

Awoonga Callide Pipeline

54km Pipeline Supplying Raw Water to Callide Power Station



Project Need

Located in Biloela, Central Queensland, Callide Power Station consist of three power stations: Callide-A, Callide-B and Callide-C. These stations generate electricity from coal-fired power to supply electricity to the national market.

The Awoonga Callide Water Supply Scheme was authorised in 1988, which required three pump stations and a 54km mild steel cement lined (MSCL) pipeline. This pipeline would supply untreated water to the cooling towers of the Callide Power Station. The pipeline delivery would start from the Awoonga Dam on the Boyne River, rising 528 metres to the crest of the Calliope Ranges and then traversing down towards the Callide Dam. The transport capacity of the 54km Awoonga-Callide pipeline is estimated to be 14,900 megalitres per annum.

Solution

After thorough consideration of all possibilities, Steel Mains was awarded a contract by SunWater to manufacture and supply the pipeline. Steel Mains appeared to be the ideal choice due to its key ability in offering quality long distance large diameter pipes that can tolerate varying terrain conditions. Steel Mains provided 54km x 700OD MSCL Sintakote® steel pipe specified with Sintajoint Rubber Ring Joints and cathodic protection for the ultimate corrosion resistance. The high electrical resistance of Sintakote is maintained during its life due to the low absorption of the Sintakote. The pipeline is in three segments where the pump stations are located: Awoonga to Wooderson (30km), Wooderson to Bocoollima (20km) and Bocoollima to Outfall (4km).

Achievements

The Awoonga-Callide pipeline is a major component of the Awoonga Callide Scheme which will now successfully deliver and supply the water needed to run the Callide Power Station. Sintakote fusion-bonded polyethylene coated pipelines are made to last, making it the superior choice that can be expected to provide Callide Power Station and SunWater with over 100 years of service with no considerable expense on maintenance.

Project: Awoonga Callide Pipeline

Principal: SunWater

Location: Queensland

Completion: 1988

Supplied: 54km x 700OD Sintajoint® Rubber Ring Joint (RRJ)