

Attachment 2 - Network Diagrams

A2.1 Introduction

This attachment provides diagrams showing a high-level overview of the main transmission networks and interconnections for each region of the National Electricity Market (NEM) high-voltage transmission network. These diagrams approximate the AEMO Energy Management System (EMS) network model, but do not precisely reflect AEMO's boundary of direct oversight. The NTNDP CD provides more detailed diagrams.

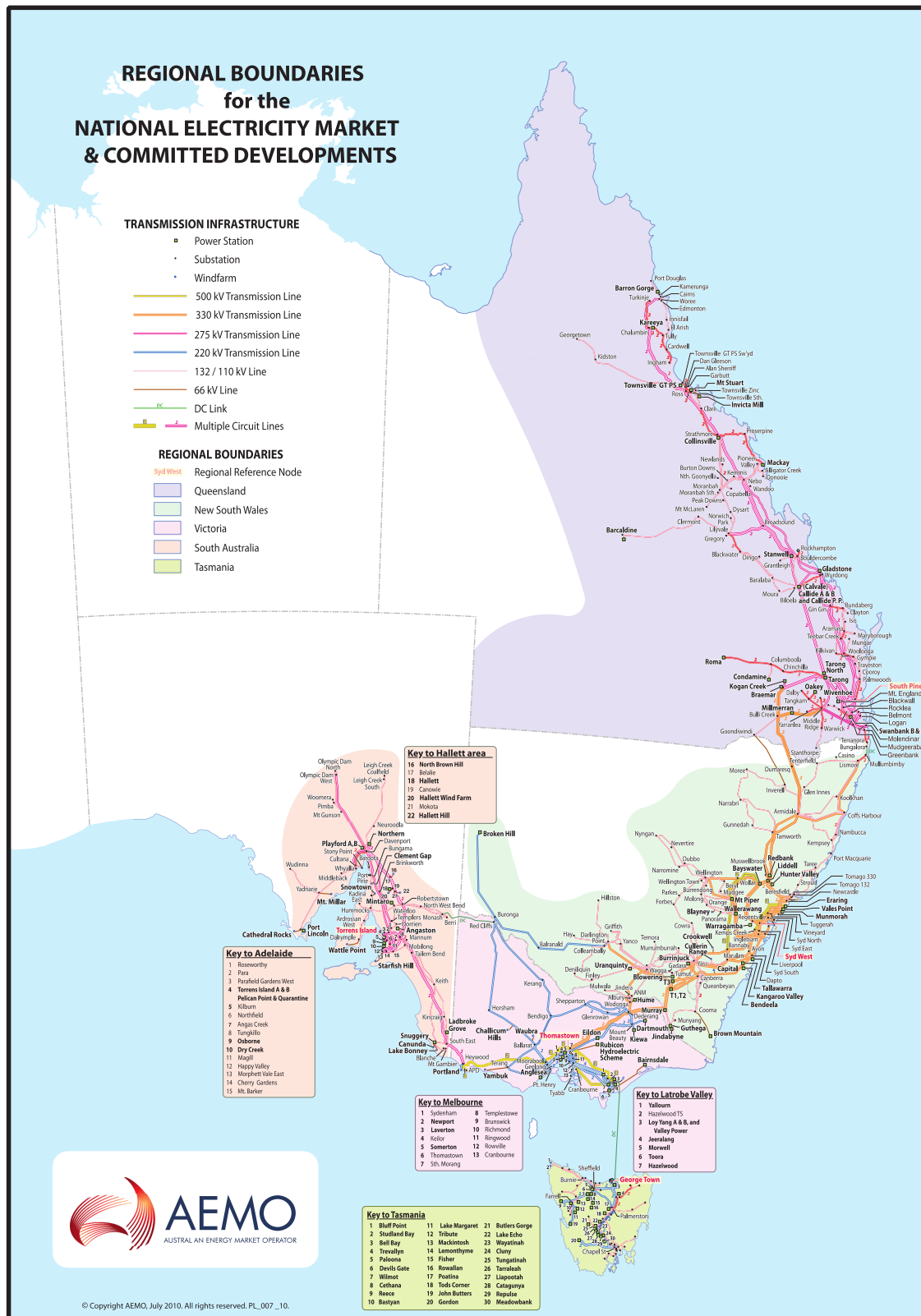
AEMO has also developed an interactive map of the high-voltage transmission network, power stations, and the gas transmission network, which is available from the NTNDP CD. This map also shows the approximate location of modelled committed projects and routine augmentations described in Chapter 3, Development by Scenario - Generation and Transmission Expansion, and Chapter 4, Development by Zone - Generation and Transmission Expansion.

