SCOTTISH ENERGY ADVISORY BOARD Tuesday 5th December 2017 Edinburgh

MINUTES OF MEETING

Ministers

- Rt Hon Nicola Sturgeon, First Minister (Co-Chair)
- Paul Wheelhouse, Minister for Enterprise, Innovation & Energy

Members

- Professor Sir Jim McDonald, University of Strathclyde (Co-Chair)
- Keith Anderson, Scottish Power Renewables
- Andrew Jamieson, ORE Catapult
- Claire Mack. Scottish Renewables
- Alistair Philips-Davis, Scottish and Southern Energy
- Deirdre Michie, Oil and Gas UK
- Damien Yeates, Skills Development Scotland
- Frank Mitchell, ESAG
- Brian Cowell, EDF Energy
- Professor Alex Kemp, University of Aberdeen
- Dick Winchester, Pipistrelle Ltd
- Roy MacGregor Global Energy Group
- Jim Hannigan, Doosan Babcock
- Graeme Sweeney, The Chopping Company
- Jim McColl, Clyde Blowers Ltd
- Melfort Campbell, IMES Group
- Charles Hammond, Forth Ports
- Linda Hanna. Scottish Enterprise
- Audrey MacIver, Highlands and Islands Enterprise
- Sam Ghibaldan, Citizens Advice Scotland
- Duncan Burt, National Grid

Attendees

- Jim Smith, Scottish and Southern Energy
- Chris Stark, Scottish Government
- Sue Kearns, Scottish Government
- David Ritchie, Scottish Government
- Kat White, Scottish Government

Secretariat

- Sean Jamieson, Scottish Government
- Fredrick Brown, Scottish Government

Welcome and Introductions

- The First Minister opened the meeting by apologising for her late arrival and thanking all attendees for coming to the last SEAB meeting of 2017. Mr Wheelhouse was also unavoidably delayed for the start of the meeting.
- 2. The First Minister updated the Board on attendance at today's meeting welcoming:
 - Claire Mack, Chief Executive of Scottish Renewables;
 - Jim Hannigan who has replaced Les King from Doosan Babcock;
 - Brian Cowell who has replaced Stuart Crooks from EDF Energy; and
 - Noting Alistair Philips-Davis early departure from today's meeting and welcoming his colleague Jim Smith who would cover the remainder of the meeting.
- 3. The First Minister wished to place on record her gratitude for the work and participation of former Board members, Niall Stuart of Scottish Renewables, Les King of Doosan Babcock and Stuart Crooks of EDF Energy.
- 4. The First Minister noted in anticipation of the publication of the Energy Strategy later in December. She also set out some of the key energy events she had been involved in since the last meeting of SEAB in June. These included:
 - The opening of the new Scottish Power offices in Glasgow;
 - The launch of the Programme for Government in September putting the transition to a low carbon economy at the heart of its narrative;
 - The official opening of Hywind the world's largest floating offshore wind farm:
 - The opening of the Oil and Gas Technology Centre Innovation Hub in September following on from Colette Cohen's very informative presentation at the June SEAB meeting;
 - The pledge to establish a Scottish Energy Company; and
 - The challenges of keeping BiFab from entering administration.
- 5. Sir Jim also reflected on developments within the energy sector, including:
 - The Scottish Government's pledge to phase out diesel and petrol cars by 2032:
 - Plans to create 20 PhD scholarships within the technology partnership; and
 - The installation of the world's largest lithium ion battery by Elon Musk (Tesla).

Matters Arising

6. Sir Jim noted the apologies of lan Marchant, David Sigsworth and Dick Winchester.

- 7. Sir Jim asked Duncan Burt for an update following publication of the Northern Security Report and on activities since the June meeting.
- 8. Duncan Burt noted that national planning for a black start event has changed from up to 5 days to up to 7 days. Considerable work has been undertaken in the last year, principally on modelling timescales for restoring 100% of demand following an event. This has created a good understanding of where we are. Work this year will build on this, and provide further evidence to inform key decisions regarding a recovery standard and how to best target investment. National Grid have engaged regularly with the SEAB Black Start Task Group and are due to provide the Task Group with a report and final analysis end-Feb 2018. A work plan is being developed that will allow for physical testing of the restoration plans.
- 9. Graeme Sweeney commented that locational factors are of great importance in regards to solutions.
- 10. The draft minutes of the previous SEAB meeting held on Monday 26th June 2017 were approved as an accurate record of the meeting.

Scotland's Energy Strategy

11. The First Minister wished to formally thank members for their input to the production of the Energy Strategy which will be published on Thursday 20th December 2017. She invited Chris Stark to present the outline of the Strategy and its key themes.

Scotland's Energy Strategy Presentation

- 12. Chris Stark introduced the draft Energy Strategy by noting the strong feedback from the consultation phase, with a total 254 responses being received with many from institutions. Before introducing the key three approaches:
 - A whole system approach (involving heat/power/transport);
 - A "transition that works for all"; and
 - A smart approach to local energy solutions

Chris Stark outlined the key themes that the Energy Strategy will focus on to enable Scotland to achieve a target of the equivalent of 50% of its heat, transport and electricity consumption supplied from renewable sources. Additionally increasing the productivity of energy usage by 30% across transport, industry/commercial and residential sectors by focusing on the following themes:

- Consumer engagement and protection (protecting consumers from excessive or avoidable costs, and to raise awareness of the opportunities and benefits of smarter domestic energy applications and systems);
- Energy efficiency (improving the use and management of energy in homes, buildings, industrial processes and manufacturing);
- Renewables and low carbon (promoting Scotland's established renewable industry);

- Innovative local energy systems (supporting local communities in developing development of energy systems and networks);
- System security and flexibility (ensuring that Scotland has the capacity, connections, flexibility and resilience to maintain secure and reliable supplies of energy); and
- Oil and Gas Industry Strengths (supporting a balanced transition).
- 13. Sir Jim thanked Chris for his presentation and opened the discussion to the board.

