

**WYLFA NEWYDD – MAJOR PROJECTS – LESSONS LEARNT**

**1. Background**

- 1.1 At the March Board meeting, an update was presented on the current status of Wylfa Newydd and the emerging Welsh Government response following the First Minister defining the project as a priority.
- 2 The Board asked for large infrastructure projects to be considered as comparators in terms of good practice.

**2. Issues for consideration**

- 2.1 Further to existing engagement, there has been new desk based research and new direct engagement with key projects such as Crossrail and Hinkley. Lessons have already been learnt and are being applied and will continue to be considered going forwards (Appendix 1).
- 2.2 It is clear that across the different themes of the Wylfa Newydd Programme, there is a need and opportunity to maintain a live network of engagement across major UK infrastructure projects in order to ensure we take account of both good and bad practice.

**4. Risks**

- 4.1 There is a risk that the Welsh Government approach to Wylfa Newydd is developed and implemented in isolation. It is therefore suggested that Officials should maintain a live network of engagement across major UK infrastructure projects to ensure we take account of both good and bad practice.

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Appendix 1- Lessons Learnt - Crossrail and Hinkley

Lesson Learnt	Application
<b>Crossrail</b>	
<p><u>Programme</u> Senior buy-in to the initiative is key for a number of reasons: in driving teams to plan and produce lessons learned material; in supporting the teams to report both positives and negatives with the focus on recommendations for future projects; and in positioning lessons learned at an appropriate level of priority within the teams.</p>	<p>Secured via the Welsh Government Board and High Level Group.</p>
<p><u>Economy</u> Achieving the full range of potential benefits from investment requires a wider focus than successfully delivering the construction work. For many programmes such wider benefits are critical for achieving value for money.</p>	<p>The Wylfa Newydd Legacy Framework is being built around a series of principles that collectively should deliver a long term sustainable outcome – across all stages of the project and across all bases (economy, society, and environment).</p> <p>There is a clear steer from the developer that all eggs should not be in the “construction basket”. Our negotiating position and the shape of our interventions must be separated to secure best outcomes across the key stages of the project: development (up to 2019); construction (to 2025) and then over 40-60 years of operation.</p> <p>To ensure the wider benefits arising from Welsh Government engagement with Wylfa Newydd are maximised, it is important we also develop appropriate KPIs and ensure read across to the relevant national strategies etc.</p>

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<b>Lesson Learnt</b>	<b>Application</b>
<p><u>Resource</u> A dedicated central resource is essential for driving the lessons learned as this will never be a priority compared to delivery.</p>	<p>Programme office is in place/under development</p>
<p><u>Stakeholders</u> Where one sponsor has, on occasion, sought to introduce scope and change, the other has provided valuable challenge. The result of this has been to reduce the amount of change which has been absorbed by the project.</p>	<p>As the project will be delivered by the Private Sector this has limited relevance to Wylfa Newydd but is relevant to associated developments such as the third crossing and Port of Holyhead.</p>
<p><u>Using management information</u> Rich, detailed management information is vital to help project sponsors make effective decisions to minimise the risks they retain on programme delivery and funding.</p>	<p>The Programme Office to continue engaging with the Crossrail lessons learnt team in the development of reports</p>
<p><u>Choosing appropriate finance</u> Where private sector contributions are sought in future, the “Department” needs a good understanding of what beneficiaries stand to gain from the programme and their commitment to delivering the funding.</p>	<p>This is applicable and of particular relevance in our engagement with the developer, the UK Government and others on impact mitigation/ compensation and interventions. We will continue to maintain dialogue with the Crossrail team</p>
<p><u>Governance roles</u> Review points used by the “Department” on Crossrail helped sponsors to gain assurance that the programme was fit to proceed. Such assurance would benefit current and future programmes by testing, for example, the:</p> <ul style="list-style-type: none"> <li>• robustness of programme plans and cost estimates;</li> <li>• programme’s commercial and procurement strategies; and</li> <li>• delivery body’s capability to deliver.</li> </ul> <p><a href="https://www.nao.org.uk/wp-content/uploads/2014/10/Lessons-from-major-rail-infrastructure-programmes.pdf">https://www.nao.org.uk/wp-content/uploads/2014/10/Lessons-from-major-rail-infrastructure-programmes.pdf</a></p>	<p>HLG has agreed that the legacy benefit plan once signed off should be shared with external stakeholders</p>