These diagrams are indicative representations only and should not be relied on⁷⁶. Interested parties should contact the relevant transmission network service provider (TNSP) to confirm a particular location's actual network configuration.

⁷⁶ AEMO has checked the diagrams for accuracy.

A2.2 Regional boundaries diagram

Figure A2-1 Regional boundaries



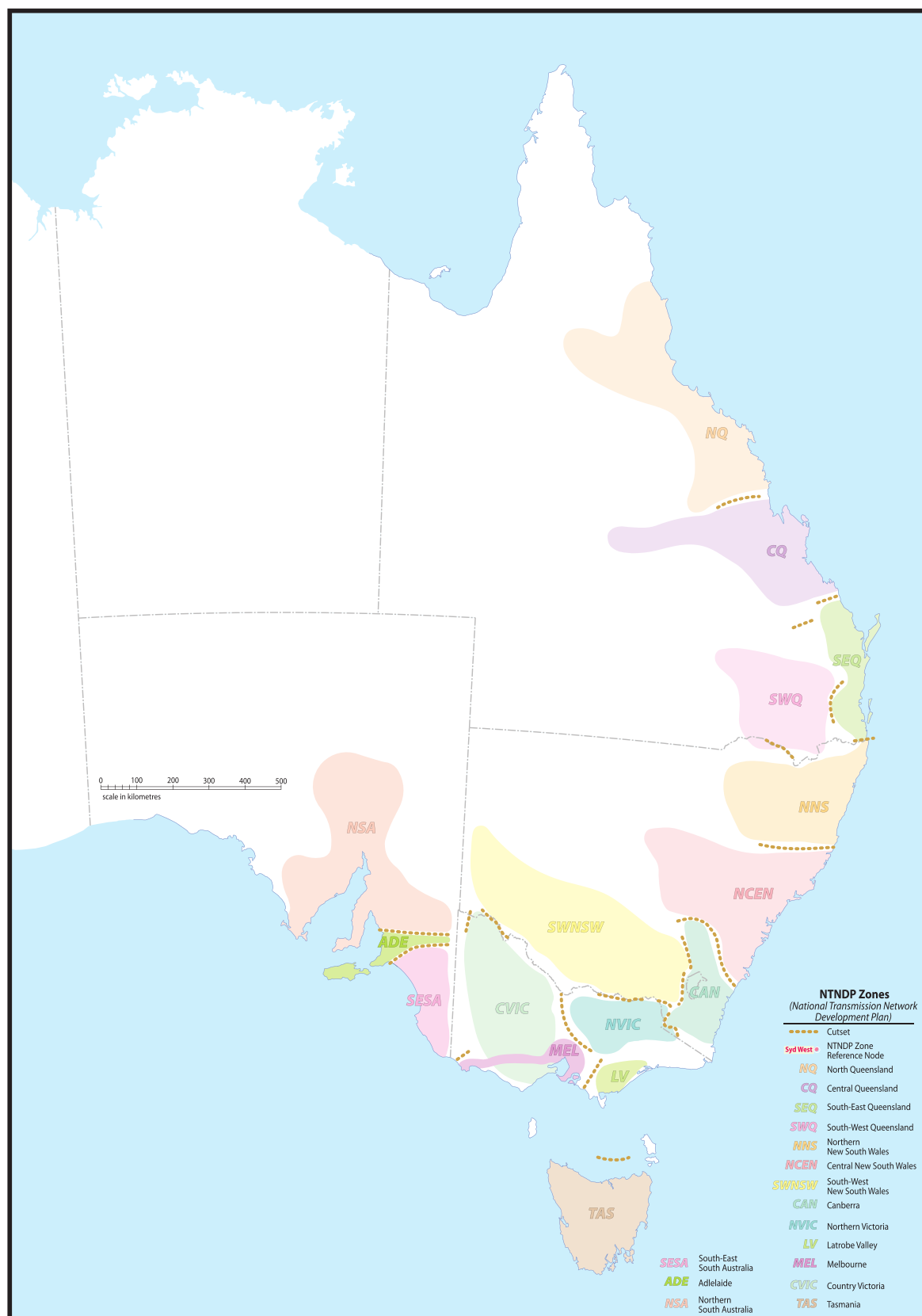
A2.3 NTNDP Zones

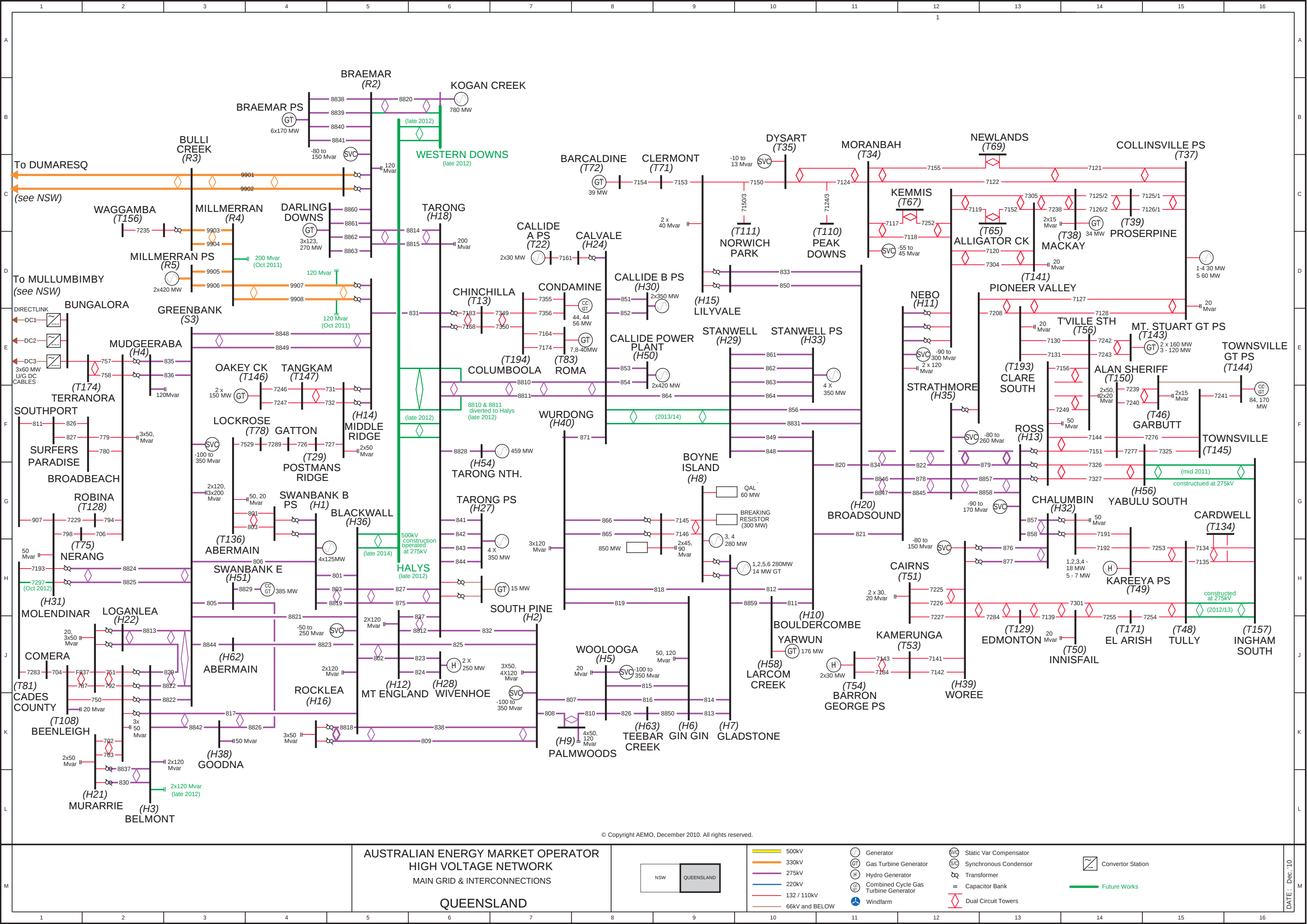
Table A2-1 lists the names and abbreviations of the NTNDP zones used in the 2010 NTNDP. Figure A2-1 shows the NTNDP zones and indicates their boundaries.

