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# Contractor Connect Scheme

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## 1 Preface

This Western Power Corporation document “Contractor Connect Scheme” provides the electrical contracting industry with information relating to Western Power’s connection process.

Under this scheme electrical contractors are authorized to connect and energize direct-metered new installations supplied via a service pillar once approved and accredited by Western Power.

## 2 INTRODUCTION

The Contractor Connect Scheme allows Authorized Electrical Workers who are employed by Accredited Electrical Contractors to connect and energize installations on behalf of Western Power upon completion and testing of the work. This scheme is limited to installations where the maximum demand per meter does not exceed 100 amperes (direct wired metering) however does not include connections to Western Power’s overhead network.

An exemption has been granted by the Director of Energy Safety under Regulation 242 of the Electricity Regulations 1947, allowing installations to be energized prior to Western Power receiving a Notice of Completion from the Electrical Contractor or In-house electrical license holder.

Accredited Electrical Contractors and their Authorized Electrical Workers will move to a system of electrical inspection audit with random sampling of their installation work. It is not a requirement of the scheme that every Electrical Worker from a particular company be authorized. Those not authorized will be subject to the current inspection sampling system.

## 3 CONTRACTOR CONNECT ENTRY REQUIREMENTS

Entry to the Contractor Connect Scheme is voluntary. Electrical Contractors are required to nominate for the scheme by completing an approved Contractor Connect application form detailing the following information:

- Electrical Contractor details.
- List of the Electrical Contractor’s nominees.
- List of Electrical Workers seeking to be authorized.

*(Application Form, appendix N-1)*

**An Electrical Contractor’s company management plan must also be included with the application.**

On receipt of the Electrical Contractor's application form, an experienced Western Power officer will assess the Electrical Contractors eligibility to join the scheme based on the following entry requirements:

- A nominee of the Electrical Contractor who is responsible for signing notices for their electrical workers has been nominated to attend the approved training course. The nominee will be eligible to attend the training course, regardless of their individual inspection sample rate.
- A company management plan is submitted which details the processes the Electrical Contractor's has in place to ensure all electrical work carried out is safe, complete and verified to conform with the relevant Australian/ New Zealand Standards and WA Electrical Requirements (WAER).
- The management plan ensures that the Electrical Contractor assumes full responsibility of the work of their Electrical Workers and such responsibility is not delegated to the worker.
- The company management plan also addresses the following minimum requirements:
  - 
  - Electrical Workers are instructed to work safely.
  - Each Electrical Worker is required to have adequate test equipment, tools and materials to complete the job to required standards.
  - The Electrical Contractor must be provided with an assurance that the electrical installing work performed by their workers is safe, carried out correctly, has been checked and tested and has been verified.
  - An assessment of each Authorized Electrical Worker's performance is carried out at regular intervals to ensure that the Electrical Worker is capable of carrying out electrical work correctly and safely, and the correct checking and testing procedures as detailed in the management plan are being followed.
  - Training is provided to Electrical Workers on any new standards, testing methods or installation methods introduced.
  - Electrical Workers are issued with, and must complete an installation test sheet that details all tests that must be carried out on an installation to ensure compliance with AS/NZS 3000 and any other relevant standard. A comprehensive installation check must also be completed in accordance with the electrical contractors check- list. This check must be verified on the electrical contractors installation test sheet.
- The Electrical Contractor seeking accreditation must have traded as an electrical contractor for the previous 2 years.
- The Electrical Contractor or employed Electrical Worker must not have committed an offence resulting in prosecution or Electrical Licensing Board disciplinary action within the preceding 2 years nor have any prosecution or disciplinary action pending. However, if the Electrical Contractor and the employed Electrical Worker can demonstrate significant work performance improvement and have implemented management systems to ensure high work standards, this requirement may be waived.
- Selected Electrical Workers must be on a sample rate greater than one, thus demonstrating a previous work history.
- All Electrical Workers nominated for the scheme must have had at least 12 months post apprenticeship electrical installing experience as an "A" Grade Electrical Mechanic and be accredited by Western Power's to connect service equipment.
- Electrical Contractors must have completed a minimum number of 50 major installations (metro) or 30 major installations (country) in the 12-month period prior to entry.

- Electrical contractors and electrical workers must have a serious defect free period of at least 6-months prior to entry. This criteria may be reviewed where it can be demonstrated that the management system they have in place can ensure that such defects will not re-occur. The number of jobs inspected after the serious defect has occurred, without further defects will assess this improvement.

