



GLOBAL POWER WORKS REFERENCE LIST

MACARTHUR WIND FARM PROJECT - CONSTRUCTION OF 132kV MACARTHUR & TARRONE SUBSTATIONS	
Client	▪ Leighton Contractors Propriety Limited (LCPL)
Location of Project	Corner Gerrigerrup Rd & Macarthur-Hawkesdale Rd, Macarthur, Victoria
Size and complexity	<p>The Macarthur Wind Farm Project is a Consortium between LCPL and Vestas to install 140 wind turbines and connect to the National grid at 500kV.</p> <p>Leighton Contractors Propriety Limited (LCPL) has been appointed the Principal Contractor for the construction and commissioning phases of the project. The final client of this project is AGL/Meridian.</p> <p>Global Power Services Pty Ltd appointed as the subcontractor for the Electrical Construction of 132kV/33kV Electrical substations at Macarthur and Tarrone.</p> <p>33kV / 132kV Macarthur Wind Farm Substation and 132kV/550kV Tarrone Terminal Substations are 60kilometers apart. Global Power managed the construction of these two substations concurrently with proper logistical and resource management.</p>
Time frame of project	Contract with LCPL signed on 13 th February 2012 and project completion on 31st May 2012. (This project is going on as per the planned schedule)
Major vendors and suppliers involved	<p>Primary Plant Equipments:- LCPL</p> <p>Busbars and other yard fittings and materials:- LCPL</p> <p>Cables:- LCPL</p>
Value of project	Contract Value:- AU\$ 2,958,700.00
Reference persons including contact details	<p>Nicholas Cole,</p> <p>EPIC Project Engineer, Tel: (03) 9228 7700</p>
Other matters of relevance	<p>Installation of 2 numbers of 132kV 280MVA Transformers and 1 number 132kV 50kA 3 bay GIS (all supplied by Hyosung Corporation Korea) was also installed at Macarthur Substation by Global Power in parallel to the contract with LCPL</p> <p>Installation of 1 numbers of 132kV 600MVA Transformers and 1 number 132kV 50kA 7 bay GIS (all supplied by Hyosung Corporation Korea) was also installed at Tarrone Terminal by Global Power in parallel to the contract with LCPL</p> <p>The contract Value of installation of those Hyosung supplied Equipments is \$889,900.00. This is in addition to the contract directly with LCPL</p>

MERREDIN POWER SUBSTATION - CONSTRUCTION OF 132KV SUBSTATION	
Client	▪ Western Power
Location of Project	Lot 190, Robartson Road, Merredin, WA Approximately 10kilometers from the small country town of Merredin
Size and complexity	<p>The main purpose of this Western Power (WP) project is to connect Electrical Power generated by Merredin Energy Pty Ltd's (ME) from their 73.5MW Merredin Power Station (MDP) to Western Power's network at Merredin Terminal (MRT). This project requires the an additional terminal bay (Bay 7) at Merredin Terminal, Installation of Relay rooms at Merredin Power Station and Merredin Zone substation.</p> <p>All the civil works, Electrical works, Earthing works and final road works were carried out by Global Power directly</p> <p>This project involves the construction works at three different locations (substations), which Global Power managed successfully with proper planning of logistical and resources management.</p>
Time frame of project	Contract with Western Power signed on 11 th October 2011 and project completion on 5th May 2012.
Major vendors and suppliers involved	<p>Primary Plant Equipments:- Western Power Busbars and other yard fittings and materials:- PLP Australia Cables:- Western Power & L & H, WA Lighting / Lighting Masts:- Ingal EPS, Maddington, WA Structural Fabrication:- M-Steel Miscellaneous Electrical & civil Materials:- EIW, Malaga</p>
Value of project	Contract Value:- AU\$ 1,342,000.00
Reference persons including contact details	<p>Bob Merryfull, Construction Manager (Western Power), Tel: (08) 9326 4160 Mob 0427 083 532</p>
Other matters of relevance	<p>This substation project involves the modification of protection and scada systems in the existing Merredin Zone Substation to configure with the new Bay 7. Global Power carried out these modification works within the planned short term power outages at these stations.</p>

