

SA WATER PUMP STATIONS TRANSFORMER REPLACEMENT

SEPTEMBER 2015

ABOUT THE PROJECT

To ensure the reliable supply of electricity to SA Water's pump stations along the Mannum-Adelaide and Morgan-Whyalla pipelines, ElectraNet is planning the replacement of transformers and other plant at our high voltage electricity substations.

The electricity substations are located beside SA Water's pump stations, within larger compounds that contain pipelines, tanks and other supporting buildings and equipment.

At each site, the transformers are directly connected to water infrastructure within the SA Water pump station and only supply power to the pump station they are connected to, providing secure and reliable power for this critical public infrastructure.

As the equipment at the substation sites is nearing the end of its technical and economic life, they are being replaced to reduce the risk of extended interruptions caused by ageing equipment, ensuring the security of the state's water supply.

Along the Mannum-Adelaide pipeline, ElectraNet will undertake works at the:

- Mannum-Adelaide Pump Station 1 in Mannum
- Mannum-Adelaide Pump Station 2 in Palmer
- Mannum-Adelaide Pump Station 3 in Tungkillio
- Millbrook Pump Station in Millbrook

Along the Morgan-Whyalla pipeline, ElectraNet will undertake works at the:

- Morgan-Whyalla Pump Station 1 in Morgan
- Morgan-Whyalla Pump Station 2, approximately 25km west of Morgan
- Morgan-Whyalla Pump Station 3, approximately 45km west of Morgan
- Morgan-Whyalla Pump Station 4 in Robertstown

TWO MINUTE TECH TUTORIAL

Information in this section adapted from www.sawater.com.au

What are pump stations?

SA Water's pump stations and pipelines transmit water from extraction points on the River Murray to storage tanks, reservoirs and treatment plants around Adelaide and other major centres around the state. ElectraNet's 132 kV Eastern Hills and Riverland networks provide high-voltage electricity supply to the SA Water pump stations on the Mannum-Adelaide and Morgan-Whyalla pipelines.

The Mannum-Adelaide Pipeline

The first major pipeline built from the River Murray, the Mannum-Adelaide Pipeline is

60 kilometres long and runs from Mannum to a 136 megalitre (136,000,000 litres) terminal storage at Modbury. 2015 marked the 60th anniversary of the Mannum-Adelaide pipeline.

The Morgan-Whyalla Pipeline

The Morgan-Whyalla pipeline runs from Morgan through Hanson, Spalding, Nelshaby and Port Augusta to Whyalla. Built in 1944, it is now a dual pipeline system that meets demand for 66,000 megalitres (66,000,000,000 litres) of water a year, pumping through four pump stations over a distance of 379 kilometres.

Direct connection to electricity transmission

Pump stations are connected to the electricity transmission network as some of the motors

that power them require high voltages to operate. Generally a transformer is required on site to convert the voltage requirements.





Morgan-Whyalla 2 Pump Station

TIMELINE

Q2, 2015		<ul style="list-style-type: none"> Construction commences at the Morgan-Whyalla Pump Station 2
Q3, 2015		<ul style="list-style-type: none"> Construction commences at the Morgan-Whyalla Pump Station 1
Q4, 2015		<ul style="list-style-type: none"> Construction commences at the Morgan-Whyalla Pump Station 3 Construction commences at the Morgan-Whyalla Pump Station 4
Q1, 2016		<ul style="list-style-type: none"> Construction completed at the Morgan-Whyalla Pump Stations 1 to 4
Q2 – Q4, 2016		<ul style="list-style-type: none"> Construction commences at the Mannum-Adelaide Pump Station 1 Construction commences at the Millbrook Pump Station
Q1 – Q3, 2017		<ul style="list-style-type: none"> Construction commences at the Mannum-Adelaide Pump Station 2 Construction commences at the Mannum-Adelaide Pump Station 3
Q4, 2017		<ul style="list-style-type: none"> Construction completed at the Mannum-Adelaide 1 to 3 and Millbrook Pump Stations

KEEP UP TO DATE

Most of the pump stations along the pipelines for this project are located in rural areas, away from townships and residential areas. However, there are a small number of neighbouring residents at some of the sites.

As we work together to maintain and strengthen our state's power assets, ElectraNet will keep neighbouring residents informed about works on site that may have an impact.

If you have any queries, feedback or would like to keep updated, please contact ElectraNet at: community.liason@electranet.com.au, toll-free on 1800 890 376 or visit electranet.com.au.

You may also write in to: PO Box 7096, Hutt Street Post Office, Adelaide SA 5000