

Regional Energy Strategic Plan policy framework consultation

Closing date: 8th October 2024

British Hydropower Association Consultation response

The British Hydropower Association (BHA) is the leading trade membership association solely representing the interests of the UK hydropower industry and its associated stakeholders within the wider community.

Our Mission is to drive growth in the sector by engaging, influencing and promoting Hydropower, Tidal Range and Pumped Storage Hydro, as firm, renewable power, providing critical infrastructure for achieving Net Zero and Energy Security.

1. Introduction

1.1. Focus on distribution network

The BHA welcomes the introduction of the RESP and those that will enable decarbonisation to be implemented across the distribution network. The previous decade has been largely focused on transmission connected generation and transmission constraints and upgrades. The ability to decarbonise at the distribution (where heat, industry and transport will need to be decarbonised) has been hampered by the transmission constraints upstream and slow progress on digitisation (and therefore visibility), alongside slow progress on a whole systems approach to smart local energy solutions that will enable new generation to be absorbed by new flexible load (heat and transport) alongside smart systems and storage, thus avoiding issues of constraints upstream.

1.2. People and expertise

Those who will be the enablers of the RESP must have the ability to facilitate a whole systems approach to decarbonisation on an area by area basis. Siloed thinking will not create the acceleration of progress we need to make in this decade. The RESP must be front and central to a new way of thinking and working, creating opportunities, out of the box thinking alongside innovation of process to circumvent unnecessary bureaucratic barriers. Skilled people are at the heart of solutions and those people need to be across organisations including NESO.

See appendix A for a diagram that shows how the hub and spoke of the RESPs must work alongside other hub and spokes, such as the NZ hubs and Community Energy England. Decarbonising Communities must be at the heart of the RESPs work alongside the Local Power Plan. Capitalising on the knowledge available and understanding where that knowledge can be found must be central to the strategy. Local Authorities in many cases do not have the expertise, resource or insights to enable

this change – this must be understood. The BHA wishes to raise concern that it is stated that there is no additional resource for LAs to have additional resources nor funding for LAEPs. This can not happen without resource for the people with requisite skills in-house. The culture of external consultants developing ‘strategies and plans’ must change. £100k for another report that has been largely copied and pasted is not value for money and leaves LAs devoid of the understanding of how to implement these strategies. We can not waste another decade on report creation culture that does not deploy activity.

1.3. Local generation

There is currently no price stabilisation mechanism for bringing forward sub 5MW generation. The Contracts for Difference has a lower parameter of 5MW and this parameter is a legacy of the CfD sitting next to the FiT which supported generation up to 5MW. Without a bankable business model, new generation such as Hydropower, small on shore wind and Anaerobic digestion, can not come forward. This generation is all key, as it is winter generation that will be needed to support the electrification of heat.

This must be addressed if we are to decarbonise across the distribution network. This could be addressed through:

- Bringing forward P441 which will allow local energy markets to proliferate at the local level.
- Reduce the CfD to 1MW for distribution connected generation
- Create a local energy generation tariff for winter generators

This has to be the decade of decarbonising communities across the distribution network. The UK is lagging on its ambitions for decarbonising Heat and transport and they are high CO2 emitters.

Creating Smart Local Energy Solutions will reduce constraints, defer or avoid grid reinforcement and also take a big step towards providing local affordable energy.

The BHA welcomes the focus of the RESP, delivery will be key and collaboration will be core to achieving successful deployment..

1. What are your views on the principles (in paragraph 2.8) to guide NESO's approach to developing the RESP methodology? Please provide your reasoning.

2.8 We propose that NESO's approach to developing the RESP methodology should embody the following principles:

- *Be place-based – ensure a place-based approach is integrated into energy system planning.*
- *Be whole system – adopt a whole system perspective (ie gas and electricity, but also heat, transport and industry).*
- *Be vision-led – provide a clear long-term objective for energy system development that reflects a region's characteristics and sets agreed priorities for the region while ensuring alignment with national priorities.*
- *Be proactive – enable proactive development of the energy system and investment in network infrastructure to ensure it enables net zero, while remaining agile and taking an adaptive approach to account for uncertainty.*

These are good foundational principles and the hub and spoke framework should provide a homogenous and uniform enablement for those principles to be adopted and represented at each spoke.

