Commissioning Process. All documentation supplied by the ETI in relation to the Project Commissioning Process must be returned on demand, without any copies

being retained by the Respondent.

- k) In this RfP, any phrase introduced by the term “include”, “including”, “in particular”, “for example”, “such as” or similar expression shall be construed as illustrative and shall not limit the sense of the words preceding that term.
- l) This RfP, and any dispute or claim arising out of or in connection with it (including any dispute or claim relating to non-contractual obligations), shall be governed by and construed in all respects in accordance with the laws of England and Wales and the Respondent agrees that the Courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim arising out of or in connection with this document (including any non-contractual disputes or claims).
- m) The submission of a Proposal will confirm acceptance of the foregoing provisions by the Respondent without qualification. Any attempt to qualify any of the foregoing provisions in this Section 8 (Important Notices), either expressly or impliedly, may result in a Respondent being disqualified.

APPENDIX A – IDENTIFICATION OF SITES TO SUPPORT 16 GW OF NUCLEAR REPLACEMENT

1. Approach To Identification Of Sites For The Replacement Phase

In November 2005 the UK Government announced a review of energy policy and under this remit the DTI in February 2006 established a nuclear siting expert group to consider the potential availability of UK sites for new nuclear power stations should they be required. The scale of any future nuclear new build programme would depend partly on the availability of suitable sites in the UK. Pragmatically it was considered that there would be little point in the Energy Review recommending policy options to Ministers in support of new nuclear build if no suitable candidate sites were likely to become available economically or within a realistic timeframe. The availability of potential sites therefore contributed to the government's view of the overall feasibility of a new nuclear build programme and the development of its energy policy.

Members of the DTI's nuclear siting expert group contributed toward the development of a discussion paper now known as the Jackson report². This report identified the major business, economic, safety, environmental and technical factors that could influence the selection of a site for the construction of one or more nuclear power stations in the UK. Key criteria included consideration of a Strategic Environmental Assessment, connectivity to the National Grid, and access to sufficient water for cooling. Influenced by these issues, the expert group also suggested a hierarchy for site selection:

- Existing nuclear power station sites
- Other existing civil nuclear sites
- Conventional power station sites
- Greenfield sites

Subsequently, Government Infrastructure Policy was directed through the development of a series of National Policy Statements to support the implementation of strategic planning. This was intended to balance local impacts against the strategic importance of national infrastructure development when applications were considered by the Infrastructure Planning Commission. This involved seeking nominations from parties interested in developing new nuclear power stations against 12 specific siting criteria identified which were a mix of:

- physical criteria of the site,
- environmental factors associated with the surrounding area
- safety criteria against which development approvals by the nuclear safety regulator are likely to be with-held

Developers or land owners nominated 1 or more sites which were reviewed by Government, which ultimately accepted nominations at the following 8 sites:

Hinkley Point	Wylfa	Sizewell	Bradwell
Moorside	Oldbury	Heysham	Hartlepool

The Government review rejected nominations at the following sites:

- Dungeness (environmental issues)
- 2 Greenfield sites on the Cumbrian coast; Kirksanton and Braystones

² Siting New Nuclear Power Stations: Availability and Options for Government. Discussion Paper for DTI Expert Group. Jackson Consulting (UK) Limited. 26 April 2006. www.berr.gov.uk/files/file39030.pdf

The National Policy For Nuclear Power generation includes a section (Part 4) identifying potentially suitable sites for the deployment of new nuclear power stations in England and Wales before the end of 2025³.

Much of the land at the majority of sites was owned or partially owned by NDA and EDF Energy. Arrangements were made by Government to:

- Exclude Wylfa from the mix of EDF Energy owned future development sites to improve opportunities for other developers
- Auction long leases of NDA owned land next to existing power stations at Wylfa, Oldbury and Moorside (next to Sellafeld)

The outcome has evolved into 3 independent developers who now have access to sufficient sites to develop around 16GW by 2030:

- EDF (NNBGenco) – twin EPRS at each site of Hinkley Point and Sizewell
- Horizon – twin ABWRs at each site of Wylfa and Oldbury
- NuGen – three Westinghouse AP1000 reactors at Moorside

2. Independent Review

As part of the overall process of Strategic Siting Assessment, the Government commissioned an independent review to determine if other sites of significant merit had been omitted from the nomination and assessment process.⁴ Now known as the “Atkins Report”, this work used the site description of “worthy of further consideration” to identify that it is for Government (on the basis of advice from Regulators and others), to determine whether they are suitable or potentially suitable from the perspective of the siting selection criteria applied by the Strategic Siting Assessment process.

Atkins drew upon both new work and historic CEBG records and experience to complete this study and identified the following additional sites as “worthy of further consideration” :

- Druridge Bay, Northumberland
- Kingsnorth, Kent
- Owston Ferry, west bank of the Trent in North Lincolnshire

³ National Policy Statement for Nuclear Power Generation (EN-6) Volume I of II. DECC July 2011.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/47859/2009-nps-for-nuclear-volumel.pdf

⁴ A Consideration Of Alternative Sites To Those Nominated As Part Of The Government's Strategic Siting Assessment Process For New Nuclear Power Stations. Prepared by Atkins for DECC November 2009.

<http://webarchive.nationalarchives.gov.uk/20110302182042/data.energy/npsconsultation.decc.gov.uk/documents/atkins.pdf>

APPENDIX B – APPROACH TO IDENTIFICATION OF SITES TO SUPPORT THE EXPANSION PHASE(S)

1. Approach To Identification Of Sites For The Expansion Phase(s)

Through its rigorous approach, the site criteria and site selection for the 16 GW replacement phase can be considered a sound basis for the first consideration of potential sites which may be suitable for development as part of a nuclear expansion scenario.

Given the magnitude of the expansion scenarios and the concurrent deployment of new thermal plant fitted with CCS, further potential development sites need to be identified. The following assumptions are to be used as the basis for the initial analysis and included within Assumption Set (1):

- Criteria for the siting of new nuclear power stations beyond 2030 will be no less onerous than those for nuclear power stations developed up to 2030
- Developers will preferentially seek sites with access to sufficient water for direct cooling on the basis of plant efficiency and business case economics
- For a range of reasons, future new nuclear power stations will be deployed as twin or triple reactor units with individual unit generation of between 1150 Mwe and 1650 Mwe and a combined site generation of around 2.5 to 3.5 GW per site
- Nuclear new build will not be developed in Scotland
- Nuclear new build will not be developed in Northern Ireland
- Brownfield or greenfield sites on the UK east coast suitable for large scale development will be preferentially allocated to thermal CCS plants because of system connectivity to CO2 transport, storage and disposal
- Any UK power plants specifically and exclusively for UK plutonium disposition will be constructed on the Sellafield licensed site (not Moorside)
- A site or sites will be required for UK technology demonstrator programmes under the expansion scenarios for one or more SMRs and a Gen IV sodium cooled fast breeder reactor

From these assumptions, the approximate number of sites required associated with nuclear power new build scenarios are as follows scenarios :

Scenario	Number Of Power Sites (2.5 to 3.5 GW)	Number Of Technology Demonstrator Sites
Replacement (16GW)	5	Nil
Expansion (40 GW)	12	1 or 2
Expansion (75GW)	25	2 or more

2. Constraints On Site Availability

Based on the references listed in Appendix A the following sites can be grouped with a decreasing level of acceptability or likelihood of being successfully developed against the current criteria.