Assessment of the Electrical Contractor's eligibility to join the scheme will include examining contractor's and workers past work performance by checking Western Powers Inspection Computer System (ELIS).

Western Power will also consult with EnergySafety, prior to authorization, to determine whether there are previous or pending prosecutions or disciplinary actions on contractors and workers seeking entry to the scheme.

## 4 TRAINING

An approved training provider will deliver the training to intended Contractor Connect operatives. Western Power's Power Training Services and The College of Electrical Training are currently authorized to provide this training.

Electrical Workers, including company Nominees, will be required to pass a theoretical and practical assessment in the following course outcomes:

- Introduction and requirements of the Contractor Connect scheme.
- Legislative requirements.
- Installation Testing and verification.
- Pillar connection requirements.
- Meter and Installation connection, testing and sealing.
- Main Earth Neutral (MEN) connection requirements.
- Administration requirements including auditing, refresher training and Notices.

Each successful electrical worker will be issued with a Western Power "Authority to Connect" card displaying the worker name. This card will certify that the Electrical Worker is authorized to energize installations on behalf of Western Power.

## 5 ELECTRICAL CONTRACTOR AND WORKER OBLIGATIONS

To maintain their accreditation, the Electrical Contractor will be required to comply fully with their approved company management plan. Key requirements of the company management plan are listed below. The Electrical Contractor will be required to:

- Detail the system and plan they have implemented to ensure all electrical work is safe, complete, verified and complies with the relevant mandatory Australian Standards and WA Electrical Requirements.
- Provide regular training and standards updates to all Authorized Electrical Workers.

- Regularly audit and monitor workers practices and performance, thus ensuring the company management plan requirements are being complied with. Such audits covering the testing and checking components may be conducted on-site, within a simulated testing environment or at a recognized training institution.
- Keep and maintain records of all installations completed, internal audits and training for a minimum of 7 years.
- Keep records of all internal audits, including any defects incurred by their Electrical Workers after the work has been completed. All records must be made available to Western Power on request.
- As part of their requirement to maintain a current “Register of Electrical Workers”, the register is to also indicate whether the Electrical Worker is authorized under this scheme.
- Advise Western Power should an Authorized Electrical Worker leave their employment. This notification must be sent to Western Power within 10 working days of the employee’s resignation.

Electrical Workers will only remain authorized whilst they are nominated by, and are employed by an Accredited Electrical Contractor. Should an Authorized Electrical Worker change company they will be no longer authorized, therefore they will be unable to energize installations unless their new employer is also accredited and has written to Western Power seeking permission to transfer the workers authorization.

Should an Authorized Worker transfer to a non-accredited Electrical Contractor, they will then revert back to the original system of inspection and will not be authorized to energize installations.

If an Authorized Electrical Worker ceases to be employed by an Accredited Electrical Contractor for greater than a 2- year period, they must re-qualify for re-entry to the scheme.

## 6 PROCESS

Once an Electrical Contractor and their Authorized Electrical Workers have successfully completed the training course, the following processes will occur:

- All Authorized Electrical Workers will be issued with a Western Power “Authorized to Connect” card.
- Western Power will issue all operatives with approved meter seals.
- Western Power will arrange for Accredited Electrical Contractors to be issued with meter fuse cartridges where required.
- Service Connection Test Forms will be made available to each Accredited Electrical Contractor.
- On commencement of work, the Electrical Contractor will submit a Preliminary Notice as required under Regulation 51 of the Electricity (Licensing) Regulations 1991.
- On completion of work, the Electrical Worker will check and test the installation in accordance with the approved checking and testing processes/ methods as detailed in the Electrical Contractors approved Management Plan.

The Electrical Worker will connect the consumers mains to Western Power supply, test for correct connections, insert the meter fuse, test the meter, seal the meter and meter fuse and then leave the installation connected to supply. As the meter is being tested, results must be recorded on the Service Connection Test Form.

*(Service Connection Test Form, appendix N-2)*

- Within 3 working days of completing the installation, the Electrical Contractor must submit a duly completed Notice of Completion to Western Power. A Service Connection testing form must also be completed. This can be done manually or electronically, if the Electrical Contractor is a participant of the ETIC scheme. If done electronically, the Electrical Contractor will be required to store the service connection form with the Notice of Completion for the period of seven years.