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Lesson Learnt	Application
<b>Review of Major Australian Infrastructure Projects</b>	
<p><u>Transport</u> Major project upgrades on existing infrastructure that needs to remain operational pose complex technical challenges. The recommendation is that Governments should focus on the best risk adjusted cost outcome, not the lowest cost bid.</p> <p><a href="http://infrastructureaustralia.gov.au/policy-publications/publications/files/Review_of_Major_Infrastructure_Delivery_PWC.pdf">http://infrastructureaustralia.gov.au/policy-publications/publications/files/Review_of_Major_Infrastructure_Delivery_PWC.pdf</a></p>	<p>This has particular relevance to the third crossing and Port of Holyhead. This issue should/has also been flagged with Horizon regarding road upgrades, creation of Park and Ride facilities etc.</p>
<b>Hinkley Point C</b>	
<p><u>Early Development/Supply Chain</u> EDF Energy established an Employment Brokerage back in 2012 in partnership with Jobcentre Plus so that all available jobs associated within the project were advertised across the Somerset Jobcentre Plus network and through EDF Energy’s own Hinkley Point C Brokerage Website. Local people interested in job opportunities were offered support and guidance by a team of EDF Energy’s Employment and Skills Managers (ESMs) and ‘Hinkley Point Champions’ who were located in Job Centres across Somerset.</p> <p>The brokerage aimed to provide early training interventions in advance of demand to support community partners by providing pathways with opportunities for up skilling, develop a future workforce through the provision of apprenticeships and training opportunities in the construction supply chain and ensuring that EDF Energy’s supply chain partners recruited, trained and inspired local people.</p> <p>While the brokerage has been successful in placing a number of people within short term employment contracts with a number of employers, the</p>	<p>This will always be a balance between being too early or too late to directly optimise employment opportunities. There is a need to ensure that brokerage is established 2-3 years before FID to maximise value. Assuming mid-late 2019 FID for Wylfa Newydd, its brokerage needs to be established now. Progress is being made on this, with DWP leading on a Horizon, Coleg Menai and North Wales EAB pilot with 20 posts being initially targeted.</p>

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<b>Lesson Learnt</b>	<b>Application</b>
delays to the Hinkley Point C FID has meant that 2012 (i.e. 4 - 4.5 years in advance of FID) proved too early a start to the brokerage scheme with many of the early trainees now employed permanently elsewhere.	
<p><u>Supply Chain Development</u> EDF has supported the establishment of a Hinkley Point Supply Chain team to maximise opportunities for local/regional companies. Early establishment has meant the supply chain has had time on the one hand to address specific needs and issues to maximise their competitiveness within the sector, while on the other it has possibly been too early for some with expectations raised and dashed as potential work opportunities have been delayed, little or no support is available and interest has waned.</p>	Supply chain expectation needs to be carefully managed and effective communication with local businesses is vital to maintain project credibility and interest. Given the relative weakness and lack of readiness of the local supply chain, supportive intervention measures will be essential and early engagement is far preferable.
<p><u>Local Consortia Development</u> While the opportunity for Somerset food and drink businesses was clear, the sheer scale of supply required by EDF Energy provides a huge challenge. The solution arrived at locally was to establish a collaboration between all interested producers and the resulting formation of Somerset Larder, a company that can provide a central food hub for all Hinkley Point C's catering contractors. Served exclusively by local food and drink businesses, Somerset Larder should provide a long term boost for the county's economy. However, the Somerset Larder was established 3 years ago and has had to scramble for other work pre FID to maintain itself as a credible entity.</p>	As with the Early Development/Supply Chain point above, there will always be a balance between being too early or too late to directly optimise opportunities. Nevertheless, the lesson from the Somerset Larder experience has been that once established, such entities need support to reach the contract line so that they can effectively compete with more established entities from outside the area.
<p><u>Construction</u> The associated development construction period was underestimated. Delays in delivering associated developments (such as workers accommodation, Park and Ride, jetty, highway improvements) has had a considerable impact on existing infrastructure, services, communities etc.</p>	There is a need to ensure that associated developments are delivered on time to mitigate any adverse impacts, thus delivery planning is key.

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Lesson Learnt	Application
<p>More migrant workers/workers were drawn from elsewhere in UK and/or lower proportion of overall workforce drawn locally than originally anticipated. There were difficulties in recruiting locally. There are currently 52 languages spoken on-site.</p>	<p>While it is inevitable that many workers will come from across the UK and further afield, we need to begin training programmes, provide apprenticeship support etc. as soon as possible focused on maximising opportunities for local people.</p>
<p><u>Noise and Disturbance</u> The project is now 24/7 and anxiety, stress and sleep deprivation issues are being experienced locally linked in with noise and disturbance as a result of more unsociable shift patterns and vehicle movements.</p>	<p>We need to bear in mind that this is a 10 year construction programme and will have significant impacts on local communities. We need to shield communities as much as possible from traffic and onsite activity.</p>
<p><u>Transport/Worker Movement</u> EDF had assumed a 60 minute Travel to Work Area (TTWA). 75% of the construction workers currently on-site (1,600 workers) live within 15 miles to site.</p>	<p>This may be less of an issue in Anglesey given limited supply within 15 miles to site but we need to look at impacts and capacities of construction workers on a much more localised area (30 minutes) and the effect this may have on house prices and availability of housing for local, non Wylfa Newydd connected workers.</p>
<p><u>Construction Traffic</u> More construction traffic at unsociable hours has been experienced. EDF in their desire to accelerate the construction programme have pushed the boundaries of what was agreed in DCO Requirements.</p>	<p>We need to have robust traffic management plans in place to mitigate against traffic impacts. Horizon may need to build flexibility into their DCO estimates if to avoid later complaints of non-adherence to conditions.</p>

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<b>Lesson Learnt</b>	<b>Application</b>
<p><u>Park and Ride Facilities</u> There were greater levels of commuting and demand experienced on Park and Ride than anticipated. To date, 95% of workers use the Park and Ride facilities.</p>	<p>People appear to want to live close to a Park and Ride facility. This may lead to Park and Ride R hotspots in some communities e.g. Valley close to a Wylfa Newydd proposed Park and Ride.</p>