

**Accredited Service Provider - Design Consultant** 

**Contestable Works - Accreditation Information Pack** 

Version: 4.0 - July 2021



# Welcome – Information Pack for Design Consultants Contestable Works Projects

Thank-you for your enquiry on becoming an Energex Accredited Service Provider.

This information pack is designed to provide your company with information on the accreditation process together with information on the roles and responsibilities of an ASP. The pack also provides information on what is classed as contestable work and what is classed as non-contestable work in the Energex distribution area.

This information pack is also a "training refresher" for existing rated Design Consultants.

ASP's are not permitted to tender their services to customers or clients for non-contestable work. ASP's can only undertake contestable work, all non-contestable work is done only by Energex.

It is highly recommended that you also read the <u>Information Pack for ASP Electrical Contractors</u> so that your company will have an understanding of the working relationships between Energex, the developer, the design consultant and the electrical contractor.

The term "developer" refers to all parties undertaking contestable work projects and includes organisations such as land developers and property developers. The local council and the Department of Transport and Main Roads are also the "developer" when undertaking Rate 2 public lighting projects.

Should you have any questions on any of the items contained within this information pack, please send an email to <a href="mailto:asprating@energyq.com.au">asprating@energyq.com.au</a> and a member of the evaluation team will contact your company to answer your questions.

The Energy Queensland Contestable Works Team



# Accredited Service Provider / Energex Contractors / Third Party Service Provider

- <u>Accredited Service Providers</u> are design consultants and electrical contractors who have been evaluated by Energex as having the required management systems, safe systems of work, processes and competencies to undertake Contestable Works:
  - (i) Design and construct new Energex assets (for third parties),
  - (ii) Design and construct upgrades to the existing Energex network (for third parties) to enable these new assets to be connected to the existing network.
- <u>Accredited Service Providers</u> are engaged by third party organisations such as developers, principle contractors working on land development, local councils, TMR, etc.
- Accredited Service Providers are not engaged directly by Energex.
- Energex Contractors who are engaged directly by Energex are required to be on a
  Preferred Contracting Panel (PCP). Further information on the PCP and types of work available
  for Energex contractors is available from the Energy Queensland Strategic Procurement Group.
  A company does not have to be an Accredited Service Provider to tender to Energex for contracts
  as an Energex Contractor.
- <u>Authorised Service Providers</u> are companies authorised to undertake Shared Assets work for Third Parties who have their assets located on or located in the Energex Network. Further information on the qualification process for Shared Assets type work is available on the Energex Internet Website

This Information Pack only relates to <u>Accredited Service Providers</u>



# Overview of Design Contestability and Construction Contestability

### Contestable Work

- In the Energex distribution area only Developer Design and Construct works associated with:
  - The design and construction of Subdivisions
  - The design and construction of Rate 2 Public Lighting
  - The design and construction of Large Customer Connections

are classified as contestable works that are able to be designed by rated design consultants and constructed by rated electrical contractors.

### Non-Contestable Work

- In the Energex distribution area there is no design or construction contestability for Customer Initiated Works (CIW) such as:
  - Customer connections to supply including connections to new customers in new subdivisions.
  - Network alterations / asset rearrangements.
  - Network extensions / customer supply upgrades.
  - Supply availability investigations / Single points of supply.
  - Conversion of overhead network assets to underground network assets.
  - Network alterations and upgrades required due to Micro Embedded Generation.
  - Pilot cable works / secondary systems works / protection systems, etc.
  - Transmission network alterations. I.e. 110kV and 132kV network assets.
  - Alteration of Rate 2 Public Lighting driven by works other than a local authority requirement for an upgrade to the lighting scheme for the benefit of the community.
    - Eg: Relocation of a streetlight pole for a new driveway, civil works or building works.

All of the above items are non-contestable work done only by Energex.



# Design Contestability for Subdivisions

- Includes all design work to make electricity supply available to the lots in a subdivision.
- Includes "small lot subdivisions" such as one lot into two lots. (Eg: Mum and Dad developers)
- Includes community title subdivisions subject to compliance with applicable Energex standards.
- Includes Manufactured Home Parks subject to compliance with applicable Energex standards.
- Includes any \*ROL Associated Early Works that are required as part of a subdivision project.
- Includes any Rate 2 public lighting associated with a subdivision overhead and underground.
- Includes any Low Voltage works and 11kV works overhead and underground.
- Includes any 33kV overhead works only. 33kV Underground is non-contestable works.
- Includes all required upgrade works to the existing (energised) electricity distribution network.
- Subject to concept approval from Energex, developers may rearrange pilot cables, pole mounted reclosers (PMR's) and system voltage regulators (SVR's) within the area of works, however the final cutover of pilot cables and system programing of PMR's and SVR's is non-contestable work. Due to long lead times, these items shall be identified by the design consultant very early in the design phase of the project.
- Only includes works directly associated with the making of supply available to new lots and does
  not include works at an other location, even if conditioned by a local council development permit.
  <u>Eg</u>: An intersection upgrade some distance from the subdivision for increased traffic flows as
  conditioned by the local council's development approval. This is non-contestable work.
  - \*ROL = Reconfiguration of Lot.



