

# Case Study: Conductor Replacement on a 132kV Tower

## Overview of Centaur Work

### PROJECT OVERVIEW

- **Client:** DEWA
- **Project Initiation:** Received the RFP from the client (on the list of approved EPC contractors)
- **Tender Submission:** Multiple site visits and pre-tender clarification meetings. Post tender submission, additional clarification meetings held (extremely competitive)
- **Tender Award:** Due to direct work experience, execution capability & efficiency, track record and relationship with the client, Centaur won the Tender
- **Execution Timeframe:** [ ]

### KEY FINANCIAL METRICS

- **Profit:** Approx. 60% profit
- **Payment terms:** 30 days

### PROJECT PLANNING DETAILS

#### • Project overview:

- Supply of new ACSR Scoter conductor
- Replacement of the damaged conductor span in the 132kV OHL NAJM-CBCH circuit between Towers #22 and #35
- Comply with all DEWA, RTA & DM<sup>(1)</sup> safety/HSE requirements and other prevailing rules & regulations
- Installation of scaffolding at road crossing and associated traffic diversions; associated design & engineering activities

#### • Project specialty:

- Working at high elevations – only skilled & competent work force with prior experience was deployed
- Coordinate with DEWA to cut the power supply while executing the project
- Coordinate with RTA & Dubai police to arrange traffic diversions; DEWA support available if required

#### • Project hurdles:

- Project executed near a live circuit – the conductor for the NAJM-CBCH circuit (132kV) was replaced while a nearby circuit (DSTA-INDS) was live
- Working over major road crossings – the existing 132kV OHL crosses two main roads (Umm Suqeim and Marabea)
  - Scaffolding – difficult to erect a scaffold at the center median because of the important junctures and the insufficient space
  - Improvised – long span scaffold structures (height: 20m & road crossing: 80m) were erected on both roads
    - This type of scaffold structures was used for the first time
- RTA permission for Net Passing<sup>(2)</sup> of the scaffolding structures – difficult to obtain RTA approval to completely close the road for 10 minutes for rope passing for the net installation
  - Close coordination with RTA & Dubai Police allowed for project completion



#### Notes:

1. DM – Dubai Municipality
2. Net Passing – what exactly is this?