MADDINGTON SUBSTATION - CONSTRUCTION OF 132KV SUBSTATION	
Client	▪ Western Power
Location of Project	29, Austin Avenue, Maddington, WA - 6109
Size and complexity	<p>The existing 132kV transmission line between Cannington terminal and Gosnells substations has been reconfigured to connect into the new Maddington substation. This work involves replacing a number of the existing wood poles and installing several new steel poles.</p> <p>Maddington substation designed as initially to be a single transformer substation with 25MVA capacity with another two transformer bays for future expansion.</p> <p>Global Power was the principal contractor of the project with Roam Pty Ltd as Poles fabrication & installation subcontractor and M-steel as structural steel fabrication subcontractors.</p> <p>All the civil works, Electrical works, Earthing works and final road works were carried out by Global Power directly</p>
Time frame of project	Contract with Western Power signed on 23rd September 2010 and project completion on 5th May 2011. Actual construction works on site between 18th October 2010 and 5th May 2011
Major vendors and suppliers involved	<p>Primary Plant Equipments:- Western Power</p> <p>Busbars and other yard fittings and materials:- PLP Australia</p> <p>Marshalling Box fabrication:- Star sheet metals, Perth</p> <p>Cables:- Western Power & L & H, WA</p> <p>Lighting / Lighting Masts:- Ingal EPS, Maddington, WA</p> <p>Structural Fabrication:- M-Steel</p> <p>Poles Fabrication & Installation:- Roam Pty Ltd, Malaga, WA</p> <p>Miscellaneous Electrical & civil Materials:- EIW, Malaga</p>
Value of project	Contract Value:- AU\$ 2,601,122.00
Reference persons including contact details	<p>Nigel Darby,</p> <p>Construction Contract Manager (Western Power), Tel: (08) 9326 6518</p> <p>Mob 0447 728 366</p>
Other matters of relevance	This substation project involves the modification of protection and scada systems in the existing Gosnells and Cannington substations to configure with the new Maddington substation. Global Power carried out these modification works within the planned short term power outages at these stations.

COLLGAR WIND FARM - CONSTRUCTION OF 220KV TERMINAL STATION	
Client	▪ Western Power
Location of Project	945, Bulls Head Road, Nora Dt, Merredin, WA - 6415
Size and complexity	<p>The Collgar Wind Farm is one of the largest renewable energy projects to be undertaken in Western Australia and is forecast to generate and deliver, on average, 792,000MWh of renewable electricity into Western Power's network - the South West Interconnected System.</p> <p>The construction of 220KV terminal has successfully been completed by Global Power within the scheduled time.</p> <p>This made possible to Global Power by early planning on all complex issues like finding proper accommodation for our site team in this country area (where the main Collgar wind farm construction project is going on), proper logistic operations to sent equipments and materials to Collgar site from city.</p>
Time frame of project	Contract with Western Power signed on 18th June 2010 and project completion on 25th Jan 2011. Actual construction works on site between 19th July 2011 and 25th Jan 2011
Major vendors and suppliers involved	<p>Primary Plant Equipments:- Western Power</p> <p>Busbars and other yard fittings and materials:- PLP Australia</p> <p>Marshalling Box fabrication:- Star sheet metals, Perth</p> <p>Cables:- Western Power & L & H, WA</p> <p>Lighting / Lighting Masts:- Ingal EPS, Maddington, WA</p> <p>Panel Board Fabrication:- NRP Electricals, WA</p> <p>Fire System (Vesda):- Wormald, WA</p> <p>Miscellaneous Electrical & civil Materials:- EIW, Malaga</p>
Value of project	Contract Value:- AU\$ 1,909,593.00
Reference persons including contact details	<p>Bob Merryfull,</p> <p>Construction Manager (Western Power), Tel: (08) 9326 4160</p> <p>Mob 0427 083 532</p>
Other matters of relevance	<p>The \$750 million Collgar Wind Farm is the largest wind farm in the southern hemisphere and is expected to generate enough electricity to power more than 120,000 homes.</p> <p>Western Power Managing Director Doug Aberle said it was a significant project for the business.</p> <p>“Western Power is pleased to have delivered the connection project under budget and ahead of schedule,” Mr Aberle said. <i>(quoted in Western Power website)</i></p>

