

Case Study

EDF NNB Hinkley Point C - Project Handover Process and Systems - Peer Review



Courtesy of: EDF Energy

Scope

Hinkley Point C by EDF represents the first new nuclear power station to be built in the UK since Sizewell B in almost 25 years.

EDF requested that OCCMS undertake a full audit of existing 'Completions and Commissioning' processes, handover documentation and contractual expectations from both EDF and all subcontractors. This included:

- Identifying systems and processes currently in use and provide recommendations on alignment, process improvements and key documentation requirements.
- Creation and proposal of an implementation plan to deploy a modern completions management system (CMS) for the project.

The focus of this phase was to identify and engage with all key stakeholders, understand the contractual relationships between them and EDF, audit processes and handover materials prior to the deployment of a modern CMS to record and control and capture the handover process.

Activities included the deployment of specialists from OCCMS to site to gather data across all subcontractors. Compilation of a review report and associated recommendations, and the creation of an implementation plan to deploy a modern CMS onto the HPC Project.

The duration of this peer review was set at 8-10 weeks from start to final presentation of findings and recommendations.

Project Challenges

From our previous meetings with EDF and their PM consulting partner Jacobs the following challenges were identified:

- Current high percentage of non-digital engineering data.
- Contractual variations on handover exist across the subcontractors and participants
- The high number of subcontractors increases the time required to align processes and data for handover
- Limited visibility of subcontractors internal systems and availability of resource for controlling construction and completions handover of documentation
- Handover documentation provided via PDF documents, with a maximum of 50 pages, with no digital linking or 'smart' capability
- NCR recording undertaken in disparate systems
- ECS codes not being used in subcontractor documentation for handover, and not throughout the project lifecycle (i.e. subcontractors re-numbering tags)
- Large volume of temporary works which can be documented, but not carried forward into an overarching CMS and are left within existing systems
- Lack of visibility to EDF of overall handover status, KPI reporting and centralised NCR recording. Management and capture of handover certification (ECSR/EESR reports)



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Successes

Completion of the peer review within the allotted 8 to 10 week time window and to budget, revealed the following key findings and recommendations:

- The implementation of an overarching completions management process and system for HPC.
- Proposed initiatives to expand the capabilities of some of the IT Systems (i.e. SWITCH, COMET and Teamcenter) will be introduced too late to meet the target requirements for the Drive to 25 and do not meet the requirements for a completions management system.
- The use of a tried and tested 'off the shelf' Completions Management System instead of the use of untested, newly developed add on modules to existing IT systems
- The use of electronic approval for capturing inspections which would negate the need to use paper in the field and associated problems with storage and timing to complete
- The first stage of implementation should focus on the civils construction scope and re-alignment of the existing handover team
- The existing civils handover team to be briefed and re-organised to form the basis of a new completions team
- A supplementary team should be deployed to integrate with the new completions team to review and capture the back log of 'handovers' and associated quality records completed to date
- Creation of an overall civils handover structure in CMS which aligns to the existing partitioning strategy
- Commencement of work with the main plant installation contractor to investigate scopes of work, appropriate use and timings for the inclusion of completions and commissioning data into a main plant CMS
- Work with EDF Commissioning to deploy a Completions Management System to track the progress of Commissioning Test Packs (CTPs), to use the Commissioning Test Packs and limits to build the handover EESR packs and to ensure Commissioning personnel track FATs for major equipment packages for early involvement
- Implementation of a preservation process on the HPC Project. Preservation should be undertaken within the CMS process from the initial delivery of the item right through to active commissioning and beyond
- Develop interfaces between the new SMS and existing systems and registers such as MEL, Teamcenter, SWITCH and EAM/Asset Suite. Interface with Teamcenter to utilise URL technology so documentation retrieval shall always be for the latest version at time of request.

The success of the peer review focused on the recommendation of centralising the completions process and generating pre-populated certificates from the data downloaded from engineering deliverables, removing the need for the many paper-based and semi-electronic systems currently in use and removing siloed or disparate data being maintained by the various parties on the project.

If your project is not going to schedule, get in touch with OCCMS today and see how we can help get your project back on track: info@occms.com