

Attachment 5.17 Statement prepared by Group Executive Network Strategy (PUBLIC) May 2014



STATEMENT OF JOHN HARDWICK, GROUP EXECUTIVE NETWORK STRATEGY

NETWORKS NSW

I, John Hardwick, Group Executive Network Strategy at Networks NSW, of Level 17, 570 George Street Sydney of the State of New South Wales, affirm:

Position

- I am the Group Executive Network Strategy at Networks NSW. I have been in this role from October 2012. Although I am employed by Ausgrid, my role is to lead and coordinate the overall asset management strategy for the three distribution network service providers which comprise Networks NSW: Essential Energy, Endeavour Energy and Ausgrid (the NSW DNSPs).
- 2. As the Group Executive Network Strategy, I am responsible for setting and implementing the overall safety and asset management frameworks and strategies. Refer to Attachment 1 Position Description Group Executive Network Strategy for further details.

Educational background and professional experience in the energy sector

- 3. My relevant professional experience is as follows:
 - Over 30 years maintenance and construction engineering experience in the NSW Electrical Industry
 - Commenced as an Electrical Technician at Sydney County Council in 1983
 - Appointed to the position of Executive Manager Maintenance & Replacement Planning
 with EnergyAustralia in 2004 and spent seven years developing a program to identify
 and implement world best practice in maintenance requirements analysis and
 replacement strategies.
 - Appointed to the position of Executive Manager Operations Lower Hunter & Central Coast in 2012
 - Appointed to my current position of Group Executive Network Strategy for Networks NSW in 2012 to implement the Government's reform of the NSW electricity distribution industry.
 - Winner of the Maintenance Engineering Society of Australia's 2002 Steve Maxwell Leadership Award
 - Lead for the team winning the Silver Award in the 2009 Australian Asset Management Excellence Awards.
 - Current Chair of the Global Forum on Maintenance and Asset Management (GFMAM)
 and the immediate past National Chair of the Asset Management Council.

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- Co-author of Living Asset Management published by Engineers Media
- 4. My educational background is as follows:
 - Certified Fellow of Asset Management (CFAM) 2010
 - Masters of Business Administration at the Australian Graduate School of Management
 2004.
 - Certificate IV Human Resources 1996
 - Associate Diploma in Electrical Engineering 1992
 - Electrical Trade Certificate (Honours) 1984
- 5. My CV is attached as Attachment 2.

Background

- 6. This statement is made in support of the NSW DNSPs revised regulatory proposals to the Australian Energy Regulator (**AER**). The AER proposed, in its draft determinations dated 27 November 2014, inter alia, real reductions in allowable capital expenditure (**capex**) and operational expenditure over the amounts proposed by the NSW DNSPs in their substantive regulatory proposals
- 7. The reductions in capex proposed by the AER will result in cancellation of funding for a large number of planned programs and projects, which will have adverse consequences for the safety, reliability and ongoing sustainability of the NSW DNSPs.

The CASH prioritisation process

- 8. As part of the Networks NSW capital governance and risk management framework, the DNSPs use the Capital Allocation Selection Hierarchy (**CASH**) methodology to assist in selecting the projects for inclusion into the capital expenditure planning process each year which best meet the NSW DNSPs' business objectives. The methodology is used to assess and prioritise projects according to the level of associated risk and present recommendations for the optimal investment portfolio to the board of Networks NSW. The network risk topics considered in the most recent CASH ranking are:
 - Network asset condition;
 - Public safety, environmental or regulatory impact;
 - Network initiated fire risk;
 - Network reliability impact;
 - Community impact (Reputation);

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- Work health safety employee risk; and
- Network capacity implications.
- 9. Each of the risk categories are weighted equally in assessment. In order to facilitate an effective prioritisation, each program is broken down into pre-prioritised subcomponents of short term need (immediate requirement), medium term need (short-term requirement, but risk-manageable prior to replacement), and long term need (expected future or strategic renewal requirement).