However, every 'spoke' will have a different starting point and there must be effective mechanisms that will ensure learning is shared across the different spokes and a regionally fragmented approach does not develop.

The Question of whose 'vision' and who will lead the 'proactive development' is a cause for concern in light of the Strategic Board Governance structure. Local Authorities are pared to the bone and whilst some combined authorities are skilled and delivering on NZ ambitions, some are not even off the starting blocks. Until LAs have a legal mandate to address NZ, this will not get the 'volunteer' resource required with the requisite expert skill sets. This will leave the Strategic boards led by the networks who are beholden to their shareholders and only working in line with regulatory oversight which to date has not led to the speed and deployment of NZ transition that we need and expect. Accountability must be addressed. LAs are not accountable on NZ without a mandate and the networks are not accountable unless forced to be so by Ofgem – this could lead to a seriously skewed approach to RESPs.

The NZ Hubs are well placed to support the LAs to be better represented within the strategic boards - but again, their set up and funding model leaves them spread out across the regions, with varying capabilities, capacities, which limits their impact.

The working groups can enable a more bottom up, expert led support to the strategic board, but as so often happens top down, trumps bottom up and that granularity of knowledge is overlooked. A

formal arrangement for the strategic boards to liaise with and learn from the working groups should be suggested, rather than left to chance.

There is a risk of a Postcode lottery of development. Areas with strong leads may eclipse their needs over other areas with different needs- eg in the NW, Greater Manchester and Cumbria NZ journeys are very different and with differing challenges and different starting points. Cumbria and N Yorkshire have a more aligned journey, how will this learning across the RESP boundaries be transmitted?

Whole system thinking is key, but is reliant on policy determinations from central Government eg, announcement on Heat for domestic heating, digitisation of the grid to enable visibility for flex, the ability of NESO to accelerate DSF .

Expertise and people with relevant skill sets is a concern. This is complex and many LAs will not be able to feed in effectively when they don't have the necessary skill sets? Training is mentioned, but this goes beyond 'training', multi-vector energy systems isn't something that should be left to people who are 'generalists'.

In conclusion – the principles are admirable, but the ability to deliver on those principles is entirely dependent on the people in place to enable this to happen. The RESP framework must be very firm and the starting point well laid out. D-FES is a useful tool and those who have LAEPs have a head start. Those without the LAEP will be hard pressed to make an effective start. Resource must be provided alongside the framework to enable this impartial LAEP groundwork to be done.

2. Do you agree that the RESP should include a long-term regional vision, alongside a series of short-term and long-term directive net zero pathways? Please provide your reasoning.

The regional vision should be based on a LAEP which should be drawn from the literature review of work done to date from each region. There is always the risk that work is repeated and more reports are commissioned and more money spent on external consultants to create another report. Each region will have a shelf of reports that are likely to have been developed under the RDAs and subsequently (having worked there many years ago, I know the volume of work that will still be relevant). The D-FES should be the backbone, layered with historic report findings and progressed into short, medium and long term goals. The Long term 'vision' is Net Zero and historic reports should give an indication of how to get there. A LAEP for each region would give uniformity, these should be undertaken in-house by NESO to build knowledge and capability and ensure that learning is transferred between regions, not through external consultancies which does nothing to empower, enable or progress skills within LAs. LAEPs are expensive and most LAs do not have the budget, but they are a key tool to sit alongside the D-FES. They must be done in-house, otherwise the capability remains with consultants and routes forward are hampered.

RESPs have to foster action, not more reports, pathways and actions that take time and then don't get delivered.

What must be included in the regional vision:

The vision must be backed by proactive policy support to be ahead of the problem (Broadband roll out is an example of policy lag – rural areas are still left behind!). There must be an aspiration to create and deliver ‘smart localised energy systems’.

