

Electrabel:

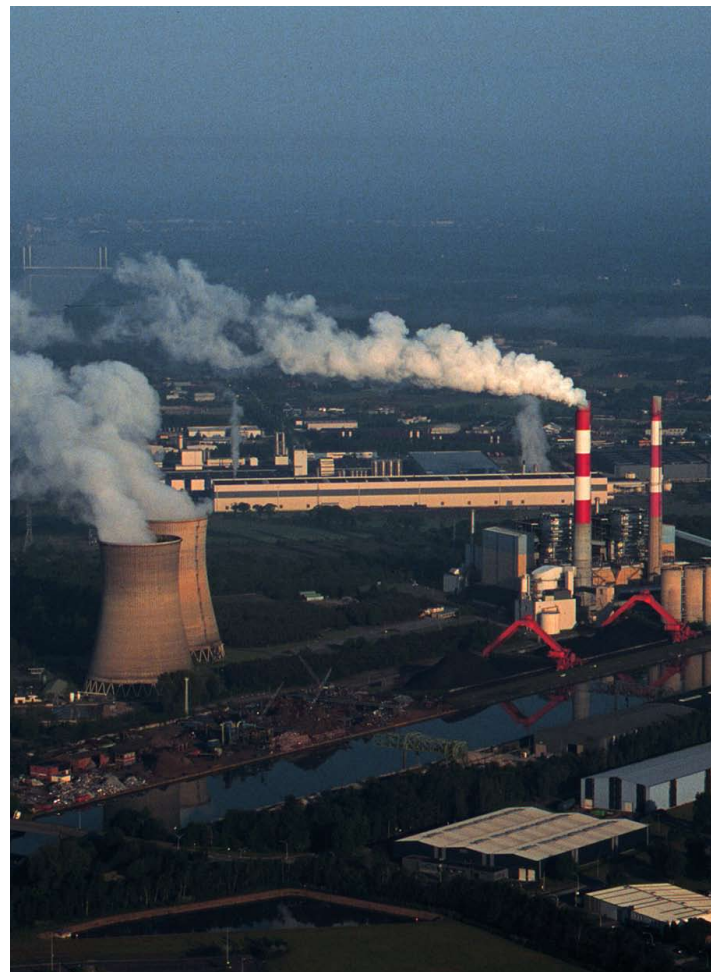
A focus on reliability and Availability

‘Good preparation is half the work’. With this mantra in the back of their heads, some time ago, Electrabel from Langerlo, Belgium, went searching for a partner to lift the preparation and implementation of their revisions to a higher level. ‘The current situation in the energy market ensures that the focus increasingly lies on the reliability and availability of the units,’ says Raf Verheyden, Project Leader for Revisions and Major Work at Electrabel. ‘For revisions, this translates into an emphasis on quality and the duration of the work.’

The Langerlo production site of Electrabel, a subsidiary of Suez, in the Belgian town of Genk, is a coal and biomass power station. Electrabel also has a very diverse production capacity in Europe amounting to no less than 30 GW, consisting of nuclear power stations, coal-fired power stations, gas turbines, gas-fired power stations, windmills, hydro-electric power stations and biomass plants. At these sites, Electrabel employs more than 15,000 people, approximately 8,500 of whom work in Belgium.

Production size

At the Langerlo production site are two separate units (power stations), each producing 230 MW, that can be fuelled by coal, gas or diesel. In most cases, coal is used, in combination with wood dust, olive pulp and sludge from waste water purification for the production of ‘green’ electricity. The total production capacity of Electrabel in the Benelux countries is 18 GW, which is good for an annual production of 90TWh. There are also two smaller gas turbines on this production site, each of 40 MW. ‘We employ 92 people at Langerlo for the full operation and maintenance of all of these plants,’ says Verheyden. ‘The Production Department works 7 days a week, 24 hours a day, and the Maintenance Department works normal working hours, except in the event of catastrophes’.



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Liberalisation

‘In the past, we used to carry out a major part of the revisions to our plants ourselves with the help of borrowed personnel,’ says Verheyden. However, since the liberalisation of the energy market, profit margins were put under increasing pressure. Consequently, organisational processes had to be reorganised to cut costs and gain efficiency, also in the case of revisions. Now the focus is mainly on reliability, availability, quality and optimum working time. ‘This is a major challenge for us as an organisation. All the more so, because we have to carry out all of the maintenance work associated with a revision with 66% less own personnel than in the past. To make this possible, more attention has to be devoted to good preparation. So, by the end of 2006, we invited PDM to thoroughly examine the preparations and implementation of the revisions carried out until then.’

Approach

‘Using the Turnaround Readiness Assessment (TRA) method, we first examined how Electrabel manages its revisions compared with the best practices defined by PODM,’ says Bert Schuit, Senior Consultant at PDM. ‘Furthermore, we charted the quantitative results obtained with the revisions until then. Based on this information, we then indicated the areas of the organisation that needed further improvement and their total improvement potential. In consultation with Electrabel’s management, we then formulated ‘the vision on success’. By combining this vision with the quantitative results obtained, it was relatively simple to determine which improvement points would lead to the quickest result. For example, we started by defining objectives and establishing the scope. The study took about three months in total. The result was a comprehensive report including the observations of previous revisions and recommendations for future revisions in order to bridge the gap between the vision and the current status.’

Process plan

‘Finally we defined a complete process plan for Electrabel,’ continues Schuit. ‘This plan comprised all the best practices defined by PDM. For each of the best practices, PDM indicated the possible improvements for a revision at Electrabel. Also, various procedures and schedules were developed to support the future processes. Examples of this were a scope change procedure, an overrun and underrun procedure and planning procedures.’

‘Every unit is shut down for 4 to 5 weeks every two years for revision,’ says Verheyden. ‘Only once in eight years we have a so-called major overhaul, during which a unit is idle for 10 weeks. The next overhaul is due in September 2008. At the moment, we are busy working out all the preparatory work on paper, with a number of PDM’s recommendations. I cannot say as yet whether this will lead to the desired result. After all, the rubber meets the road in September of this year. The future will show it.’