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| **Cluster** | **Climate Change, Energy, the Environment and Water** |
| **Agency** | **Energy Corporation of NSW** |
| **Division/Branch/Unit** | **Technical Advisory Services** |
| **Role number** | **Various (TBA)** |
| **Classification/Grade/Band** | **EO15** |
| **Senior executive work level standards** | **Work Contribution Stream: Professional/Technical Specialist** |
| **ANZSCO Code** | **139999** |
| **PCAT Code** | **2119192** |
| **Date of Approval** | **September 2024** |
| **Agency Website** | **https://www.energyco.nsw.gov.au/** |

**Who we are**

The Energy Corporation of NSW (EnergyCo) is a statutory corporation established under the Energy and Utilities Administration Act 1987 and governed by its Board, appointed by the Minister for Energy. EnergyCo is a Staff Agency employing all EnergyCo staff and is an agency related to the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

EnergyCo plays a pivotal role in the NSW Government’s Electricity Infrastructure Roadmap, which aims to transform the state’s electricity system into one that is cheap, clean, and reliable. As Infrastructure Planner under the Electricity Infrastructure Investment Act 2020, EnergyCo is responsible for leading the delivery of the State’s first five Renewable Energy Zones (REZs) and the first two priority transmission infrastructure projects (PTIPs), which are located in the Central-West Orana, New England, South West, Hunter-Central Coast, and Illawarra regions. We work closely with communities, investors, and industry to investigate, plan, recommend and coordinate generation, storage and network infrastructure projects

Primary purpose of the role

The Principal Engineer, Power Systems is a specialist role that makes creative, technical and commercial contributions and manages a team of power system analysis engineers to provide guidance and support to ensure successful execution of power system modelling and analysis tasks.

This specialist role is responsible for overseeing external consultancy relationships by defining the power system analysis scope, conducting peer reviews and ensuring alignment with NSW infrastructure roadmap and Network Infrastructure Strategy. Collaboration with key stakeholders, such as AEMO and network service providers, is crucial in joint planning efforts to integrate REZ infrastructure effectively and deliver a secure and reliability energy supply.

# Key accountabilities

* Manage a team of power system analysis engineers to provide specialist advice, guidance, support, and mentorship to ensure successful execution of modeling and analysis tasks.
* Delegate tasks effectively, monitor progress and quality of work, and provide constructive feedback to optimise team and consultant performance.
* Define the scope of power system analysis projects when engaging external consultants, ensuring alignment with organisational goals and objectives.
* Effectively communicate expectations, provide clear instructions, and maintain regular communication with external consultants to ensure successful project outcomes.
* Engage in joint planning efforts with key stakeholders, such as AEMO and network service providers, to integrate REZ infrastructure effectively within the broader energy landscape.
* Provide expert recommendations and specialist advice to the Consumer Trustee on matters related to REZ infrastructure, taking into account technical feasibility, cost-effectiveness, and potential benefits to electricity consumers.
* Perform technical due diligence to support the REZ competitive process for generation and contestable transmission, as well as competitive processes conducted by the Consumer Trustee for the Electricity Infrastructure.
* Maintain strong links with technical, research and professional bodies to ensure the Corporation is at the forefront of technical and scientific expertise with regard to renewable energy infrastructure.

Key challenges

* Developing and implementing solutions that are strategically aligned to REZ program objectives, technically robust and innovative to advance the integration of renewable energy technologies, ensure system safety and strength, and optimise investment outcomes.
* Collaborating with stakeholders to support optimal REZ infrastructure solutions and negotiating credible technical outcomes in major REZ network infrastructure project procurements.
* Managing a diverse team of talents and resources including contractors and consultants to deliver coordinated and effective technical solutions.

Key relationships

| Who | Why |
| --- | --- |
| **Government** |  |
| Key stakeholders | * Provide timely, expert briefings on new and emerging issues, approaches and preferred outcomes and report on the performance of government policies and plans. * Establish effective working relationships with staff across government agencies. |
| **Internal** |  |
| Director Power Systems, EnCo Executives | * Provide technical advice and seek direction regarding priorities to strengthen the outcomes and performance of REZ infrastructure programs and full capital works portfolio * Provide expert technical advice to influence decisions, create-buy in, share accountability and resolve conflict * Advise on technical and delivery risks and resourcing issues * Advise on emerging and contentious issues and solutions |
| Staff and work teams | * Provide leadership, expertise and guidance * Formulate operational plans and contribute to strategic plans * Inspire and motivate team, provide leadership and clear direction and build performance * Provide information and advice about organisational objectives, policies and procedures * Drive effective and efficient service delivery and stakeholder engagement |
| **External** |  |
| Consumer Trustee | * Liaise with the Consumer Trustee on the development of REZ Infrastructure Plans * Prepare recommendations on REZ infrastructure |
| Network companies, REZ participants | * Implement robust processes to support effective and efficient delivery of the Government’s REZ infrastructure programs * Work closely with and sustain strong, productive and proven relationships with national, state, established network providers and suppliers; emerging industry players and other private sector entities |
| Communities, Local Government, NSW government agencies; Australian Government agencies | * Manage effective relationships and networks to solicit support and deliver EnCo initiatives * Represent EnCo for resolution of emerging program issues |
| Peak industry bodies, academia key industry stakeholders | * Build confidence in the technical expertise and capabilities EnCO |

