



Independent Pricing and Regulatory Tribunal
New South Wales

Annual Compliance Report

Energy network operator compliance during 2016-17



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1 Executive summary

The Independent Pricing and Regulatory Tribunal (IPART) administers the licensing regimes for energy networks operating in NSW. As part of this role, we monitor and assess the NSW electricity and gas networks' compliance with their licence conditions and other legislated obligations, and report annually to the Minister on the extent to which they met their licence conditions.¹

IPART also monitors obligations related to electricity network safety management systems, reliability and performance monitoring and incident monitoring.² Further, IPART monitors compliance with the new obligations imposed on TransGrid, Ausgrid and Endeavour Energy following the leasing or partial leasing of these businesses to private operators. These new obligations include requirements related to environment impact assessments, critical infrastructure and employment guarantees.³

IPART's regulatory scope for the gas networks is limited to licence compliance through monitoring the self-reporting of compliance by gas networks. The NSW Department of Planning and Environment have the safety and technical regulatory responsibilities for gas networks.

This report sets out the extent to which the networks have complied with their obligations during 2016-17. It includes our main findings regarding the networks performance against their licence conditions. Our findings are based on the networks' self-reporting regarding compliance as well as independent audit findings, and our own records.

1.1 The networks continue to work towards full compliance

Fifteen energy networks were licensed to operate in 2016-17, including four electricity network operators, seven natural gas reticulators and four liquid petroleum gas (LPG) distributors. Overall, the networks met their major compliance requirements. Non-compliances were generally non-material in nature, and had no significant impact on customers.

The non-compliances can be categorised as operational non-compliances and reporting non-compliances. The latter type includes delays in submitting reports required by the licence or by IPART's reporting manual.

¹ As required under section 88 of the *Electricity Supply Act 1995* (ES Act) and 75A(3C) of the *Gas Supply Act 1996* (GS Act).

² The electricity technical and safety regulatory functions were transferred to IPART in 2015 .

³ These obligations are found, respectively, in the *Code of Practice for Authorised Network Operators*, NSW Government Planning and Environment, September 2015; individual licence conditions of the transacted network operators, and Schedule 4 of the *Electricity Network Assets (Authorised Transactions) Act 2015*.

TransGrid has previously advised us that it faces some practical difficulties in complying with its critical infrastructure licence conditions. We note that a review of the licence conditions by the NSW Minister for Energy and Utilities in response to this matter is in progress.

1.2 Summary of electricity networks' compliance

With the transfer of regulatory functions for the safety and reliability to IPART, we introduced a reporting manual and an audit guideline in 2016. Several of the reporting and auditing requirements were new for the networks for 2016-17 and apply to licensed and non-licensed networks.

We undertook compliance monitoring in 2016-17, including several audits and investigations to monitor compliance with licence obligations and other legislative requirements of the networks during the year. We also required self-reporting by the networks. The licensed networks were not found to have any material non-compliances.

The areas of non-compliance are summarised below.

- ▼ **Critical infrastructure licence conditions** – Ausgrid reported one non-material non-compliance with its critical infrastructure licence conditions, and TransGrid reported two non-material non-compliances with those conditions. These were confirmed by independent audits. Endeavour Energy was subject to the critical infrastructure licence conditions for only the last 17 days of the reporting period. It reported full compliance with its critical infrastructure conditions, and this was not subject to audit for this reporting period (see section 3.1.1 for more information).
- ▼ **Reliability and performance licence conditions** - Ausgrid reported five non-material non-compliances with these conditions which have been rectified, with the exception of meeting the Long Rural feeder standard, whilst Endeavour Energy and Essential Energy reported full compliance with these conditions. Independent limited assurance audits found Essential Energy had a non-material non-compliance in relation to its customer service standards (see section 3.1.2 for more information).
- ▼ **Electricity network safety management system requirements** – the network operators have improved their level of compliance with the safety management system requirements during the previous year, but continue to have areas of non-compliance. These relate to bushfire risk management which was the focus of our safety management audits during 2016-17 and are in the process of being rectified. All are non-material in nature, except for Sydney Trains (not licensed) which has been found to have area of material non-compliances (see section 3.2.1 for more information).
- ▼ **Notices to amend safety management systems** - During 2016-17, we issued a number of notices to electricity network operators requiring them to amend their safety management systems with regard to bushfire risk in three stages and within specified timeframes. All of the networks failed to meet some timeframes, but the work was largely completed satisfactorily after the due date. The exception is Sydney Trains which has outstanding material and non-material non-compliances (see section 3.2.1 for more information).

