

JOB DESCRIPTION

Position Title:	Graduate Geothermal Plant Engineer – Ngāwhā
Location:	Ngāwhā Geothermal Plant
Reports To:	Assistant Plant Manager
Direct Reports:	NIL
Financial Responsibility:	As per delegated authority
External Relationships:	Consultants; Local Bodies; Government Agencies; Contractors

PURPOSE

To assist with the engineering support and technical development of geothermal binary plant operations, ensuring effective and safe asset operation, optimal plant performance, and compliance with environmental consents and regulatory requirements.

OBJECTIVES

These are the overall objectives (high level) for the position – they should feed into the divisional / organisational objectives

Number	Description	Weighting
1.	Assist with maintaining a Safety Culture in the Geothermal Generation division through compliance, monitoring, leading by example and mitigating safety risks	50%
2.	Assist with delivery of geothermal binary plant asset management that maximises plant utilisation, optimises performance and minimises costs	50%

DUTIES

These are the day-to-day tasks that make up the individual's role

Area	Activities
Technical engineering support	
Geothermal binary plant performance analysis	<ul style="list-style-type: none"> Assist with analysis of binary plant performance, thermal efficiency and capacity optimization Conduct theoretical assessments and real measurements of geothermal fluid temperatures, flow rates, and binary fluid conditions

	<ul style="list-style-type: none"> • Suggest possible avenues for performance improvements and thermal efficiency enhancements • Support ongoing development of maintenance strategies to maximise binary plant availability
<i>Binary plant design and modifications</i>	<ul style="list-style-type: none"> • Prepare design concepts and options for binary plant improvements and modifications • Carry out necessary investigations, surveys and analyses for project implementation relating to geothermal and binary fluid systems • Provide technical data for preparation of cost benefit studies, budget projections, and business cases • Assist with preparation of preliminary and detailed designs for binary plant enhancements • Provide documentation necessary for project delivery
Operational Support	
<i>Binary plant operations assistance</i>	<ul style="list-style-type: none"> • Support efficient and safe operation of the geothermal binary plant to maximise output and availability • Assist with binary plant monitoring and SCADA system operation support • Help identify and develop enhanced operating procedures for geothermal and binary fluid systems • Support development and execution of maintenance work plans • Assist with binary plant maintenance activities to achieve operational goals and long-term asset protection • Involvement in plant breakdowns, plant trips and failure mode analysis
<i>Technical documentation</i>	<ul style="list-style-type: none"> • Assist in maintaining and updating technical drawings and engineering documentation for binary plant systems • Support preparation of technical reports and operational procedures for geothermal operations • Contribute to binary plant performance reporting and analysis
Process Safety and Compliance	
<i>Binary Plant Operations Assistance</i>	<ul style="list-style-type: none"> • Support efficient and safe operation of the geothermal binary plant to maximise output and availability • Assist with binary plant monitoring and SCADA system operation support • Help identify and develop enhanced operating procedures for geothermal and binary fluid systems • Support development and execution of maintenance work plans • Assist with binary plant maintenance activities to achieve operational goals and long-term asset protection • Involvement in plant breakdowns, plant trips and failure mode analysis
<i>Technical documentation</i>	<ul style="list-style-type: none"> • Assist in maintaining and updating technical drawings and engineering documentation for binary plant systems • Support preparation of technical reports and operational procedures for geothermal operations • Contribute to binary plant performance reporting and analysis
Process Safety and Compliance	

<i>Major Hazard Facilities Compliance</i>	<ul style="list-style-type: none"> Assist and engage with ongoing requirements of the Health and Safety at Work (Major Hazard Facilities) Regulations 2016 Support development and maintenance of the existing safety case for geothermal binary generation operations Work with the geothermal generation team to ensure unique process safety requirements are developed and maintained
<i>Process Safety Management</i>	<ul style="list-style-type: none"> Participate in Process Safety Management activities and exercises including: <ul style="list-style-type: none"> Hazard and Operability Studies (HAZOP) Layer of Protection Analysis (LOPA) Consequence Analysis studies Management of Change (MoC) reviews Emergency Response Plan reviews and drills
<i>Environmental and Regulatory Compliance</i>	
	<ul style="list-style-type: none"> Assist with environmental monitoring and consent compliance Support management of legislative requirements, resource consents, codes and regulations Contribute to environmental reporting and regulatory submissions
<i>Other Duties</i>	Carry out any other duties and responsibilities as may be requested from time to time which are generally consistent with the objectives of the position

EXPECTED OUTCOMES

Monitored bi-annually through the Performance Development (PDP) Process

ADDITIONAL RESPONSIBILITIES

Asset Management	Level 5 of the Responsibility Matrix (if applicable)
Health and Safety	Level 5 of the Responsibility Matrix
Risk Management	Level 5 of the Responsibility Matrix