Group Of Sites	Number Of Sites In Group	Sites
New build plans announced by developers	5	Hinkley Point, Wylfa, Sizewell, Oldbury, Moorside
Sites identified as suitable within the National Policy Statement but without plans yet announced by developers	3	Heysham, Hartlepool, Bradwell
Sites nominated through the SSA process but rejected by Government for inclusion in the NPS	3	Kirksanton, Braystones, Dungeness
Sites “worthy of consideration” but not nominated. Rejected for inclusion in the NPS	3	Druridge Bay, Kingsnorth, Owston Ferry

This table suggests that based on current known information and current selection criteria there are unlikely to be insufficient suitable sites to deliver the 40 GW expansion scenario.

If this conclusion is tested and were to be upheld, then this would suggest that:

- The siting of future large power plants is a national strategic issue to be considered from an end system perspective, taking account of the mix of generation technologies, rather than market led by individual development projects at incrementally selected locations
- There would be insufficient sites suitable for the level of nuclear power development in the UK consistent with the lowest cost pathway for achieving the 2050 CO₂ reduction targets
- Nuclear Licensed sites in England and Wales previously used for reactor test and operations activities remain strategically important to the UK and should be protected and retained as preferred sites for future nuclear power reactors or prototype reactor demonstration.

APPENDIX C – LIST OF UK ECOLOGICAL AND HERITAGE DESIGNATIONS

The UK Government takes advice from Natural England, Natural Resources Wales and other organisations on how to safeguard the natural wealth for all. Designations are introduced nationally and through EU directives and the impact of proposed developments considered through Environmental Impact Assessments associated with specific projects and associated planning applications. In this context they are relevant for aspects of the project scope including the construction and operation of power stations, the abstraction of cooling water and the impact to visual amenity. They are also relevant to associated activities including the laying of underground cable or stringing of overhead wires and associated pylons which connect the power stations to the national grid. The following is a non-exhaustive list of ecological and heritage designations in alphabetical order (not hierarchy):

- Ancient and semi natural woodland
- Areas of outstanding natural beauty
- Community forests
- Environmentally sensitive areas
- Heritage coasts
- Maritime conservation zones
- National forest
- National nature reserves
- National parks
- Ramsar sites
- Registered battlefields
- Registered parks and gardens
- Scheduled ancient monuments
- Sites of special scientific interest
- Special areas of conservation
- Special protection areas
- World heritage sites

APPENDIX D – NOT USED

APPENDIX E – PROPOSAL CONTENT AND FORMAT

In addition to the requirements in Section 6 of the RfP, the Proposal shall be arranged according to the structure defined below and shall explicitly include all the information listed.

The Proposal shall not exceed a maximum of 70 pages (excluding the required appendices to the Proposal which are explicitly excluded from the overall page count). The sections within Appendix E below include a suggested page count for guidance, but it is for Respondents to choose where to include most detail. The ETI may exclude Proposals which exceed the page count, or which are unreadable when printed on A4 hardcopy. Schedules or organisational diagrams within the Proposal may be formatted by Respondents for printing in A3 format to aid ETI assessment, but these will be counted as 2 pages within the page count.

The Proposal (and supporting documentation) shall be in electronic form in both PDF and Microsoft Word formats.

Respondents are required to make a Proposal for the Project comprising the following components:-

1. EXECUTIVE SUMMARY [1 page]

A summary of the Proposal, describing briefly:

- the overall Project Objectives, deliverables and outputs (as specified in Sections 2.2, and 3.4 of this RfP);
- the organisation undertaking the work and the Project organisation structure (including identification of the Sole Contractor or Prime Contractor and proposed Subcontractors (and Respondents are reminded of the ETI's preference that any Subcontractors (and their employees) are solely from entities in the same group as the Respondent – See Section 4.3 (Participant Contracting Structure) of the RfP body);
- summary of the proposed approach to the Project and the work to be undertaken (and, where appropriate, by which legal entity);
- summary of the Project deliverables;
- the proposed duration of the Project;
- confirmation of compliance with the RfP and brief summary of any key exceptions/deviations; and
- the proposed ETI Investment for the Project and (if different) the proposed Total Project Cost.

2. PROJECT TEAM MEMBERS AND STRUCTURE [approximately 5 – 10 pages, plus appendices]

2.1. Organisations Comprising The Project Team [approximately 1 page]

This section should briefly describe (i) the Sole / Prime Contractor organisation and, where appropriate, each of the proposed Subcontractors (with confirmation of whether or not each proposed Subcontractor is a legal entity within the same group as the Respondent, and (ii) the proposed role of each legal entity within the Project Team.

The ETI reserves the right to require further clarification in relation to the group structure relevant to the Respondent and proposed Subcontractors.

2.2. Project Team Organisational Structure [approximately 1 page]

This should provide an organisational diagram showing all legal entities and their respective roles within the Project Team and identifying internal and external interfaces with ETI and any third parties.

2.3. Key Individuals and Critical Roles [approximately 5 pages]

This section should describe all key roles and all associated key individuals (including deputies and alternates where appropriate). As well as key technical and other specialists, this should specifically include the Project Manager and Chief Technologist (or Senior Technical Specialist). See Section 2.5 of the RfP main body.

The proportion of each individual's time dedicated to the Project should be identified and their expertise briefly summarised; (CVs, of no more than 2 pages each, should be included in an appendix).

This section should include a statement regarding the ETI's prior agreement to the proposed substitution of Project Team staff, noting the expectation of a timely response and that agreement would not be unreasonably withheld if a demonstration has been made that the proposed substitute has at least equivalent experience to the originally proposed technical specialist.

2.4. Project Team Contracting Structure [approximately 1 page]

The ETI intends that a single Respondent will contract with the ETI, either as Sole Contractor or as Prime Contractor with agreed parts of the Project being subcontracted (where appropriate and as agreed with the ETI) by the Prime Contractor to one or more other legal entities (the ETI's strong preference being that such other legal entities are within the same group of companies as the Respondent, with a common parent – see Section 4.3 in the body of the RfP). Each Respondent (where it proposes to contract with the ETI as a Prime Contractor) should:

- include confirmation that all other companies/entities identified as proposed Subcontractors will be subcontracted directly by the Respondent; and
- identify any of the proposed Subcontractors that are not in the same group as the Respondent.

An organisation diagram showing all relevant organisations and their roles should be included. The positions of the key individuals identified as required by Section 2.3 of this Appendix E (including the proposed Project Manager and Chief Technologist – see Section 2.5 of the RfP body) should be indicated.

