Together Against Sizewell C

SIZEWELL C PLANNING APPLICATION INQUIRY (IP no. 20026424)

ORAL REPRESENTATIONS REGARDING
ISH9 POLICY & NEED

Note: statements made in respect of agenda items 2(b), 3(a)-(c) are those made on TASC's behalf by Ruchi Parehk of Cornerstone Barristers

Agenda item 2: National policy and the assessment of the need for new nuclear power generation

(b) Applicability of EN-1 and EN-6 in light of the Written Ministerial Statement on Energy Infrastructure (2017 WMS)

1. The starting point for present purposes is that EN-1 and EN-6 do not have effect for the purposes of s.104 of the Planning Act 2008 ("PA 2008"), as confirmed by the 2017 WMS and accepted by the Applicant. This is because the Project cannot be deployed by the end of 2025. There is therefore no statutory mandate to decide this application in accordance with EN-1 and EN-6 pursuant to s.104(3) PA 2008.

2. Pursuant to the 2017 WMS, however, the Secretary of State directed that regard must be had to EN-1 and EN-6 under s.105(2)(c) PA 2008, unless they have been suspended or revoked. Importantly, the 2017 WMS directs that "*[i]n respect of matters <u>where there is no relevant change of circumstances</u> it is likely that significant weight would be given to the policy in EN-1 and EN-6*" (emphasis added).

3. TASC submit that there have been a number of relevant changes of circumstances such that, following the 2017 WMS, EN-1 and EN-6 cannot rationally attract significant weight. Rather, in light of the significant changes set out below, the policies can only attract limited, if any, weight in the determination of this application. (In order to

avoid repetition, we cross-refer below to other documents containing detailed arguments where relevant.)

(1) Significant changes in the scale of development. There have been significant changes in the scale of this Project from the time of the Sizewell Site Assessment which led to its inclusion in EN-6 over a decade ago. For e.g., the size of the site assessed in EN-6 was 117ha compared to the present 332ha (also referred to as 371.7ha) proposal. Further, the Appraisal of Sustainability ("AoS") was based on a base case of "at least one" reactor, compared with the current twin reactor proposal. At no point does the AoS say that a twin reactor model was assessed or that a twin reactor project would be suitable.

(2) Significant changes in the climate change regime. EN-1 and EN-6 were guided by climate forecasts in UKCP09; the current forecasts in UKCP18 are materially worse. The latest IPCC Report produced as part of its sixth assessment report provides an even more alarming and stark warning about the risks of irreversible climate change.

(3) Significant legal and policy progression. This includes, but is not limited to:

i. Introduction of the 'net zero' target in the Climate Change Act 2008.

ii. CCC's Sixth Carbon Budget (Dec 2020), including (among other matters):

a. Requires emissions reduction by 78% on 1990 levels by 2035.

b. The five forecast scenarios, 3 of which include only 5GW of nuclear capacity (which would be achieved by Hinkley Point C and Sizewell B).

iii. The UK Hydrogen Strategy (August 2021) which sets out the government's expectations that demand for hydrogen will be between 250 to 460 TWh/yr by 2050.

iv. The marked difference in Government's emphasis between EN-6 and the emerging policy for 2026-2035. New nuclear power stations are described in the former as playing "*a vitally important role*" (para 1.1.1), whereas the Government's July 2018 response to the consultation on the criteria for new locations stated: "*nuclear has an important role to play in the UK's energy future as we transition to the low-carbon economy*" (para 3.9).

v. The significant shift away from the Government's reliance on market forces for the financing of energy projects in EN-1 (see for e.g. paras 2.2.2, 2.2.19, 3.1.2, 3.3.6) to the consideration now of direct investment and/or possible underwriting through the Regulated Asset Base model.

(4) <u>Significant reductions in the cost of alternatives.</u> At the time of designation of EN-1 and EN-6, the cost of renewable sources of electricity generation were deemed prohibitive. This is no longer the case; the costs have dropped significantly over the last decade and are predicted to continue falling. The latter point is particularly relevant given that the Project will not be up and running until at least 2035. An example of how EN1 considered the cost of energy production is demonstrated in para 3.5.8 which states *"The Government believes that nuclear power is economically competitive with other forms of generating technology (including the lowest cost renewable technologies) and new nuclear is likely to become the least expensive form of low carbon electricity generation"*, a statement that can no longer be substantiated.

