

Summary of Root Cause Analysis and Lessons Learned – 12 May Crane Accident

On Thursday 12 May 2016, an accident took place in Barakah that involved a 45-ton mobile crane, which tipped over with an attached man basket while performing window flashing installation work on the exterior of one of the support buildings at site.

During the task, the crane operator took the decision, against Barakah NPP HSE policies and procedures, to extend the crane boom beyond the safety design basis to change the working position. This action caused the working radius of the crane to exceed the safety parameters, causing the crane to tip over and the crane boom to crash onto the floor and into the collapsed man basket, producing severe injuries to two workers attending the installation work.

All safety and emergency units were dispatched to the accident and provided emergency medical services to the injured. Additionally, a Stop Work Order was immediately issued for the immediate vicinity of the accident and all crane works throughout the Barakah site.

Although medical care was provided to the injured, the two workers suffered severe injuries which resulted in fatalities.

Both workers were employed by subcontractors of Hyundai Samsung Joint Venture (HSJV), a subcontractor to Korea Electric Power Company (KEPCO) the holder of the Prime Contract for Barakah Nuclear Energy Plant.

Led by ENEC, all the entities involved in the accident collected funds to provide additional compensation to the families of the workers who died in the accident and commemorated the workers with a series of tribute events. The crane operator was taken to police custody and a criminal investigation was led by the Abu Dhabi courts.

The Root Cause Analysis report identified that the key causal factor for the accident was that the crane was operating beyond the established safe limits, contrary to Safety Policies and Procedures.

To avoid future occurrences and capture lessons learned a total of 18 root causes were identified, and comprehensive corrective actions program containing 21 individual actions were developed.

No further crane accidents have occurred at site since May 2016.