# Design Contestability for Rate 2 Public Lighting.

- All design work for Rate 2 public lighting <u>not associated with a subdivision project</u> driven by the requirement for an upgrade to the lighting scheme for the benefit of the community.
- Includes all works for both overhead and underground public lighting.
- Includes all upgrade works to the existing public lighting network.
- Includes public lighting works associated with roadworks being undertaken by a public entity such
  as a local council or the Department of Transport and Main Roads (TMR).

#### Note 1

The relocation of existing HV and / or LV network assets for roadworks is classified as non-contestable work and is designed and constructed by Energex. The public lighting design package, prepared by the design consultant, has to be based on the Energex "Issued for Construction" worksplans for the network relocation works.

### Note 2

The installation of LV Points of Supply for public lighting projects is classified as non-contestable work, this being a network extension where there is no existing Point of Supply. It is the design consultant's responsibility, early in the planning phase of the public lighting project, to identify and if necessary make application to Energex for the required network works to make a Point of Supply available for the proposed public lighting. Lead times apply to Energex works. The exception to this rule is where LV network is being designed and constructed as an integral part of a subdivision project.



# Design Contestability for Large Customer Connections

- All design work for electrical reticulation to make supply available to a customer with loads in excess of 1000kVA. Eg: Commercial and Industrial Substations / Chamber Substations.
- Includes 11kV works and LV works overhead and underground.
- Includes works external to the substation, required to connect the substation to the existing network.
- Does not include network asset re-arrangements, external to the substation, not directly associated with the upgrade for load. This is classified as non-contestable work and will be designed and constructed by Energex.
- Does not include secondary system protection relay programming, as this is non contestable work.

### LCC Design Accreditation

- Prior to making an application to Energex for an LCC Design Accreditation a design consultant must have successfully completed three subdivision projects in the previous 24 months which contain 11kV network alterations, switching, connection and commissioning of 11kV assets and LV assets.
- By their nature, LCC projects are commercially high risk complex projects that shall only be undertaken by a design consultant with experience in all aspects of Energex Contestable Works.



- The company lodges an on-line enquiry via the Energex website.
- The company will be contacted by telephone to discuss the enquiry.
- The company is sent the Accreditation Information Pack together with other information including the two evaluation forms, the BMS evaluation form and the Design Capability evaluation form.
- The company submits to Energex for <u>desktop evaluation</u> their company's:
  - Business Management System documentation
  - Design Capability Documentation.
  - Safe Systems of Work.
  - Safe Work Method Statements.
  - Design Process Flowcharts.
  - Design Audit Processes and Checklists.
  - Staff Competencies.
  - Authorised Persons Documentation.
  - > Equipment and Tool Register.
  - The completed network design capability test/s.
- The company must achieve a "pass" and where required provide the evidence for each of the questions contained within the two evaluation forms.
- The company pays the evaluation fee to Energex.



- Following successful completion of the desktop evaluation and the design capability test/s,
   Energex then conducts an on-site audit at the design consultant's office.
- The Energex audit team requires access into the company's records for staff induction and training, staff qualifications and competencies, project management systems, insurance certificates, sub-contractor engagement processes, audit processes, safe systems of work, etc.
   Commercial in Confidence apply any items viewed by the Energex audit team.
- All of the design consultant's field equipment being audited shall be available at the time of the on-site office audit and where required all such items shall be "in test or calibrated".
- The design consultant's Business Management System "evaluation score" together with the Design Capability "evaluation score" are combined to allocate a rating level to the company.
- New design consultants start by default within the "B" grade section of the rating system.
- The ASP grading system for design consultants is from A0 (highest) to C14 (lowest).

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A grade = A0 A1 A2 A3 A4

B grade = B5 B6 B7 B8 B9

C grade = C10 C11 C12 C13 C14
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Design consultants with multiple WCS accreditations may have different rating levels.
 Eg: A consultant could be rated A2 for WCS47.1 and rated B6 for WCS47.3.



- Existing design consultants seeking an additional design rating are subject to the full accreditation process including a review of their Business Management System, Design Capability, Safe Systems of Work, processes, documentation, flowcharts, etc.
- Details of access to the Work Category Specifications (WCS) 47.1 and 47.3 for design will be provided in the ASP Application Pack.

#### Note 1

WCS47.1 – The Design of Subdivisions includes design work for Rate 2 Public Lighting required as an integral part of the subdivision project.

### Note 2

Where a design consultant has not submitted any contestable projects to Energex in a two year time period their rating will be made inactive and a re-rating process will be required to have the rating re-activated. For this re-rating process an appropriate fee will be charged for re-evaluation.