The Portfolio Investment Plan

- 10. One outcome of the CASH prioritisation process is the document referred to as the Portfolio Investment Plan (**PIP**).
- 11. The PIP is a risk prioritised list of all network capital projects currently in progress or proposed to be undertaken. The document captures network expenditure only (that is, it excludes non-system capital expenditure, which indirectly support the operation of the network and primarily consists of ICT, Property and Fleet expenditure). The PIP is prepared and approved by the board annually as a key stage in our investment governance process and is also referred to as the 'gate 1' approval.
- 12. We recognise that the factors driving network investments and risk can change over time

 for example due to changes in demand, failure modes, asset deterioration, delivery
 costs, standards and policies. As a result a formal change control process is in place to
 provide governance and transparency for any changes to the board approved portfolio and
 risk position.
- 13. Below, I refer to PIP for each of the three NSW DNSPs current as at 16 December 2014 (version 4.0) which were used as an input into the revised regulatory proposals. Those documents have been created in the following manner.
- 14. In late 2013, each of the networks provided to Group Network Strategy their proposed investment portfolio for the 2014-19 regulatory period. Those projects were ranked according to the CASH prioritisation methodology and presented to the board for approval (2013 gate 1 approval).
- 15. The board considered the risk based portfolio, including a number of projects and programs at selected constraints point, when determining an appropriate investment risk appetite. The board sought visibility and were adequately informed of both the prioritisation process and the risk outcomes resulting from deferring expenditure.
- 16. The board did not approve the initial risk position proposed by the NSW DNSPs. The board amended the portfolio to reflect the boards informed decision to move to a less conservative risk position through deferring some of the lower risk projects and programs.

- 17. As a result of the move to a less conservative risk position the network expenditure proposed by each network reduced by the following percentages:
 - (a) Ausgrid: 24%;
 - (b) Endeavour Energy: 15%;
 - (c) Essential Energy: 16%.
- 18. These decreases resulted in the removal of lower risk projects which could not be accomplished within the revised risk appetite as determined by the board.
- 19. As part of the 2014 gate 1 approval process each network subsequently submitted revised proposed investment portfolios, prioritised using the CASH methodology, in November 2014. These portfolios adopted as their starting point, the revised risk appetite approved by the board in 2013. The board has not yet approved the revised proposed investment portfolios, pending the outcome of the AER's revenue determination.
- 20. The PIP for each DNSP referred to below was generated based on data provided by each network in December 2014. That data is essentially the same as that provided by the networks in November 2014, with certain changes in respect of individual projects (for example, due to changed circumstances) noted.
- 21. On 17 December 2014, in response to the AER's Draft Determination the board instructed the DNSPs to base their Revised Regulatory Proposals on version 4 of the PIP recognising that the factors driving network investments and risk can change over time and adjusting for these changes within the formal change control process.
- Accordingly, change controls are in progress to amend the PIP to reflect the expenditure contained in the Revised Regulatory Proposals,. As the change control process has not been completed, version 4 of the PIP has been used as the basis for the individual lists for each entity referred to below. This will not completely align with the final Revised Regulatory Proposals.
- 23. The PIP contains the following information for each project:
 - (a) Project / Program ID and description.
 - (b) Project / Program Type: denotes whether the planned activity is a program (a program is a large volume of small and similar activities conducted together, for example upgrades of similar technology conducted at sites within a geographic area), a major project (a major project is generally site specific).
 - (c) "Principle driver" of the investment: whether the project or program is a renewal of the network, maintaining or growing capacity of the network; compliance with

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- regulatory obligations, executing network connections. Note that these are business drivers and will not align with the AER's RIN drivers.
- (d) The amount of direct expenditure (excluding overheads) allocated to the project in each year of the regulatory period.
- (e) The priority ranking resulting from the CASH process.
- (f) "Reg Period \$" refers to the total expenditure on that project or program over the 2014-19 regulatory period in nominal dollars.
- (g) "Reg Period Cumulative" is a running total of expenditure, representing the expenditure of each activity and the higher ranked activities before it on the list;
- (h) "Percent" refers to the cumulative percentage of proposed expenditure constituted by each activity and the activities ranked before it on the list. For example, the last entry in the list is 100%. This means that the last activity on the list and all of the activities preceding it constitutes 100% of the DNPS's proposed expenditure. That is, if the DNSP is allowed 100% of its proposed expenditure it will undertake all of the activities on the PIP Project list.

