TALLAWARRA POWER STATION HDD

OIL/GAS | SEWER | STORMWATER | POWER | WATER | TELCO

PROJECT OVERVIEW

A joint venture consisting of TRU Energy and Nacap Australia was engaged to install a new 272mm steel gas main spur from the Eastern Gas Pipeline, in order to feed the new 400 MW gas fired power station being constructed by TRU Energy at Yallah.

LOCATION
Tallawarra Power Station, Yallah NSW

CLIENT
Nacap

PIPE
272mm steel

GEOLOGY
Rock & broken ground

LENGTH
763 metres

TECHNIQUE
HDD

SCOPE OF WORKS

As part of the overall project, a section of the pipeline was required to be installed under the F3 freeway, the Illawarra rail line and a number of creeks. The 763 metre section had to be installed using HDD. with depths in some locations exceeding 28 metres whilst avoiding existing bridge piers. In some places the depth would exceed 28 metres to avoid bridge piers. UEA utilised its 300,000 pound HDD rig and the Paratrak 2 system for locating the bore, which enabled real time monitoring of the bore profile and ensured the bore was not compromised at any point.

CHALLENGES

Throughout the pilot bore the ground conditions varied in consistency, so a good mud plan was developed and adhered to throughout the operation. A hole-opener with 16 inch medium formation cutters was used to forward ream the 700 metres of rock. Once the rock section had been completed, the drill rig was re-mobilised to the exit side where it proceeded to forward ream the clay section.

As part of the process for bore hole approval, UEA was required to pull a section of dummy pipe approximately 36 metres long. Once the pipe had been pulled in it was inspected for damage and tested. The dummy piece was unscathed and the client approved the installation of the new pipe. The 763 metres of gas pipeline were placed on rollers in preparation for pullback to reduce friction during the process, and throughout the pullback process the pipe coating was tested to ensure its integrity.

COMPLETION

Despite the difficult changing ground conditions, UEA successfully installed the new steel main which subsequently passed all QA requirements and testing. The project was delivered on time and within the required budget.