

WPD - NIC Bid Challenges

DSO Systems NIC Bid Information

Introduction

For Ofgem's 2017 Network Innovation Competition (NIC), Western Power Distribution (WPD) intends to propose innovative solutions to support the transition from DNO to DSO.

This document also outlines the process WPD intend to follow and the timeline through to full submission pro-forma (FSP) submission. The first process is to complete the attached systems tender response document by the 16th January 2017 (12pm). No additional information, above that included, will be provided at this stage. Please submit to: wpdinnovation@westernpower.co.uk.

This call has been published on Achilles UVDB, ENA Collaboration Portal and WPD's Website. Shortlisting to the information day will be based on how readable the submitted information is, evidence that the proposal is truly innovative and novel and that there isn't an undue level of risk.

A future call will be made in May 2017 which will be targeted at developing smaller NIA projects with third parties to commence in 2018 and beyond.

Requirements

The NIC is an annual opportunity for electricity network companies to compete for funding for the development and demonstration of new technologies, operating and commercial arrangements. Up to £81m per year is available through the Electricity NIC. The NIC is expected to focus on funding larger scale innovative projects, at higher TRLs. Projects that have significant overlap with existing NIC or NIA projects are not eligible for funding.

As set out in Ofgem's Electricity NIC Governance Document an NIC project must involve the development or demonstration of at least one of the following:

- A specific piece of new (i.e. unproven in GB) equipment (including control and/or communications systems and/or software);
- A specific novel arrangement or application of existing electricity transmission and/or distribution equipment (including control and communications systems software);
- A specific novel operational practice directly related to the operation of the electricity Transmission System/Distribution System; or
- A specific novel commercial arrangement.

Also, it must be demonstrated that a project meets all the following criteria:

- Accelerates the development of a low carbon energy sector and/or delivers environmental benefits while having the potential to deliver net financial benefits to existing and/or future network customers;
- Delivers value for money for electricity customers;
- Creates knowledge that can be shared across energy networks in Great Britain (GB) or create opportunities for roll-out across a significant proportion of GB networks; and

- Is innovative (i.e. not business as usual) and has an unproven business case where the innovation risk warrants a limited Development or Demonstration Project to demonstrate its effectiveness.

Scope of Works

We expect the roles and responsibilities of DNOs to change, reflecting the increasing impact of low carbon generation and the decarbonisation of heat and transport. The increased renewable generation is expected to result in a greater need for balancing services by National Grid as the System Operator, with much of these services being provided by customers connected to the distribution network. At the same time the DNOs are looking to use flexibility services to defer or avoid reinforcement where this is economically advantageous.

This raises new challenges for DNOs in terms of how they determine and procure and enact their long term and short term requirements for flexibility services. Processes and tools will be required for ;

- Long term flexibility service requirements evaluation
- Short term flexibility service requirements evaluation, and service triggering
- Data exchange with other flexibility service providers and users to reduce third party impacts and for conflict management

A process is required to identify future network constraints and identify those for which flexibility services are a suitable solution, including the option of the DNO acting as a storage provider of last resort.

In addition to long term planning, there will be a need for shorter term assessment of flexibility service requirements, to determine whether flexibility services that have been procured for particular situations will need to be enacted and to manage the procurement and execution of services where the requirement becomes evident at short notice, or after an event has occurred.

Another substantial challenge will be co-ordinating the use of flexibility services used by the DNO and those used by other parties. While the TSO will be the largest purchaser of flexibility services, co-ordination will need to include generators and suppliers who may also purchase these services and to prevent conflicts between flexibility services procured by different parties, or flexibility services being called upon where their effect would be counteracted by other automatic network actions. E.g. alteration of generation output within Active Network Management schemes, automatic network reconfiguration etc.

DSOs may take on further responsibilities such as local network balancing on behalf of the TSO. Any proposed systems should be able to support the potential range of DSO activities.

Timeline

The first process for consideration is to submit the Initial Proposal documentation by the **16th January 2017, noon (12pm)** and be available for a face to face meeting on the 31st January 2017 in London.

WPD will invite the top eight applicants through to the face to face meeting and subsequently proceed with a single bid through to full submission.

Requirement	Date
Submission of Initial Proposal	16/01/2017 (12pm)
Notification of Progress to Information Day	23/01/2017
Attend Information Day Meeting	31/01/2017
Announcement of Bid to Proceed	03/02/2017
Submit ISP	Early April 2017 (Exact date to be confirmed)
Announcement of Bid to Proceed to FSP	Late April 2017 (Exact date to be confirmed)
Submit FSP	Late July 2017 (Exact date to be confirmed)

Notes for Submission

- Within each proposal, WPD expects the applicant to have considered and planned for the full resourcing all aspects of project bid, mobilisation and delivery, including any activities it may wish WPD to undertake.
- Applicants are advised to review previous NIA and NIC projects and ensure synergies are highlighted and potential duplication is commented upon and differentiated.
- The NIC mechanism is currently under consultation for proposed changes. Further information can be found at <https://www.ofgem.gov.uk/publications-and-updates/network-innovation-review-our-consultation-proposals>
- Information must be submitted to WPD within the published pro-forma, which is limited to 5 pages. Information submitted within additional datasheets or appendices will not count towards the scoring.
- Proposals will be scored against the following criteria:

Criteria	Sub-criteria	Weight or score of sub-criteria
Technical Fit 35%	Number of challenges project solves	25%
	Quality of methods / approach used	5%
	Quality of innovation	5%
Service Levels and Delivery 35%	Compliance with NIC Governance	20%
	Quality of bid delivery programme	10%
	Knowledge transfer	5%
Financial and Commercial 30%	Benefits accruing to customers	15%
	Benefits accruing to wider system	10%
	Cost analysis	5%

If any of the responses to the sub-criteria are scored below satisfactory, WPD will exclude the bid.

Answers will be scored using the table below and applying this to the marks / percentage available for each question.

100%	Excellent, fully meets and goes beyond expectations
75%	Good, fully meets expectations
50%	Satisfactory, meets minimum requirements
25%	Poor, falls below minimum requirements
0%	Did not answer the question