## 7 SAMPLE INSPECTION OF ELECTRICAL WORK

Western Power will conduct randomly selected, on-site sampling of the electrical installation work performed by each Authorized Electrical Worker.

The ELIS computer system will be utilized to randomly select work performed by each Authorized Electrical Worker in accordance with the sample inspection system.

Each Authorized Electrical Worker will be assigned a predetermined sample rate, which will be entered into ELIS manually.

## 8 AUDITING OF ELECTRICAL CONTRACTORS AND WORKERS

Western Power's Inspection Services will audit each Accredited Electrical Contractor and Authorized Electrical Worker to ensure compliance with the companies approved management plan, Electrical Workers checking and testing competence and scheme requirements.

Every Accredited Electrical Contractor will be initially audited within the first 6 months of commencing on the scheme and thereafter at 12 monthly intervals. Audits will include the following checks:

- The Electrical Contractor is complying fully with their approved management plan. (training records, internal worker audits and checking and testing)
- All defects detected by the Electrical Contractor when auditing their Authorized Electrical Workers are recorded.
- The nature of defects recorded by the Electrical Contractor of poor work performance by Electrical Workers as detected by the contractors' on-site audits and advise received from the installations builders and/ or customers.
- The storage of records is for a minimum period of 7 years in accordance with the scheme requirements.

Completion Notices are correctly completed and signed, thus verifying that only Authorized Electrical Workers have been energizing installations.

Each Authorized Electrical Worker will be subjected to an on-site audit. Such audit will be conducted at 12 monthly intervals from when the worker joins the scheme and will cover the following requirements:

- Safe work performance and work practices of the Electrical Worker.
- The Electrical Workers knowledge of required test results.
- The Electrical Worker is testing and checking installations in accordance with the company management plan and relevant standards.
- The Electrical Workers installation and testing of service equipment is satisfactory.
- The installation complies with all relevant standards.

Detailed records of these audits will be maintained and kept by Western Power.

Should an Electrical Contractor or Electrical Worker be found to not be complying with the requirements of this scheme, their accreditation will be reviewed. The electrical contractor or worker will be removed from the scheme where instances of serious non-compliance or repetitive non-compliance's have occurred. In all instances, Western Power must be satisfied that appropriate measures have been implemented to ensure the non-compliance does not re-occur.

All complaints from the public relating to substandard work performed by operatives will be subject of investigation by a Western Power Inspector. Where it is confirmed that the electrical contractor or worker has committed a serious non-compliance or repetitive non-compliance's have occurred they will also be removed from the scheme. Any confirmed serious breach will be forwarded to EnergySafety on the standard "Breach Complaint" form for further action.

Any Accredited Electrical Contractor and/ or Authorized Electrical Worker, as appropriate, removed from the scheme will not be eligible for re-entry to the scheme for a minimum period of 6 months and until they have demonstrated significant work performance improvement.

Where an Electrical Contractor loses accreditation, Electrical Workers employed by this contractor will be ineligible to continue on the scheme unless employed by another Accredited Electrical Contractor or the Electrical Contractor's accreditation is reinstated. Such Electrical Workers will revert back to the sample inspection system.

## 9 VALIDATION OF NOTICES AND SCHEME PARTICIPANTS

Western Power will ensure that only Authorized Electrical Workers who are employed by Accredited Electrical Contractors are energizing installations.

The correct validation of notices will be checked as part of Western Power's inspection auditing requirements.

## 10 APPEALS PROCESS

If an electrical contractor or electrical worker is aggrieved by any decision that prohibits them joining, suspends or removes them from the Contractor Connect Scheme they may appeal in writing to Western Power to have the decision reviewed.

Such appeal must be in writing and clearly outline the reasons for the appeal. The appeal must be submitted to Western Power not more than 14 days after the aggrieved person is advised of the decision. Western Power will respond to the appeal within 28 days of receiving the appeal details or if it is not possible to adjudicate during this time frame advise the aggrieved person accordingly within the 28- day period.

Where Western Power rejects the appeal and the electrical contractor or electrical worker is still aggrieved by the decision, a further appeal may be made in writing to EnergySafety who will adjudicate on the matter as the final arbitrator but only where the appeal relates to alleged unfair or inappropriate application of the scheme criteria and not to the criteria themselves.