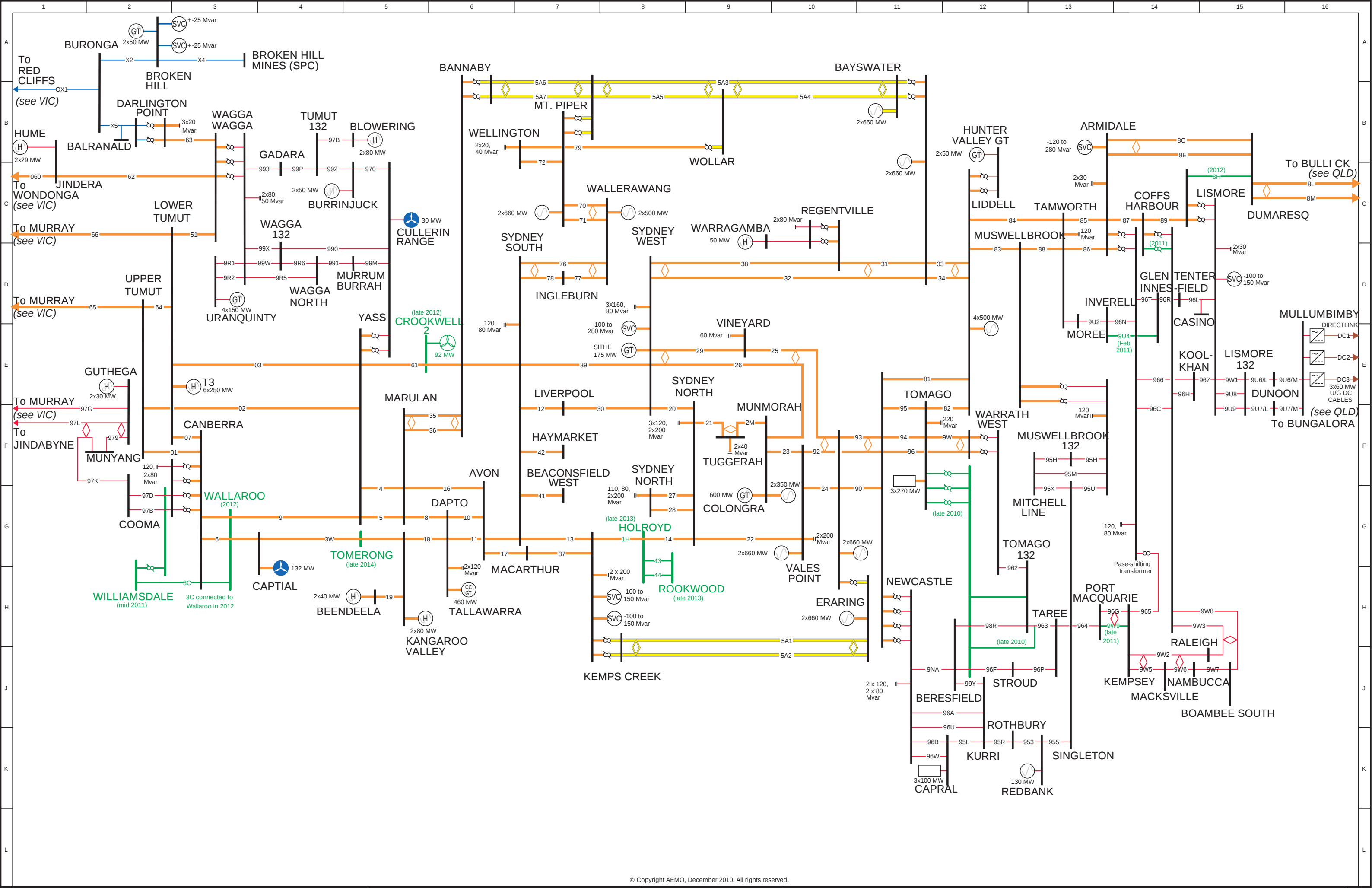
Table A2-1 NTNDP Zones

NTNDP Zone	Abbreviation
North Queensland	NQ
Central Queensland	CQ
South East Queensland	SEQ
South West Queensland	SWQ
Northern New South Wales	NNS
Central New South Wales	NCEN
Canberra	CAN
South West New South Wales	SWNSW
Northern Victoria	NVIC
Country Victoria	CVIC
Melbourne	MEL
Latrobe Valley	LV
Tasmania	TAS
South East South Australia	SESA
Adelaide	ADE
Northern South Australia	NSA

Figure A2-2 NTNDP Zones







© Copyright AEMO, December 2010. All rights reserved.