(5) <u>Significantly increased availability of low carbon alternatives.</u> The ability for renewables to be effectively utilised at scale has significantly improved over the last decade, as also evidenced by the clear shift in government policy. Again, the fact that the Project will not be operational until at least 2035 further underscores the issues with relying on policies based on information from over a decade ago.

4. It is also important to note in this context that BEIS announced a review of the National Policy Statements for energy infrastructure on 23 April 2021. Pursuant to s.6(3) PA 2008, in deciding to review a national policy statement the Secretary of State must consider whether: (a) since the time of its publication, "*there has been a significant change in any circumstances on the basis of which any of the policy set out in the statement was decided*"; (b) the change was not anticipated at that time: and (c) if the change had been anticipated at that time, any of the policy set out in the statement would have been materially different. While BEIS has not published its statement on these matters, it is plainly the case that the Secretary of State was satisfied that these three limbs had been met so as to justify a review. The review, in itself, is therefore clear evidence of a relevant and significant change in circumstance.

5. Accordingly, and given the limited (if any) weight that should be attributed to EN-1 and EN-6, TASC submit that it is for the ExA to form its own judgment as to whether there is a "need" for a new nuclear power station at Sizewell for deployment after 2025. TASC maintain that there is no proven need for this Project: see pp 8-15 of the Policy and Need written representation [REP2-481b]. The headline point, however, is that the urgent need is for decarbonisation, which includes decarbonisation of the electricity grid. The UK grid requires flexibility, not baseload/firm power. Fixed and inflexible production from Sizewell C will not meet either of these requirements because it will take too long to deploy and will not be suitable for continuously load-following. While there is a need for additional electricity generation, this can be achieved without this Project.

6. A further consequence of the arguments set out above is that the 'IROPI' case made at the strategic level for Sizewell C in EN-6 cannot be given any weight. Moreover, given the absence of any need for the Project, TASC submit that it is unable to meet the IROPI test for the purposes of the Conservation of Habitats and Species Regulations 2017.

7. Finally, and in the alternative, if the ExA is minded to give greater weight to EN-1 and EN6 in the planning balance under s.105 PA 2008, there remain serious concerns as to the Project's ability to satisfy or meet the requirements of the policies therein. (See

Appendices B and C to TASC's Policy and Need written representation [REP2-481b] which set out a critical review of EN6 volumes I and Annex C in volume II).

(c) The implications of other relevant documents and publications issued since the submission of the application for the application of NPS policy including: Energy White Paper, Updated Energy and Emissions Projections 2019 (October 2020), The Ten Point Plan for a Green Industrial Revolution (November 2020), National Infrastructure Strategy (November 2020), Response to the National Infrastructure Assessment (November 2020), The Sixth Carbon Budget: The UK's path to Net Zero (December 2020).

In connection with this agenda item, TASC draw the ExA's attention to our document REP3-139, specifically to our answer to EXQ1 G.1.4 which refers to documents and publications listed above. TASC contend that our comments in REP3-139 remain valid.

(d) The scale and urgency of the need in the light of national energy policies overall.

Neil Crumpton made the following oral presentation on behalf of TASC: "My name is Neil Crumpton. I'm leading on this for TASC. And just for a bit of background, I am a retired electrical engineer. I worked for Friends of the Earth, was an energy specialist for about 16 years and served on various government committees including low carbon assessment technologies. There's no doubt that there's a clear need for the quick decarbonisation of the electricity sector and a need for reliable electricity generation taking into consideration the amount of renewables that are likely to be coming on the system. When I say reliable, I prefer to call it dispatchable. Dispatchable means that it can be generated very quickly at the times when renewables don't provide sufficient output to the grid. Nuclear is essentially baseload, although it can reduce its outputs, but it is essentially baseload. So, the question of need in relation to Sizewell C, comes down to whether: can it reduce carbon emissions?; which is the best fit in terms of decarbonizing before 2035, as well as after 2035; and its ability to providing dispatchable, rather than baseload, power.