Respondents should identify in their Proposal any foreseen issues or difficulties in (i) executing Subcontracts, and (ii) not being permitted to use Subcontracts with companies/entities that are not in the same group as the Respondent.

Respondents are required to confirm in this section of their Proposals whether or not they (or any of their proposed Project Team members) are involved with any third party in relation to any site(s) for future power generation development (including advising any third party on the evaluation, suitability and/or acquisition of a site for the purpose of future power generation development).

3. PROJECT TEAM CAPABILITY AND EXPERIENCE [5 – 10 pages; no appendices]

Objective evidence of experience within organisations included within the Project Team, including as required by Sections 2.5 and 5.1.4 of the RfP and including (but not limited to) the following:

- conduct of environmental impact assessments for energy or transport infrastructure projects of national or international significance;
- preparation, or support to preparation, of planning applications for UK energy or transport infrastructure projects of national significance;
- specification for, or management of, ground investigation works to inform site development of UK or European Energy or Transport infrastructure projects of national significance;
- cooling water system appraisal or design for large thermal or nuclear power plant; and
- siting appraisal to inform the potential development of new nuclear stations.

The Proposal must also include an indication of the number of people employed by the Respondent with experience in the appraisal of potential development sites and the associated preparation of environmental impact assessments, and compare these numbers against the resource levels required to deliver this Project.

4. PROJECT APPROACH AND PROGRAMME OF WORK [approximately 15 – 20 pages]

4.1. Project Approach [approximately 4 pages]

Respondents should provide a summary of the overall approach to the Project.

This should include a summary work flow diagram which clearly identifies the key elements of scope, their interdependencies and how they contribute to the overall Project Objectives (See Section 2.2 of the body of the RfP)

Within this section the Respondents should include a preliminary draft of Assumption Set (1) and Assumption Set (2) that will form the basis of the Project. These will be further refined, finalised and delivered to the ETI in month one of the Project delivery phase (see Section 3.4).

4.2. Programme of Work [approximately 10 pages]

The programme of work to be undertaken during the Project should be described and be consistent with the scope of work specified in Section 3.5 of the body of RfP. A one page summary Project schedule (Gantt chart) should be included in this section of the Proposal.

Each scope of work should be broken down into Tasks and a Task-by-Task description of the proposed scope provided, identifying for each Task:

- the Task leader and other Project Team members involved;
- the Task objectives;
- the scope and nature of the Task, and the technical approach to it (e.g. methodologies, tools, techniques);
- the outcome from the Task; and
- dependencies, constraints and assumptions (Assumptions Set (1) or (2)).

4.3. Framework For The Project Technical Report [approximately 2 pages]

This will identify the structure of the Project Technical Report including the main sections of the report and their purpose (see Sections 3.4 and 3.5.20 of the RfP body).

4.4. Framework For The Project Summary Report [approximately 1 page]

This will identify the structure of the Project Summary Report (see Sections 3.4 and 3.5.21 of the RfP body) which describes issues, trends, limits and options without identifying any postulated locations for new nuclear power plant beyond those locations at which specific new nuclear development plans have already been announced. This is to include the design of a standardised graphic form of presentation such that the output from each sensitivity study can be compared with the baseline.

4.5. Structure Of The 2 Hour Project Presentation For ETI [approximately 1 page]

This will identify the structure of the Project Presentation (see Section 3.5.22 of the RfP body) to be delivered at ETI's premises describing the Project approach and Project outcomes, conclusions and recommendations.

4.6. Format Of The Fortnightly Project Progress Report [approximately 1 page]

This will identify the template of the fortnightly Project Progress Report (see Section 3.4 of the RfP body) including the main sections of the report and their purpose.

5. TECHNICAL EXCLUSIONS AND ASSUMPTIONS [approximately 2 pages]

Provide a table describing any technical exclusions relevant to the delivery of the scope of work for this Project (see Section 3.5 of the RfP body). Provide a table re-confirming the assumptions provided by ETI to approach and bound the scope (Assumption Set (1)). Provide a table summarising the

assumptions (with associated reasoning) made by the Respondent to approach and bound the scope (Assumption Set (2)) and to optimise value delivered to ETI.

6. PROJECT MANAGEMENT [approximately 3 pages, plus appendices]

6.1. Project Management Activities [< 1 page]

Respondents should describe how the Project will be managed (e.g. management, coordination, quality assurance; reporting).

6.2. Deliverables and Milestones [< 1 page]

ETI policy is that payments from the ETI Investment are made only following successful completion of agreed Milestones (being points in the Project where significant value has been delivered to the ETI, typically by submission of deliverables representing the completion of major Project Tasks / Work Packages / reports). Payment of ETI Investment monies in respect of a Milestone is subject to acceptance by the ETI of the Milestone's constituent deliverables against agreed acceptance criteria (terms and conditions of payment shall be included in the Project Contract).

Following the detailed specifications of each deliverable in Section 3.4 of the RfP body, a summary table should be provided here detailing the proposed Milestones and their constituent deliverables together with the proposed costs and delivery dates for each Milestone and constituent deliverable.

See also Section 8 of this Appendix E (Project Finances).

6.3. Risk Management [<2 page, plus Risk Register as an appendix]

Respondents should describe their proposed risk management strategy (i.e. how risks to the successful delivery of the Project will be identified and managed throughout the Project duration). They should also separately provide a Risk Register as an appendix, identifying the key challenges, risks (including any assumptions or dependencies identified earlier), issues and opportunities which may affect the successful delivery of the Project outcomes and identifying planned activities to address / mitigate each item.

6.4. Health, Safety and Environment Management (HSE) [typically < 1 page unless work is not desk based – in which case typically 2 -3 pages]

Respondents should confirm that all work during the Project will be entirely desk-based, or clearly state the nature of any exceptions to this (e.g. site visits, field trials, experimental or laboratory work). In the event that any work is not entirely desk-based, then Respondents should provide evidence of the competence of the Prime Contractor and relevant Subcontractors to undertake the Project, and should summarise their approach to managing and coordinating HSE in the Project. Specifically:

- Respondents should advise whether any work to be undertaken during the Project is not desk based (e.g. site visits, field trials, experimental or laboratory work).
- If the Project involves any activity which is not desk based then the Respondents are required to provide evidence throughout the Project that HSE is being managed, that planned and proactive assurance activities are undertaken throughout the Project, and that such arrangements are adequate. Respondents are required to set out in their Proposal how their management arrangements will enable such evidence to be provided.
- Respondents should identify any specific HSE issues related to specific facilities or sites to be used during the Project. To the extent that parts of the Project may take place outside of the UK, the Respondents should deal with the corresponding issues as they apply in the local laws of the relevant country.
- Respondents should demonstrate their experience of identifying and managing HSE issues in projects of equivalent complexity and scale, including incorporation of safety into design.
- Respondents should set out their approach to managing Subcontractors.

The Respondents should also set out any key HSE risks or issues in the Risk Register referred to in Section 6.3 above.