### Note 3

The documentation being submitted by the company for evaluation has to align with the types of work that will be performed under the relevant Work Category Specifications.

#### Note 4 - Travel Costs

The design consultant is required to cover all costs of travel and accommodation for two Energex staff members should the on-site capability audit take place outside the Energex distribution area. This may involve airfares and an overnight stay (interstate or intrastate) for the two audit team members. These costs are in addition to the application fees.



- The design capability tests contain a number of the more common scenarios (but not every scenario) that design consultants will encounter during design work on the Energex network...
- There are no concrete cable pit and cable duct scenarios in the subdivision design capability test.
- The design capability tests are updated as required to prevent them from becoming "stale" or "out of date" with the latest Energex standards and policies.
- The capability tests are evaluated using the forms that are used for design compliance audits on "live projects" submitted by design consultants.

#### Note 1

A company is permitted two attempts at the design capability test. If the company is not successful at the second attempt, a six month hiatus will be required prior to the third attempt at the test. This is to enable the company to review their previous submissions and gain a greater understanding and knowledge of Energex's standards and policies.

### Note 2

Energex reserves the right to issue a different version of the capability test to the company after the six month hiatus.



- The WCS47.1 Subdivisions design capability test is about 210 240 hours desk top design work.
   There is no field work required for the subdivisions design capability test as all field information is provided in the test package.
- The WCS47.3 Public Lighting design capability test is about 130 140 hours desk top design work.

  There is no field work required for the public lighting design capability test as all field information is provided in the test package.
- The WCS47.6 Large Customer Connection design capability test comprises four different types of Commercial and Industrial substation scenarios together with a full "open book" 100 question and answer examination on Energex Standards and Policies. Each one of the four separate LCC test scenarios is approximately 130 – 140 hours desk top design work and design consultants must successfully complete all four test scenarios.

There is no field work required for the Large Customer Connection design capability test as all field information is provided in the test package.

# Design Consultant - Business Management Systems

- The design consultant is involved in the full life of the project, from the start of the design through to completion of construction and acceptance of the commissioned assets by Energex. The consultant's responsibility is not limited to simply producing a set of design drawings.
- The design consultant needs to have processes so that they can interface effectively with the developer (their client) and Energex during the full life of a project.
- The consultant needs to have processes for providing ongoing support for the full life of the project to the ASP electrical contractor who will be constructing the works.
- The design consultant needs to have their own checklists to ensure that the design packages submitted to Energex are compliant with Energex standards and policies. Energex can provide examples of flowcharts and checklists to assist the applicant to develop suitable documentation.
- The design consultant needs to have company processes to deal with incoming alerts from Energex and dissemination to appropriate design staff. Eg: Standards alerts, safety alerts, maintenance instructions, operational updates, Tech Alerts, etc.

#### Recommendation

It is highly recommended that the design consultant has a dedicated manual containing documents, procedures, forms, flowcharts, checklists, etc, specific to working on Energex contestable work projects.



# Design Consultant - Safe Systems of Work and Authorised Persons

- Design consultants must have in their safe systems of work, documented procedures and Safe Work Method Statements for their staff to access the HV, LV and SL networks during site visits.
- The design consultant's staff are required to open and access energised electrical assets such as transformers, ring main units, LV pillars, streetlight poles, streetlight pits, streetlight cable joints. Where necessary, design consultants must be able to access concrete HV / LV cable pits.
- The design consultant must ensure that their staff have the necessary competencies, field
  equipment and safety equipment to undertake site visits and where required all such equipment is
  "in test or calibrated".
- Energex does not provide an escorted entry service for design consultants wishing to enter locked assets such as Padmount Transformers, Ring Main Units, Chamber Substations, etc.
- The design consultant must ensure that their staff are <u>Authorised Persons</u> so as to be able to hold an Energex S3 System Key for access to the Energex network.
   Refer to Energex Form 3010 for more details on Authorised persons.
- The design consultant must ensure that all notification procedures for staff accessing HV assets shall be followed at all times. Telephone - 1300 748 343. <u>Log In</u> to the site and <u>Log Out</u> of the site.
- There is no "work around" to the requirement for the design consultant's staff to hold the required competencies, authorised person status, SWMS, PPE, tools and equipment to undertake site visits and to access the Energex network.