Impact of reduced expenditure - Ausgrid

- 20. A copy of the PIP for Ausgrid is at Attachment 3 AG PIP v4.0 for Revised Proposal on the enclosed DVD.
- 21. The impact of the reduced expenditure in the Ausgrid draft determination is that a number of projects and programs are unfunded. With the draft determination constraining network capital expenditure by 44% there are 237 projects and programs that remain unfunded (from row 324 in Attachment 3).
- 22. For example, the following projects and programs are unfunded:
 - i. **Oil Containment program** (DOC_11.04.01_S and DOC_11.04.01-1_S rows 456 and 458 of Attachment 3)
 - Lack of adequate oil containment at a number of Ausgrid's substations is a serious environmental compliance issue under the *Environment Protection Act 1997* (NSW). Ausgrid has consulted with the NSW Environment Protection Authority in relation to this issue.
 - 2. This program involves prioritising the risks associated with lack of adequate oil containment at different sites and remedial measures to address those risks, including installation of oil containment equipment.
 - 3. Ausgrid uses the Oil Containment Risk Assessment model to prioritise sites in relation to risks from the use of oil filled equipment. Failures can occur with

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transformer bundling, oil separation equipment and pipework. Ausgrid conducts surveys and investigations of the substation sites to develop a risk based list. For example, proximity to water courses and/or environmentally sensitive areas mean high risk installations which need to be addressed.

- 4. Failures could have (significant) environmental impact resulting in a breach of the *Environment Protection Act 1997* (NSW) and fines.
- 5. Ausgrid forecasts that 4 sites in sub transmission substations and 60 sites in zone substations will need to be remedied in relation to oil containment issues in the 2014-19 regulatory period.
- ii. **Noisy transformer replacement program** (DOC_11.04.03-2_S and DOC_11.04.03_S rows 518 and 556 of Attachment 3)
 - 1. Noisy transformers are an environmental compliance issue under the *Protection of the Environment Operations Act 1997* (NSW).
 - 2. This program is reactive in nature. It is generally driven by noise complaints by neighbours in proximity to the site. Ausgrid then investigate the noise levels and takes measurement to confirm the noise levels compared to the Australian standard (under 5 decibels above background noise).
 - Ausgrid then assesses the options including constructing acoustic enclosures around the transformers, installing noise barriers on property boundary, modifying configuration to de-energise transformer or replacing transformer with a low noise equivalent.
 - 4. Ausgrid has prepared noise reports in relation to the nine noisy transformers proposed to be remedied in the 2014-19 regulatory period. These noisy transformers are located in:
 - Dulwich Hill, three;
 - Jannali, two; and
 - Concord, four.
 - Similarly, Ausgrid has received 58 complaints regarding distribution substation noise levels between 2000 and 2013. Ausgrid planned to replace three DCs each year in the 2014-19 regulatory period.
- iii. **Blackspot program** (DOC_11.03.41_S and DOC_11.03.40_S rows 482 and 502 of Attachment 3)
 - 1. Ausgrid initiated this program due to the risk of motor vehicle accidents (ie collision with poles). Vehicles collision with poles can cause pole failures and subsequent

danger to general public including the direct consequences of fatalities or serious injury. This program involves rectification and relocation of poles in consultation with Road and Maritime Services (**RMS**). The poles to be rectified or relocated are selected based on historical or assessed fatality data.

2. This program is discretionary but has proven to reduce fatalities caused by collision with power poles. Ausgrid planned to relocate 105 distribution poles and 15 transmission poles over the 2014-19 regulatory period. If the Ausgrid Black Spot Program was to further develop, the contributing effects expected towards reducing collisions would be similar, if not better than those experienced by Endeavour Energy (described below) given the high traffic density of Ausgrid's franchise area.