"There's no doubt that the government's place a lot of reliance on the modelling system they have, it's called the dynamic dispatch model, the DDM. I noticed the ministers made considerable reliance on this at the Select Committee meeting in January. Just to be aware that they're not just comparing nuclear inclusive scenarios with renewables only. But also, with renewables and carbon capture, and or use and storage as well, which are a separate, distinct set of scenarios that should be considered. Indeed, because the government are progressing carbon capture and storage and use technologies, that is the likely pathway, they are going at the moment. So, the modelling is key to their statements in the energy white paper. And in all previous statements, they would rely heavily on their modelling. However, the government have made it clear that their modelling is continually being updated and they do release reports on the government website. The inputs into the software are changing all the time as technology costs fall, or when this and that policy

comes into force. In that sense, the need, as defined by the model, can be changing all the time.

“In terms of what has changed in the modelling, I would suggest that several things have come forward since the energy white paper was published, for example the BEIS hydrogen strategy, which was released last week, and the climate change committee's recent reports, where they're talking about a forecast of a need for a considerable amounts of hydrogen demand, rising towards 2050. I would also say that the government's model also needs to be informed by the biomass strategy, which they say will be published in 2022. Personally, I think doing any modelling, without including biomass as a potential use within the electricity sector, is completely inadequate, it almost makes a nonsense of it. One could use biomass for aviation, but aviation is non-essential, whereas electricity generation is highly essential. Biomass can provide dispatchable electricity generation as well. There's also storable hydrogen and carbon negative hydrogen if you're using it with carbon capture and storage. So, there's all these technology aspects feeding into the model, which informs the Minister.

“Regarding need, can I just say that the BEIS hydrogen strategy is estimating demand for hydrogen gas between 250 and 460 terawatt hours a year by 2050. Similarly, the climate change committee is estimating something like 200 terawatt hours of hydrogen gas per year by 2050. This is not currently included in the DDM modelling. In fact, the modelling only includes 20 terawatt hours for electricity generation. But that's an input the staff members have selected without much explanation. And it's way below the demand now being forecast by their own government department and the climate change committee. The DDM modellers also assume natural gas is used for the hydrogen generation that they do include. Now, it's generally regarded by numerous authorities that green hydrogen, that is produced by curtailed electricity-generated use of electrolysers, is likely to be as cheap, if not cheaper, than natural gas reformed with carbon capture by 2030 to 2035. So, the model itself really does need to include assessment of green hydrogen in its future updates, and indeed, the huge amount they're now forecasting will be needed. I think both these aspects, the high hydrogen demand and the use of curtailed electricity, of which there is a lot of in the renewal scenarios in their modelling, that can be used for this green hydrogen production. And I think those would transform the outputs of the existing model and lead to some very different conclusions as to the statements of need at the moment. I think this has, in terms of policy, implications for the habitats directives and the application of the IROPI need for a scheme on the Sizewell C site by 2035. To summarise, the government's reliance on the DDM model at the present time is not justified given the many strong arguments against it. It is insufficient at this time, for numerous reasons I've just stated, to base too much reliance for the need for Sizewell C, on the existing modelling. Thank you very much.”

During the hearing, TASC Chair Pete Wilkinson made the following oral contribution: “The driver for energy policy is to achieve net zero carbon by 2050. That can be met more quickly and more cheaply through efficiency, decentralisation, localisation and energy conservation without resorting to nuclear power’s long-lived radioactive waste legacy to pass on to future generations, without the wholesale disruption of the east Suffolk environment and without

12 million of tonnes of aggregate being transported across the country. In that respect, nuclear is, as alluded to earlier, an option not a necessity. If there was certainty about the need for nuclear, we would not be discussing it here.

Can we remind ourselves that, in November 2005, Tony Blair announced that nuclear power was 'back with a vengeance' in the face of predictions that the lights would go out in 2017. In the intervening 16 years since the Blair announcement, no new nuclear electricity was generated, 2017 came and went and the lights stayed on. In fact, demand for electricity has been falling steadily and predictions for a 20% increase by 2020 turned into a fall of 16%. The cost of renewable sources of electricity continues to fall. Nuclear costs continue to rise. We face a climate emergency yet are asked to pay for the costs of building a plant which will take 12 – 15 years to construct, at the end of which it will leave us a carbon debt of millions of tonnes of CO2, and which will have only a marginal impact on the need to drive down greenhouse gas production. Investment in nuclear diverts funds away from renewables which are deployable more quickly and which represent a much faster response to the climate emergency. We need climate action now, not in 15 years' time. We cannot predict what the world will look like in 2035, but it is entirely possible that as technological advances continue to allow us to innovate, Sizewell C will be redundant and surplus to requirements by 2035 or later.