- The design consultant is engaged by and paid by the developer for all developer design and construct projects. Energex does not engage the services of the design consultant.
- Energex is not involved in the tendering process for contestable works in any way. Depending upon the contractual arrangements with the developer the design consultant may assist the developer with tendering for construction of the works.
- Energex requires the design consultant to act as the primary point of contact between all stakeholders in a subdivision, public lighting or large customer connection project.
- Energex does not normally talk to or liaise direct with the developer as all discussions go via the
  design consultant. Energex reserves the right to contact and include the developer in any
  correspondence should there be issues with the design, construction or safety of a project.
- The Energex contestable works team requires one point of contact with the design consultant for all email correspondence. The contestable works admin team will not send electronic correspondence to different offices of the design consultant in a situation where the consultant may have offices in multiple locations.
- Energex does not provide a "pre-start" meeting for design consultants or electrical contractors for Subdivision or Rate 2 streetlight projects. The electrical contractor commences work on site after Energex issues the Approval to Construct.
- Energex does provide a "pre-start" meeting for Large Customer Connection projects. The Energex Planning Officer, Energex Connections Officer, Energex Assessment Officer, Design Consultant, Electrical Contractor, Builder and Civil Contractor shall be in attendance at the meeting.



- The electrical contractor is not permitted to make any changes to the design of the project without referring these proposed changes back to the design consultant. The design consultant may need to liaise with Energex and / or other authorities regarding the proposed changes to the design.
- If Energex is requested by the developer, design consultant or the electrical contractor to attend a site meeting to discuss or resolve issues on a project, the consultant and the contractor shall be in attendance.
- During the full life of the project the design consultant provides engineering support to the electrical contractor.
- It is the responsibility of the design consultant to ensure that all approvals for the project are in place prior to commencement of the construction of the project.
- The electrical contractor is not permitted to commence construction of the works until the Supply Agreement is in place and Energex has issued the Approval to Construct to the design consultant and the electrical contractor.
- The fact that the worksplans may have an Energex project number does not indicate that Energex
  has accepted the worksplans from the design consultant and that the electrical contractor can
  commence construction of the works. Design consultants have a "block" of pre-allocated
  Energex project numbers for them to use on designs for contestable works projects.
- The electrical contractor constructs the works using only Energex approved materials. These can be purchased from various electrical wholesalers and the Energex Distribution Centre.
- It may be necessary for the design consultant to liaise with and coordinate with other design consultants when designing adjacent projects.

# Design Consultant - Energex Standards, Manuals and Policies

- Australian Standard AS/NZS3000 "The Wiring Rules" does not apply to the Energex network.
- Design consultants need to have an understanding of Energex's manuals standards and policies so as to produce compliant design packages. Design consultants are not required to "fully know all the manuals, standards and policies" however consultants do need to know where to access and obtain the required information within the relevant documents.

### Some examples are:

The Standard Conditions for Public Lighting Services

Public Lighting Design Manual. Public Lighting Construction Manual.

**Underground Distribution Construction Manual** 

Overhead Design Manual. Overhead Construction Manual.

Network Labelling and Signage Manual. Network Standard Building Blocks.

Distribution Earthing Manual. Resource Estimation Guide.

Energex Worksplan Standard. Energex Subdivision Standards.

Relevant Work Category Specification's. Customer Outage Guidelines.

Commercial and Industrial Substations Manual.

Queensland Electricity Connections Manual. Queensland Electricity Metering Manual. Network Outage Guidelines.

 Consultants shall refer to the relevant manuals in the first instance, prior to contacting Energex seeking technical advice or design guidance.



# Design Consultant - Design Compliance to Energex Standards and Policy.

- Energex conducts a design review on every project submitted by a design consultant. This is a
  design review only and not a full design audit.
- Energex conducts design audits based on a sampling rate of how many projects a consultant submits in a financial quarter.
- Energex reserves the right to conduct a design audit on any project at any time.
- Energex may action a site visit as part of a design review or a design audit.
- The design audit results are entered into the database and these audit results will make the consultant's level "go up" or "go down" in the grading system. Consultant's rating "scores" are allocated quarterly by the database between A0 (highest) to C14 (lowest).

#### Note 1

In the event that a high risk non-conformance is identified in the design, the consultant will be required to conduct an investigation and prepare a report for the Energy Queensland Contestable Works Manager. Generally this investigation and report must be actioned within five business days. Following this report there will be a non-conformance meeting between Energy Queensland and the design consultant.

#### Note 2

If there are design defects on a project at the time of the Energex final product compliance audit, these defects are rectified by the design consultant. It is not the responsibility of the electrical contractor to rectify design defects, however it is expected that the electrical contractor will notify the design consultant of design defects found during the construction of the project.



# Design Consultant - RPEQ Approval of Worksplans (Design Drawings)

- Energex does not "approve" worksplans from design consultants, Energex "accepts" worksplans from design consultants.
- The RPEQ electrical engineer supervising the design work is the person who approves the consultant's worksplans and certifies compliance with Energex's policy and standards.
- Energex places a considerable amount of responsibility on the electrical RPEQ who is supervising
  the design work. The electrical RPEQ is the consultant's final level of the compliance checking of
  the design work prior to submission of the design package to Energex.
  - Energex expects that the RPEQ certifying the worksplans will have a good understanding of what he or she is certifying as being compliant with Energex standards and policy.
  - BPEQ Code of Practice for Registered Professional Engineers.
- The fact that a consultant's worksplans have been certified as compliant by an RPEQ does not mean that the design submission package will be automatically accepted by Energex.
- Energex conducts design reviews and if errors are discovered in the drawings, the design consultant will be advised of the errors so that corrections to the drawings can be made by the consultant.
- Energex does not undertake progressive design reviews on contestable work projects. Eg: 50%, 80%, 95%, etc.



