# Data Engineer

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| **Position title:** | Data engineer |
| **Reports to:** | Team Lead Data Engineering |
| **Business unit:** | Electricity Networks |
| **Employment category:** | Contract (Employment Agreement) |

## About United Energy

As an electricity distribution company, we provide safe, reliable and affordable power to 700,000 Victorians in Melbourne's east and south eastern suburbs and the Mornington Peninsula using our network of poles, wires and infrastructure to bring power to homes and businesses across our service territory — that's more than 13,000 kilometres of wires and 200,000 poles.

But we do so much more than manage poles and wires. We're also the gateway to a clean energy future, dedicated to finding solutions and harnessing new technology to benefit our customers, communities and the environment. This includes industry leading projects in community batteries, demand management, smart charging for electric vehicles (EVs) and microgrids.

And as more customers choose solar, batteries, EVs and smart appliances — the electricity system is becoming increasingly complex, and so too is the level of innovation required to manage it. That's where you come in.

## About the Electricity Networks team you'll be part of

The Electricity Networks team is responsible for the efficient and effective management of our electricity distribution networks and assets. They do this through developing engineering standards, asset strategies and long-term views of the network, network planning, investing in future network technology, asset maintenance planning, network safety and compliance management and bushfire mitigation strategies.

## Our core values

Live safely

Improve our business

Be customer and community minded

Be the best you can be

Succeed together

# Purpose of the position

We are seeking a Data Engineer to design, build, and maintain reliable, scalable ETL data pipelines that support analytics, reporting, and operational use cases for Smart Meter Applications across Citipower, Powercor and United Energy. This role is primarily focused on on-premise environments, with opportunities to contribute to AWS modernisation initiatives and influence future data platform direction.

The three main responsibilities of the role are:

- Design, develop, and maintain ETL processes and data pipelines using Pentaho, Oracle and PostgreSQL databases
- Design and develop analytical use cases, applications and analytic tools to improve network reliability, performance, and operational management
- Provide cross division operational support for day-to-day needs

# Your key responsibilities

**Develop and design ETL's and data pipelines**

- Design, develop, and maintain scalable and fault-tolerant ETL and data pipelines (batch & stream) to ingest, transform, and load data into analytical data stores.
- Maintain and enhance business and analytical data models to ensure ongoing support of analytics and reporting use cases
- Design and implement automated data quality checks, data drift detection, and anomaly monitoring to ensure high-integrity data feeding analytics and operational reporting
- Serve as the go-to expert for data-related incidents (pipeline failures, data latency, performance issues) and coordinate resolution with engineering, operations, and IT security teams.
- Ensure data quality, accuracy, and performance across production systems


**Design and Develop use cases, applications and analytic tools:**

- Work closely with SMEs and technical specialists to gather and clarify data requirements
- Contribute to the high-level design of data solutions, ensuring use cases meet business, security, and technical requirements
- Develop and productionise data-driven use cases, ensuring smooth transition to BAU support
- Support delivery of data outputs for analytics, dashboards, and reports, where required
- Ensure delivered use cases are monitored, supported, and continue to provide business value


**Provide Cross Division Operational Support for day-to-day needs.**

- Provide subject matter expert guidance (database level) across ETL, data pipelines, metering, asset and network automation systems
- Collaborate with Data Analytics, Data Science and business teams to translate requirements into scalable and supportable data solutions
- Translate Smart Grid and operational data strategies into implementable data solutions, working across multiple business areas
- Work collaboratively with Information Technology (IT) teams to design secure, supportable, and compliant data solutions, adhering to organisational security and governance standards

# What you'll bring to the business

## Education / Qualifications:

- Tertiary qualifications in Engineer or IT/Computer Science or business-related discipline (preferred)

## Knowledge:

- Strong working knowledge of SQL and relational databases, particularly PostgreSQL and Oracle
- Experience with one or more ETL tools such as Pentaho, Oracle Data Integrator (ODI), Informatica or similar.
- Experience with Python or similar scripting language for data processing and automation
- Understanding of GIS systems (e.g. Smallworld) and asset management systems (e.g. SAP) is desirable
- Working knowledge of BI tools and how data is consumed for reporting and dashboards
- Understanding of production-quality code, including supportability, debuggability, and maintainability
- Knowledge of application automation, release lifecycle processes, and source code control methodologies
- Strong data analysis and problem-solving skills, with high accuracy and attention to detail
- Ability to communicate complex technical concepts clearly to both technical and non-technical audiences
- Well-developed verbal, written, and interpersonal communication skills
- Innovative and solution-oriented mindset, with a proactive, can-do approach

## Experience:

- Extensive experience in data analysis and data modelling, including extraction of data from core systems, data manipulation, and end-to-end solution design
- Extensive experience in SQL and PL/SQL, including relational database development, query optimisation, and support of analytical data models
- Demonstrated experience in collaboratively working on a central code repository with an appropriate VCS, e.g., Git, following peer review/pull request processes
- Previous experience in the Utilities sector preferred not mandatory

# The skills and competencies you'll have

## 'Thought' competencies

1. Manages complexity: Making sense of complex, high quantity, and sometimes contradictory information to effectively solve problems

2. Strategic mindset: Seeing ahead to future possibilities and translating them into breakthrough strategies

3. Customer focus: Building strong customer relationships and delivering customer-centric solutions

## 'Result' competencies

1. Optimises work processes: Knowing the most effective and efficient processes to get things done, with a focus on continuous improvement

2. Action oriented: Taking on new opportunities and tough challenges with a sense of urgency, high energy, and enthusiasm

3. Plans and aligns: Planning and prioritising work to meet commitments aligned with organisational goals

## 'People' competencies

1. Communicates effectively: Developing and delivering multi-mode communications that convey a clear understanding of the unique needs of different audiences

2. Builds effective teams: Building strong-identity teams that apply their diverse skills and perspectives to achieve common goals

3. Builds networks: Effectively building formal and informal relationship networks inside and outside the organisation

## 'Self' competencies

1. Instils trust: Gaining the confidence and trust of others through honesty, integrity, and authenticity

2. Manages ambiguity: Operating effectively, even when things are not certain or the way forward is not clear

3. Situational adaptability: Adapting approach and demeanour in real time to match the shifting demands of different situations

# Other relevant information

- Availability duty may be required
- Travel to other work locations / sites may be required