# Role dimensions

## Decision making

* The Principal Engineer, Power Systems works towards making informed decisions on power system methodologies, modelling approaches and tools to optimize the integration of REZ infrastructure.
* As a specialist, this role is a business critical advisor to the Director Power Systems and Executive team of EnCO rely on recommendations made by this role.
* Provide advice relating to project risks by ensuring compliance with regulations and industry standards and conducting technical due diligence and making recommendations to mitigate risks.

## Reporting line

Director, Power Systems

## Direct reports

2-3 direct reports

## Budget/Expenditure

TBA

Key knowledge and experience

* Postgraduate qualifications in electrical engineering or equivalent relevant experience
* Extensive experience in power system planning and analysis.
* Experience in technical advisory leadership roles with a keen understanding of policy and commercial factors impacting heavy infrastructure integration.
* Extensive knowledge of technical complexities of integrating renewable energy within established electricity networks

# Capabilities for the role

The [NSW public sector capability framework](https://www.psc.nsw.gov.au/workforce-management/capability-framework/the-capability-framework) describes the capabilities (knowledge, skills and abilities) needed to perform a role. There are four main groups of capabilities: personal attributes, relationships, results and business enablers, with a fifth people management group of capabilities for roles with managerial responsibilities. These groups, combined with capabilities drawn from occupation-specific capability sets where relevant, work together to provide an understanding of the capabilities needed for the role.

The capabilities are separated into **focus capabilities** and **complementary capabilities**.

# Focus capabilities

*Focus capabilities* are the capabilities considered the most important for effective performance of the role. These capabilities will be assessed at recruitment.

The focus capabilities for this role are shown below with a brief explanation of what each capability covers and the indicators describing the types of behaviours expected at each level.