# Design Consultant - Accuracy of Design Drawings

- Design Consultant's drawings submitted to Energex shall comply with the Energex Drafting Standard.
- All design drawings are detailed to a component and item level. Accuracy of the information on the drawings is critical as the design consultant's drawings are used by a number of different teams within Energex.
  - Contestable Works Team.
  - Network Data Services Team.
  - Premise Data Team.
  - Network Operations Team.
  - Network Access Team.
  - Network Property Team.
  - Assessment Officer (Field Auditor).
  - Commissioning Coordinator.
  - LV Outage Officer.
- A design consultant's drawings which do not comply with the Drafting Standard will be returned to the design consultant for corrections and amendments.
- Inaccurate data on drawings can cause construction delays, switching and commissioning delays, electrical contractors ordering incorrect materials, capitalisation errors, incorrect billing for public lighting, all of which will result in re-work and re-design for the consultant.
- During the life of a project, the design consultant may have to review, amend and re-issue updated drawings due to changes in the timing of works, network changes, construction issues, etc.



# Design Consultant - Network Mapping Information Request.

- At the commencement of the design of the project, consultants request a "maps package" from Energex. There is currently no fee for this service.
- Energex does not issue a "Design Information Package" or a "Design Parameters Advice" for Developer Design and Construct projects, as is provided by some other electrical entities.
   In the Energex distribution area, all scoping and planning work for DD&C projects is the responsibility of the design consultant.
- The maps package contains only items requested by the consultant. Typically these include SL geographic diagram, LV geographic diagram, 11kV geographic diagram, 33kV geographic diagram, pilot cable geographic plus an AutoCAD extract from the worksplans database.
  It is recommended that consultants should not use the AutoCAD extract as an xref file in their worksplans design as there may be spatial location errors with the network data.
- Additional information that may be requested is items such as the billable customer for streetlighting, tariff of existing streetlighting, pole details, transformer sizes, snap shot of the HV operating network, details of nearby projects, etc.

### Note 1

Energex does not undertake site visits on behalf of rated design consultants.

#### Note 2

Energex's Customer Contact Centre and the Energex On-Line Portal do not provide supply availability information to design consultants for subdivision or public lighting projects.



### Design Consultant - Site Visits

- It is the responsibility of the design consultant to undertake any site visits prior to commencing the planning and design of the project.
- The design consultant, in a scoping / planning role, determines the scope of works necessary to make supply available to all lots in the subdivision / public lighting project.
- The design consultant is required to confirm all HV, LV, and SL network connectivity and type of assets to be altered by the design. Eg: Network open points, type of HV switchgear, pole details, pole top constructions, type of earthing, network labels, SL details, etc.
- The consultant is required to scope all planned HV, LV and SL switching locations, the planned locations for generators and the locations for any planned HV Live Line activities.
- The design consultant may need to visit site on a number of occasions during the life of the project to provide ongoing support to the electrical contractor constructing the works.

#### Note 1

The design consultant is required to peg the locations of all proposed overhead mains poles. The consultant needs to allow for pole pegging at the time of design and again at the time of commencement of the construction of the project. The consultant's design officer pegs all overhead mains poles, not the surveyor, not the electrical contractor, not the developer. Energex may check the consultant's pole pegging as part of the design review or design audit.

### Note 2

If an accredited design consultant is undertaking a Rate 3 public lighting project, it is the responsibility of the consultant to confirm that a proposed point of LV supply is suitable for the project. Eg: A drop down service on a pole or spare fuses inside a LV service pillar.



# Design Consultant - Network Planning and Concept Designs

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- Energex requires all design consultants to provide 33kV and 11kV concept plans where the project involves alterations to the 33kV or 11kV networks. Concept plans are essentially high level only looking at the proposed HV network, HV conduits and associated HV assets. On some occasions, the concept plan may come down to the LV network. Concept plans are never the full completed drawings showing all details such as schedules, site ID's, network labels, etc.
- Concept plans are very important where there are non-contestable works (done only by Energex) within the developer's scope of subdivision works. Eg: Pilot cables, pole mounted reclosers, system voltage regulators, 33kV underground, 132kV and 110kV transmission network, etc.
- On multistage master planned subdivisions, design consultants must provide "the full picture" from the developer even if they have only been engaged for work on the first several stages.
- Energex requires concept plans for all subdivisions, public lighting and LCC projects that involve a
  concrete cable pit and duct system for the distribution network. The design consultant is
  responsible for ensuring that any existing pit cards are accurately updated and any new pit cards
  are created as required by the new works.
- If requested Energex can provide preliminary information to the design consultant to enable the creation of a concept plan.