7. PROJECT INTERFACE WITH THE PARALLEL PROJECT ON SYSTEM REQUIREMENTS FOR ALTERNATIVE NUCLEAR TECHNOLOGIES [approximately 1 – 2 pages]

This interface is key to enabling the parallel ETI project to proceed. Respondents are required to describe the preparations and interfaces to underpin a workshop which is successful for both projects.

8. PROJECT FINANCES [approximately 1 – 2 pages]

Respondents should provide:

- a figure for the proposed Total Project Cost;
- a figure for the proposed (fixed price) ETI Investment;
- figures for any proposed Participant Funding and/or Third Party Funding (where appropriate); and
- a breakdown of the Total Project Cost between Milestones.

If there are any assumptions or limitations to these costs, these should be clearly stated.

Respondents should also provide a breakdown of the proposed Total Project Cost as specified in the table below. Please refer to the notes beneath the table before completing it.

Total Project Cost Breakdown by Category	Sole/Prime Contractor	Subcontractor 1	Subcontractor 2	Subcontractor 3 ⁵	Total
Number of Person-days					
Base Labour					
Materials					
Subcontractors (major)					
Subcontractors (minor)					
Travel & Subsistence					
Overheads					
Profit					
Other					
TOTAL PROJECT COST					
ETI Investment					
ETI Investment (% of Total Project Cost)					
Own Funds (Participant Funding)					
Third Party Funding (Private Funding)					
Third Party Funding (Public Funding)					

Notes on Category Breakdown table:

- i. Base Labour should include direct add-ons (e.g. NI, pension etc).
- ii. The total cost of all proposed Subcontractors should be included in the Respondent's total cost figures, and a breakdown of each major Subcontractor's costs should be included in subsequent columns in the table. (In this context a major Subcontractor is one whose contribution is budgeted at more than 20% of the total Project Cost or which is critical to the

⁵ Further columns to be added as required.

success of the Project).

- iii. The selected Respondent(s) will be required to provide justification of overhead calculations during the Project Detailing and Contract Finalisation Stage. The ETI can provide a spreadsheet to calculate overheads on request.
- iv. Respondents should note that under state aid rules, profit cannot be paid if they wish to receive a licence for Arising IP.
- v. Academic Respondents should determine their costs using the JeS system. Note that ETI funds academic Participants at 100% Full Economic Cost.
- vi. Please note that during the Project Detailing and Contract Finalisation Stage (prior to Project Contract execution) the ETI will require a more detailed cost breakdown, including a schedule of payments against Milestones. This will require completion of the ETI's financial monitoring forms. Whilst not compulsory; it is strongly recommended that Respondents use the ETI's standard budget form for fixed price contracts.

For all sources of funding or resource to be provided in addition to the ETI Investment, the Respondents should provide full details of such funding, including:

- evidence of the availability of those funds for the Project;
- details of the sources of any Third Party Funding, (including identifying where any such funding is Public Funding), and the terms and status of such funding; and
- any other commercial impacts associated with any proposed reliance on Participant Funding and/or Third Party Funding.

9. INTELLECTUAL PROPERTY [approximately 1 – 3 pages]

Respondents should read Section 4.6 (Intellectual Property) of the RfP body before completing this section.

9.1. Arising IP

Respondents should provide a brief overview of the nature of any anticipated Arising IP from the Project, including the areas of technology in which the IP will arise and the forms of the anticipated IP rights arising. This should expressly include reference to development of any existing technology, any innovations, any results and any know-how.

In this Project, the ETI will own all Arising IP. It is not anticipated that licences of Arising IP will be granted to the Sole / Prime Contractor (or any Subcontractor).

9.2. Academic Institutions

Academic Respondents should include details of any proposed requirements in relation to academic research, teaching and publication in their Proposal (see Section 4.6.3 of the body of the RfP).

9.3. Background IP

Respondents should describe any Background IP (e.g. patents, proprietary data, computer algorithms, know how or other IP) only to the extent that there is Background IP:

- which is or may be needed (whether by the ETI, or to be licensed from the Sole/Prime Contractor to a Subcontractor, or to be licensed by a Subcontractor to the Sole/Prime Contractor or to another Subcontractor, or otherwise) to carry out the Project or which may be used during the Project; or
- which may be needed by the ETI, an ETI Member or other third party to exploit Arising IP.

The description of any such Background IP should detail:

- the nature of the IP (including the legal nature of the IP right);
- the rights to that IP that are or may be required and by whom;
- ownership and control, whether this is by the relevant Respondent, any of the other Project Team members or by any other third parties;
- whether there is any reason that such Background IP will not be made available as and to the extent needed to carry out the Project and/or exploit Arising IP; and
- proposed terms for such Background IP to the extent needed to carry out the Project and/or to enable the ETI, the ETI Members and other licensees of the ETI to use and exploit the outputs of the Project must be identified.

10. DUE DILIGENCE REQUIREMENTS [typically 2 – 3 pages, plus appendices]

The ETI's due diligence requirements in relation to the submission of a Proposal are set out at Annex E1, Section 1 (Submission of the Proposal) and Annex E2 (General Due Diligence Requirements).

11. PLAN FOR PROJECT CONTRACT FINALISATION [approximately 1 page]

Respondents should, in this section, provide a plan for contract identifying key issues to resolve during the Project Detailing and Contract Finalisation Stage, before Project Contract execution, for example:

- Project Contract – key provisions to resolve (based on draft Project Contract; see Section 4.2 of the RfP main body);
- timing sequences for the setting up of the Project organisational structure (eg Subcontracts) including any dependencies or other factors which could impact or delay the Project;
- internal approvals – confirm what internal approvals will be required for the proposed Sole/Prime Contractor and any Subcontractors in order to enter into the Project Contract; and
- securing finance – identify any further actions required to ensure that all relevant funding arrangements are in place.

The plan for contract should be structured and link clearly back to the previous sections set out in this RfP.

Respondents should explicitly confirm that all key technical, commercial and legal resources, across the Project Team members, required to meet the Project Contract execution target date (see Section 5.3 of the RfP), will be available to achieve a signed contract by that date. A table should be included providing names and contact details (phone and email addresses) of key contacts for the Project Detailing and Contract Finalisation Stage. This should include, for the Respondent (proposed Sole / Prime Contractor) and each proposed Subcontractor, the main project management and technical contacts. Additionally, the Respondent should include names and contact details of its relevant legal, commercial and finance representatives.

Any key risks or issues which may impact on meeting the Project Contract execution target date should be identified.

12. STATEMENT OF COMPLIANCE [less than 1 page]

Respondents are required to provide a Statement of Compliance in accordance with Annex E3 (see also Section 7 of the main body of the RfP).

Respondents are also required to provide, in a separate appendix to the Proposal, a compliance table in the format set out in Annex E4 (not included in Proposal page count – see Section 13 of this Appendix E, below).

