



PROJECT COLLABORATION TOOLKIT (PCT)

COMPARISON OF OIL & GAS PCT COLLABORATION WITH CURRENT NUCLEAR SECTOR PROJECT PRACTICE CASE STUDY



SINCE THE ECITB PROJECT COLLABORATION TOOLKIT WAS CREATED AND LAUNCHED IN 2016, ECITB HAS BEEN PILOTING THE PCT AGAINST A NUMBER OF PROJECTS OF VARYING SIZE, COMPLEXITY AND SCOPE. THROUGH THE OIL & GAS (UK) CROSS SECTOR COMMITTEE, IT WAS AGREED THAT A COMPARISON OF COLLABORATIVE PROJECT PRACTICES BETWEEN THE OIL & GAS AND NUCLEAR INDUSTRY SECTORS WOULD BE A WORTHWHILE EXERCISE. THE OUTCOMES OF THE COMPARISON ARE PRESENTED IN THIS DOCUMENT.

Members of the Oil & Gas (UK) Cross Sector Committee, including a representative of EDF Energy for the UK Nuclear sector, agreed to a cross-sector comparison of project collaboration practices in late 2017.

Although a specific 'pilot' nuclear project was identified, the comparison of practices proceeded on the basis of a higher level review of the ECITB PCT against EDF Energy project management processes.

The results of the Review are summarised in the following tabulation.



ECITB PCT & NUCLEAR SECTOR PRACTICE COMPARISON TABLE

REF	PHASE	ECITB PCT PHASE ELEMENT	EDF ENERGY NUCLEAR SECTOR PRACTICE	REMARKS, CONSIDERATIONS & ACTIONS
1	PHASE 1	<p>1.1 Appoint Collaboration Champion:</p> <p>Guides toward the appointment of an appropriate person to the role of Collaboration Champion where a collaborative project delivery strategy is envisaged.</p>	<p>EDF does not currently recognise the Collaboration Champion role, but the responsibilities described for the role in the PCT could be taken by the Project Sponsor.</p>	<p>EDF has well established Stakeholder Management processes and Lifetime Agreements with key procurement / supply chain partners. Collaborative project delivery strategies could be managed through these processes and arrangements.</p>
2		<p>1.2 Undertake Collaborative Assessment and Establish Enabling Climate:</p> <p>Promotes the formal assessment of collaborative capability in organisations that may (possibly pre-selection) be required to support project delivery</p>	<p>EDF does not undertake formal assessment of collaborative capability with its working partners. However, it already has substantial knowledge of the capabilities and behaviours of its lifetime partners. Track record and previous performance are also closely scrutinised as part of the tendering process for other contracts and work.</p>	<p>Learning from ECITB PCT Pilot projects suggests that project lead entities are taking a number of different approaches to assessing collaborative capability. These range from consideration of past track record / performance (as EDF) to more formal behavioural assessments set out in tendering processes. For particular and critically important collaborative projects, EDF could consider a behavioural assessment approach as used by UK Power Networks (see PCT 1.2 Case Study reference)</p>
3		<p>1.3 Stakeholder Management Conference and Periodic Project Reviews:</p> <p>Such an event could take a number of forms but is promoted by the ECITB PCT not only to allow effective cascade of the Project Brief but also to support the assessment of collaborative capability and behaviours in potential project partner organisations</p>	<p>Such events are not commonly staged by EDF but a Stakeholder Management Conference style event has been held for the HPC new build programme. For other key projects potential partners and suppliers are invited to meet with the EDF project and site teams in a less formal environment. This allows partners and suppliers to raise key questions and hold open discussions with the team about risks and concerns. These discussions allow informal assessment of behaviours and capabilities.</p>	<p>Such events are used by EDF when appropriate (e.g. HPC new build programme). Other less formal events are used to develop good understanding and as part of relationship building with potential partners and suppliers.</p>
4		<p>1.4 Establish Foundations for Stakeholder Trust:</p>	<p>There are many examples of supportive, collaborative behaviour and inter-organisational trust on EDF projects and looking to build trust is quite normal. EDF uses periodic Supply Chain Conferences to share its values and ethos in order to support behavioural alignment with partner companies. Through Behaviours for Success, the CAP 2030 strategy and a number of safety based initiatives, EDF seeks to lead its supply chain partners toward collaborative success.</p> <p>Self-interest and poor relationship behaviours are challenged.</p>	<p>EDF does not commonly develop and use a Project Behavioural Charter (see PCT 1.5) in order to capture, record and gain agreement to the behaviours that are considered important to particular projects. If this practice was introduced, the Charter could be used at periodic reviews to assess and measure behavioural performance.</p>