QUALIFICATIONS AND EXPERIENCE

Knowledge, Skills and Abilities:

Education	Essen-tial	Pref-erred	Experience	Essen-tial	Pref-erred
Bachelor's degree in electrical, Mechanical, or Chemical /Process Engineering	X		Experience in mechanical and/or electrical systems in heavy industry		X
Full current NZ driver's licence	X		Industrial automation and SCADA systems experience		X
			Ability to understand engineering drawings and principles	X	
			Proficient in Microsoft Office suite	X	
			Proficient in CAD		X

			Focus on safety and quality	X	
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Personal Attributes:

Accountability

- Holds self and others accountable for required work output and standards
- Ensures that effective controls and contingency plans are in place
- Projects/tasks within area of own accountability are completed on time and within budget

Accuracy

- Works with a high level of precision and attention to detail
- Performs duties with exactness and holds self to rigorous standards
- Is careful to double-check work and avoid errors and mistakes

Analytical Skills

- Is very methodical when conducting analyses
- Efficiently identifies reliable data input sources
- Analyses data/information quickly and without error
- Draws meaningful conclusions from data analyses
- Excels in extracting critical information from raw data
- Structures arguments lucidly and logically

Communication

- Expresses views in a fluent, clear, logical manner which captures interest and gains support
- Speaks with enthusiasm, authority, and conviction
- Is an effective listener
- Shows tact and diplomacy in dealing with others
- Effectively adapts own communication style to suit different audiences
- Delivers information effectively in a variety of written formats including reports, letters, memo's and emails

Cooperation / Collaboration

- Willingly accepts assignments from Team Leader
- Volunteers for work
- Contributes expected share in team context

Judgement

- Has a good sense of judgement and good intuition
- Avoids snap judgements and rash decision-making
- Thinks before speaking or taking action
- Draws logical conclusions

Process Management

- Good at figuring out processes to get things done
- Understands how to separate and combine tasks for efficient workflow
- Can simplify complex processes
- Regularly reviews processes to ensure minimum resources are used while maximum efficiency is maintained

At Top Energy's discretion, this Job Description may be amended in consultation with the position holder

Manager's Signature	Position Holder's Signature
Manager's Name (please print)	Position Holder's Name (please print)
Date	Date

Responsibility Matrix

Asset Management

Level	Level Title	Job Title	Responsibility
1	Business Leader	CEO	<ul style="list-style-type: none"> • Able to direct the work of others in all roles, particularly in policy development, analysis of strategic requirements, asset management capability development, risk management and performance improvement. • Proactive in shaping the Asset Management culture and championing Asset Management principles and best practice. • Must have sufficient understanding of Asset Management principles and practice to evaluate the quality of the work being done.
2	Head of Division	Divisional GM	<ul style="list-style-type: none"> • Able to direct others in asset management planning, the implementation of asset management plans, risk management and performance improvement and asset information management. • Able to guide and show others how to undertake the full range of asset management activities. • Able to undertake independently the analysis and development of asset policies and the investigation of incidents and communication of lessons learned. • Able to lead and evaluate compliance reviews and audits. • Contributes to the specification, selection, and integration of asset management information systems.
3	3 rd Tier Management	Managers (Report to GM)	<ul style="list-style-type: none"> • Able to independently undertake activities in asset management planning, the implementation of asset management plans, risk management and performance improvement and asset information management. • Able to contribute to policy development, strategy development, asset management capability development, risk management and performance improvement in the area of asset management for the business
4	4 th Tier Management	Supervisor / Foreman (Report to a Manager)	<ul style="list-style-type: none"> • Able to guide and show team members how to undertake implementation of asset management plans, asset management capability development, monitoring and reviewing progress and performance and asset information management as it pertains to their area of the business. • Able to undertake asset management planning, asset management capability development, risk management and

			<p>performance improvement as it relates to their area of the business.</p> <ul style="list-style-type: none"> • Contribute to asset information management as it pertains to their area of the business
5	General	All other staff	<ul style="list-style-type: none"> • Understands the contribution each role makes to the achievement of the asset management strategy and objectives. • Understands the interdependencies between asset management roles. • Undertake activities involved in the implementation of asset management plans and risk management and performance improvement as directed by manager as it pertains to their area of the business