- local energy consumption needs to be met through new, small scale local generation, including Hydropower;
- storage and Smart local energy systems.
- Local supply models (P441)
- A scheme similar to the Rural Broadband project to focus on Rural Areas
- Provide funding for local and rural community scale local area energy plans.
- A Contracts for Difference for key local generators such as Hydropower, small scale wind and Anaerobic Digestion that will help match electrification of heat and transport.

These smart local solutions may offer better ‘value for money’, will reduce the socialised cost of grid reinforcement and take less time to deploy.

What are Local Energy Solutions?

Each localised energy solution will be bespoke to each community, but there will be intrinsic similarities that can form the basis of real world scenarios and the ability to share, learn and create a pool of knowledge.

- Rural hydropower generation, matching the winter demand from the electrification of heating homes.
- Collective community low carbon heating solutions.
- Solar PV panels combined with smart water cylinder and domestic battery storage.
- Active network management and Smart Local Energy Systems balancing the grid at a local level to allow Electric Vehicle charging points.
- Community, containerised battery, backup solutions.
- EV car clubs with V2G.

Rural Grid:

This is the ‘end of the line’ in many areas and some rural areas have ‘weak’ grid, meaning it may not have capacity for ‘additional loads’ to be added. Reinforcing the entire rural grid to enable and meet the total demand of electrification of heat and transport will be too expensive, take too long and will not be a priority due to low population density of rural areas.

Local Energy Markets

- A local supply model will create a sustainable business model for new distribution generation that will support decarbonisation in rural areas.
- A local energy market would enable small-scale generators to sell the electricity they generate to local households and businesses, getting a fair and guaranteed price for their electricity and offering consumers discounted electricity.

- This allows the sector to grow and thrive, communities will reap substantial benefits by keeping revenue within local economies and creating new skilled, local jobs.
- localised solutions mean reductions in expensive grid reinforcements and increased community resilience
- Encourage more community owned renewable energy generation with the local economic benefits realised through the lifetime of the project
- Supporting rural businesses as energy price crisis causes overheads to soar.

Community Action

- Collective action will be cheaper, faster and more effective.
- We need localised energy solutions.
- Community action leads to collaboration, networks and knowledge transfer.
- A just and equitable Net Zero transition, people don't get left behind.
- Keen and informed Community members are trusted messengers within their communities advocating for new, and often little understood technologies.
- Community Wealth Building via Community Benefit Societies
- Community action needs support for community energy planning, seed and development – cheaper than total grid reinforcements.

3. Do you agree there should be an annual data refresh with a full RESP update every three years? Please provide your reasoning.

The RESP should have a data refresh and update annually – 3 years is too long. RESPs and NESO must have ownership and work in an agile, dynamic way a 3 year cycle means ownership and accountability is too protracted.

4. Do you agree the RESP should inform the identification of system need in the three areas proposed? Please provide your reasoning, referring to each area in turn

Yes this is a key need:

- a) Providing consistent assumptions – this is dynamic and consistent revaluation around changing demands is key to ensuring those demands are met. This will need close correlation with working groups from specialist areas: EV charging; Industrial electrification; heat pump roll out. The learning in one area can then be used to inform other areas within the network. Finding Local Energy Solutions will be key here – this will require good interactions between on the ground delivery, planning and the networks.
- b) Setting out the spatial context for capacity needs – this corresponds to the point a) above, as the demand is changing, so will the need for further capacity. This is taking the information from a) and feeding to the networks
- c) Informing strategic network investment. – b) can then inform the strategic network investment

5. Do you agree technical coordination should support the resolution of inconsistencies between the RESP and network company plans? Please provide your reasoning.

There is conflict between DNO and DSO objectives and there needs to be RESP to ensure that the best solutions are brought forward that will accelerate decarbonisation and bring future benefits to consumers.

6. What are your views on the three building blocks which come together to form the RESP in line with our vision? Are there any key components missing?