- ▼ **IPART reporting requirements** – Some network operators failed repeatedly to report in accordance with timeframes in our Reporting Manual, mainly in the reporting of electricity network safety incidents. There were also 20 breaches of section 63R of the *Electricity Supply Act 1995*, due to late notification of serious electricity work accidents. We introduced the incident reporting requirements in our Reporting Manual in October 2016, and the level of compliance has improved since the requirements began (see section 3.2.2 for more information). TransGrid also failed to submit its critical infrastructure audit report for 2015-16 by the due date of 14 October 2016, constituting a failure to comply with our Audit Guidelines during 2016-17.

As the networks become more experienced in reporting in line with IPART's reporting requirements, and with some of the minor non-compliances being rectified during the year, IPART expects the compliance of the networks to improve during the 2017-18 financial year.

1.3 Summary of gas networks' compliance

Gas authorisation and distributor licence holders were mostly compliant with their respective authorisations/licence conditions.

Of the seven natural gas reticulators and four liquid petroleum gas (LPG) distributors, Elgas Ltd (Elgas) reported one non-compliance that related to unlicensed distribution. It has applied for a licence amendment to add this district to its licence and this application is currently under assessment.

Our regulatory scope for the gas networks is significantly smaller than for the electricity networks.

2 Context

IPART is responsible for administering the licensing regimes for energy networks operating in NSW. These include electricity transmission and distribution networks, natural gas reticulation networks and LPG distribution networks. As part of this role, we are required to monitor the extent to which:

- ▼ The electricity network licence holders comply with the conditions of their licences, which are imposed by the Minister for Energy and Utilities (the Minister), and the *Electricity Supply Act 1995* (the ES Act).
- ▼ The gas network authorisation and distribution licence holders comply with the conditions of their authorisations and licences, which are imposed by the Minister and the *Gas Supply Act (NSW) 1996* (the GS Act).

Each year, we are required to prepare and forward to the Minister a report on the networks' compliance performance during the 12 months ending on 30 June in that year.⁴ The Minister must lay the report or cause it to be laid before both Houses of Parliament as soon as practicable after receiving the report.⁵

To provide context for this report, the sections below outline the purpose of the report, the licence and authorisation holders it covers, and the information sources it draws on.

2.1 The purpose of this report

The main purpose of this report is to provide a transparent view of the compliance performance for each energy network licensee during 2016-17. This provides important information to the Minister – who may cancel or suspend a licence if the licensee contravenes the conditions of its licence or take other enforcement actions – and enables stakeholders to compare the compliance performance of the licensees with each other and over time.

We also take this opportunity to report on the energy network operators' performance against some of their other legislated obligations, and to summarise the natural gas reticulators' key operating statistics.

⁴ Under section 88(1) of the ES Act and section 75A(3C) of the GS Act.

⁵ ES Act, s88(2) and GS Act s75A (3D).

2.2 Networks covered

Table 2.1 and Table 2.2 provide an overview of the electricity and gas licensees covered by this report.

