CDM DIFFERENTLY CASE STUDY

2025

CDM 20-20 Case Study: InterGen-Spalding ~ Power Station Extension 2018-19

InterGen

Introduction

Spalding Energy Expansion Limited (SEEL) ran an 'in-house' version of the two day ICE 'Comprehensive CDM 2015 Overview' course on 7th February 2018 in Spalding, Lincolnshire. Notably, the course was chosen by SEEL to equip the project team, which was in the process of beginning construction of an extension to the Spalding gas-fired power station, with the skills, knowledge and experience, to discharge their duties in compliance with CDM 2015. In all, twelve members of the project team including the three main package contractors as well as senior SEEL staff participated

About the Project

On this project SEEL had procured the main items of plant and issued them to a third party to install. In addition SEEL has contracted several other companies directly, to provide the gas fuel connection, the 400kV Grid connection, the temporary construction power supply, the water supply and site drainage.

From the outset SEEL recognised that they needed to be involved with the site management, far more than if this was a standard EPC contract. Furthermore, SEEL recognised the implications this could have when considering CDM2015 regulations. The SEEL team members had undertaken NEBOSH training previously but most were not familiar with the changes brought about by CDM 2015. SEEL recognised that this was probably true for some members of the contract companies. As a result, the decision was taken to run a CDM course with both the SEEL and contract company team members. The hope was that this would deliver on two counts, firstly ensure that we were all aligned with respect to the CDM2015 regulations and secondly, provide a sound basis for team building. The course was booked and paid for by SEEL and places were offered out to contract companies. In addition we purchased individual copies of the book "Teamwork not Paperwork" (published by ICE) for everyone who attended.

What We Learned

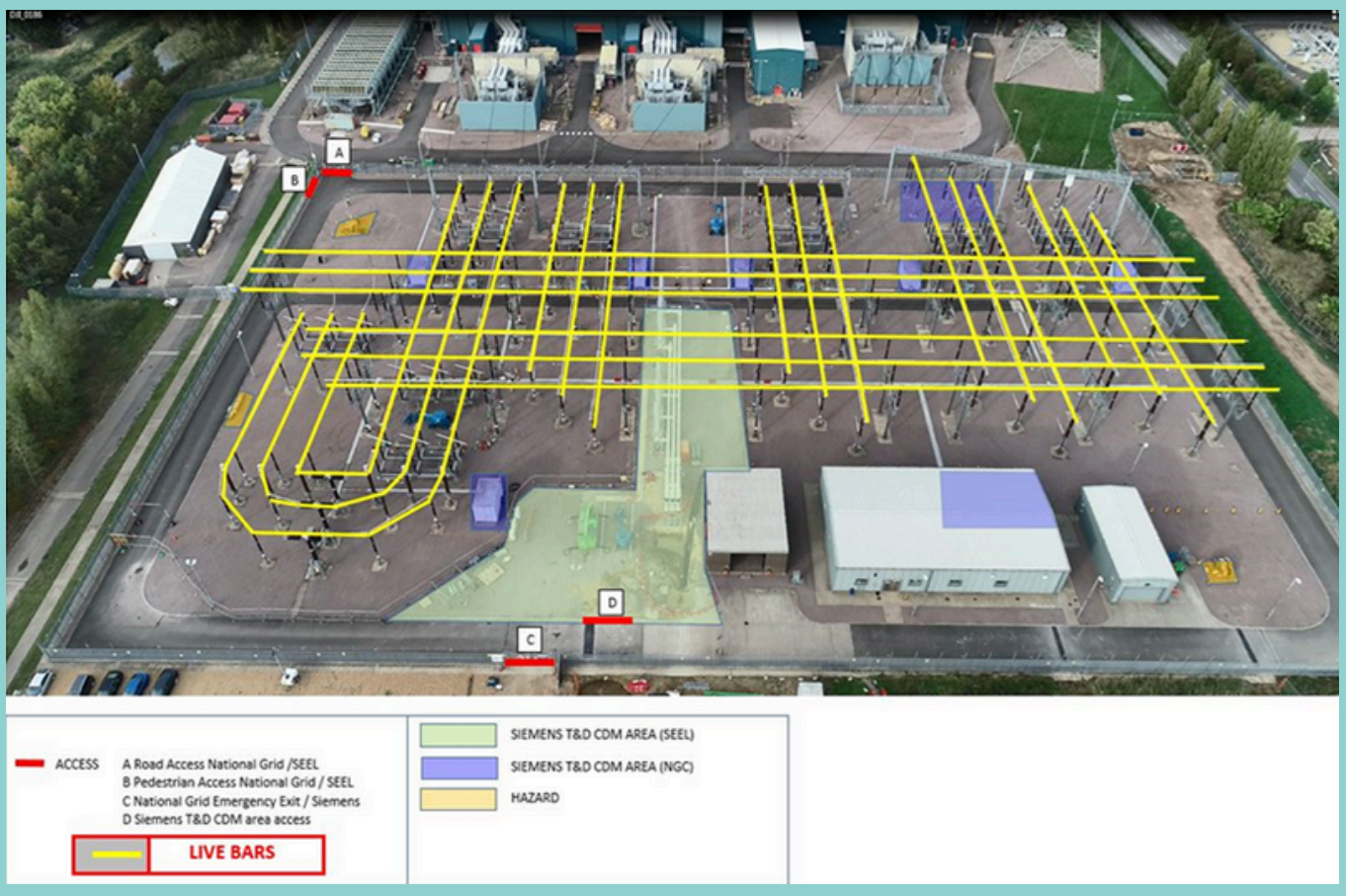
Most people prior to the course believed there could only be one principal contractor and one F10.