Impact of reduced expenditure - Endeavour Energy

- 23. A copy of the PIP for Endeavour Energy is at Attachment 4 EN PIP v4.0 for Revised Proposal on the enclosed DVD.
- 24. The impact of the reduced expenditure in the Endeavour Energy draft determination is that a number of projects and programs are unfunded. With the draft determination constraining network capital expenditure by 43% there are 289 projects and programs that remain unfunded (from row 138 in Attachment 4).
- 25. For example, the following projects will not be undertaken
 - i. Steel tower below ground rectification work (TM803 row 181 of Attachment 4);

Endeavour Energy has undertaken studies of the foundations and soil properties beneath steel towers during which Endeavour Energy identified 123 towers with heightened risk of foundation corrosion. These towers were further prioritised based on soil conditions to assess corrosion rates. As a result, Endeavour Energy listed 32 steel towers as the highest risk which need attention during the 2014-19 regulatory period. This program addresses this risk by reviewing the foundations and depending on the assessment, replacing or refurbishing the footing with concrete encased footings or installing sacrificial anodes.

If the project is cancelled or deferred, the risks of steel power fall-over increase which would have negative impact on the reliability of its network and expose members of the public and also staff of Endeavour Energy to risks including electrical shock.

ii. Low Mains Remediation (DS413 – row 200 of Attachment 4) and Low Voltage Consac Replacement (DS006 – rows 394 and 395 of Attachment 4).

Both of these programs are to address areas of the network with known and identified safety risks.

1. Low Mains Remediation

Low mains are conductors that breach the ground safety clearances to Australian Standards. They pose safety hazards to the public which are normally detected during routine inspection processes. Endeavour Energy undertook a re-analysis and reprioritisation of low mains concerns in 2014 following the fatality of a member of the public in another utilities area. Endeavour Energy is utilising new risk matrix assessment criteria during routine inspections and LiDAR to detect low mains and prioritise their rectification.

It is expected that 540 of these instances exist in the network which will be rectified over the next 3 years with ongoing review and rectification to follow based on defect data.

Deferral or deletion of this program will increase public and vehicle risk of contact with low mains which could result in burns and fatalities to individuals.

2. Low Voltage Consac Replacement

Consac cable is a low voltage (**LV**) conductor which makes up 7% of Endeavour Energy's LV cable network (520km currently installed). The cable is prone to heightened risk of failure which results in potential public shock risks due to possible open circuit neutrals, as well as associated reliability impacts.

Endeavour Energy initiated this replacement program in response to heightened risk of shocks, damage to customer's equipment, interruptions, costly emergency repair works associated with this particular cable. Endeavour Energy planned to replace approximately 50kms of high priority Consac cables during the first three years of the current regulatory period, followed by increased quantities thereafter as the current rate of replacement is inadequate to manage the risks in timely manner.

The main risks of deferral / cancellation of this program are increased risk of electrical shock for Endeavour Energy employees or members of public and repetitive un-planned interruptions to electricity supply to customers.

iii. Track Blackspot remediation (DS008 - row 287 of attachment 4).

1. Endeavour Energy initiated this program during last regulatory period due to the risk of motor vehicle accidents (ie collision with poles). This program involves rectification and relocation of poles in consultation with RMS. The locations are selected based on historical or assessed fatality data. While new designs include assessment to reduce the risk of creating 'blackspots', 140 sites currently exist on the network that require remediation. Approximately 9 sites are chosen per year for rectification in consultation with RMS to address the public risk of colliding with Endeavour Energy poles.

- 2. This program is discretionary but as estimated by Endeavour Energy, has contributed to the reduction of driver fatalities reducing the average rate from 14.9 fatalities per year (in the previous ten year period) to an average of 5 fatalities per year over the last five years within Endeavour's franchise area.
- 3. Deferral or cessation of this program will result in increased risk of ongoing injuries and fatalities to road users due to 'blackspot' poles.

Impact of reduced expenditure - Essential Energy

- 26. A copy of the PIP for Essential Energy is at Attachment 5 ES PIP v4.0 for Revised Proposal on the enclosed DVD.
- 27. The impact of the reduced expenditure in the Essential Energy draft determination is that a number of projects and programs are unfunded. With the draft determination constraining network capital expenditure by 30% there are 198 projects and programs that remain unfunded (from row 106 in Attachment 5).
- 28. For example, the following projects will not be undertaken:
 - Zone Substation Unplanned Equipment Failure Replacement (ESS 84 row 169 of Attachment 5);
 - 1. This is a reactive program to respond to unplanned equipment failures in zone substations.
 - 2. Essential Energy can reasonably estimate the number of future failures due to type faults which are currently unknown and failures of assets which did not reach the year of planned replacement, relying on historical failure data. Essential Energy extrapolates to annually have over the 2012/13-2018/19 period:
 - three circuit breaker failures;
 - four instrument transformer failures;
 - six protection relay failures;
 - twenty surge arrestor failures;
 - two auxiliary transformer failures;
 - two isolator failures; and
 - one battery charger failure.
 - 3. The assets would have functionally failed and must be replaced when Essential Energy replaces them. In other words, the asset replacement cannot be deferred or

