

UNITED KINGDOM ATOMIC ENERGY AUTHORITY
Minutes of the 3rd Board Meeting in 2019

Date: 4 June 2019

Location: RACE Board Room, B1,
Culham Science Centre

Members present:

David Gann, Chair
Ian Chapman
Norman Harrison
Shrin Honap
Antonia Jenkinson
Sue Scane
Chris Theobald

In attendance:

Adam Baker (BEIS)
David Martin
Lyanne Maclean
Jim Hutchins
Maya Riddle (sec)

Kay Nicholson, Head of Assurance (Items 3-4, 7-9)
Alli Brown, Finance Director (Item 4)
James Davis, Rob Skilton & Steve Wheeler (Item 5)
Jerome Pamela, Chair of CPAC (Item 6)
Martin O'Brien, New Research Director (Item 10)

Apologies:

Adrian Smith

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1 Chair's Opening Remarks

- 1.1 The Chair welcomed the newly appointed Chief Operating Officer (COO) and everyone made introductions.
- 1.2 He informed members that head-hunters were in place for the recruitment of four new non-executive directors (NEDs) and that the adverts should go out today. He was committed to improving diversity on the Board and had already put forward some suggestions. He asked members to engage their networks.
- 1.3 He asked whether members had any conflicts of interest and no conflicts were noted.
- 1.4 The Board approved a contract with the US Fermi lab
- 1.5 While the Board was supposed to approve any international contracts, The Chair suggested that this be part of the Executive's delegations and not require Board approval unless the contract was novel or contentious.
- 1.6 The Board membership was agreed consisting of the Chair, NEDs, CEO and CFO. The Terms of Reference for the Board were agreed with a more detailed review to follow once the new NEDs were in place.
- 1.7 Members discussed having a patron for UKAEA and it was agreed that the chair would lead on this.

2 Minutes of the 21 March 2019 meeting

- 2.1 The Board approved the minutes of the 21 March meeting.
- 2.2 The key actions and matters arising were reviewed

3 CEO's Report

- 3.1 The CEO presented the key points from his report, which included:
 - The STEP business case had been agreed at the BEIS Project Investment Committee and he was socialising the case with senior government officials. This had resulted in a visit from the Chancellor of the Exchequer;
 - The JET contract extension included key milestones and there was a risk that the second milestone would be late due to delays in commissioning the active gas handling system. This was a top priority for the Executive and we were further mobilising resource;
 - The scientific case for operating JET in 2021-2024 was prioritised towards ITER. Refurbishments and enhancements would be required in 2019 and 2020 to prepare for this.
 - If JET operations were extended beyond 2020, then the UK host contribution may rise
 - There was a risk to timely MAST-U operations as the current configuration of the supergrid transformer might preclude operations on JET and MAST-U at the same time. External experts were undertaking a review to determine whether we could revert to the previous configuration and a report was due on 10 June;
 - The Science Minister had visited ITER the previous week;

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- EUROfusion had put out a call to host and manage the JET data after the closure of JET and we wanted to bid.
 - We had signed heads of terms for a new facility on the Advance Manufacturing Park in Rotherham and the Local Enterprise Partnership (LEP) was providing a grant for building enhancements;
 - BEIS and the Welsh government had been complimentary about our work on the case for the proposed National Thermal Hydraulics Facility. We expected a contract to undertake further work; and
- 3.2 The Board acknowledged the issues relating to JET and supported the actions being taken.
- 3.3 It was agreed that we should bid to host the JET data centre.
- 3.4 It was agreed that we should hold a Board meeting in Rotherham.
- 3.5 The Board noted the report.

4 Financial Update

- 4.1 The report represented the P12 management accounts for the year, which was on the same basis as the financial reports to date. An explanation would be provided when reviewing the statutory accounts for any further changes. The NAO was currently undertaking its year-end audit.
- 4.2 Headlines for 2018/19 included:
- There was an operating loss of £8.2m with the main driver being a £9.5m change in the revaluation of Harwell land;
 - Cash and grant-in-aid out turned roughly as expected;
 - Spend against the National Fusion Technology Platform programme was lower than budgeted, but the majority of the underspend had been rephased in agreement with BEIS; and
 - There was also lower spend on the MAST-U enhancement the 5-year grant had been rephased in agreement with EPSRC/UKRI.
- 4.3 It was proposed that the budget for 2019/20 as agreed by the Board in March 2019 be updated to reflect the delegations from BEIS. The majority of the difference related to preparations for post-2020 JET operations.
- 4.4 There was a huge step up in capital in 2019/20 and growth in the organisation meant that the percentage from EU Commission was now around 40% of turnover, which was good from a going concern perspective.
- 4.5 Members noted the increase in the liabilities estimate for JET decommissioning following a major review of the plans, which had been undertaken in collaboration with the Nuclear Decommissioning Authority. There were also options to reduce this figure.
- 4.6 Members commended the new summary.
- 4.7 The Board noted the financial position at the end of the financial year and endorsed the revised budget for 2019/20.

5 Presentations from RACE

5.1 A presentation was given on our contract for the European Spallation Source (ESS) Hot Cell. Key points included:

- Although not a fusion project, the remote handling technology was relevant to fusion. The systems engineering was also relevant to future fusion power plants such as STEP and DEMO;
- The procurement had been a learning experience and use of a negotiated procedure had reduced costs/risks; and
- We would be doing the overall system integration for the Hot Cell and were building a computer simulation of the entire system to develop and test the control systems.