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5	PHASE 1	1.5 Establish Collaboration Plan and Behavioural Charter:	Collaborative Relationship Management Plans and Project Behavioural Charters are not used by EDF.	Consideration should be given to the benefits of introducing relationship plans and Project Behavioural Charters on projects where collaboration is critically important to delivering the project successfully.
6		1.7 Establish Contracting Principles:	EDF is known to utilise a range of different contract forms and styles to support its procurement and supply chain policies through its Acquire Goods and Services (AGS) process. Details of the contracts used to support collaboration and partnerships (e.g. Lifetime Agreements) are not known	It is recommended that EDF reviews its contract forms and strategies for collaborative and partnership working arrangements to ensure that they contain the facility to 'shape' and incentivise the behaviours that are required for successful performance (e.g. behavioural performance KPIs linked to profit margin / variable profit opportunity)
7	PHASE 2	2.1 Project Team Selection Process:	For many years, EDF has been building integrated project management and delivery teams on its projects but how deeply the principles of integrated team working are applied is variable. Team integration can be influenced by regulatory, project assurance and SQEP requirements.	The ECITB PCT promotes building effective, integrated teams by selecting the 'best person for role', irrespective of employer entity and minimising role overlap and man-marking. Some ECITB PCT pilot projects have achieved enhanced effectiveness and cost reduction through an integrated team approach.
8		2.2 Establish Common Project Delivery Objectives & Align: For projects adopting a collaborative delivery strategy, the ECITB PCT promotes alignment of lead entity and partners to a carefully crafted set of project delivery objectives as critically important.	Project objectives are established by EDF via the Project Definition Document, part of the approval process for Gate B in the Investment Delivery Process. However, how project delivery objectives are communicated to contract and supply chain partners can vary.	Regular review of project delivery objectives should be undertaken at periodic project reviews. At project reviews the environment should be sufficiently open and informal to allow any incidence of misalignment to objectives or self-interested behaviour to be raised and discussed. As previously mentioned, a Project Behavioural Charter can also be helpful to assess behavioural performance.
9		2.3 Create Collaborative Project Team Environment:	EDF relies on monthly reporting and progress meetings for open and frank discussion and the opportunity to challenge behaviour and performance. The success or otherwise of collaborative relationships would be assessed by EDF in an informal way at progress meetings.	See previous recommendations for 4, 5 & 8.

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10	PHASE 2	2.4 Document and Agree Project Scope:	EDF undoubtedly has robust processes for establishing, baselining and documenting project scope. Project scope establishment is strictly governed by the Investment Delivery Process - gated processes.	Whereas nuclear sector assurance and validation requirements drive the need for robust scope definition and management, learning from oil & gas suggests that collaborative project delivery strategies can be effective on projects with considerable scope uncertainty. On non-critical projects it may be possible to take an alternative approach to project governance and assurance that will allow the benefits of phase overlap to realise schedule and cost opportunities? Feedback from ECITB PCT pilot projects to date suggests that benefits can be delivered by 'fast tracking' projects by means of phase overlap and taking a less regimented (e.g. strict adherence to gated process, irrespective of project type, size and complexity) and more agile approach to project planning and scheduling.
11	PHASE 2	2.9 Agree Project Processes, Standards and Specifications:	As a highly regulated energy industry sector, the nuclear industry has adopted a significant library of codes standards and specifications and a sophisticated and complex set of work processes.	The oil and gas sector has reflected that overly complex and prescriptive work processes and excessive specifications have driven unnecessary schedule time and cost into delivery of its projects. As with comment and recommendation in 10, the ECITB PCT would promote a reduction in unnecessary process and a 'fit for purpose / functional' approach to specification on projects.
12	PHASE 3	3.1 Collaborative Schedule and Cost Control Processes:	EDF encourages the use of a single "master schedule" which is shared with contractors and suppliers to allow visibility of how individual party elements of work impact on dependencies in the overall project plan. Similarly, a single reporting format (EDF reporting format standard) is used to avoid redrafting and reformatting information multiple times. Nuclear security protocols rarely allow shared IT platforms or co-location of team members.	Whilst accepting that nuclear industry regulation and security protocols may inhibit some of the ECITB PCT guidance, it is recommended that the boundaries of applicability for such protocols be reviewed. If the nuclear industry (and EDF as a sector representative) are being impeded by a 'one size fits all' approach to the application of regulation and security protocols, work processes and specifications, it may be possible to identify potential efficiency gains on at least non-critical project scopes through collaborative practices.

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13	PHASE 4	4.1 Evaluate Project Lessons Learned:	EDF requires that an 'OpEx' (Operational Experience) or lessons learnt review takes place at the start of the project as well as at the end and throughout the delivery lifecycle. This allows lessons of the past to be set into the project basis, the contracting arrangements and the technical design. Key questions from EDF Human Performance Tools methodology are "Have we done this job before?" and "What happened last time we did this job?"	EDF have commented that the ECITB PCT, in addressing and listing elements associated with "Lessons Learned" only in Phase 4 – Close Out, are creating a perception that lessons learned should only be considered at the close of the project. This is clearly not the case and as with EDF, lessons learned should be part of a continuous lifecycle approach. ECITB will address this point in PCT edition 2.

OUTCOMES:

- Following conduct of a 'high level' comparison of ECITB PCT guidance to nuclear (EDF Energy) project practices, many similarities are apparent.
- EDF Energy already addresses a number of the ECITB PCT recommended collaborative practices in its project management processes.
- The comparison exercise, ECITB / EDF Energy discussions that have taken place and the outcomes summarised in this document can be used as the basis for further high level sector review and action planning.

CONCLUSIONS:

- EDF Energy already has a number of collaborative / relationship management approaches built into its project management practices.
- The highly regulated environment and nuclear security protocols can inhibit some collaborative practices.
- The nuclear regulatory environment necessitates the deployment of very prescriptive work processes, governance and assurance processes.
- On non-nuclear process, less complex projects there may be an opportunity for enhanced performance through agile planning, fast-tracking and reduced work process and simpler, (supply chain driven) functional standards and specifications.