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- increased restoration times following zone substation equipment failure; and
- the network being placed at risk for a longer time due to loss of contingency.
- ii. Zone Substation Power Transformer Unplanned Failure Replacement (ESS_72 row 190 of Attachment 5); and
 - 1. This is a reactive program to respond to unplanned power transformer failures in zone substations. This program allows for expected future expenditure based on forecast failure rate. It enables Essential Energy to deliver a run-to-end-of-economic life strategy by managing the consequences of in-service failures. It seeks to:
 - maintain Essential Energy's strategic spares holding at prudent levels, that allows for timely replacement of transformers from a wide range of ratios and capacity; and
 - maintain current best practice restore times in the event of a transformer
 - 2. The expenditure of this program will only be incurred where failure events occur.
 - 3. The consequences of deferring or cancelling this program are:
 - Spares capacity cannot be adequately managed to respond to transformer failures;
 - Restoration times and costs increases over the regulatory period due to inadequate spares holding; and
 - with significant investment deferral potential for gaps (both ratio and capacity) in spares coverage to exist resulting in failure to manage network risk and meet Schedule 5 of the licence conditions.
- iii. **Utility Blackspot** (ESS_2009 row 168 of Attachment 5).
 - 1. This plan has been developed to address the frequency of vehicles colliding with power poles on sides of roadways. It involves identifying and remedying sites (including for example, relocating certain poles) where crashes with utility poles are more likely to take place. This plan is a collaborative effort with the NSW Centre for Road Safety and the NSW State government to curb the road toll and trauma associated with pole crashes.
 - 2. Over the last three years, the NSW Centre for Road Safety recorded approximately 720 utility pole crashes within the Essential Energy footprint. These resulted in 8 fatalities, 366 injuries, and 354 non-casualties (tow away).
 - 3. The key objectives of this plan / investment case are:

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- to reduce the number of fatal pole crashes or those resulting in injury as a result of crashes within the Essential Energy footprint; and
- to identify high risk sites and review assets located in these locations.
- 4. The proposed capital investment for priority Blackspot locations represents an investment of \$7.75 million over a 5 year period (2014-19) or approximately 40 sites remedied. Cancelling or deferring this program means that these 40 sites would not be remedied, and collision at those sites may occur which otherwise may be less likely to occur, or leading to less severe consequences, had the site been remedied.

Affirmed	VIIadu 11a
New Sout	n Wales, this 20 January 2015

at 11.21cm J. Hardwell

John Hardwick

Before me:

maria mitchell

Signature of witness:

Name of witness:

JP182714.

78 St Vincent St, VIIadulla 2539

Oualification of witness: Justice of the Peace

Position Description				
Position Title:	Group Executive Networks Strategy			
Position Number:	tbd	Division:	Networks NSW	
Reports to:	Chief Executive Officer, Networks NSW			
Date Created:	June 2012	Date Updated:		
Job Analyst Name:	Andrew Pitman			
CEO Signature:	(signed)		-	
Position Number: Reports to: Date Created: Job Analyst Name:	tbd Chief Executive Officer, No. June 2012 Andrew Pitman	Division: etworks NSW	Networks NSW	

ORGANISATIONAL CONTEXT

Networks NSW is the group of companies comprising Ausgrid, Endeavour Energy and Essential Energy. Although they remain separate legal entities with separate network operations, these companies are managed together under common governance arrangements effective from 1 July 2012, to implement the Government's reform of the NSW electricity distribution industry.

Each network company will be managed by a Chief Operating Officer who has the overall responsibility to build and maintain their electricity distribution network in line with strategy and policy frameworks set by Networks NSW. The management of network strategy, development, operations and health, safety and the environment within each network company is guided by the strategic frameworks and policies from a Group Network Strategy function. This same function monitors the performance of each Network Company and ensures their compliance with policy and network governance requirements.