## Appendix A - Application Form

## Application for Contractor Connect Authorisation

Please complete and send to Western Powers Metering Centre 6 Hillary Place Forreestfield, WA 6058  
 Telephone 9359 7552 or fax 9359 7575

### Company details

Company trading name																															
Address																															
Suburb or town																Post code															
Contact name																															
Telephone	(				)																Fax	(				)					
EC Licence No																															

Company electrical nominees	
Name	EW licence name

Electrical workers for authorisation	
Name	EW licence name

I, \_\_\_\_\_ (enter your name)  
 seek approval on behalf of, \_\_\_\_\_ (insert company name)  
 to become a Western Power accredited electrical contractor for the purpose of energising installations to a maximum loading of 100 amperes.

I agree to abide by the conditions of the scheme and fully implement the works management plan as submitted by my company.

The selected electrical workers as listed above, are full time employees of my company and are nominated so as they may be authorised to energise installations on behalf of Western Power whilst in the employ of my company.

Name																				
Signature											Date		/		/					

## Appendix B - Service Connection Test Form

## Service Connection Test Form

Please complete and send to Western Powers Metering Centre 6 Hillary Place Forrestfield, WA 6058  
 Telephone 9359 7552 or fax 9359 7575

Prior to connecting the consumer mains to supply the Electrical Worker must correctly verify and test all conductors, thus ensuring connections are not transposed and the meter box is not inadvertently energized

### Installation details

Installation address	<input style="width: 100%; height: 20px;" type="text"/>																	
Suburb or town	<input style="width: 100%; height: 20px;" type="text"/>												Post code	<input style="width: 100%; height: 20px;" type="text"/>				
Electrical worker name	<input style="width: 100%; height: 20px;" type="text"/>																	
EW Licence No	<input style="width: 100%; height: 20px;" type="text"/>						Meter number	<input style="width: 100%; height: 20px;" type="text"/>										
Seal number - if C. Connect	<input style="width: 100%; height: 20px;" type="text"/>						Telephone (	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>		)	<input style="width: 100%; height: 20px;" type="text"/>							

PRE-TEST VISUAL CHECK		Worker to initial once verified
Visually check the conductor orientation at the meter		
Single Phase ANNA		
Three Phase AA / AA / AA / NN		
Turn the main switch/s OFF and remove the neutral load tail from the meter prior to testing		
<b>CAUTION: THE LINE NEUTRAL COULD BE LIVE</b>		
METER VERIFICATION TESTS	Expected Voltages	Volts
Recorded		
De-activate the Service Protective Device (SPD) and confirm the meter terminals are de-energized. Note: the SPD could be meter fuse/s or circuit breakers. (Confirms the consumer mains are directly installed from the pillar to the SPD/s)	<b>0v</b>	
Test from the line terminal of the SPD/s to the meter line neutral terminal (Confirms supply and correctness of the line neutral connection)	<b>240v</b>	
Test from the line terminal of the SPD to the metal meter enclosure (Confirms the meter box is earthed and not inadvertently energized)	<b>240v</b>	
Test from the line neutral terminal of the meter to the disconnected neutral load tail (Confirmation that active & neutral conductors are not transposed)	<b>0v</b>	
Test from the line terminal of the SPD to the disconnected neutral load tail (Confirms the customers MEN connection is made)	<b>240v</b>	
If connection is 3- phase, test between the line terminals of the SPD/s R - W / R - B / W - B (Confirms 3-phase supply & each phase is correctly connected to the SPD/s)	<b>415v</b>	
Energize the SPD/s		
Test between the line active terminal/s and line neutral terminal (Confirms correct connection of meter and SPD/s)	<b>240v</b>	
If three phase, test between phases on line active terminals (Confirms correct connection of meter and SPD/s)	<b>415v</b>	
Test from line neutral to disconnected neutral load tail (Confirms the line neutral and active conductors are not transposed)	<b>0v</b>	
De-energize the SPD/s and re-connect the neutral load tail		
METER LOAD TEST		Initial when complete
Energize the meter and load test from the load active terminal/s (each phase) to the load neutral terminal. The meter should rotate or pulse in the forward direction. (Confirms the meter is correctly connected and can record power consumption)		
If Contractor Connect (CC) authorized, seal the meter and leave energized. If not CC authorized, meter must be left de-energized with circuit breaker SPD's suitably tagged.		

Signature	<input style="width: 100%; height: 20px;" type="text"/>	Date	<input style="width: 20px; height: 20px;" type="text"/>	/	<input style="width: 20px; height: 20px;" type="text"/>	/	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>
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