CLARKSON 132/22kV SUBSTATION, WESTERN AUSTRALIA		
Client	▪ Western Power	
Project Overview (e.g. greenfield, brownfield, coordination with other contractors...)	Complete greenfield civil and electrical construction including pre-commissioning of Western Power's 132/22kV Clarkson Substation, Western Australia	
Contract Value	\$2,000,000.00	
Completion Date	2007	
Services Provided	Complete Electrical works of:- <ul style="list-style-type: none"> • 2 line circuits, 1 transformer circuit • 22kV indoor switchboard assembly • Complete civil works • Steel structure fabrication and erection • Primary plant installation and assembly • Switchroom and control room fit out including panel fabrication and wiring • Field control/protection cabling and AC/DC supplies • Pre-commissioning and testing • Site Assembly and testing of 2 x 132/22-11kV 33MVA transformers of VA Tech EBG 	
Delivery Method (include whether Principal Contractor)	1. Substation works as subcontract to Thiess Kentz (It was Thiess Kentz 1st substation project) 2. Transformer assembly works as subcontract to VA Tech EBG (the transformer manufacture)	
Relevance of Project and Services performed	Substation and transformer assembly and testing works	
Referee Contact Details	Bob Merryful, Western Power	(08) 93264160
SOUTHERN TERMINAL SUBSTATION, WESTERN AUSTRALIA		
Client	▪ Western Power	
Project Overview (e.g. greenfield, brownfield, coordination with other contractors...)	Brownfield electrical construction including pre-commissioning	
Contract Value	\$600,000.00	
Completion Date	2007	
Services Provided	Electrical construction and commissioning of 2 additional 132kV bays:- <ul style="list-style-type: none"> ▪ 2 bays breaker and half yard ▪ Fitout of new tilt panel switchroom 	

	<ul style="list-style-type: none"> ▪ Interconnection with existing control room ▪ Install complete AC & DC system in new relay room 	
Delivery Method <i>(include whether Principal Contractor)</i>	Sub contract of Thiess Kentz	
Relevance of Project and Services performed	Substation fitout, Power & Control systems	
Referee Contact Details	Bob Merryful, Western Power	(08) 93264160
330/132kV KENWICK LINK TERMINAL SUBSTATION, WA		
Client	<ul style="list-style-type: none"> ▪ Western Power 	
Project Overview <i>(e.g. greenfield, brownfield, coordination with other contractors...)</i>	Complete greenfield electrical construction including pre-commissioning	
Contract Value	\$650,000.00	
Completion Date	2007	
Services Provided	Substation construction including pre-commissioning:- <ul style="list-style-type: none"> ▪ Complete Switchroom fit out ▪ Install complete AC & DC systems ▪ Fabrication and installation of protection racks ▪ Installation of 550MVA 330/132-22KV Transformers ▪ Complete primary erection works ▪ Testing and commissioning 	
Delivery Method <i>(include whether Principal Contractor)</i>	Sub contract of Thiess Kentz	
Relevance of Project and Services performed	Substation fitout, Transformer erection, Primary erection works, Power & Control systems	
Referee Contact Details	Bob Merryful, Western Power	(08) 93264160
132kV ZONE SUBSTATION AT MANILDRA, NEW SOUTH WALES		
Client	<ul style="list-style-type: none"> ▪ Country Energy 	
Project Overview <i>(e.g. greenfield, brownfield, coordination with other contractors...)</i>	Complete greenfield civil and electrical construction of a 2 x transformer 132kV zone substation at Manildra, NSW	
Contract Value	\$1,200,000.00	
Completion Date	2002	

Services Provided	Complete greenfield civil and electrical construction of a 2 x transformer 132kV zone substation including construction of 300 Sq.meter control building with sub basement:- <ul style="list-style-type: none"> ▪ Complete Switchroom fit out ▪ Install complete AC & DC systems ▪ Fabrication and installation of protection racks ▪ Installation of 550MVA 330/132-22KV Transformers ▪ Complete primary erection works ▪ Testing and commissioning 	
Delivery Method <i>(include whether Principal Contractor)</i>	Principal contractor to Country Energy	
Relevance of Project and Services performed	Substation fit out works	
Referee Contact Details	Bob Bowden	0419435078
MILLSTREAM 220/132kV SUBSTATION (RIO TINTO'S MILLSTREAM OPERATIONS), WESTERN AUSTRALIA		
Client	<ul style="list-style-type: none"> ▪ ABB / Western Power Business Development Joint Venture 	
Project Overview <i>(e.g. greenfield, brownfield, coordination with other contractors...)</i>	Millstream 220/132kV Substation (Rio Tinto's Millstream operations), Western Australia	
Contract Value	1,300,000.00	
Completion Date	2005	
Services Provided	<ul style="list-style-type: none"> • Complete 220/132kV substation • 2 line circuits in, 4 line circuits out plus 1 transformer • Steel structure erection • Primary plant installation and assembly • Switchroom and control room installation • Field control/protection cabling and AC/DC supplies • Pre-commissioning and testing 	
Delivery Method <i>(include whether Principal Contractor)</i>	Sub contract of Western Power Business Development Joint Venture	
Relevance of Project and Services performed	Complete civil and electrical fit out of substation	
Referee Contact Details	Tony Ryan	(08) 9326 4135