While considerable changes are likely to occur in the operating environment of the business, Networks NSW and each network business will remain focused on:

- Achieving the objectives set out in the State Owned Corporations Act 1989, including
 - Operating at least as efficiently as any comparable privately owned business;
 - Maximising the value of the business to the State;
 - Operating a safe, reliable and sustainable network; and
 - Balancing commercial, social, environmental and customer expectations:
- Implementing initiatives identified under the Network Reform Program; and
- Fully harnessing the skills and capabilities of our people through a clear focus on leadership and cultural transformation, underpinned by our corporate values.

POSITION PURPOSE

The Group Executive Network Strategy leads and coordinates Network NSW's overall asset management strategy and management framework to guide and optimise investment in asset replacement, augmentation and maintenance in the networks consistent with required safety, risk and service standards, and monitors the overall performance of network assets and monitors compliance with Network NSW's policies and directives. This includes the development of network architecture/configuration policies and smart grid/intelligent network strategies and programs.

The Group Executive Network Strategy also ensures maximum value is generated for Networks NSW through a single approach to the management of fleet, property and logistics.

The Group Executive Network Strategy also leads and coordinates Networks NSW's overall approach to the management of health, safety and the environment.

KEY ACCOUNTABILITIES

Asset Strategy and Policy

 Develop and implement Network NSW's overall asset management framework, strategies, and policies to establish common network planning and maintenance standards that drive the capital and maintenance programs, guide network planning and service delivery activities within the Network businesses and establishes investment prioritisation and allocation criteria to optimise the effectiveness of group investments.

Asset Performance and Compliance

- Implement asset management data and information strategies to drive asset condition and performance reporting and to support network investment planning and optimisation.
- Establish programs to assess Networks NSW group companies' compliance with agreed frameworks, strategies and policies.
- Manage consolidation of group portfolio and program reporting including cost, schedule and compliance

Investment Prioritisation and Allocation

- Establish the investment governance framework and overall investment prioritisation and allocation for Networks NSW.
- Monitor the network portfolio of work and program management at an enterprise-level to ensure effective prioritisation, allocation, approval and oversight of capital and maintenance investments across the portfolio.

Network Technology and Innovation

- Develop smart grid/intelligent network strategies. This includes review, consolidation and coordination of existing and new smart grid/intelligent network programs.
- Establish and maintain governance and oversight of major network technology initiatives including business case development.
- Establish a Centre of Excellence for business analysis, supporting major productivity

initiatives across Networks NSW

Property, Fleet and Logistics

- Coordinate shared property, fleet, logistics, and inventory arrangements across Networks NSW.
- Align procurement program for property and fleet with procurement, inventory and logistics and enable network focused development of policy and strategy in line with needs of predominant user of assets.

Health, Safety and Environment

- Monitor and improve the Network NSW's safety and environmental management systems. This includes the development and implementation of Safety and Environment Risk Management Plans and the direction and strategy for key process, cultural and behavioural change initiatives to embed safety as the number one priority and to drive continuous improvement in safety performance.
- Deliver and improve core HSE services including workers compensation, rehabilitation and return to work and environmental services.

POSITION DIMENSIONS

Staff

Number of direct reports: 4

Overall Enterprise Networks Budget (annual)

CAPEX \$3.3b OPEX \$1.7b

(Based on 2012/13 budget targets)

Value of enterprise electricity assets: \$24 billion

CHALLENGES

- Building the organisational culture and systems that keep employees, the community and the environment safe and free from injury and keeps safety at the forefront of the way in which we perform our jobs
- Ensuring clarity of roles and responsibilities for strategic asset management across network companies
- Developing a strategic asset management framework and lifting the performance of network companies through optimised asset management strategies
- Optimising investment decision making and prioritisation
- Implementing robust asset information and performance monitoring processes and systems
- Determining the smart network strategy for Networks NSW and ensuring appropriate future returns in investment in smart technologies

 Ensuring maximum values is generated through improved management of property, fleet and logistics across the Networks NSW

KEY RELATIONSHIPS

- Chief Executive Officer, Chief Operating Officers, Group Executives and Board advising and reporting on asset strategies and investments, policies, plans, performance and compliance.
- Managers and key professional staff advising and directing in respect of asset policies and governance requirements, technical issues and smart technologies
- Technical regulators and industry associations advising in respect of asset technologies and technical standards and influencing appropriate technical outcomes for the industry.