Risk Management

Level	Level Title	Job Title	Responsibility
1	Business Leader	CEO	<ul style="list-style-type: none"> • Conveys Boards of Directors' risk appetite levels • Directs the work of others in all roles in relation to risk and regulatory issues. • As a member of the Executive Management Team, formulates Risk Management policy. • Sets business level goals, policies and objectives for risk management and reports to Boards of Directors • Deploys plans to achieve the business level goals. • Proactive in shaping the risk management culture and champions risk management principles and best practice. • Sets business level policies for System and Information Security
2	Head of Division	Divisional GM	<ul style="list-style-type: none"> • As a member of the Executive management Team, formulates Risk Management policy. • Sets divisional level guidelines and objectives for risk management and reports to the CEO on performance regarding risk management objectives. • Deploys plans to achieve the divisional level objectives. • Directs the work of the division in relation to risk management within appetite across the division. • Champions risk management principles and best practices; guides, empowers and supports direct reports in all aspects of company policy adherence in relation to risk management framework and regulatory compliance where relevant. • Sets divisional level requirements to comply with the System and Information Policies and ensure the Information Security Management System is understood and adhered to
3	3 rd Tier Management	Managers (Report to GM)	<ul style="list-style-type: none"> • Guides, empowers and supports direct reports in all aspects of company policy and appetite adherence in relation to risk management and regulatory compliance where relevant. • Sets functional level objectives for risk management and reports to the Divisional GM • Deploys plans to achieve the functional level objectives. • Leads by example in adherence to best practice in risk management at all times.

			<ul style="list-style-type: none"> Assists other Managers in identifying, evaluating and responding to strategic, business and operational risks. Champions risk management principles and best practices Incorporates the Information Security Management System, policies, and standards into all activities to reduce risk and improve controls. Ensures direct reports understand and adhere to their responsibilities.
4	4 th Tier Management	Supervisor / Foreman (Report to a Manager)	<ul style="list-style-type: none"> Leads by example in adherence to best practice in risk management at all times. Actively and openly discusses risk management with work team on a regular basis. Assists other Supervisors in identifying, evaluating, and responding to strategic, business and operational risks. Champions risk management principles and best practices Incorporates the Information Security Management System, policies and standards into all activities to reduce risk and improve controls. Ensures direct reports understand and adhere to their responsibilities.
5	General	All other staff	<ul style="list-style-type: none"> Takes responsibility for risk management as it relates to own work activities within the company. Assists the General Manager Finance and the reporting manager to continually improve those parts of the Risk Register that relate to own role. Ensure all activities comply with the requirements of the Information Security Management System, policies and standards.

Health and Safety

Effective functioning of the safety management system depends on the commitment by all staff – from the CEO to frontline workers – to perform their duties and responsibilities so far as is reasonably practicable.

Level	Level Title	Job Title	Responsibility
1	Business Leader	CEO	<ul style="list-style-type: none"> Conveys Boards of Directors' health and safety risk tolerance levels Directs the work of others in all roles in relation to health and safety. As a member of the Executive Management Team, formulates Health and safety risk management policy. Sets business level goals and policies for health and safety and reports to Boards of Directors Deploys plans to achieve the business level goals. Proactive in shaping health and safety culture and champions health and safety principles and best practice
2	Head of Division	Divisional GM	<ul style="list-style-type: none"> As a member of the Executive Management Team, formulates health and safety risk management policy. Directs the work of the division in relation to health and safety across the division. Guides, empowers and supports direct reports in all aspects of health and safety legislative and company policy adherence.

			<ul style="list-style-type: none"> • Sets divisional level guidelines/ policies and objectives for health and safety and reports to the CEO. • Deploys plans to achieve the divisional level objectives. • Proactive in shaping health and safety culture within the division and champions health and safety principles and best practice
3	3 rd Tier Management	Managers (Report to GM)	<ul style="list-style-type: none"> • Leads by example in adherence to best practice in at all times. • Guides, empowers and supports direct reports in all aspects of health and safety legislative and company process adherence. • Champions risk management principles and best practices; guides, empowers and supports direct reports in all aspects of company policy adherence in relation to safety risk management framework and regulatory compliance where relevant. • Sets functional level objectives for health and safety and reports to the Divisional GM • Deploys plans to achieve the functional level objectives. • Ensures staff assigned to work have current certification, training, knowledge, experience and confidence to conduct said work. • Leads by example in adherence to best practice in health and safety at all times. • Actively and openly discusses health and safety with operational group and contractors on a regular basis
4	4 th Tier Management	Supervisor / Foreman (Report to a Manager)	<ul style="list-style-type: none"> • Leads by example in adherence to best practice in health and safety at all times. • Guides, empowers and supports direct reports in all aspects of health and safety legislative and company process adherence. • Actively and openly discusses health and safety with work team, including contractors, on a regular basis. • Ensures staff assigned to work have current certification, training, knowledge, experience and confidence to conduct said work. • Follows procedures so far as is reasonably practicable and reports accidents / incidents as and when they occur
5	General	All other staff	<ul style="list-style-type: none"> • So far as is reasonably practicable, takes responsibility for own health and safety at all times. • Actively and openly discusses and contributes to health and safety improvements. • Follows procedures so far as is reasonably practicable and reports accidents / incidents as and when they occur. • Advises direct supervisor if lacking current certification, training, knowledge, experience or confidence before conducting assigned work.