Could I just finish by saying that, nowhere in the documentation mentioned by Mr Philpott, on behalf of the Applicant ,this morning is Sizewell mentioned by name. It is no surprise that government wants to keep the word nuclear in the statements it makes about the energy sector as the UK has a huge investment in nuclear weapons and needs to ensure the supply chain and nuclear skills base is maintained."

(e) The funding arrangements for the Project together with any associated consequences for the timing of the project, and hence its capability of meeting an urgent need for new generating capacity.

Mr Wilson made the following oral representation: "TASC endorse the comments made by Alison Downes of Stop Sizewell C, in regard to doubts about the timing of SZC's financing. TASC also listened to some of the Compulsory Acquisition hearings last week and heard the clients speaking about their confidence in obtaining the funding required for this project. However, when you compare that confidence with EDF's financial statements and the comments that are made in those, it makes you realise that there's quite a variance. That may well be because in the financial statements, EDF have a legal obligation to not make misleading claims in their financial statements, a practice they were previously fined about 5 million [mis-read as 50 million at the ISH] euros because they misled the financial markets over the HPC deal. As a result of this, TASC consider that the Applicant takes far more care

in what they put in writing in their financial statements, as compared with claims they put forward in the DCO process.

"TASC draw attention to two of the statements included in EDF's recent financial statements. One of them acknowledges that EDF's objective for Sizewell C is to obtain third party investors by the date of FID and then goes on to say,' without an appropriate risk-sharing mechanism and financing structure, that won't be possible' and then the financial statements actually say, 'at this stage, it's not clear that the group will achieve this objective'. So EDF are obviously casting doubt over the ability to obtain that third party investment (this being highlighted by Mrs Downes', of Stop Sizewell C, comments during the hearing that several financial institutions have confirmed they have no plans to invest in the Sizewell C project).

"EDF's financial statements then go on to say that the Applicant's ability to take FID on Sizewell C will be conditional and may be dependent on operational control of the Hinckley Point C project. Obviously HPC has been delayed, so when, or if, that control will actually occur, must be in doubt. EDF actually acknowledge this when they say in their financial statements, that none of the conditions they list are currently assured. In TASC's opinion, the afore-mentioned places a lot of doubt as to the ability of the Applicant to have sufficient funds for this project, especially in the timescale that they seem to be implying that they will obtain it.

"TASC consider that the ExA needs to be satisfied that, if the Sizewell C FID is conditional on the Applicant obtaining operational control of HPC, there is evidence that the HPC project is likely to be completed. We say this in the knowledge that EDF are reported as having substantial debts so there must be doubts about their ability to fund the remainder of the HPC project, and that there is growing momentum to remove Chinese involvement from the UK's infrastructure, which could have a major impact on the HPC project if EDF's Chinese partner in the venture, CGN, are removed from, or choose to leave, the partnership."

Agenda item 3: Application of national policy and the correct approach to decision making

(a) The Drax High Court (May 2020) ("HC") and Court of Appeal (January 2021) ("CA") judgments

8. At the outset it is important to note that the Drax judgments were decided in the context of a different statutory provision, namely s.104 PA 2008, which has no application to the present Project.

9. In so far as is relevant – i.e. in respect of changes of circumstances – the *ratio* from those judgments is follows:

(1) S.104(7) (i.e. whether adverse impacts outweigh benefits) may not be used as a means of challenging policy or of anticipating a review under s.6, which remains the appropriate process for dealing with changes of circumstances after a policy has been designated: see CA at [105]; HC at [38]. An argument that a change in circumstance warrants reduced or even no weight is also precluded under s.104(7): see HC at [108].

(2) S.104(7) cannot be used to circumvent s.104(3) on the question of need irrespective of a change of circumstance after the designation of the relevant national policy statement: see HC at [107].

(3) S.104(7) cannot be used to circumvent s.106(1)(b) which entitles the Secretary of State to disregard representations relating to the merits of policy set out in a national policy statement: see CA at [105].