There will need to be identification and prioritisation of some of the shorter term pathways where new business models come forward that can enable acceleration of change. This will need proactive support to bring forward innovation and share learnings across the other RESP areas. Eg,

- Seasonal Constraints – the ability to allow more generation on the grid during winter months, to reduce curtailment costs – the RESP should be able to review areas of possibility and fast track impactful routes of change.
- Local Energy solutions – Morecambe battery train, a replicable model for decarbonising branch line diesel trains and providing utility scale battery for local constraint management and heat load.
- Model to decarbonise terrace streets - a funded business model to decarbonise street by street
- Off gas grid rural communities – a whole community approach business model to decarbonise and remove people from Oil and address Electrification of transport.

The RESP should identify these opportunities and give them adequate coverage and support to ensure they are picked up as innovation projects.

Not enough innovation projects are being brought forward through siloed criteria (not whole systems thinking) or subjective panels. NESO and RESPS should have the ability to fast track projects that they see can have multi-vector benefits and DSR and Flexibility benefits that are going to speed up decarbonisation and be replicable and scalable.

Current SIF processes must be challenged – innovation should not be a coemption, but strategically aligned with broader criteria than the current silos. Innovation projects should not be at the mercy of subjective panels, but rather viewed through strategic need.

7. Do you agree with the framework of standard data inputs for the RESP? Please provide your reasoning.

Yes, these are all useful data inputs. There needs to be the input through the NZ Hubs who are in touch with their regions and can also feed in other local intelligence. The NZ hubs could also ensure there are online workshops and data gathering exercises across the region to ensure there is a route for information to flow from grass roots up. The wisdom of the crowd is often overlooked, but should be effectively utilised.

8. Do you have any suggestions for criteria to assess the credibility of the inputs to the RESP?

A watching brief on all inputs should be held by a suitably qualified person.

9. Do you agree with the framework for local actor support? Please provide your reasoning.

In principle this should work, but there is always the danger that stakeholder engagement becomes a tick box exercise rather than an intelligence mining exercise that is valued and seen as valuable. A good strategic board should value the information from working groups, but often this doesn't happen and decisions are made at Strategic board level and then shared with the working groups for opinion, which is too often not heeded.

Strong Governance of the strategic board with experts who understand the value of working group knowledge must be ensured.

10. Do you agree with the purpose of the Strategic Board? Please provide your reasoning.

As stated above, the RESP will thrive or fail on the quality of the strategic board and their abilities. LAs don't have a mandate to NZ and until they do and are resourced to enable this work, then it will always be a roulette as to whether they can field experts who can deliver. There has to be a strong counter to the monopoly networks if the transition is going to happen at speed and in a way that gives consumers good value for money. Accountability is key and it is not clear who is accountable and for what, within the suggested Governance structure – this is a very large risk to success.

11. Do you agree that the Strategic Board should include representation from relevant democratic actors, network companies and wider cross-sector actors in each region?

Yes – there needs to be a well weighted cross section that has the expertise and accountability to deliver. This needs to be broader than LAs and networks, it must be representative of the region's interests.

12. How should actors (democratic, network, cross-sector) be best represented on the board? Please provide your reasoning, referring to each in turn.

There should be a number of working groups and each working group should be represented on the board. Working groups can be given specific remits and tasks and feedback into the strategic board. These people must be expert and willing to learn and put the time into the delivery of the RESP. It can not be a talking shop and must have clear actions and timelines for delivery. There must be a strong chair from NESO who can manage the differing objectives at the table.

13. Do you agree with the adaptations proposed for Option 1? Please provide your reasoning.

14. Do you agree with our assessment that Option 1 is a better solution than Option 2? Please provide your reasoning.

15. Do you agree a single region for Scotland is optimal? If you think a two-region solution is better, do you agree the split should occur at the SSEN and SPEN DNO boundary? If not, please provide your reasoning and alternative option(s)

There should be 1 region for Scotland as the biggest issue is the B6 Boundary and this is relevant to the entire area.

Appendix A – deployment of the Local Power Plan and how this sits with the RESP