| **Capability group/sets** | **Capability name** |  | **Behavioural indicators** | **Level** |
| --- | --- | --- | --- | --- |
| A yellow sign with a person icon  Description automatically generated | **Display Resilience and Courage**  Be open and honest, prepared to express your views, and willing to accept and commit to change | | Create a culture that encourages and supports openness, persistence and genuine debate around critical issues  Provide clear exposition and argument for agreed positions while remaining open to valid suggestions for change  Raise critical issues and make tough decisions  Respond to significant, complex and novel challenges with a high level of resilience and persistence  Consistently use a range of strategies to remain composed and calm and act as a stabilising influence even in the most challenging situations | Highly Advanced |
| A yellow sign with a person icon  Description automatically generated | **Act with Integrity**  Be ethical and professional, and uphold and promote the public sector values | | Model the highest standards of ethical and professional behaviour and reinforce their use  Represent the organisation in an honest, ethical and professional way and set an example for others to follow  Promote a culture of integrity and professionalism within the organisation and in dealings external to government  Monitor ethical practices, standards and systems and reinforce their use  Act promptly on reported breaches of legislation, policies and guidelines | Advanced |
| A black and white symbol with arrows  Description automatically generated with medium confidence | **Communicate Effectively**  Communicate clearly, actively listen to others, and respond with understanding and respect | | Present with credibility, engage diverse audiences and test levels of understanding  Translate technical and complex information clearly and concisely for diverse audiences  Create opportunities for others to contribute to discussion and debate  Contribute to and promote information sharing across the organisation  Manage complex communications that involve understanding and responding to multiple and divergent viewpoints  Explore creative ways to engage diverse audiences and communicate information  Adjust style and approach to optimise outcomes  Write fluently and persuasively in plain English and in a range of styles and formats | Advanced |
| A black and white symbol with arrows  Description automatically generated with medium confidence | **Work Collaboratively**  Collaborate with others and value their contribution | | Establish a culture and supporting systems that facilitate information sharing, communication and learning across the sector  Publicly celebrate the successful outcomes of collaboration  Seek out and facilitate opportunities to engage and collaborate with stakeholders to develop solutions across the organisation, government and other jurisdictions  Identify and overcome barriers to collaboration with internal and external stakeholders | Highly Advanced |
| A black and white symbol with arrows  Description automatically generated with medium confidence | **Influence and Negotiate**  Gain consensus and commitment from others, and resolve issues and conflicts | | Influence others with a fair and considered approach and present persuasive counter-arguments  Work towards mutually beneficial ‘win-win’ outcomes  Show sensitivity and understanding in resolving acute and complex conflicts and differences  Identify key stakeholders and gain their support in advance  Establish a clear negotiation position based on research, a firm grasp of key issues, likely arguments, points of difference and areas for compromise  Anticipate and minimise conflict within the organisation and with external stakeholders | Advanced |
| A check mark in a square  Description automatically generated | **Deliver Results**  Achieve results through the efficient use of resources and a commitment to quality outcomes | | Seek and apply the expertise of key individuals to achieve organisational outcomes  Drive a culture of achievement and acknowledge input from others  Determine how outcomes will be measured and guide others on evaluation methods  Investigate and create opportunities to enhance the achievement of organisational objectives  Make sure others understand that on-time and on-budget results are required and how overall success is defined  Control business unit output to ensure government outcomes are achieved within budgets  Progress organisational priorities and ensure that resources are acquired and used effectively | Advanced |
| A check mark in a square  Description automatically generated | **Think and Solve Problems**  Think, analyse and consider the broader context to develop practical solutions | | Establish and promote a culture that encourages innovation and initiative and emphasises the value of continuous improvement  Engage in high-level critical analysis of a wide range of complex information and formulate effective responses to critical policy issues  Identify and evaluate organisation-wide implications when considering proposed solutions to issues  Apply lateral thinking and develop innovative solutions that have a long-lasting, organisation-wide impact  Ensure effective governance systems are in place to guarantee quality analysis, research and reform | Highly Advanced |
| A purple square with black gears  Description automatically generated | **Technology**  Understand and use available technologies to maximise efficiencies and effectiveness | | Champion the use of innovative technologies in the workplace  Actively manage risk to ensure compliance with cyber security and acceptable use of technology policies  Keep up to date with emerging technologies and technology trends to understand how their application can support business outcomes  Seek advice from appropriate subject-matter experts on using technologies to achieve business strategies and outcomes  Actively manage risk of breaches to appropriate records, information and knowledge management systems, protocols and policies | Advanced |
| A blue and black sign with people  Description automatically generated | **Manage and Develop People**  Engage and motivate staff, and develop capability and potential in others | | Refine roles and responsibilities over time to achieve better business outcomes  Recognise talent, develop team capability and undertake succession planning  Coach and mentor staff and encourage professional development and continuous learning  Prioritise addressing and resolving team and individual performance issues and ensure that this approach is cascaded throughout the organisation  Implement performance development frameworks to align workforce capability with the organisation’s current and future priorities and objectives | Advanced |
| A blue and black sign with people  Description automatically generated | **Optimise Business Outcomes**  Manage people and resources effectively to achieve public value | | Engage in strategic and operational workforce planning that effectively uses organisational resources to achieve business goals  Resolve any barriers to recruiting and retaining people of diverse cultures, backgrounds and experiences  Encourage team members to take calculated risks to support innovation and improvement  Align systems and processes to encourage improved performance and outcomes | Advanced |

# Complementary capabilities

*Complementary capabilities* are also identified from the Capability Framework and relevant occupation-specific capability sets. They are important to identifying performance required for the role and development opportunities.

Note: capabilities listed as ‘not essential’ for this role are not relevant for recruitment purposes however may be relevant for future career development.

| **Capability group/sets** | **Capability name** |  | **Description** | **Level** |
| --- | --- | --- | --- | --- |
| A yellow sign with a person icon  Description automatically generated | Manage Self | | Show drive and motivation, an ability to self-reflect and a commitment to learning | Advanced |
| A yellow sign with a person icon  Description automatically generated | Value Diversity and Inclusion | | Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives | Adept |
| A black and white symbol with arrows  Description automatically generated with medium confidence | Commit to Customer Service | | Provide customer-focused services in line with public sector and organisational objectives | Adept |
| A check mark in a square  Description automatically generated | Plan and Prioritise | | Plan to achieve priority outcomes and respond flexibly to changing circumstances | Advanced |
| A check mark in a square  Description automatically generated | Demonstrate Accountability | | Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines | Advanced |
| A purple square with black gears  Description automatically generated | Finance | | Understand and apply financial processes to achieve value for money and minimise financial risk | Adept |
| A purple square with black gears  Description automatically generated | Project Management | | Understand and apply effective planning, coordination and control methods | Advanced |
| A purple square with black gears  Description automatically generated | Procurement and Contract Management | | Understand and apply procurement processes to ensure effective purchasing and contract performance | Adept |
| A blue and black sign with people  Description automatically generated | Inspire Direction and Purpose | | Communicate goals, priorities and vision, and recognise achievements | Adept |
| A blue and black sign with people  Description automatically generated | Manage Reform and Change | | Support, promote and champion change, and assist others to engage with change | Adept |