13. APPENDICES TO PROPOSAL [5 to 15 pages for elements within the page count]

The following appendices are expressly required to be included in the Proposal. They are included within the maximum page count limit [5 to 15 pages]:

- CVs of key individuals (see Section 2.3 of Appendix E); and
- Risk Register (see Section 6.3 of Appendix E).

The following appendices are expressly required to be included in the Proposal and are excluded from the maximum page count limit:

- due diligence information, as required at Section 10 of this Appendix E, Section 1 of Annex E1, and Annex E2; and
- the compliance table in the format described in Annex E4.

APPENDIX E

ANNEX E1 – DUE DILIGENCE INFORMATION REQUIREMENTS

The ETI requires due diligence information during two stages of the Project Commissioning Process:

- Submission of the Proposal. Certain information is required with the Proposal as part of the first Stage of the Project Commissioning Process; and
- Project Detailing and Contract Finalisation. Further information will be required if any Proposal is selected to proceed to the Project Detailing and Contract Finalisation Stage.

Please note that successful completion of all elements of the ETI's required due diligence is a pre-requisite to any contract award: failure to meet any due diligence requirements may result in the exclusion of the Respondent(s) and/or the Proposal from the Project Commissioning Process.

1. SUBMISSION OF THE PROPOSAL

1.1. State Aid

Each Respondent shall confirm that there are no potential, threatened, pending or outstanding recovery orders by the European Commission in respect of any funding received by that Respondent (all proposed Participants).

1.2. General Due Diligence

All Respondents and proposed Subcontractors, (except ETI Members, universities / higher education institutions and UK/EU government laboratories / agencies), which may provide more than 20% of the resources for the Project or which may provide an input which is critical to success of the Project, shall provide due diligence Information to the ETI according to the table in Annex E2.

1.3. Insurance

Each Respondent should confirm that insurance cover for the following risks is held by that Respondent, and should confirm levels of cover and expiry date for each. The ETI will require evidence of these during the Project Detailing and Contract Finalisation Stage (see Section 2d) of this Annex E1).

- Property damage (both any property occupied by the Respondent and any third party properties);
- business interruption;
- employer's liability;
- public liability;
- product liability (or justify its exclusion if not appropriate); and
- professional indemnity.

Additionally, each Respondent should identify:

- if it self-insures or intends to self-insure for any of these risks;
- if it is intending to take out any project-specific insurance for the Project and the scope and intended beneficiaries of such insurance; and
- how (to the extent not already identified) it intends to insure against risks in the Project.

In relation to professional indemnity insurance, Respondents should note that the ETI has the following requirements:

- each Participant is required to have in place at the start of the Project a professional indemnity insurance policy (with at least a 6 month unexpired term);
- each policy should have a limit of indemnity of not less than £1,000,000 each and every loss;
- each policy should provide an indemnity at least as extensive as the ETI's policy (the ETI will make this assessment). For example, the cover needs to include cover for negligent acts or omissions, and dishonest or fraudulent acts or omissions by the insured);
- each Participant will need to agree to maintain a professional indemnity insurance policy in force for 6 years from the date of completion of the Project;
- the ETI will require sight of the insurance policy provided by the Participant or a copy of a letter of confirmation from the Participant's insurance company or broker summarising the policy.

1.4. Health Safety and the Environment

The ETI's HSE requirements in relation to the Proposal are set out at Section 6.4 of Appendix E and should be dealt with in the corresponding section of the Proposal

Respondents should also note Section 2a) of this Annex E1, below relating to HSE requirements in the Project Detailing and Contract Finalisation Stage.

1.5. Intellectual Property

The ETI's IP due diligence requirements are set out at Section 9 (Intellectual Property) of Appendix E and should be dealt with in the corresponding section of the Proposal.

2. PROJECT DETAILING AND CONTRACT FINALISATION STAGE – FURTHER DUE DILIGENCE REQUIREMENTS

These are only required if a Proposal is selected to proceed to the Project Detailing and Contract Finalisation Stage, and will include:

- a) in the event that any Project work is not entirely desk based, a competency assessment will be carried out on the preferred Respondent at the Project Detailing and Contract Finalisation Stage, to assess the Respondent organisation's health & safety management systems and specific technical competence to manage the risks in the Project. The ETI competency assessment process requires the Respondent to complete a detailed questionnaire, the contents of which follow closely the competency assessment guidance set out in the Health and Safety Executive's Approved Code of Practice – managing health and safety in construction – Construction (Design and Management) Regulations 2007;
- b) further IP due diligence. This will include a detailed Background IP questionnaire which will be issued by the ETI for completion to identify Background IP and third party IP relevant to the Project. Respondents and Subcontractors (if any) may be asked to provide evidence of ownership or rights to use the relevant IP for the Project and/or for exploitation of the results of the Project;
- c) financial due diligence on the breakdown of costs for the Project to enable the ETI to assess value for money and ensure that it meets state aid requirements;
- d) copies of insurance policies; and
- e) any other information that the ETI reasonably requires in order to invest in the proposed Project, including any information necessary to meet state aid requirements.

APPENDIX E

ANNEX E2 – GENERAL DUE DILIGENCE REQUIREMENTS

A stand-alone copy of this form is available to download from the ETI website.

Details of Organisation	
Full name:	
Registered Office:	
Type of Business: <input type="checkbox"/> Sole Trader <input type="checkbox"/> Limited Company <input type="checkbox"/> Partnership <input type="checkbox"/> Other – please describe:	
Names of Directors/Partners/Owner:	
VAT Number:	
Details of Directors, Partners or Associates	
Have any directors, partners or associates of the organisation been involved in any organisation which has been liquidated or gone into receivership? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Have any directors, partners or associates of the organisation been convicted of a criminal offence relevant to the business or profession? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Please give (and attach if necessary) full details if you have answered 'Yes' to either of the two previous questions.	
Audited Financial Accounts	
Please supply Audited Financial Accounts for the last 3 years for the organisation, or relevant part thereof.	
Claims of Litigation	
Please provide (and attach if necessary) details of any claims or litigation against the organisation in the last 3 years (including any which are outstanding) and/or any anticipated claims.	

APPENDIX E

ANNEX E3 – STATEMENT OF COMPLIANCE

Each Respondent shall provide a Statement of Compliance which confirms:

- that the Respondent has full authority to submit a Proposal on the basis of this Request for Proposals;
- that the Proposal has been appropriately reviewed by the Respondent's technical, commercial, financial and legal representatives; and
- the level of internal approval obtained by the proposed Subcontractors in order to make the Proposal (letters of support from each proposed Subcontractor should be included).

Each Respondent shall provide a statement that the Proposal is fully compliant with all aspects of the RfP and also the terms and conditions of the draft Project Contract (Section 4.2), or shall state clearly any exceptions, deviations, alternative approaches or additions to the requirements of the RfP and/or draft Project Contract (as appropriate), with justification. Additional comments and clarifications should also be listed where appropriate (for example to clarify interpretation of requirements), but these must be differentiated from any deviations, exceptions (etc.) above.