AUSTRALIAN ENERGY MARKET OPERATOR
HIGH VOLTAGE NETWORK
MAIN GRID & INTERCONNECTIONS
NEW SOUTH WALES



- 500kV
- 330kV
- 275kV
- 220kV
- 132 / 110kV
- 66kV and BELOW

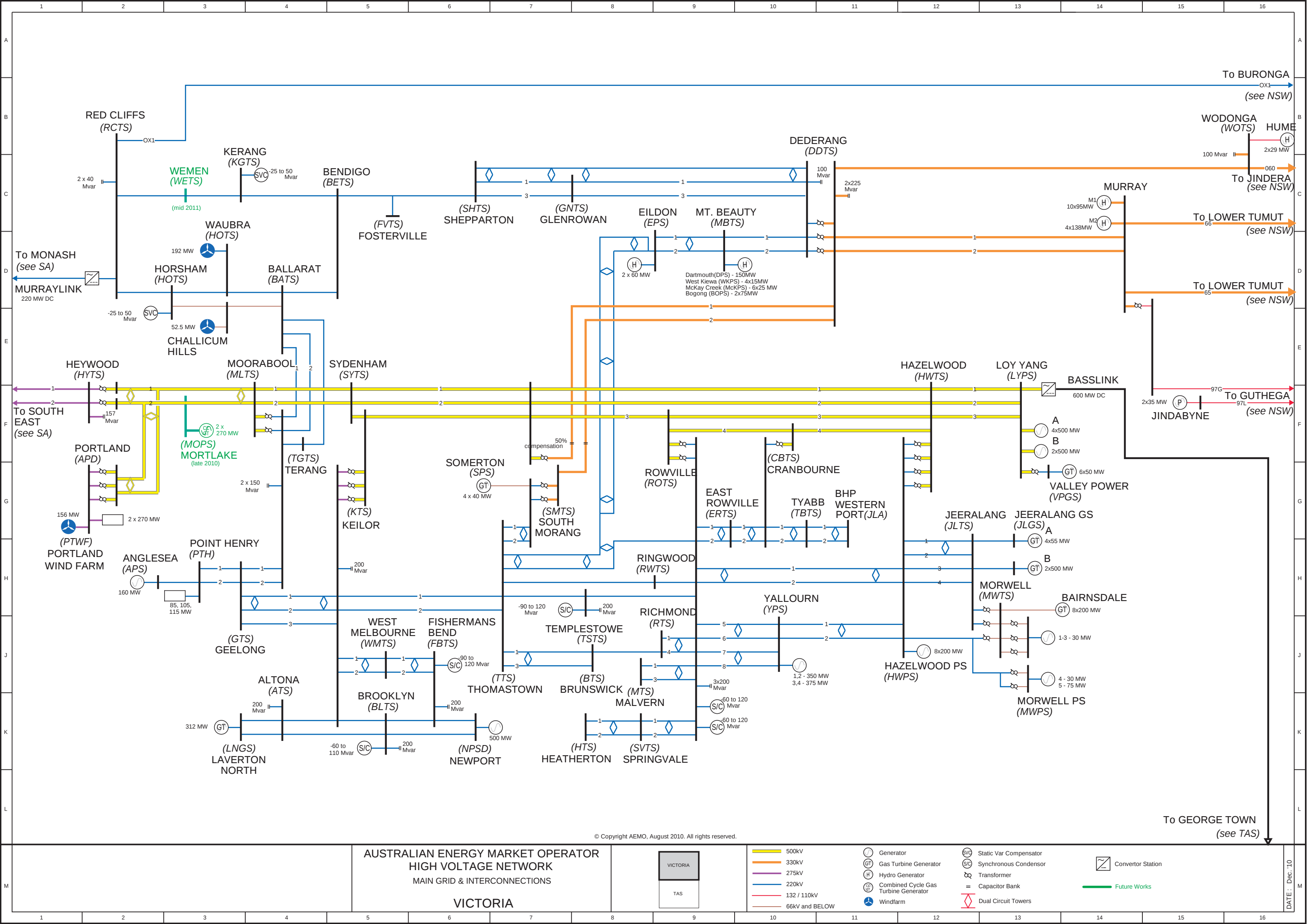
- Generator
- Gas Turbine Generator
- Hydro Generator
- Combined Cycle Gas Turbine Generator
- Windfarm