WORK HEALTH AND SAFETY

Demonstrate personal leadership in the implementation of the Safety Management Systems of Networks NSW and facilitate its effectiveness by ensuring adequate resources are available, that all employees are aware of their Work Health and Safety obligations and that one's personal behaviour models the organisation's commitment to Work Health and Safety.

ETHICS, EEO, ENVIRONMENT AND QUALITY

All employees within Networks NSW are required to have an awareness of, and a commitment to:

- The Networks NSW values and code of ethics
- Equal Employment Opportunity
- Environmental Management Protection

This is in addition to the specific job details described in this document and in conjunction with the appropriate policies and procedures as amended from time to time.

KNOWLEDGE, SKILLS AND EXPERIENCE

Required Qualifications

- Tertiary qualifications in engineering, or other relevant discipline supported by relevant experience.
- Post graduate management qualification is desirable.

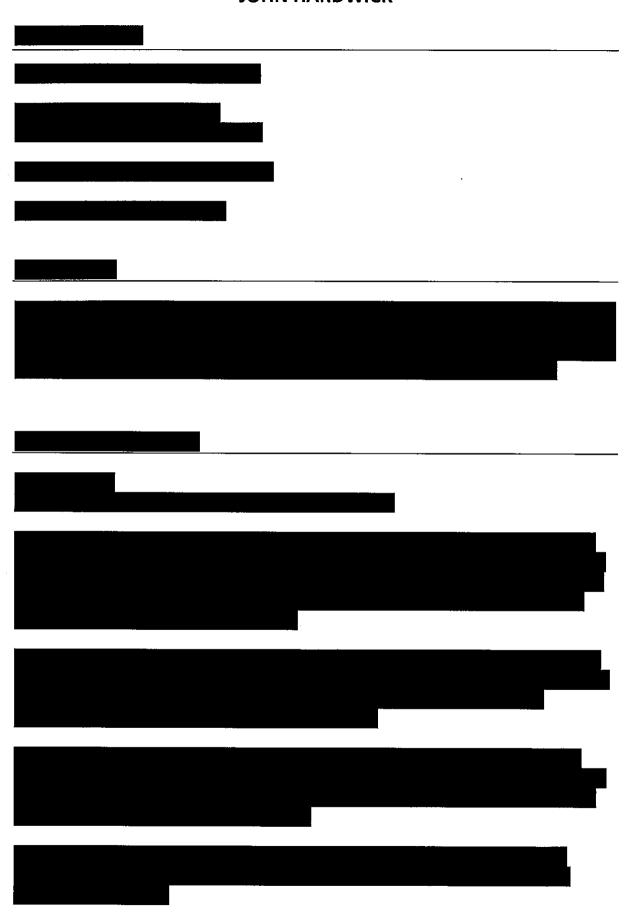
Experience

- A senior executive with demonstrated experience in strategy development, strategic asset management, large scale infrastructure operations with significant weighting of experience in the electricity distribution industry.
- Depth of experience in the development and management of engineering standards and capex and opex optimisation.

