

Bath & North East Somerset

Local Plan (Core Strategy /Placemaking Plan) 2011-2029

Partial Update

**Options Consultation
January 2021**

**Topic Paper: Energy Balancing Plants – Amendment to
Policy CP3**

**Bath & North East
Somerset Council**

Improving People's Lives

1 Introduction

- 1.1 The Development Plan (Core Strategy and Placemaking Plan) identifies that Climate Change is one of the 6 key drivers of change within Bath and North East Somerset. The plan recognises that there is a need to tackle the causes and effects of climate change through lower carbon lifestyles; limiting use of increasingly scarce resources; reducing dependency on fossil fuels especially in light of 'peak oil' concerns; making sure that the area is resilient to climate change, particularly the potential for flooding.
- 1.2 Since the adoption of the Development Plan there have been a range of technologies that have become commercially viable for providing power to the grid. Examples of these are improvements in solar technologies and a rise in battery storage plants. Another technology that was not previously prevalent at the time of the adoption of the Development Plan are Balancing or Peaking Plants. These are power plants designed to balance the fluctuating power requirement in the electricity network and operate during periods of high-level demand for electricity or shortfalls of electricity supply. Balancing/peaking plants are generally gas turbines or gas engines that burn natural gas.
- 1.3 It is acknowledged that there is a need for flexibility and stability in the energy supply, and that balancing/peaking plant is necessary for the transition to 100% renewable electricity. However, there is concern that gas-powered plant undermines the Council's commitment to addressing the Climate Emergency. This paper will outline National Policy for energy supply, alternative technologies and options of how this could be addressed through the Partial Update of the Local Plan.

2 National Policy

National Planning Policy Framework

- 2.1 Paragraph 5 of the National Planning Policy Framework (NPPF) notes that it: "...does not contain specific policies for nationally significant infrastructure projects, which are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework). Local planning authorities should be aware that national policy statements form part of the overall framework of national planning policy, and may be a material consideration in preparing plans and making decisions on planning applications."
- 2.2 The NPPF requires Local Planning Authorities to plan for Climate Change, paragraph 149 states Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures.

- 2.3 Paragraph 151 sets out that plans should provide a positive strategy to increase the use and supply of renewable and low carbon energy and heat. They should consider identifying suitable areas for renewable and low carbon energy sources and supporting infrastructure and, outside such areas, support community-led initiatives. They should also identify opportunities for energy demanded by development to be served by decentralised, renewable or low carbon energy supply systems, and they should promote co-location of heat customers and potential suppliers.

National Policy Statement for energy

- 2.4 National Policy Statement for energy EN-1 (NPS) reinforces the Government's commitment, as set out in the Climate Change Act 2008, to cut greenhouse gas emissions (GHG) by 80% by 2050, compared to 1990 levels. Whilst noting that EN-1 relates to major energy infrastructure, it nevertheless serves to demonstrate that energy has long been vital to economic prosperity and social wellbeing and that it is important to ensure that the UK has secure and affordable energy.
- 2.5 The NPS which was published in 2011 acknowledges fluctuating energy demands associated with renewable energy at paragraph 3.3.11 in stating *'some renewable sources (such as wind, solar and tidal) are intermittent and cannot be adjusted to meet demand. As a result, the more renewable generating capacity we have the more generation capacity we will require overall, to provide back-up at times when the availability of intermittent renewable sources is low. If fossil fuel plant remains the most cost-effective means of providing such back-up, particularly at short notice, it is possible that even when the UK's electricity supply is almost entirely decarbonised we may still need fossil fuel power'* This paragraph does acknowledge fossil fuel use will likely form a part of primarily decarbonised energy infrastructure. It further goes on to say at paragraph 3.3.12 that *'The Government does not therefore consider it prudent to solely rely on these (renewable) technologies to meet demand without the additional back-up capacity'*
- 2.6 The National Policy Statement for Energy (EN-1) was written in 2011 when the UK was legally bound to the requirements of the 2008 EU directive which committed the government to "cut greenhouse gas emissions by at least 80% by 2050, compared to 1990 levels."
- 2.7 Since then, in 2019, The Climate Change Act 2008 (2050 Target Amendment) Order 2019 (S.I. 2019/1056), increased the required UK carbon reduction target from 80% to 100% from the 1990 baseline.

2.8 In October 2020 it was announced that the Secretary of State has made a "provisional decision" to review the NPS in response to a legal challenge against the documents. The judicial review challenge is seeking to force the government to review the NPS in light of the UK's commitments to curb carbon emissions, such as its 2016 ratification of the Paris Agreement that requires signatories to make efforts to reduce global warming. Source: [Planning Resource article, "Government 'provisionally' decides to review energy national policy statements following legal challenge", 7th October 2020](#)

2.9 In December 2020 the UK Government published its [Energy White Paper, Powering our Net Zero Future](#). The white paper puts net zero and the effort to fight climate change at its core, following the Prime Minister's [Ten Point Plan for a Green Industrial Revolution](#).

2.10 Regarding the UK's ambition for future energy generation it is noted that:

"A low-cost, net zero consistent system is likely to be composed predominantly of wind and solar. But ensuring the system is also reliable, means intermittent renewables need to be complemented by technologies which provide power, or reduce demand, when the wind is not blowing, or the sun does not shine. Today this includes nuclear, gas with carbon capture and storage and flexibility provided by batteries, demand side response, interconnectors (see 'Energy system' chapter) and short-term dispatchable generation providing peaking capacity, which can be flexed as required.