We intended to have at least three very separate, but neighbouring, CDM areas and intended to have three Principal Designers and three F10s. We recognised that SEEL needed to have an input and manage the boundaries between the various areas. The course allowed us to discuss and indeed confirm that this approach was possible and indeed, for our site, very practical. We were able to explore and discuss how we would manage situations where one contractor needed to carry out work in another CDM area. In addition we were able to discuss and explore how we would manage the various areas and keep everyone involved.

As a result of this process, we employed UAV (drone) technology to capture high-resolution aerial images of the site. These images were then annotated to provide precise up-to-date site layout drawings. These drawing were used during all-party site briefings.

This process was used for both the main construction site and also for the HV substation, a weekly meeting was held to discuss if the site plan was still accurate and to brief each other about the works in progress. The drawing was then updated and all parties signed on to the latest revision.

Spalding North 400kV Substation CDM Area Identification



How We Adopted The Principles & Practice

The training has benefitted us in many ways, it allowed us to ask questions and explore different scenarios, which were real and applicable to our site. The training provided a “safe” environment for us to test ideas and solutions, whilst at the same time allowing people to voice their opinions openly. The team-building element came out very quickly with people feeling comfortable to put ideas on the table, this element was further enhanced by a team social evening.

The training continues to be part of what we do every day, the CDM arrangements and management on site have worked very well with people respecting each other’s areas and needs. For me as a representative of the SEEL management team, the course was held at the right time, just as contractors were mobilising to site, it smoothed the way for a safe and efficient mobilisation, with main contacts already known. In addition it allowed SEEL as the Client to set their expectations in a group format, with the main players hearing the same message directly from us.

Following on from the course, we were keen to ensure that the CDM process did not burden the project team with excessive paperwork. As a group, we decided that we would produce an aerial photograph of the site. This would then be annotated to show the various working parties and CDM areas on site. A weekly meeting was held to review the drawing and where necessary amendments were made.

The revision was updated and the drawing was circulated to all parties. In addition a sign-on sheet was kept to capture attendance at the meetings. This method was used (and still is being used) successfully on both the main construction site and the HV switchyard.

The ICE course was chosen following recommendation from a colleague at another InterGen Power Station, who had attended the same course and had been made aware that the course could be delivered at site. It has certainly had a positive benefit on both the project and the personnel involved in the project. It is seen as one of the successes of this project and has led to an excellent working relationship. It was great to see the positive immediate impact the course had had on people. The principles and ideas gained continue to support a very strong and respected CDM culture on our site. Since undertaking the course, we brought another big contractor onto the project who was of the belief there could only be one principle designer, one CDM area and one F10 on a project. Through our training we have helped that contractor understand how we are running the project and through encouragement have helped them accept this concept.

Follow-Up Comments - February 2024

Commissioning of the Open-cycle gas turbines (OCGT) was completed in July 2019, with successful handover to Operations; the project was delivered ahead of schedule, on budget and most importantly, with zero Lost Time Incidents.

I left InterGen in 2019 and since that time have worked on several other projects. Currently the original management and delivery team from the OCGT project are back together working on a significant battery storage project in the UK.

During a recent “lessons learnt” session we identified that the two-day CDM refresher course we held at the start of the OCGT project, was a crucial contributor to the success of the project. Having a CDM professional walk us through the 2015 updates, and the ability to test possible scenarios, allowed a lot of the key CDM decisions to be made quickly and early on.

In addition, the benefit of the team building element should not be underestimated. When we started on site, we already knew each other and were able to communicate efficiently. In addition, we understood the Client role and were keen to show that as a team, we took it seriously.

The use of high-tech aerial photography and video techniques were used not only to produce site plans, it also allowed us to update the CDM boundaries as they changed and issue the revised plans quickly, to all stakeholders.

We have adopted the process and methods applied to the OCGT project as our standard model and look forward to repeating the same format and CDM 2015 refresher course on future projects.

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