Why should you read this?

- simple claims can also produce big losses
- all parts in a plant, even the most remote ones can pose a hazard
- incentive payment/system to reduce DSU/ALOP, understood as a credit only.

EAR+DSU/ALOP – Damage to pipe rack due to collapse of adjacent concrete water tank (not insured under the policy)

Description of the risk

SARAS is one of the largest refineries in Europe. It was built in the early fifties and is located in Sardinia, Italy.

The construction of the Sarlux Integrated Gasification Combined Cycle (IGCC) project within the refinery began in December 1996 and was completed about 5 years later. The plant converts heavy oil residues provided by the refinery into synthesis low calorific gas ("SYNGAS"), which in turn powers gas turbines to produce electrical energy. The energy is sold to "Ente Nazionale per Energia Elettrica s.p.a" (ENEL) , the Italian state-owned electricity utility. The plant also supplies steam and hydrogen for the process units in the refinery.

The main plant consists of the following units:

- Feedstock gasification unit (process plant)
- Combined cycle unit
- Air separation unit

The details of the plant as well as the process description can be found in the attached websites.

The risk was covered under a EAR + DSU/ALOP policy. The sum insured amounted to € 542,5 mio for the EAR and € 266 mio for the DSU/ALOP.

Description of the loss

The loss concerns damage to a pipe/cable rack, owned by SARAS and SARLUX. The damaged section of the rack was adjacent to a concrete waste water basin located some 300m away from the plant. Although this water basin formed part of the refinery's key facilities, was not part of the insured works.

Damage occurred during the construction of the combined cycle project on 6th May 2000. At that time most of the SARLUX units were in operation, with only one being in commissioning and another switched off.

At 5pm there was a noise similar to an explosion at the premises of the refinery, however the instrumentation in the control room did not indicate irregularities in any of the process units. An operator of the SARLUX plant immediately started an inspection and only 10 minutes after the whole plant was shut down.

The operator detected the collapsed pipe rack section and a surrounding area flooded by water. Further investigation revealed that the concrete waste water basin installed close to the rack structure – which was being filled up for the first time and due to faulty design - had burst impacting the rack and releasing about 15.000m³ of water. The rack collapsed along a length of approximately 80m.
It was only good fortune that the 60 inch blown down pipe containing high inflammable syngas was only distorted and not leaking, as the procedure to vent the complete plant from syngas took two hours and was only possible by using this pipe.

Claim adjustment

The possibility to recover costs incurred for the material damage from Third Party was considered out of question. The collapsed water basin causing the pipe rack destruction formed part of the new key facility at the refinery which was owned by SARAS and was explicitly excluded from subrogation.

Notwithstanding that the material damage was relatively straightforward to quantify, the claim became problematic as much as the pipe rack was built on an existing pipe rack belonging to SARAS that was not insured under the EAR policy. In addition to apportioning the repair costs between the EAR policy and the property insurance, the subdivision of cover for the pipe rack had more similar, though more complex, implications to the DSU cover.

An aspect of the material damage claim, which was not immediately apparent, was the exceptionally high costs related to plant shutdown, conservation and start-up. As already mentioned the power plant and the processing units were remote from the pipe rack damage location and were in fact, not directly involved in the impact of the collapsed water tank. However, it was later revealed that in the interest of safety and indeed to enable repair work to proceed, shut down and hence start-up were essential.

Priority therefore, had to be given to closing the delay period as soon and as much as possible. However, further investigations gave away that the subcontractors progress was/could be hindered by the contractors, whose interest were in direct conflict with those of the insured. The CAR policy covering the pipe rack incident had the effect of providing additional work to the contractor at increased rates through cover for ICOW (increased costs of working).

In an attempt to reduce the DSU claim an incentive payment of € 258,000 /day for each day reduced (maximum 20 days) of the programmed 124 days repair schedule was offered to the contractors. Prior to making the incentive offer it was checked that the repair programme calculated by the project managers was accurate. The incentive payment was effective reducing the programmed delay period of 124 days to 99 days, which meant a saving of about € 5.2 million.

The gross amount of claim was € 6.882.600 under the EAR section.
It was settled at € 6.8 mio, after applying a deductible of € 82.600.
Under the DSU/ALOP section the gross claim was € 45.536.916.
The settlement was € 16 mio, after reduction by a deductible of € 29.536.916 , corresponding to 60 days.

Conclusions
This is a clear example of how even simple events can cause disastrous losses. All components of the risk must be analysed and rated.

Complex losses require the assistance of an insurance loss accountant, who will detect loss reducing payments (incentive payments from government, etc) and delays not covered under the policy (due to non availability of funds, penalties for late payments etc). Progress monitoring during construction can also supply facts to identify uninsured delays.

Incentive payments can be a good tool to reduce the amount of settlement. However, note that any incentive payment represents an advanced credit only, since the DSU loss can be triggered only at the ‘anticipated completion date’. Subject to everything progressing as planned, the credit becomes a portion of the loss. However, due to further losses the critical path can be changed in a way to result in no time savings for the initial loss, justifying no payments under the condition of the policy.

Pictures see next pages! →


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Less example supplied by Ugo Pino, Italy
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