By 2050, we expect low-carbon options, such as clean hydrogen and long-duration storage, to satisfy the need for peaking capacity and ensure security of supply at low cost, likely eliminating the reliance on generation from unabated gas."

2.11 The White Paper also outlines the Government's intention to review the NPS and publish by the end of 2021. It does state though that while the review is undertaken, the current suite of NPS documents remain relevant government policy and have effect for the purposes of the Planning Act 2008.

3 Review of technologies

3.1 [The RTPI published a report on smart energy in 2019](#) which highlights the challenges associated with meeting 2050 decarbonisation objectives. Whilst not policy, the report indicates some challenges going forward regarding energy security and looks towards a future where nothing should be planned without having successfully demonstrated it is fit to take its place in a net-zero emissions future. The RTPI report recognises, as does the NPS, that energy storage capacity is integral to provide flexibility in the energy system. The report recognises the lack of policy direction related to storage projects and debate over whether storage projects should be considered as low carbon infrastructure, particularly Gas Peaking Plants.

- 3.2 Since the publication of the NPS, technology has changed and there is more public support for alternative means for dispatchable energy such as battery storage to reflect a changing national direction in the urgency to reduce carbon emissions, as is reflected in the updated Climate Change Act. For example, in December 2019, [RenewableUK published research](#) which has shown that the total cumulative capacity of battery storage planning applications has soared from nearly 6,900 megawatts (MW) a year ago to over 10,500MW today (December 2019) – enough to fully charge over a million electric vehicles. The market has developed extremely rapidly - in 2012, applications stood at just 2MW. The number of UK companies involved in the sector has grown over the past 12 months from 300 to more than 450 and the average battery project size has increased slightly from 27MW to 28MW.

4 Local context

- 4.1 The Development Plan (Core Strategy and Placemaking Plan) is underpinned by the need to tackle the causes and effects of climate change.
- 4.2 The Spatial Strategy seeks to move the district towards a low/reduced carbon economy and Objective 1 - Climate change - of the Strategic Objectives seeks to encourage and support the increased generation and use of renewable and low carbon energy, including through the delivery of community led schemes. This is implemented through Policy CP3 which sets out the targets and framework to achieve an increase in the level of renewable energy generation in the District. It is recognised through the Policy that these will be monitored and adjusted as technologies and initiatives improve.
- 4.3 Since the adoption of the Placemaking Plan in 2017 the Council has declared a Climate Emergency and has signed up to the UK100 Pledge. A pledge to provide the leadership needed to enable our communities to achieve 100% clean energy across all sectors in Bath & North East Somerset by 2030, and as a way to enable carbon neutrality by 2030 (a more rapid pace than the governments targets within the 2050 Target Amendment).
- 4.4 Stretch Pathway modelling, as reported in the [Council Climate Emergency Progress Report from October 2019](#), indicate the scale and speed of ambition needed in B&NES to realise the 2030 goal. These are **not** targets but highlight that in order to achieve carbon neutrality by 2030 “local installation (of renewable energy) needs to be developed rapidly and at scale, including for example, 50% of existing homes having a solar PV roof by 2030 (currently only 3.1% do), plus around 116 football pitches worth of solar PV on commercial roof space and ground mounted sites, plus around 28 large (2.5 MW) wind turbines.”

5 Conclusion

- 5.1 It is acknowledged that there is a need for flexibility and stability in the energy supply, as is recognised in the NPS. However, since the publication of the NPS technology has changed and there is more public support for alternative means for dispatchable energy such as battery storage to reflect a changing national direction in the urgency to reduce carbon emissions, as is reflected in the updated Climate Change Act and the 2020 Energy White Paper, Powering our Net Zero Future.
- 5.2 It is the view of the Local Planning Authority that Gas Peaking Plants are inconsistent with Local Plan policy objectives and undermine the Council's commitments to reduce carbon emissions and achieve carbon neutrality by 2030. It is considered that alternatives do exist which both will secure long term energy security and help ensure the Local Plan renewable energy targets are met.
- 5.3 The NPPF requires Local Planning Authorities to plan positively for their areas. The NPS appears not to facilitate a local policy preventing Gas Peaking Plants. However, in order to facilitate an increase in the level of renewable energy generation and the transition to realising the Council's 2030 goal (to achieve 100% clean energy across all sectors), the proposed policy approach is to amend Policy CP3 to require balancing/peaking plant applicants to demonstrate that their scheme will contribute to the Core Strategy targets for Renewable Electricity and Heat generation.

6 Suggested policy approach through the Partial Update / Options Document text

- 6.1 In order to facilitate an increase in the level of renewable energy generation and the transition to realising the Council 2030 goal (to achieve 100% clean energy across all sectors), the proposed policy approach is to amend Policy CP3 to require peaking plant applicants to contribute to the Core Strategy targets for Renewable Electricity and Heat generation.

POLICY CP3: Renewable Energy

Development should contribute to achieving the following minimum level of Renewable Electricity and Heat generation by 2029.

Capacity (Megawatt)

Electricity 110MWe (Megawatt Electricity)

Heat 165MWth (Megawatt Thermal)

Development should also contribute to the need to balance electricity demand and supply in order to assist the transition to 100% renewable electricity. Proposals for grid balancing plant will be expected to follow the hierarchy below:

1. Energy storage plant co-located with renewable energy generation plant
2. Freestanding energy storage plant

Balancing plant that increases the district's carbon emissions, for example those that burn fossil fuels such as gas will not be acceptable.