From:
To: Jones, Hefin

Cc:
Subject: CHSP Submission on BESS following Open Floor Hearing 2

Date: 27 July 2019 15:25:14

Attachments:

Dear Hefin

Attached is the CHSP submission from the Faversham Society summarising the presentation made at Open Floor Hearing 2.

Kind regards

David

Sir David Melville CBE Vice Chair

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Additional submission for deadline 3, following Open Floor 2

On behalf of the Faversham Society

Battery Energy Storage System (BESS)

- The Faversham Society and others have raised our concerns about the hazards associated
 with large scale BESS in written submissions. Following Open Floor Hearing 2 at which a
 number of participants, including the Faversham Society, reiterated these concerns and
 raised others, we have requested a further ISH on the Batteries and Related Technology and
 will shortly be sending you an extensive range of questions requiring responses from the
 applicants.
- 2. One of the central issues is the lack any National Planning Statements on BESS, and indeed a general lack of guidance, both national and local.
- 3. The Health and Safety Executive (HSE) have however begun to recognise the need for research and guidance and have established a Battery Safety and Energy Storage Test Facility: https://www.hsl.gov.uk/what-we-do/large-scale-testing-and-evaluation/battery-safety-and-energy-storage
- 4. In 2016 the HSE initiated an extensive review of BESS the 3-year 'HSE Shared Research Programme: Energy Storage': https://www.hsl.gov.uk/energy-storage. The focus is on commercial or grid scale technologies. As far as we can ascertain the results have not yet been published.
- There is however guidance for the Insurance industry in the form of a Technical Guidance Note from Allianz Risk Consultancy entitled Battery Energy Storage Systems (BESS) Using Liion Batteries: https://www.agcs.allianz.com/content/dam/onemarketing/agcs/agcs/pdfs-risk-advisory/tech-talks/ARC-Tech-Talk-Vol-26-BESS.pdf
- 6. At Open Floor 2 we quoted extensively from this detailed publication which concludes 'BESS using lithium-ion batteries are susceptible to thermal runaway and have been involved in several serious fires in the last few years'. The document recognises the lack of guidelines and highlights current knowledge gaps; describes the loss experience due to BESS fires in Hawaii, Arizona, Wisconsin and Belgium; describes the hazards; and makes detailed recommendation for the planning of BESS in relation to: Fire and Rescue Services; Construction and Location; Material, Equipment and Design; Ventilation and Temperature Control; Gas and Smoke Detection; Fire Protection and Water Supply; and Maintenance.
- 7. There is no reference to these crucial safety issues in the application and thee applicants chose not to respond when we raised them at Open Floor 2.
- 8. The Faversham Society feels strongly that the applicants should be required to respond to these and other questions given that their proposed BESS is subject to all of these concerns and is of an unprecedented scale. Further, we believe these matters are of such importance that they should be subject to thorough investigation in a further Issue Specific Hearing.

Professor Sir David Melville CBE, BSc, PhD, CPhys, FInstP, Sen Mem IEEE(USA)

Vice-Chair

The Faversham Society