Consumers

- 14. Consumers are seen as an important part in producing change with similarities highlighted between that of improvements in super-fast broadband being largely in response to consumer demand.
- 15. Despite an appreciation for the consumer focus of the Strategy the reality of achieving the Strategy's aims were noted as being potentially negative to the consumer. An emphasis placed upon altering consumer behaviour and how to promote behavioural change was welcomed by SEAB members. Similarities with the improvement in broadband internet due to consumer demand were drawn as evidence of the importance of consumers.

Economic and International

- 16. Commercial efficiency was noted, with the transport sector seen as vital in reaching the 2040 targets with evidence cited of 30% of freight currently running empty. Improved efficiency would not only be beneficial but an opportunity for job creation. This raised one member to enquire what measures might be used to ensure targets are achieved such as subsidies. The First Minister commented to the board that targets can place a pressure on creativity within an industry that can promote change quickly.
- 17. The economic value of the oil and gas industry was noted with a combined strategy (allowing the sector to capitalise upon) being favoured. A holistic view was deemed vital to the success of the industry with comparisons as seen in other areas such as Scottish Water and the financial industry.
- 18. Additionally, concerns were raised that the oil and gas industry may in turn be demonised and it is important that a balanced message is promoted within any strategy or this may lead to a reduction of investment to the industry. Similarly, jobs within the oil and gas sector need to be promoted following the recent reduction in job numbers.
- 19. The importance of attracting the correct workforce was noted as influential with a concern that a tightening of talent flow as a result of Brexit could have impacts for Scotland's energy sector. It was therefore key that young people were inspired to choose the energy sector as a career route.

20. The Energy Strategy was recognised as promoting Scotland as a world leader in driving, and not just promoting change, at home and abroad. However it was noted that Scotland will require solutions that are specific to its environment, for example, pump storage. An international perspective was additionally noted as having the ability to drive economic opportunities with similarities taken from the success of the tidal industry. With the importance of European collaboration also being acknowledged.

Infrastructure

- 21. The issue of methodology and the Scottish energy mix was seen as an important part in delivery of the strategy with one member noting the opportunity to combine technologies currently in use and the nation's resources to see what could be produced. Another member promoted the significance of hydrogen as a form of energy storage and noted various regions of the world where it has been put to use. Additionally the importance of using carbon dioxide for other purposes rather than storage was also raised.
- 22. Sir Jim noted work by both Edinburgh University and Herriot Watt University, led by Stuart Hazeldine, focusing on the potential uses of carbon and agreeing it could be economically beneficial.

ACTION: report to be requested from Edinburgh University and Herriot Watt University into the success of their findings in regards to carbon usage.

- 23. Investment in infrastructure was put forward as key with the suggestion that private investment can be promoted through public investment; offsetting any concerns regarding risk. In addition, concerns were raised regarding the UK's lack of capacity in some areas of research and that forms of funding must change to promote this.
 - Issues of system security and flexibility were recognised as crucial. One member suggested that the new 7 day recovery period from a major disruption to supply was inadequate. This was refuted by another member who stated that there is a strong plan in place to enable restoration with work underway to consider wider options for restoring demand, beyond the traditional reliance on thermal plant.
- 24. Scotland was seen to lead the world in carbon capture and it was important this was not overlooked. In regards to system security, there is a gap around what data is available that is required to ensure an economy is performing well. Despite this, security and flexibility was seen by another member as altering over time and therefore the system must follow in step with these changes.
- 25. Mr. Wheelhouse apologised for his late arrival and set out a detailed summary of the points provided by SEAB members. In particular, he noted:
 - Much work was already in place regarding behaviour;

- Acknowledging the importance of EU collaboration whilst noting the difficulty during the current political climate;
- Regardless of EU relations, a clear and coherent Energy Strategy will allow a reduction of any perceived risk;
- Noted the importance of export opportunities and how these should be capitalised upon; and
- Agreed that the narrative of the Energy Strategy should be balanced between the oil and gas and renewable sectors.
- 26. The First Minister concluded the discussion and gave her thanks to all members for their contributions. The First Minister noted various items from the discussion:
 - the importance of consumers being the key drivers of change;
 - the significance of carbon utilisation;
 - ensuring that the oil and gas sector would not be demonised during the process and asserting that the Government was very clear of the industry's important role; and
 - that targets can promote the creation and production of methods which will assist in meeting the Strategy's aims.

Terms of Reference

- 27. Sir Jim opened the discussion to members regarding the proposed updated remit and terms of reference for the board. Chris Stark suggested that moving forward would see the creation of smaller working groups, set up to facilitate focused discussion, with all members reconvening each year to obtain updates from these groups.
- 28. It was outlined that the working groups could be based on five major themes:
 - Transport;
 - Heat;
 - Hydrogen;
 - Communications; and
 - Skills & consumers.
- 29. With a hope that these smaller groups would be more outcome focused clear terms of reference should be outlined.
- 30. However, concerns were raised that without the full SEAB meeting the groups could become embroiled in their own interests which may lead to the loss of an overarching message.
- 31. It was put forward that to ensure the working groups remained focused on their aims, an aligned framework should be created
- 32. The communication working group could carry out a wider function with other aims such as the Climate Change Plan. Acknowledging that much can be

learned from understanding how private business and public communities relay information.

33. After suggestions had been put forward the outlined terms of reference for the Scottish Energy Advisory Board was approved by members.

ACTION: SEAB to set up working groups focused on various themes which will present to the board once each year

Any Other Business

34. There was no AoB and Sir Jim closed the meeting by thanking attendees for their contributions.