LEADERSHIP COMPETENCIES

COMPETENCY	EXECUTIVE BEHAVIOURS
Strategic thinking Sees the bigger picture. Applies experience and knowledge to bring fresh insights and new ideas to the business.	 Conceptualises and delivers something new or significant for the business Breaks the mould, realises opportunities that others cannot see Can create innovative, breakthrough strategies and plans.
Initiative Anticipates and takes action to create opportunities, overcome challenges and avoid future problems.	 Anticipates and takes action to create an opportunity or avoid a future problem, looking ahead within a three to five year time frame Creates a framework which enables others to consider and/or anticipate the potential for future problems Proactively seeks out strategic opportunities to grow the business Re-shapes the organisation to take advantage of long term growth opportunities Thinks of and takes action which will benefit the whole organisation.
Developing others Recognise's others' potential and their development needs. Supports their capability and long term.	 Provides (or assigns others to provide) in depth coaching or mentoring and ongoing developmental support Carefully selects development assignments in order to build long term capability.
Leading people Energises and aligns employees around a shared vision. Creates a climate in which our employees want to do their best.	 Provides a clear vision of future success which is compelling and engaging Believes in the vision and inspires confidence in the vision Generates excitement, enthusiasm and commitment to the vision Talks about possibilities; is optimistic about the future.
Communicating and influencing Gains the support of key stakeholders in courses of action that benefit the business.	 Thinks through how they will influence over time and develops deliberate influencing strategies Builds support for ideas through informal stakeholders Uses an in depth understanding of the interactions within a group to move towards a specific outcome.
Mobilising change Displays openness to change, inspires others to change and acts to make change happen.	 Creates a sense of urgency for change Challenges the status quo when appropriate by comparing it to an ideal or vision of change Anticipates and take actions to address the emotional impact of change Recognises and reinforces the behaviours of those who embrace the change Encourages others to recognise that change is the norm.
Customer focus Creates customer value by understanding and acting in the best interests of the customer.	 Looks for long term benefits that create value for the customer Becomes involved in the customer's decision making process as appropriate Builds an independent opinion on customers' needs and problems; recommends approaches which are new and different from those requested by the customer Anticipates the customer's future needs.
Drive for results Takes personal accountability for delivering results. Displays an inner drive to improve performance and achieve a standard of excellence.	 Takes calculated risks to achieve long term improvement Conducts detailed cost-benefit analyses, being mindful of the corporate values Persistently drives through obstacles Puts commercial results ahead of personal credibility; is courageous in decision making.
Holding to account Takes personal accountability for delivering results. Displays an inner drive to improve performance and achieve a standard of excellence.	 Rigorously manages performance against demanding targets Consistently challenges individuals openly and constructively about performance problems; takes action if performance does not improve Creates a 'performance culture' where effective performance and continuous improvement are valued.

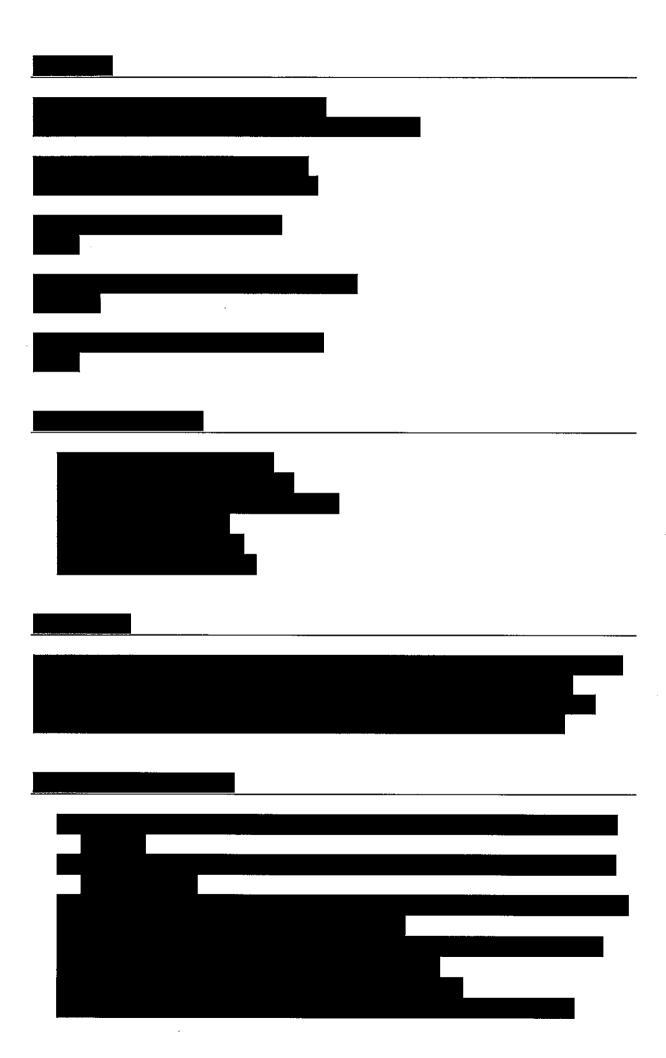
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