With respect to the terms and conditions of the draft Project Contract, each Respondent must either:-

- expressly confirm that the Proposal is made on the basis of the terms and conditions of the draft Project Contract; or
- expressly confirm that the Proposal is made on the basis of the terms and conditions of the draft Project Contract subject to clarifications and exceptions. In these circumstances, the Respondent must include in its Proposal:
 - a copy of the draft Project Contract, marked up with the Respondent's proposed clarifications and exceptions; and
 - a separate commentary against the clarifications and exceptions setting out the reason for those clarifications and exceptions.

Please note that the ETI may reject a Proposal if a material issue (including a non-compliance with the terms and conditions of the draft Project Contract) is identified by a Respondent at any stage during the Project Commissioning Process.

APPENDIX E

ANNEX E4 – COMPLIANCE TABLE

In addition to a detailed Statement of Compliance, the ETI requires that each Respondent compiles and completes a table in the format below⁶ to assist the ETI in assessing and considering each Respondent's compliance with the RfP and the draft Project Contract.

RfP Ref.	ETI Requirement	Response Reference	Fully Compliant With Requirement Yes/No	Deviation Description

⁶ Further rows to be added as required.

APPENDIX F – NOTIFICATION OF INTENTION TO SUBMIT A PROPOSAL

The following form is to be completed and received at the address (postal or email) on the front cover of this RfP no later than the date defined on the front cover and in Section 5.3 of this RfP.

NOTIFICATION OF INTENTION TO SUBMIT A PROPOSAL

Respondent Name: [Legal Name]

Address: [Registered Office Address]

Contact:

Email/telephone:

The above named Respondent hereby notifies the ETI of its intention to submit a Proposal in response to the ETI's Request for Proposals issued on 17th March 2014, entitled "Low Carbon Electricity Generation Technologies: Power Plant Siting Study Project".

The Respondent submits this notification on its own behalf and on behalf of its proposed Subcontractors:

[Please list below the legal names of the organisations / entities proposed to deliver the Project].

1. [Enter Name]
2. [Enter Name]
3. [Enter Name]
4. [Enter Name]
5. [Enter Name]
6. [Enter Name]
7. [Enter Name]
8. [Enter Name]

Signed: _____

For and on behalf of the Respondent.

Name: _____

Date: _____

APPENDIX G – NON DISCLOSURE AGREEMENT

The Non-Disclosure Agreement (NDA) protects the confidential information of the Respondent(s) and the ETI during the period of the Project Commissioning Process. For the successful Respondent(s), the confidentiality provisions in the Project Contract (when executed) will supersede this NDA for the purposes of the Project.

NOTES

In order to ensure parity between different Respondents, the ETI will not enter into negotiations on the terms of this NDA.

NDA EXECUTION PROCESS / INSTRUCTIONS

A separate electronic version of the NDA is available on the ETI Website (http://www.eti.co.uk/request_for_proposals) for completion and signature by Respondents in accordance with the following instructions:

Each Respondent (as proposed Sole / Prime Contractor) should:

- complete Schedule 1 of a single electronic NDA with its company (legal) details and a postal address for return by the ETI of a fully executed NDA;
- print and sign **TWO** paper copies of the NDA. **The NDA must not be dated on the front page;**
- scan a copy of a signed and undated NDA and email it to the ETI at the email address on the front of the RfP; and
- post both original signed and undated NDAs to the ETI at the postal address on the front of the RfP.

Following receipt, the ETI will countersign and date the two original copies of the NDA. The ETI will retain one of these copies and post the other to the Respondent at the address provided by the Respondent at Schedule 1 of the completed NDA.

CONFIDENTIALITY AGREEMENT

THIS AGREEMENT is made on of 2014

BETWEEN:

- (1) **ENERGY TECHNOLOGIES INSTITUTE LLP**, a limited liability partnership (company no. OC333553) whose registered office is at Holywell Building, Holywell Way, Loughborough, Leicestershire, LE11 3UZ (the “**ETI**”); and
- (2) **The party named in Schedule 1 of this Agreement** (the “**Respondent**”),

(collectively the “**Parties**” and individually a “**Party**”)

BACKGROUND:

The Parties intend to exchange certain Information on or after the Effective Date for or in relation to the Purpose. The Parties agree to receive such Information, and to treat it as confidential information, on the following terms and conditions.

IT IS AGREED:

In consideration of the above and for other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound, the Parties agree as follows:

- 1 In this Agreement, unless the context requires otherwise, the following words shall have the following meanings:

“**Disclosing Party**” means a Party that discloses Information pursuant to this Agreement;

“**Effective Date**” means the date of execution of this Agreement;

“**ETI Affiliates**” means the Secretary of State for Business, Innovation and Skills (and any successor governmental department or agency from time to time) and any other entity which is entitled to appoint the directors or otherwise having the ability to direct management policies of the ETI (together with any affiliates of those entities), together with their respective officers, employees, agents and consultants;

“**Information**” means any and all confidential information or data exchanged, submitted or otherwise disclosed in respect of or further to the Purpose or prepared for or in relation to the Purpose, including but not limited to written proposal documentation, due diligence materials, contractual documentation, reports, and the fact that the Parties have entered into this Agreement and are discussing and considering a business relationship;

“**Project**” means the ETI’s proposed project known as “Low Carbon Electricity Generation Technologies: Power Plant Siting Study Project”, as defined in the RfP;

“**Project Commissioning Process**” means the ETI’s commissioning process for the Project as defined in the RfP or as later may be notified or published by the ETI;

“**Project Contract**” means a Project Contract as such term is defined in the RfP;

“**Proposal**” means a Proposal as such term is defined in the RfP;

“**Purpose**” means:

- a the preparation and/or submission of any Proposals and related documents in response

to the RfP;

- b the Project Commissioning Process;
- c any activities related to the assessment of any Proposals for the Project; and/or
- d any related exchanges of Information, clarifications, clearances, discussions, due diligence, meetings, and/or negotiations in respect of the RfP, the Project Commissioning Process, any Project Contract(s), and/or the Project;

“Receiving Party” means a Party that receives Information pursuant to this Agreement; and

“RfP” means the request for proposals relating to the Project, issued by the ETI on 17th March, 2014.