WEST KALGOORLIE TERMINAL SUBSTATION, WESTERN AUSTRALIA		
Client	▪ Western Power	
Project Overview (e.g. greenfield, brownfield, coordination with other contractors...)	Installation of 33kV capacitor bank and 33kV switchboard and rearrangement of transformer circuits at Western Power's West Kalgoorlie Terminal Substation, Western Australia	
Contract Value	\$160,000	
Completion Date	2005	
Services Provided	Installation of 33kV capacitor bank and 33kV switchboard and rearrangement of transformer circuits at Western Power's West Kalgoorlie Terminal Substation, Western Australia Extension of brick substation building at Western Power's West Kalgoorlie Terminal Substation, Western Australia	
Delivery Method (include whether Principal Contractor)	<i>Principal Contractor of Western Power</i>	
Relevance of Project and Services performed	Substation fit out works	
Referee Contact Details	Charlie Ballard	(08) 93264911
TRANSGRID'S REGENTVILLE TERMINAL STATION, NEW SOUTH WALES		
Client	▪ Western Power Business Development Joint Venture	
Project Overview (e.g. greenfield, brownfield, coordination with other contractors...)	Installation of 132kV capacitor bank and associated foundations including switchgear and protection panels at Transgrid's Regentville Terminal Station, New South Wales	
Contract Value	\$250,000.00	
Completion Date	2004	
Services Provided	Installation of 132kV capacitor bank and associated foundations including switchgear and protection panels at Transgrid's Regentville Terminal Station, New South Wales	
Delivery Method (include whether Principal Contractor)	Sub contract of Western Power Business Development Joint Venture	
Relevance of Project and Services performed	Electrical fit out of substation	
Referee Contact Details	Tony Ryan	(08) 9326 4135

BHP BILLITON'S JUNCTION SUBSTATION (1600KM NORTH OF PERTH), WESTERN AUSTRALIA		
Client	▪ Areva T&D /Downer Engineering	
Project Overview <i>(e.g. greenfield, brownfield, coordination with other contractors...)</i>	Primary installation of 220kV line circuit and 6 x transformer circuits Station, Pilbara, Western Australia	
Contract Value	\$1,300,000.00	
Completion Date	2004	
Services Provided	<p>Primary installation of 220kV line circuit and 2 x transformer circuits at BHP Billiton's Junction Substation (1600km north of Perth), Western Australia</p> <p>Primary installation of 220kV line circuit and 2 x transformer circuits at BHP Billiton's Yandicoogina Substation (1600km north of Perth), Western Australia</p> <p>Primary installation of 2 x 220kV line circuit and a circuit at BHP Billiton's Newman Substation (1600km north of Perth), Western Australia</p>	
Delivery Method <i>(include whether Principal Contractor)</i>	Subcontract of Downer Engineering	
Relevance of Project and Services performed	Primary installation works	
Referee Contact Details	Jeff Yates of Downer Engineering	
TRANSGRID'S TUGGERAH SUBSTATION, NEW SOUTH WALES		
Client	▪ Western Power Business Development Joint Venture	
Project Overview <i>(e.g. greenfield, brownfield, coordination with other contractors...)</i>	Complete civil and electrical installation of 2 x 132kV capacitor banks and associated circuits at Transgrid's Tuggerah Substation, New South Wales	
Contract Value	\$600,00.00	
Completion Date	2003	
Services Provided	Complete civil and electrical installation of 2 x 132kV capacitor banks and associated circuits at Transgrid's Tuggerah Substation, New South Wales	
Delivery Method <i>(include whether Principal Contractor)</i>	Sub contract of Western Power Business Development Joint Venture	
Relevance of Project and Services performed	Electrical fit out of substation	
Referee Contact Details	Tony Ryan	(08) 9326 4135

West Angeles 220/33/22kV Substation (1600KM NORTH OF PERTH), WESTERN AUSTRALIA		
Client	▪ Areva T&D / Downer Engineering	
Project Overview <i>(e.g, greenfield, brownfield, coordination with other contractors...)</i>	Primary Installation of 220KV line circuits at Tom Price, Yandicoogina and West Anglos Substations	
Contract Value	\$1,200,000.00	
Completion Date	2003	
Services Provided	<p>Primary installation of one bay in a 220kV breaker-and-a- half substation at Mt Tom Price (1600km north of Perth), Western Australia</p> <p>Primary installation of 220kV line circuit and transformer including MV equipment at Yandicoogina Substation (1600km north of Perth), Western Australia</p> <p>Primary installation of 220kV line circuit and transformer including MV equipment at West Anglos Substation (1600km north of Perth), Western Australia</p>	
Delivery Method <i>(include whether Principal Contractor)</i>	Subcontract of Downer Engineering	
Relevance of Project and Services performed	Primary installation works	
Referee Contact Details	Jeff Yates of Downer Engineering	