- Concept acceptance is only Energex's acceptance of the planning concept. It is not and has never been a design review or a design acceptance.
- A concept acceptance issued by Energex is only valid for a period of six months. Design
  consultants must seek a renewed acceptance of the concept as there may have been changes to
  standards or alterations to the distribution network that may have affected the original concept.
- There is no partial energisation of the assets. The entire stage of the subdivision (all lots) has to be switched, connected to supply and commissioned at the same time.
- Energex requires concept plans for all proposed public lighting works in the Brisbane CBD area where there is an existing Zellweger Relay controlled supply (knock-on) for public lighting and a concrete cable pit and duct system.
- Concept plans for proposed Rate 2 public lighting works should be submitted to Energex where the design consultant has identified issues with achieving compliance with Energex standards.

### Note 1

The developer, local council or TMR do not have the authority to tell Energex what is deemed acceptable for connection to the Rate 2 public lighting tariff. Energex will only offer connection to the Rate 2 lighting tariff subject to compliance with Energex standards and policies.



# Design Consultant - Network Planning and Concept Designs

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- Design consultants are required to liaise with and coordinate work with other design consultants
  who may be undertaking design work on an adjacent subdivision or adjacent streetlighting project.
- As part of a response to a request for a maps package Energex will make an design consultant's worksplans (PDF file) available to other consultants, on an adjacent project, to enable strategic planning issues and interconnection issues of both projects to be addressed.

#### Note 1

If necessary, Energex will facilitate any meetings between design consultants to discuss interactions and coordination of adjacent projects.



The design consultant is responsible for obtaining all approvals required for a contestable works project. It is not the electrical contractor's responsibility or the developer's responsibility to obtain the approvals.

### **Mandatory Approvals**:

- Local Council Approval of the public lighting, approval of the electrical layout (location of proposed assets) and approval for works on a council controlled road. In some council areas these approvals will require the design consultant to make an application to the council for an Operational Works Approval.
- Transport and Main Roads Approval of the public lighting <u>and</u> approval for the developer to install electrical assets (in state controlled road reserve) that are to be gifted to Energex.

### Other Project Specific Approvals:

- DERM Environmental permits, cultural heritage reports, water crossings.
- Vegetation Management Reports. It is the consultant's responsibility to coordinate the provision of any VMR's required for a project.
- EMF reports. It is the consultants responsibility to provide any required EMF reports.
- Community consultation reports.
- Powerlink The approval of proposed works in Powerlink transmission corridors.
- Gas / Oil Entity The approval of proposed works near oil / gas transmission pipelines.
- Water Entity The approval of proposed works near trunk water pipelines.



- The design consultant also needs to be aware of the policies of local councils that may not be included as a condition of the development permit. Eg: Some councils do not permit the use of customer property poles, extension of existing overhead mains, new pole transformers, etc.
- Any design proposals for non-standard constructions including non-standard alignments shall be
  resolved with Energex prior to commencing the detailed design of the project. A written copy of
  any approvals for non-standard constructions shall be included in the design submission package
  when submitted to Energex.
- The point of contact for all non-standard approvals (ENSAR's) is the Energex Contestable Works
  Team, not the local Energex Hub / Energex Depot.

**ENSAR** = Energex Non Standard Approval Request. (Also known as a RFI)



# Design Consultant - Third Party Assets / Watchman Lights / Pole Inspections

### **Third Party Assets**

- The design consultant is responsible for contacting any other authority (third party) with assets on Energex's mains poles or streetlight poles should the poles be planned for recovery, replacement or alteration. The design consultant is required to liaise with the electrical contractor and the third party asset owner regarding the timings of works.
- Third Party Assets include items such as Telstra PSTN, Broadband Cables, Unmetered Supply Connections, Rate 3 Public Lighting consumer's mains, CMTS (mobile phone) antennas and hardware, NBN cabling and assets, 5G Micro Cells, etc.

### Watchman Lights

 Watchman lights (security type floodlights) are an Energex asset however there is a commercial billing contract between the watchman customer and the energy retailer. The design consultant shall contact Energex during the planning phase of any project related to the proposed relocation / recovery of poles (mains poles or streetlight poles) that are supporting Watchman Lights. The design consultant is responsible for undertaking all negotiations with the customer and the energy retailer with respect to the proposed relocation / removal of any Watchman Lights.

### Pole Inspections

The design consultant is responsible for arranging any pole inspections via an Energex accredited
pole inspector. Energex does not provide pole inspection services for contestable work projects.
Copies of any pole inspections and residual pole strength calculations shall be included in the
design submission package.