- 2 The Receiving Party shall with regard to any Information disclosed pursuant to this Agreement by or on behalf of a Disclosing Party on or after the Effective Date:
 - a hold the Information in confidence and, except as is otherwise stated herein or agreed in writing by the Disclosing Party, shall not disclose or make available the Information by publication or otherwise to any third party (including for the avoidance of doubt, disclosure in any patent application or to any patent office) and shall use any Information disclosed to it pursuant to this Agreement only for carrying out the Purpose;
 - b make copies of the Information (or any further information derived from the Information) in whatever form or medium only to the extent that the copies are reasonably necessary for the Purpose and clearly mark all such copies as confidential;
 - c take all necessary and proper security precautions (and at least as great as those it takes to safeguard its own information) to safeguard every part of the Information to prevent it from being disclosed or otherwise made available to any third party except as permitted by this Agreement; and
 - d at the request and direction of the Disclosing Party, and without delay, return or destroy any Information provided to it pursuant to this Agreement and any copies of such Information, except that one copy may be kept by the Receiving Party for archival purposes and for the purpose of defending itself against any claims arising in connection with this Agreement.
- 3 The obligations set out in clause 2 shall not apply to Information that:
 - a the Receiving Party can prove (using written or electronic records), was lawfully known to the Receiving Party or in its possession prior to its communication by or at the direction of the Disclosing Party and was not communicated to the Receiving Party subject to any restrictions on disclosure or use; or
 - b is or becomes a part of the public domain through no wrongful act of the Receiving Party or any person on its behalf, provided that this clause 3(b) shall only apply from the date that the relevant Information so enters the public domain; or
 - c the Receiving Party receives from a third party without similar obligations of confidence in circumstances where the third party did not obtain that Information as a result of a breach of an obligation of confidence; or
 - d subject to clause 4, is required to be disclosed or made available by the Receiving Party pursuant to any applicable law, governmental regulation, or decision of any court or tribunal of competent jurisdiction or any government body, agency or regulatory body.
- 4 If a Receiving Party believes it is required by law to disclose any Information under clause 3(d) above, the Receiving Party shall (in each case and to the extent not prohibited in law):
 - a provide the Disclosing Party with prompt written notice of such requirement or obligation (together with a copy of any relevant access request, court order or other evidence giving

rise to such belief) in advance of the required disclosure, to enable the Disclosing Party to seek appropriate protective relief and/or to take other steps to resist or narrow the scope of any required disclosure;

- b where it is not permitted in law to notify the requirement for disclosure in advance of the required disclosure, notify the Disclosing Party as soon as reasonably practicable after the disclosure confirming the nature of and extent of the disclosure; and
- c co-operate with the Disclosing Party with respect to such matters,

and in any event disclose only such Information as it has ascertained, after taking legal advice, it is legally compelled to disclose.

- 5 The ETI shall be entitled to disclose or make available any Information it receives from the Respondent to:
- a such of the ETI Affiliates, and either the ETI's or the ETI Affiliates' employees, officers, secondees, agents, consultants, subcontractors, proposed subcontractors, professional advisers and proposed professional advisers where such disclosure is necessary for the Purpose, provided that all such aforementioned persons to whom any Information is disclosed by the ETI are bound by obligations of confidentiality and the ETI shall be responsible for breaches of the obligations by such persons. Each ETI Affiliate may enforce this clause in accordance with the Contracts (Rights of Third Parties) Act 1999; and
 - b the Department of Business, Innovation and Skills (or other relevant government department), the European Commission and such other bodies and/or individuals (including without limitation professional advisers) as may reasonably be required for the notification of, to seek advice in relation to, as part of an assessment of, or otherwise in relation to, State aid.
- 6 The Respondent shall be entitled to disclose or make available any Information it receives from the ETI to such of its employees, officers, consultants, subcontractors, proposed subcontractors and professional advisers where such disclosure is necessary for the Purpose provided that all such persons to whom any Information is disclosed are bound by obligations that are no less restrictive than those in this Agreement. The Respondent shall be responsible for breaches of the obligations by such persons.
- 7 Each Party as Receiving Party expressly agrees and accepts that, except in the case of fraud, no representation or warranty, express or implied, is made by the Disclosing Party as to the accuracy, completeness, reasonableness or otherwise in respect of the use of the Information, and that neither the Disclosing Party or any of its affiliates nor any of its or their respective employees, officers, secondees, agents, consultants, subcontractors and professional advisers (as applicable) shall have any liability to the Receiving Party as a result of the Receiving Party's possession or use of the Information.
- 8 The Parties agree that money damages would not be a sufficient remedy for any breach of this Agreement and that the Disclosing Party shall be entitled to specific performance and injunctive or other equitable relief as a remedy for any such breach. Such remedy shall not be deemed to be the exclusive remedy for breach of this Agreement, but shall be in addition to all other remedies available at law or equity.
- 9 No rights or obligations other than those expressly set out in this Agreement are to be implied and nothing contained in this Agreement:
- a constitutes an offer by or on behalf of the Disclosing Party; or
 - b confers upon the Receiving Party a licence or other transfer of rights in respect of any Party's interest in any Information or in any present or future patent or patent application; or
 - c affects the present or prospective rights of the Disclosing Party under the patent laws of any country or precludes the filing or prosecution of any patent applications by the Disclosing Party.

- 10 This Agreement represents the entire agreement between the Parties in relation to the subject matter contained herein and supersedes all other agreements and representations, whether oral or written, between the Parties relating to such subject matter. This Agreement may only be modified if such modification is in writing and signed by a duly authorised representative of each Party. Each Party also agrees that it shall have no remedies or claims under this Agreement for any innocent or negligent misrepresentation based on statements made prior to the Effective Date.
- 11 The Parties agree that the ETI may disclose that the Respondent is involved in discussions with the ETI and the subject matter of the discussions provided that the ETI will provide a copy of any press release or other announcement to the Respondent and seek the approval of the Respondent prior to its publication or release. Other than as set out in this clause, neither of the Parties will make any public announcements, statements or otherwise publicise the subject matter of this Agreement (or its existence) without the prior written consent of the other Party and neither Party will use the business names or trade marks of the other Party in any way without that Party's prior written consent.
- 12 This Agreement shall come into force on the Effective Date and shall continue in full force and effect, notwithstanding the completion of the Purpose, for a period of seven years from the Effective Date unless extended, superseded or otherwise varied by a subsequent written agreement between the Parties.
- 13 It is not intended that a third party (other than an ETI Affiliate) should have the right to enforce a provision of this Agreement pursuant to the Contracts (Rights of Third Parties) Act 1999.
- 14 The rights of the Disclosing Party under this Agreement are in addition to and not exclusive of rights under the general law and may be waived only in writing and specifically. Delay in exercising or non-exercise of any right under this Agreement is not a waiver of that or any other right, partial exercise of any right under this Agreement shall not preclude any further or other exercise of that right or any other right under this Agreement and waiver of a breach of any term of this Agreement shall not operate as a waiver of breach of any other term or any subsequent breach of that term.
- 15 If any provision of this Agreement is or becomes illegal, invalid or unenforceable in any jurisdiction, that shall not affect:
 - a the legality, validity or enforceability in that jurisdiction of any other provision of this Agreement; or
 - b the legality, validity or enforceability in any other jurisdiction of that or any other provision of this Agreement.
- 16 Nothing in this Agreement is intended to or shall operate to create a partnership or joint venture of any kind between the Parties or to authorise one Party to act as agent for the other, and neither Party shall have authority to act in the name or on behalf of or otherwise to bind the other in any way.
- 17 Except as provided otherwise, no person may assign any of its rights under this Agreement or any document referred to in it.
- 18 This Agreement may be executed in any number of counterparts, each of which when executed and delivered shall constitute an original of this Agreement, but all the counterparts shall together constitute the same agreement. No counterpart shall be effective until each Party has executed at least one counterpart.
- 19 This Agreement shall be construed in accordance with and governed by English law and the Parties hereby submit to the non-exclusive jurisdiction of the English Courts.