5.2 A presentation was given on RACE's cybernetics work. Key points included:

- They had developed Cortex, a standardised communications framework through which all remote handling elements could communicate. It was also adaptable to decades of operations including handling obsolescence;
- They were working on Digital twins, where a computer model updated in real time with data from sensors and allowed us to superimpose things like radiation data; and
- The research was being done in collaborations with academia and industry both nationally and internationally.

5.3 The Board noted the presentations.

6 Culham Programme Advisory Committee (CPAC) Update

6.1 The chair of CPAC provided a summary from the CPAC meetings on 21-23 May.

6.2 The Board thanked CPAC for the feedback and looked forward to a formal report.

7 COO's Report

7.1 The COO informed members that there had been a RIDDOR reportable incident.

7.2 An internal investigation confirmed that the risk assessment was robust and that the crane maintenance was up to date. The CEO of Cavendish Nuclear had visited site and was taking the incident very seriously. An inquiry would look at root causes and how could we improve to stop a repeat event.

7.3 The lifting work was undertaken by Cavendish Nuclear as the trained specialists.

7.4 Other key points from the paper were highlighted:

- Someone had been knocked over by van reversing but had not been seriously injured. This was being investigated;
- Recruitment was carrying on apace. So far in 2019 around 150 job offers had been made;
- Optioneering had been undertaken on the asset management project and a budget agreed to complete the asset risk survey and to capture new assets. The spending review case included funding for a new asset management system;

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- It was proposed to assess progress with a move from 'make' to 'buy' by monitoring aggregated external spend; and
 - A red team was in place and a new workstream leader appointed to oversee getting the active gas handling system operational.
- 7.5 The safety leadership activities and the new risk assessment process would have a positive impact on our culture across the organisation.
- 7.6 The lost-time accident rate was higher in contractors than employees as they did more of the manual, hands-on work.
- 7.7 The Board noted the report.

8 Risk Update

- 8.1 The risk landscape was dominated by the impact of resourcing on programmes. The growth of the organisation was also driving cultural change and pressuring aged processes and system.
- 8.2 Members asked about asset management and noted that this was part of the risk mitigation for several risks.
- 8.3 Members noted that the statistics showed that we were in a heightened risk landscape, and that the percentage of risk mitigations was going down demonstrating that the risks were being actively managed.
- 8.4 training on the risk management process and key risks was offered if any members wanted this.
- 8.5 The Board noted the report.

9 JET decommissioning strategy

- 9.1 The renewed lifetime plan for JET was confirmed as providing costs by assets and made it relatively easy to model different scenarios. Options included:
- Taking as long as required;
 - Decommissioning within 10 year; and
 - Minimising decommissioning and maximising reuse/recycling of the assets
- 9.2 Options for JET designation were being explored and we had agreed with the BEIS policy team to work up a paper.
- 9.3 The Board supported the further development of the options.

Kay Nicholson left, and Martin O'Brien joined the meeting.

10 National Nuclear Users Facilities (NNUF) Bids

- 10.1 Members were informed that following government approval of the NNUF Phase 2 business case, EPSRC/UKRI had put out a call for expressions of interest (EoI). We had put in submissions for MRF, RACE and Adrianna. We expect to hear whether we were successful in August with grants anticipated to start in September.
- 10.2 There were some issues to be resolved such as understanding the VAT position in the grant conditions.

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10.3 In addition, we had funding from BEIS to extend the MRF building.

10.4 The Board supported the bids and noted the update.

11 Spending Review 2019

11.1 An overview of the proposed submissions for the spending review was outlined. Alongside optioneering that had been undertaken.

11.2 The Board supported the submissions.

12 Equality, Diversity & Inclusion (EDI) Update

12.1 The Board noted the good news that UKAEA had been re-awarded Athena SWAN Bronze and that there was an action plan to take us to Silver.

12.2 The Inclusion Ambassadors were doing a great job organising a number of events and we had just recruited a new EDI partner.

12.3 The Board noted the report.

13 Property Matters

13.1 The Board noted that we wanted to sell ca. 1 acre of land to UKRI so that STFC could build a new laser facility. An independent valuation had been agreed. We would look to retain the money to invest in property improvements in year.

13.2 We also wanted to set out a broad policy statement for the criteria for attracting new tenants on to the Culham site. This was that they should be aligned with fusion/related technologies, the supply chain or industrial strategy.

13.3 The Board supported the sale of land at Harwell and endorsed the criteria for attracting tenants.

14 Sub-Committee meetings

14.1 Highlights from the Board Audit Committee (BAC) meeting were provided, which had met the previous day. This included:

- The Union representative had raised the issue of road safety on the A415, particularly at in/out muster;
- The Safety, Health & Environment dashboard had been improved;
- Closure of non-conformance reports was still an area for improvement;
- An update on the Asset management project had been provided;
- Metrics for scientific quality had been agreed; and
- Self-assessment of BAC was planned.

14.2 Members discussed measures for controlling traffic including petitioning the council for traffic lights and lower speed limits. It was agreed that the Property team would look into this.

14.3 Highlights from the Remuneration Committee meeting were provided, which had met earlier that day. This included:

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- They had reviewed how well the Executive members had performed against their objectives and agreed the bonus levels;
- Employee turn-over had increased.

15 Any Other Business

- 15.1 Members commended the his preparation for a discussion session on stakeholder engagement held the previous day.
- 15.2 There was an Audit Committee meeting on 2 July and the next Board meeting was on 12 September 2019.

Secretary Maya Riddle

Chair David Gann

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