

## Electrical Commissioning & HV Specialist Services

NexGen Electricool Pty Ltd is dedicated to delivering excellence in electrical engineering commissioning, project management, and high voltage (HV) specialist services. Our certified expertise encompasses high-voltage infrastructure and control systems, ensuring that all projects are executed safely, efficiently, and in strict accordance with client objectives and prevailing industry standards.

### 🔑 Core Services

- **Testing & Commissioning** of primary and secondary equipment (protection relays, AC/DC systems, switchgear, transformers, motors, generators, SCADA).
- **HV Cable Works:** Certified splicing (up to 33kV), inline and transition joints, indoor/outdoor terminations, and enclosure conversions.
- **Protection Systems:** Programming, relay testing, scheme validation (ATS/MTS, BUSTIE), differential stability, and binary signal transfer.
- **Project Management:** End-to-end delivery, stakeholder coordination, compliance assurance, and budget monitoring.
- **Technical Advisory:** Professional guidance to internal departments, external contractors, and clients.

### ⚙️ Specialist Capabilities

- HV/LV boundary isolations and permit compliance
- HV substation pre-commissioning and energisation (132kV/22kV/11kV/400V)
- VLF cable testing, CT/VT injection, and transformer primary/secondary injection
- Power Transformer commissioning and maintenance testing
- Compliance with Local Government engineering policies and standards

### ✅ Value Proposition

- **Reliability:** Safe, compliant, and precise commissioning outcomes
- **Expertise:** Certified HV cable and protection system specialist
- **Efficiency:** Streamlined workflows and cost-effective project delivery
- **Collaboration:** Robust stakeholder engagement and technical advisory support
- **Integrity:** Commitment to maintaining contemporary work standards and long-term asset performance

## Project Experience – Tier 1 Clients (Australia, Fiji & PNG)

With over 18 years of experience, I have contributed to the successful delivery of major Tier 1 infrastructure, mining, and **Solar Energy** projects across Australia and Papua New Guinea. My portfolio demonstrates expertise in commissioning, HV systems, and stakeholder collaboration on complex, high-value projects.

### 🔑 Key Projects – Recent order

- **New England Solar Farm - BESS STAGE 2 (100MW) is currently under commissioning** (secondary contractor under sub-contractor company Integral Power Pty Ltd)
- **Various brownfield Solar Farm routine HV maintenance and testing** (secondary contractor under sub-contractor company ESB Power Pty Ltd)
- **Bitcoin mining Solar Farm, Lumos Digital Mining (5MW) – commissioned 2022** (secondary contractor under sub-contractor company Integral Power Pty Ltd)
- **Sunraysia Solar farm (255MW) – commissioned 2020** (secondary contractor under sub-contractor company Integral Power)
- **Cross River Rail – Woolloongabba Station (QLD)**  
Underground station development is transforming Brisbane's transport network, providing high-frequency services and improved access to The Gabba stadium.
- **Ok Tedi Crusher Replacement Project (PNG)**  
EPCM contract for the replacement of one of the world's largest gyratory crushers, including engineering design, procurement, and commissioning in a remote mining environment.
- **Ichthys LNG Project (NT)**  
One of the world's most significant energy projects, incorporating subsea, offshore, pipeline, and onshore facilities. Produces 9.3 million tonnes of LNG annually, with a 40-year operational life.
- **Moreton Bay Rail Link (QLD)**  
Major rail infrastructure project connecting Brisbane's northern suburbs, enhancing commuter access and regional growth.
- **QCLNG Project (QLD)**  
Large-scale LNG development by Shell QGC, involving gas field development, pipelines, and processing facilities.
- **APLNG Project (QLD)**  
Origin Energy's LNG project, including upstream gas fields, pipelines, and downstream processing facilities.
- **OneSteel / Arrium Projects (National)**  
Heavy industrial and steel manufacturing projects supporting Australia's resources and construction sectors.
- **EPC Fiji Ltd (Pacific)**  
Regional EPC projects delivering engineering, procurement, and construction services across the Pacific

✔ Value Demonstrated

- Demonstrated capability in delivering Tier 1 projects across diverse environments, including urban infrastructure, mining, LNG, heavy industry, and solar farms.
- Extensive hands-on expertise in HV commissioning, cable works, and protection systems for large-scale assets.
- Proven track record of collaboration with major clients and stakeholders, ensuring compliance, safety, and operational readiness.



## Client Testimonials

### ESB Power Pty Ltd

“NexGen Electricool Pty Ltd has consistently demonstrated exceptional technical expertise and professionalism in the delivery of high voltage maintenance and testing services for our solar farm projects. Their commitment to safety, compliance, and efficient project execution has made them a trusted partner for ESB Power. We highly recommend their services to any organization seeking reliable and knowledgeable electrical specialists.”

### Integral Power Pty Ltd

“We have engaged NexGen Electricool Pty Ltd on several major commissioning projects, including the New England Solar Farm BESS Stage 2. Their team’s depth of knowledge, attention to detail, and proactive stakeholder engagement have been instrumental in the successful and timely completion of our projects. Integral Power Pty Ltd values the integrity and technical excellence that NexGen Electricool brings to every assignment.”

## Contact

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