The Parties have caused this Agreement to be executed by their duly authorised representatives.

ENERGY TECHNOLOGIES INSTITUTE LLP

By: _____

Name: _____

Title: _____

Date: _____

SCHEDULE 1

Respondent	Signature
Company Name: Company No: Address of Company:	By: Name: Title:

The ETI will return a copy of the executed Non-Disclosure Agreement to the Respondent. Please provide the relevant name and address for this correspondence below.

Contact for return of executed Non-Disclosure Agreement	Send to [name]: At postal address:
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APPENDIX H – GLOSSARY

Term	Definition
Arising IP	Any IP which is created by or for any Participant during the Project and/or for the purposes of the Project.
Assumption Set (1)	Assumptions stated by the ETI within this RfP (including those identified in Appendix B) to be used in the conduct of the Project.
Assumption Set (2)	Additional assumptions defined and applied by the Respondent to bound the scope and schedule of the Project and optimise the scope and value delivered to the ETI.
Background IP	Any IP which is owned or controlled by, or licensed to, the Participant and/or any Subcontractor, other than Arising IP.
Chief Technologist	The individual/role as described in Section 2.5.
ESME	The ETI's proprietary "Energy System Modelling Environment" (see, for example, http://www.eti.co.uk/technology_strategy/energy_systems_modelling_environment/).
ETI	The Energy Technologies Institute LLP, a limited liability partnership (Company no. OC333553) whose registered office is at Holywell Building, Holywell Way, Loughborough, Leicestershire LE11 3UZ.
ETI Investment	The amount to be made available by the ETI on a fixed price basis for the Project.
ETI Members	The ETI's industry members (as identified on the ETI's website from time to time – http://www.eti.co.uk/about/current_members), including affiliates of such members, and Her Majesty's Government (including those public sector members identified on the ETI's website from time to time).
Habitats Directive	See: http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm
Her Majesty's Government / UK Government	Her Majesty's Government, including but not limited to all of its departments and executive agencies and the devolved administrations of Scotland, Wales and Northern Ireland.
HSE	Health, Safety and Environment.
IP	Intellectual property / intellectual property rights.
Long List	A list of sites to be considered for new nuclear power stations including existing nuclear reactor licensed sites, other UK licensed sites, potential power generation brownfield sites and finally potential greenfield sites. This list will be largely informed by existing literature including potential sites previously considered by the CEGB in conjunction with the list maintained by DECC of current, decommissioned and historic thermal power station sites.

Term	Definition
Milestone	A Project milestone with defined constituent deliverables, associated deliverable acceptance criteria and milestone value (all to be proposed in the Respondent's Proposal and subsequently negotiated/agreed in the Project Contract) which should be completed in order to reach the said Project milestone, and upon successful completion of which, subject to acceptance by the ETI that the milestone has in fact been reached, payment may be claimed from the ETI in accordance with the Project Contract.
Non-Disclosure Agreement (or NDA)	A non-disclosure agreement in the form provided at Appendix G.
Participant	An organisation which enters into the Project Contract with the ETI to deliver the Project; for the avoidance of doubt, references to "Participant" in the RfP do not include any Subcontractor(s).
Participant Funding	Funding to be provided by a Participant from its own resources and not dependent in any way on Third Party Funding.
Prime Contractor	A single organisation which contracts with the ETI to deliver the Project, together with (subject to ETI approval) Subcontractors.
Private Funding	Third Party Funding other than Public Funding.
Project	The ETI project entitled "Constraints In Deploying New Nuclear And Large Thermal Plants With CCS By 2050: Site Availability, Siting Policies and Site Selection Criteria", also known (and referred to in this RfP) as the "Low Carbon Electricity Generation Technologies: Power Plant Siting Study Project", that is the subject of this RfP.
Project Commissioning Process	The ETI's process for commissioning the Project, including as described at Section 5.
Project Contract	The contract, as described in Section 4.2, to be entered into between the ETI and the selected Respondent (as Sole / Prime Contractor, as appropriate) for delivering the Project.
Project Detailing and Contract Finalisation Stage	The second Stage of the Project Commissioning Process, as described at Section 5.2.
Project Manager	The individual/role as described in Section 2.5.
Project Objectives	The objectives of the Project, including as set out in Section 2.2
Project Presentation	The final project presentation, described at Sections 3.4 and 3.5.22 of the body of the RfP (see also Appendix E, Section 4.5).
Project Progress Report	The fortnightly Project progress report described at Section 3.4 of the body of the RfP (see also Appendix E, Section 4.6).
Project Summary Report	The final Project summary report that is a required output / deliverable of the Project (see Sections 3.4 and 3.5.21 of the body of the RfP and Appendix E, Section 4.4).
Project Team	The Sole/Prime Contractor and its Subcontractors (if any).

Term	Definition
Project Technical Report	The final Project technical report that is a required output / deliverable of the Project (see Sections 3.4 and 3.5.20 of the body of the RfP and Appendix E, Section 4.3)
Proposal	The proposal to be submitted to the ETI in response to this Request for Proposals, including all information in the main body of the proposal, appendices and supporting documentation.
Public Funding	Third Party Funding provided by a public authority or agency.
Respondent	An organisation submitting a Proposal to the ETI (i.e. a proposed Sole/Prime Contractor); for the avoidance of doubt, references to "Respondent" in the RfP do not include any (proposed) Subcontractor(s)
RfP / Request for Proposals	This Request for Proposals.
Risk Register	See Section 6.3 (Risk Management) of Appendix E.
Selection Criteria	Criteria against which Proposals are evaluated (including as set out in Section 5.1.4)
Selection Panel	The selection panel described at Section 5.1.3.
Sole Contractor	A sole organisation which contracts with the ETI to deliver the Project on its own (without Subcontractors).
Stage	A stage of the Project Commissioning Process, as described at Section 5.
Statement of Compliance	The statement of compliance required by the ETI, as described at Section 7 and at Appendix E, Annex E3.
Subcontract	A contractual arrangement between a Participant and another organisation to which work for the Project has been subcontracted.
Subcontractor	An organisation which has a Subcontract.
Task	A significant activity or group of activities (often within a Work Package).
Third Party Funding	Funding provided to or for the purposes of the Project directly or indirectly by an organisation, person or entity other than the ETI or a Participant; for the avoidance of doubt, such third party person, organisation or entity shall include (i) any third party lending to a Participant, (ii) a Subcontractor, and (iii) any company or organisation in the same group to which the relevant Participant belongs.
Total Project Cost	The amount proposed by a Respondent as the total cost of the Project (proposed ETI Investment + Participant Funding + Third Party Funding, as appropriate).
Work Package (WP)	A major section of the Project scope of work, which may be identified in order to break up the scope of work into separate manageable parts. A Work Package will usually consist of a number of Tasks.