# Design Consultant - Customer Outages and Network Switching

- The design consultant is responsible for developing a commissioning plan to enable the works to
  be connected to supply and commissioned with minimal supply interruption to existing customers.
  This may involve the consultant planning the use of Live LV work activities during switching,
  connection and commissioning activities by the electrical contractor.
  The design consultant is however not expected to know how to "write" a HV or LV switching sheet.
  Refer to WCS31 Commissioning, Operating and Accessing the Network.
- A commissioning plan shall be included on all design consultant's worksplans.
- Supply outages to major customers such as schools, shops, businesses, factories and large numbers of domestic customers are not acceptable to Energex. Outages to customers of this type require early negotiations, as per Work Category Specification WCS31.
- Consultants also need to be aware that customers may be connected to public lighting circuits.
   Eg: Telstra CMTS, 5G Micro Cells, NBN Field Cabinets, Bus Shelters, Advertising Signs, etc.
- The commissioning plan enables the design consultant to ascertain the network switching costs, cable ID and spike costs, level 2 cable test costs, generator costs and HV live line costs (all costs as applicable). These costs are available on the list of standard fees charges and shall be included in the design submission package. These costs, to be paid by the developer, will be incorporated into the Supply Agreement between the developer and Energex.
- The design consultant is responsible for ensuring the constructability of the design of the project.
- Details of access to Work Category Specification WCS31 will be provided in the ASP Application Pack.



# Design Consultant - Project numbers and Site ID (Asset) numbers.

- Energex issues to the design consultant a block of "Sxxxxxxx" series project numbers and a block of site ID (asset) numbers for use in subdivision and public lighting designs. These "S" project numbers shall be used on all subdivision and streetlighting projects.
- The design consultant assigns the "Sxxxxxxx" number to each individual project.
- The design consultant assigns the unique Site ID (asset) numbers to each of the assets to be installed or modified.
- Design consultants do not contact Energex each time that they require a project number or Site ID numbers.
- All correspondence must relate to and include the "S" series project number. The "S" series project number and the suburb / locality name must be in the subject line of any e-mail correspondence.
- The Energex Contestable Works Team works off the "S" project number, not the Works Request (WR) number.
- For Large Customer Connection projects, the Works Request number issued by the design consultant. LCC projects do not use an "S" number.



# Design Consultant - Design Submission Package

- The design consultant is the party responsible for submitting a complete and compliant design package to Energex. The design submission package must contain all of the required documentation and the worksplans. All items shall be submitted electronically to Energex.
- The design consultant is responsible for ensuring that both the Energex Contestable Works Team
  and the developer's electrical contractor are provided with the most recent revisions of the
  worksplans following any changes or amendments to the drawings for the project.
- The submission of a non-compliant or incomplete design package will result in delays to the timing
  of the project and re-work / re-design / resubmissions for the design consultant.

#### Note 1

Energex does not "download" drawings and documents from electronic project servers within the consultant's company and the same status applies to electronic "drop boxes". Energex's IT gateway automatically blocks these types of download sites.



# Design Consultant - Energex Non-Standard Approval Requests During Construction.

- ENSAR = Energex Non Standard Approval Request. (RFI's / Construction Issues)
- The electrical contractor is not permitted to make changes to the design of the project without referring these proposed changes back to the design consultant.
- Electrical contractors do not come direct to Energex with ENSAR's related to construction issues on the project. These shall always, in the first instance, be referred to the design consultant.
- The design consultant is responsible for providing engineer support to the electrical contractor and answering all ENSAR's from the electrical contractor in a timely manner.
- The design consultant does have some authority to issue approvals for shallow conduits.
- The design consultants do not have the authority to issue approvals for "out of alignments" and it is necessary for the consultant to obtain approval for the "out of alignment" from both Energex and other authorities such as the local council or DTMR.
- On some occasions, it may be necessary for the design consultant to have the RPEQ re-certify the changes to the worksplans.
  - Saying "**no**" to the design consultant's client.
- There will be times when it is necessary for the design consultant to say "no" to their client (the developer or principle contractor on a project) when the developer or principle contractor requests or proposes something that does not comply with Energex's Standards or Policy. In the first instance these matters should be resolved by the design consultant who in turn may need to refer these matters to Energex for the appropriate response.



### Road Reserve

- The design consultant is responsible for liaising with the developer and the surveyor to ensure that all new assets are located in road reserve where applicable.
   Eg: Transformers, Ring Main Units, LV pillar cutouts for narrow laneways, LV Service Pits, overhead mains poles, streetlight poles, etc.
- The design consultant is responsible for providing Energex with a copy of the survey plans, signed by the surveyor, showing road reserve for all the applicable assets.

### **Wayleaves**

- The design consultant is responsible for organising all the necessary documentation associated with wayleaves.
- Wayleaves are applicable only for overhead assets up to and including 11kV. They are not applicable to underground assets.
- Energex must have a signed copy of the wayleave form (electronic copy) prior to issuing the Letter of Offer and Subdivision Electricity Supply Agreement.
- Energex may, in some circumstances, require an easement in lieu of a wayleave.



