

Executive Summary

NIAUR can exploit a unique and timely NI opportunity to move the agenda forward on all three of your strategic objectives if you re-visit the DNO Innovation RP6 approach as deployed to date by NIEN.

Unique role of NIAUR

We commend the work by NIAUR to encourage innovation and their direct and meaningful involvement in the debate PowerOn has been facilitating regarding the role of domestic, 'behind the meter' electrical energy storage systems.

Being a single regulator of a single DNO has considerable value in clarifying and expediting meaningful discussion of the complex issues thrown up by Decarbonisation, Decentralisation, Digitalisation and in our view Democratisation.

PowerOn are a contributor to GB Energy Data Taskforce, led by Laura Sandy. In our opinion, based on direct observation, the debate to move this challenge forward is inhibited there due to multiple DNOs working in understandably close alignment to challenge or perhaps obfuscate the Data agenda. This is unfortunate as the Data will be the transformative element.

Availability of Open Data would enable a transformation of networks regulation from debating DNO submissions into a fact-based review of alternative scenarios, determined from actual, verifiable, independent data.

Some are arguing persuasively that the RAB based approach has run its course. Performance Based Regulation is cited as a better alternative. This requires data on Performance from a range of sources to enable the effective allocation of resources and fairness.

Unique position in NI

It is not too often that we can say that Northern Ireland has a unique and favourable position in any economic, policy or political debate. However,

1. the success of DS3 to date has seen world leading access to the network for renewables and has opened the eyes of potential, more flexible, players
2. Our "long stringy network", to quote a local academic expert, raises the 'cost to serve' component of DNO operations and results in high incidence of Worst Served Customers. A new approach is needed.
3. NIAUR, in our opinion, correctly avoided the Smart Meter cul de sac.
4. SEM is up and running with evidence emerging of potential for linking SEM market mechanisms to DSO services. However much more evidence is required, and many stakeholders need to debate the findings.

Our Argument

PowerOn, as a potential new actor, seeking to introduce new models to the network and market space, contend that NIAUR need to widen the DNO innovation perspective, as it is over-reliant on DNO-led initiatives.

DNO may not consider themselves incentivised sufficiently under the Final Determination to fully participate in new approaches.

Private capital from unregulated sources does not require or merit customer funded support. For example PowerOn has access to grants & favourable tax treatment of investors.

Analysis of data, results, potentials and opportunities deserve NIAUR support via NIEN.

This could inform your Strategic approach in this period on all three fronts;

21st Century Networks :- by understanding how the electrons flow between new and established actors, reducing strain on assets at peak times and extending asset life, supporting network operations by providing granular, frequent, robust data sets.

Security of Supply and Low Carbon :- by reducing fossil-fuel burn, reducing renewables curtailment and reducing system outages by mitigating peak loading and consequent stress on network components

Effective markets:- by understanding how pence can follow electrons in terms of a regulatory sandbox to define what alternative models could be deployed in RP7 and beyond.

Background to PowerOn

PowerOn Technologies is NI registered and owned. It is an early stage growth company, supported by Invest NI.

It is seeking to bring a service-based, as opposed to volumetric tariff, model to this market. PowerOn has taken an open and collaborative approach with diverse stakeholders including NIAUR, NIE Networks, NI Housing Executive, Consumer Council and Ulster University. Invest NI have supported this with R&D Grants and Collaborative Network status. The results of the R&D and Collaborative Network will be available publicly and therefore can provide a basis for other innovators and participants to refine/improve any other approach/product or service.

Background to Girona

This project is an open R&D deployment of potential commercial and regulatory models. It is truly multi stakeholder; Causeway Coast and Glens Borough Council, NIAUR, NIE Networks, NI Housing Executive, Consumer Council and Ulster University. The commercial partners in the Collaborative Network are PowerOn (Lead Company), GES Group (Commercial and Industrial Energy Equipment and Services provider), Aqua Analytics Ltd (Financial systems developer) and AnseclA (Cyber Security consultants).

Objectives

1. Determine scope for reducing network constraints downstream of Loguestown 33/11 Sub Station
2. Potential models to assess scope for revision of DUoS
3. Determine scope for DSO system services
4. Establish case studies of reductions in actual Fuel poverty by deployment of renewables and storage with appropriate tariffs
5. Provide sound evidence base for determining
 - a. 21st Century networks
 - b. Security of Supply and low carbon
 - c. Effective markets

Girona proposition

A customer with flexible energy assets is a “Benign Customer” who helps the network and the DSO transition. Such a customer deserves value recognition. They also provide Open Data to enable more efficient and effective regulation.

Barriers: - DNO stance

NIEN are quite reasonably approaching DSO transition from a DNO standpoint only. We would argue that this is the DNO using customers money from RP6 to support their argument for a DSO transition. We are seeking an open, transparent multi-stakeholder approach as proposed in this type of project to produce open evidence. We appreciate and value NIE Networks support to date for Girona but developing plans that support/align with NIE Networks overall strategy only may not be the most pertinent question.

Questions: - for NIAUR Strategy development process

Does determination of strategy need more innovation in RP6 and RP7?

Does the approach need to be more liberalised through NIAUR?

Do more actors need to be involved in transition and innovation?

Is RP6 Innovation being constrained by current DNO mindset?

Do NIAUR need to encourage/incentivise more DNO innovation?

Given an RP6 Innovation Mechanism exists, do NIAUR and NIEN agree it is effective?

Must it be more open, multi-stakeholder and multi-actor?