10. While TASC do not comment on the correctness or otherwise of the legal principles set out in Drax, it is submitted that they relate specifically to the proper scope of s.104(7) PA 2008; are not of general application; and do not apply in the present context.

11. Unlike the s.104 provision whereby, subject to prescribed exceptions, a decision must be taken in accordance with the relevant national policy statement, under s.105 EN-1 and EN-6 are "material considerations" which are to be weighed alongside other such considerations in the overall planning balance. This is not the same exercise as that to be carried out under s.104, where the relevant national policy statement has primacy. It is therefore open to (and indeed necessary for) the ExA to reach its own judgment on the weight to be attributed to each of the relevant considerations under s.105, including EN-1 and EN-6. As part of carrying out the planning balance, it is also open to the ExA to take into account any other matters which are deemed important and relevant (s.105(2)(c)), which can clearly include significant changes of circumstances.

12. Moreover, while there is a policy directive in the form of the 2017 WMS that EN-1 and EN-6 will likely attract significant weight in the s.105 balance, there is an important caveat in that this only applies where there is "no relevant change of circumstance".

On its clear terms, therefore, the 2017 WMS invites consideration of changes of circumstance which in turn will affect the weight to be given to these national policy statements within the s.105 balance.

(b) The Wylfa Newydd Nuclear Power Station Panel Recommendation Report (July 2019) and approach taken to "relevant change of circumstances" in 2017 WMS

13. The Wylfa Report sets out the approach it considers appropriate in determining whether there has been a "relevant change of circumstance" at paragraph 5.5.9. According to the Panel, it must mean "*changes in relation to policy, assessment criteria or the identification, in principle, of a particular site*".

14. TASC do not consider that the ExA is required to adopt or provide a precise definition for what may constitute a relevant change of circumstance. This is because the Secretary of State clearly considers there to have been a significant change in circumstances on the basis of which the policies in EN-1 and EN-6 were decided – as evidenced by the s.6 review announced on 23 April 2021.

15. However, even if the ExA were to adopt the definition adopted by the Wylfa Panel, TASC maintain that there have been relevant changes in policy, assessment criteria or the identification of the site – for the reasons given above at paragraph 3, including, in particular, the significant changes in the scale of the development and the significant legal and policy changes. Notably, the Wylfa Report predates the Government's announcement of the s.6 review.

(c) The implications of the above for the application of NPS policy and the appropriate process to accommodate changes of circumstance after the designation of an NPS

16. In light of the above, it is open to the ExA to take into account the relevant changes of circumstances in determining the appropriate weight to be attributed to EN-1 and EN-6. For the reasons already given, TASC submit that the National Policy Statements can only rationally attract limited, if any, weight in the determination of this application.

Agenda item 4. The contribution of the Sizewell C Project to meeting the need for new nuclear generating capacity:

(a) The updated energy and emissions projections 2019 (BEIS) (October 2020).

Neil Crumpton made the following oral presentation: "Thank you, Madam Chair, Neil Crumpton on behalf of TASC. I would just like to say that I don't wish to challenge the climate projections or emission projections, and our need to achieve net zero by 2050. Although I would say, I think most people would say, the earlier the better. Realistically, that may be a challenge. What I would say is that I do challenge the BEIS modelling on their lower electricity projection of 575 terawatt hours a year, I think it will be much near the higher end, if not beyond the higher end, given the need for hydrogen in the most recent BEIS Hydrogen Strategy and the CCC report. As I said here earlier, the current BEIS modelling is based on blue hydrogen, and I can't see how we can get to net zero if you're using blue hydrogen, because natural gas with CCS still has residual emissions. You can only usually capture about 90% of the carbon dioxide, so every terawatt hour of blue hydrogen will be associated with about 20 grammes of carbon. So, in terms of net zero, we need to not be making blue hydrogen, but electrolytic green hydrogen, also some degree of carbon negativity to match the emissions that will arrive from agriculture etc. And that's why I mentioned a small amount of whatever sustainable biomass we do have, be focused in the electricity sector, not on aviation, which is non-essential. And that's why the modelling today is insufficient in my view. But I would also say that I think the case for increased hydrogen plays into the hands of the renewables scenarios more than a nuclear scenario, because the more electricity you need for electrolysis means that you need to be building more renewables. And when the variable renewable supply, which is intermittent weather dependent, is in excess of grid demand for more of the year there's less need for dispatchable power, which is one of the things that causes more emissions, because it's often using blue hydrogen. And that changes the modelling significantly, in my view. So again, the modelling and the DDM model, needs to incorporate that green hydrogen, net zero and electrolytic use of curtailed waste that is huge in most renewable scenarios, into its modelling. And all that feeds into lower emissions in the renewable and CCUS scenarios, but it also lowers costs, and there is a value for money issue here, but it also feeds back that, with reduced costs, you can buy more of the things in the electricity sector to reduce carbon emissions. So, there is a degree of circularity, which that modelling needs to really tease out.