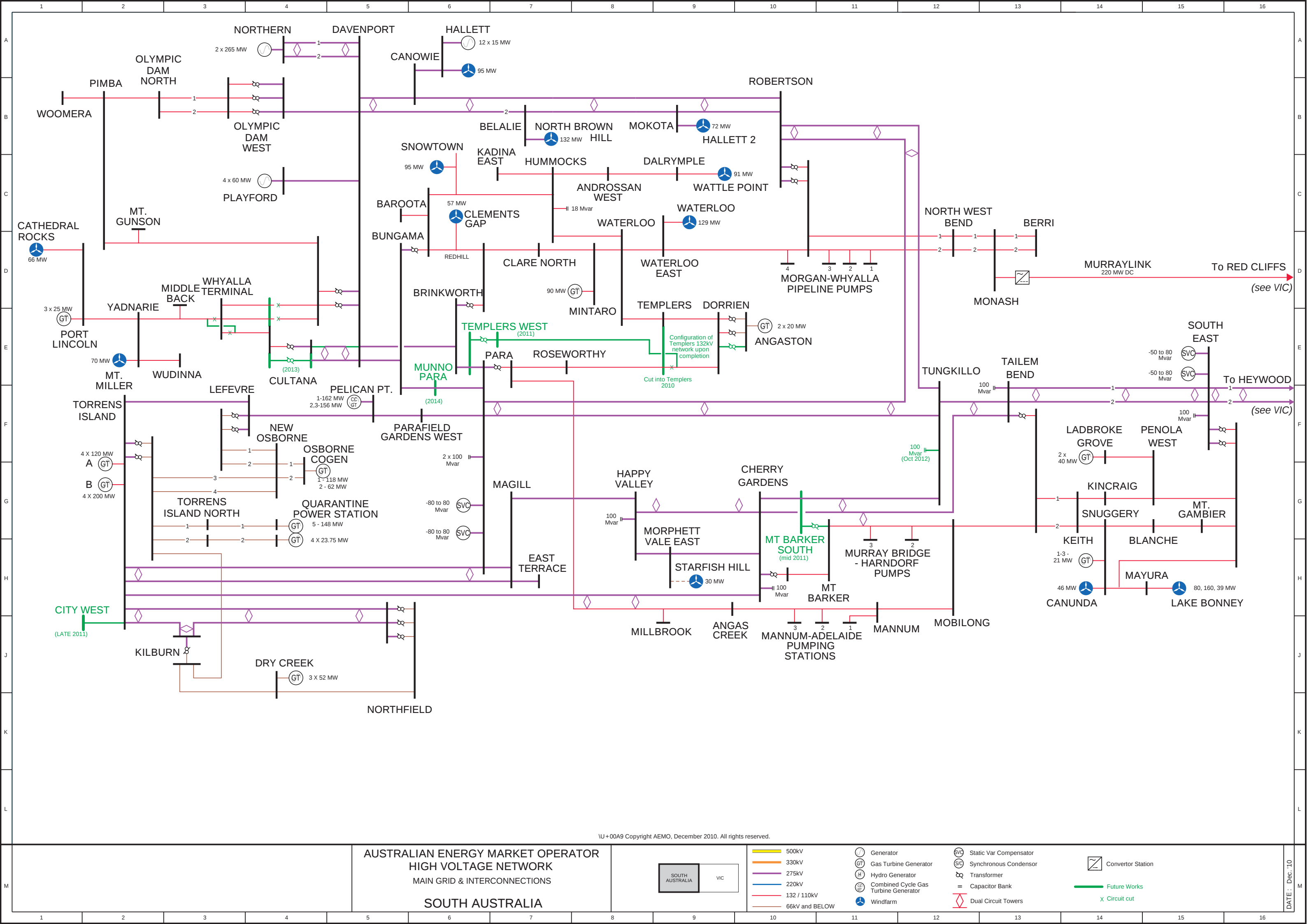
- Static Var Compensator
- Synchronous Condensator
- Transformer
- Capacitor Bank
- Dual Circuit Towers