### **Easements**

- The design consultant is responsible for organising all the necessary documentation associated
  with any required easements and the easements are prepared at the developer's expense. The
  design consultant liaises with the developer's surveyor and the developer's solicitor for survey
  plans and easement documentation.
- The design consultant is responsible for ensuring that the Registration Confirmation Statement for any easements is provided to Energex as part of the tasks for closure of the project and refund of the developer's bond.

#### Note 1

All easement documentation (The survey plan signed by the surveyor and the Form 9) has to be submitted to Energex before the Certificate of Supply will be issued or a HV / LV switching application to energise the works. The easement does not have to be registered however Energex must have this documentation which confirms the developer's intent to provide an easement to Energex.



# Design Consultant - Customer Complaints / Ministerial's / RTI requests.

- Customer complaints regarding contestable work projects will be forwarded to the design consultant for investigation. The consultant has to investigate and respond to Energex in a timely manner, usually within a maximum of three working days. The consultant will be in contact with the electrical contractor during this investigation.
- "Ministerials" require an immediate investigation and immediate answer, usually within four working hours. The design consultant and the electrical contractor have to investigate and respond to <u>immediately</u> in writing to Energex.
- Energex is a government owned corporation and subject to the Right to Information Legislation and the Public Records Act and Regulations. All correspondence, documents, worksplans, photographs, etc received from and sent to the design consultant are retained on file and are subject to this legislation.



# Design Consultant - Developer's Terms of Contract.

- Design consultants are required to ensure full compliance with the Energex WCS's, irrespective of the terms of the contract with their client. There has been occasions where the design consultant has been under the mistaken impression that they only have to undertake the work as stated in the contract with their client. The project brief, formal contract, scope of works between the client and the consultant may be as simple as "produce a design". These contracts do not exempt the design consultant from their responsibility to action compliance with all of the requirements of the WCS's.
- On large roadworks projects involving road lighting, the design consultant is the party responsible
  for liaising with Energex, not the principle contractor. There have been many road lighting projects
  that have suffered problems, including project delays, the root cause being that the principle
  contractor states that they (the principle contractor) must liaise with Energex regarding all design
  works, not the accredited design consultant.
- There have been a number of occasions where the design consultant has ceased work on a
  project as they have "exceeded their funding budget". This is an internal matter for the consultant
  and does not exempt the consultant from compliance with all of the requirements of the WCS's.
- On occasions, the developer may require the design consultant to enter into a confidentiality
  agreement and not to disclose any information about the project. Design consultants need to
  advise the developer (their client) that they (consultants) do need to discuss the project in detail
  with Energex as they (consultants) are designing Energex network assets.



# Design Consultant - Application Fees

- The design consultant is the party responsible for paying the Design Application Fee (DAF) for the design submission package. Upon receipt of the design submission package, Energex will generate a Tax Invoice and send same to the consultant for payment of the application fee.
- The design application fees are calculated by:
  - > The number of lots being created in a subdivision project.
  - > The number of streetlights in a Rate 2 streetlight project.
  - The grading level of the design consultant.
- Energex may charge additional application fees should there be additional planning work associated with the project. Eg: Planning work associated with a complex master planned development of multiple stages, planning work associated with transmission network assets.
- Any fees associated with design resubmissions will be invoiced by Energex to the design consultant.



# Developer - Fees and Charges

- As per the terms of Subdivision Electricity Supply Agreement or the Public Lighting Supply Agreement with Energex, the developer is responsible for paying:
  - All network switching costs.
  - Final product audit costs.
  - ➤ HV Live Line activity costs (if applicable).
  - Generator costs (if applicable).
  - Cable ID and Spike costs (if applicable).
  - Level 2 Cables Test costs (if applicable).
- The developer is responsible for providing the refundable security guarantee bond for a project.
- If required, and in accordance with the terms of the supply agreement, Energex may require additional switching fees or field audit fees. If so, the requirement for additional fees will be notified to the design consultant prior to Energex invoicing the developer.



# Design Consultant - Mentoring / General Items

- The Energex Contestable Works Team will provide mentoring for newly qualified design consultants for the first few contestable work projects. Subject to staff resource availability this may include accompanying the design consultant on a site visit.
- Approximately 30% to 35% of the consultant's time on a project is actually doing the detailed design work. The remaining time is "all of the other project stuff" done by the design consultant and that is the sole responsibility of the design consultant.
- Design consultants do not normally have to produce a formal "As Constructed" set of worksplans, unless there are significant red pen mark-ups, by the electrical contractor, on the As Issued for Construction worksplans.



### Further Information.

Thankyou for reading this Information Pack.

Should you have any questions on any of the items contained within this information pack, please send an email to <a href="mailto:asprating@energyq.com.au">asprating@energyq.com.au</a>

A member of the evaluation team will contact your company to answer your questions.





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