"I'd also say that renewables projects, particularly offshore wind and solar, can deploy quicker to 2035. When you're funding nuclear, you get it all at the end, in 2035. Whereas with renewable projects, they're obviously a lot smaller and they can come online during the period 2025 to 2035 so there's a carbon benefit there in terms of decarbonisation earlier. So, I would say, that the DDM model, which informs the need and all the historic white papers, etc, that we've had to date is in need of substantive upgrading. And BEIS do say it is doing continual upgrading, and it's obliged to do so for IROPI reasons, not just for EN1 and EN6. And therefore, I would say that we strongly recommend that there is a case, a moral case, as well as a policy case to urgently address the modelling, and make sure it's up to date before any final investment decision be made. Thank you very much."

(b) The anticipated extent of the Project's contribution to satisfying need for infrastructure of this type and the weight that should be given to that contribution.

Mr Wilson made the following oral presentation: Looking at the title for this agenda item, it refers to the contribution of the Sizewell C project to meeting the need for new nuclear generating capacity. TASC are sure the ExA will not be surprised that we don't believe there is a need for new nuclear. But turning to the Sizewell C project itself, we refer to the EPR reactor technology. Mr. Rhodes, on behalf of the Applicant, had recently said to the Hearing that nuclear has a proven and reliable record but TASC say that such a claim cannot be made in respect of the EPR reactor. The only EPRs operating in the world are in Taishan, China but one of them has had to close recently for technical problems. Building work on Olkiluoto, Finland started, in 2005 and it's still not operational. It's had valve problems and is now reported to have issues with the pressuriser extension line in the primary water circuit, which affects all the EPR sites throughout the world. The Flamanville 3 reactor, France's supposed flagship EPR1 project, is still not in operation, even though construction started in 2007. The French government have decided not to build any more EPR1 reactors, they want to move on to the EPR2 design once finalised. TASC's point is that no-one knows if the EPR1 design planned for SZC can be said to be guaranteed to work and cannot therefore be guaranteed to meet any need for new nuclear or electricity generation at this time.

TASC refer to the comment made by Mr. Bedford during this agenda item where he had mentioned the local community suffering adversely disproportionately for this project. And these adverse impacts may be suffered by the local communities, for something that doesn't actually function properly, if at all, at the end of the day, certainly not to the extent that the Applicant is claiming. TASC's view is that there is an urgent need, but that's for rapid decarbonisation, certainly not an urgent need for large nuclear. Because SZC is not vital to meeting the UK's electricity requirements and there are significant doubts over whether the EPR reactor design can meet a perceived need for large nuclear reactors, TASC consider little weight should be given to this project.

Agenda 5. Local Plan and other policies:

(a) The relative weight to be afforded to Local Plan and NPS policies.

(b) Whether there is any conflict between Local Plan and NPS policies?

(c) Other planning policy considerations – the revised National Planning Policy Framework (NPPF).

TASC are of the opinion that the revised NPPF affords greater protections to the design of buildings that are allowed in an AONB and provides greater protections in respect of development in areas in the AONB's hinterlands and therefore believe that greater weight should be given to the adverse impacts attaching to certain aspects of the SZC development, such as the impact of the accommodation campus and beach landing facilities that affect the setting of the AONB and the lack of alternative designs of the reactor buildings.

TASC say that the new para.176 NPPF strengthens the weight to attach to the conflict with policy SCLP6.3 Suffolk Local Plan which TASC identified at para.28 of their written summary for the Landscape ISH5 [REP5-296].