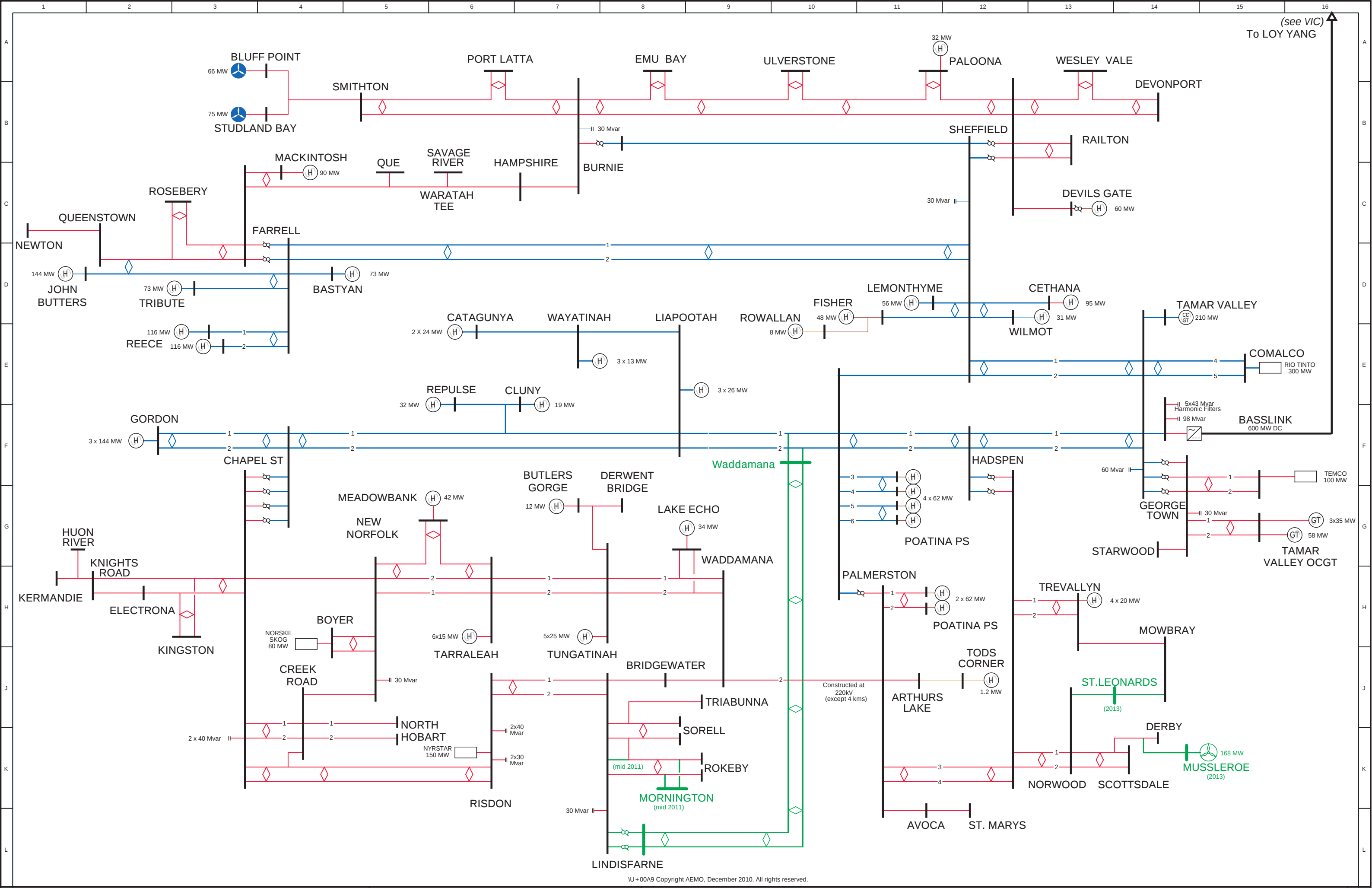


Future Works

DATE: Dec '10







IU+00A9 Copyright AEMO, December 2010. All rights reserved.



AUSTRALIAN ENERGY MARKET OPERATOR
HIGH VOLTAGE NETWORK
MAIN GRID & INTERCONNECTIONS
TASMANIA



- | | | | |
|-------|-------|--------------------------------------|------------------------|
| 220kV | 22kV | Generator | Static Var Compensator |
| 110kV | 18kV | Gas Turbine Generator | Synchronous Condenser |
| 88kV | 11kV | Hydro Generator | Transformer |
| 44kV | 6.6kV | Combined Cycle Gas Turbine Generator | Capacitor Bank |
| 33kV | | Windfarm | Dual Circuit Towers |
| | | | Converter Station |
| | | | Future Works |

DATE: Dec. '10