Table 2.1 Overview of electricity licence holders

| Licence holder | Network type | Number of customers | Area of operation |
|-------------------------|--------------|---------------------|---|
| TransGrid | Transmission | 21 | NSW excluding the central and north western areas. |
| Ausgrid | Distribution | 1.69 million | Sydney, Newcastle and Hunter regions. |
| Endeavour Energy | Distribution | 0.95 million | Wollongong, Western Sydney. Most of the NSW south coast, Southern Highlands, the Blue Mountains, and parts of the mid-west of NSW. |
| Essential Energy | Distribution | 0.83 million | Areas not covered by Ausgrid and Endeavour, which is more than three quarters of New South Wales. |

Source: Australian Energy Regulator, *Annual report on performance of the retail energy market 2015-16*, p 81, TransGrid, Ausgrid, Endeavour Energy and Essential Energy's websites.

Electricity network operator licences are available on our website. During 2016-17, new licence conditions were conferred on Ausgrid and Endeavour Energy following the change of ownership. For 2016-17:

- ▼ Ausgrid was subject, up to and including 30 November 2016, to the:
 - 'Ministerially imposed licence conditions for distribution network service providers' (DNSP licence conditions), and
 - 'Reliability and performance licence conditions for electricity distributors' (reliability and performance licence conditions).

From 1 December, it was subject to the Distributor's licence under the ES Act granted to the Ausgrid Operator Partnership (Ausgrid Licence).

- ▼ Endeavour Energy was subject, up to and including 13 June 2017, to the:
 - DNSP licence conditions, and
 - reliability and performance licence conditions.

From 14 June 2017, it was subject to the Distributor's licence under the ES Act granted to the Endeavour Energy Network Operator Partnership (Endeavour Licence).

- ▼ Essential Energy was subject for the entire financial year to the:
 - DNSP licence conditions, and
 - reliability and performance licence conditions.
- ▼ TransGrid, for the entire financial year, was subject to the transmission operator's licence under the ES Act granted to NSW Electricity Networks Operations Pty Limited (TransGrid Licence).

Further, as the reliability and safety regulator of NSW electricity assets, IPART monitors certain legislative requirements for non-licensed networks that operate an electricity network or has electricity assets within NSW.

These include:

- ▼ ActewAGL Distribution (ACT)
- ▼ Ausnet Services (Victoria)
- ▼ Directlink
- ▼ Energy Queensland
- ▼ Lord Howe Island Board
- ▼ Metro Trains Sydney
- ▼ Powercor (Victoria), and
- ▼ Sydney Trains.

The extent and scope of the reporting obligations of these networks are discussed in Section 3.2 of this report.

Table 2.2 Overview of gas authorisation holders in 2016-17

| Authorisation holder | Network type | Number of customers | Area of operation ^a |
|--|--------------------------|---------------------|---|
| ActewAGL Distribution Ltd | Natural gas reticulation | 18,579 | Eastern Capital City Regional, Greater Queanbeyan, Shoalhaven, Tumut |
| Allgas Energy Pty Ltd | Natural gas reticulation | 1,222 | Tweed, Narrabri |
| Australian Gas Networks (Albury) Ltd | Natural gas reticulation | 28,014 | Riverina and Murray regions |
| Australian Gas Networks (NSW) Ltd | Natural gas reticulation | 29,534 | Canberra Region (within NSW), Murrumbidgee and Riverina regions |
| Central Ranges Pipeline Pty Ltd | Natural gas reticulation | 3,352 | North Western, Northern and Central West Regions |
| Jemena Gas Networks (NSW) Ltd | Natural gas reticulation | 1,330,000 | Metropolitan Sydney, Murray, Central West, South West, North West, Northern, Illawarra, Canberra Region (within NSW), Murrumbidgee and Hunter regions |
| Elgas Ltd and Elgas Reticulation Pty Ltd | LPG distribution | 1,316 | Elgas: Adelong, Batlow, Gundagai, Tumut Elgas Reticulation: Hunter, Richmond-Tweed and Mid North Coast regions Murray Downs Estate, Shire of Tweed, City of Armidale |
| Origin Energy LPG Ltd | LPG distribution | 939 | Glen Innes, Broken Hill, Banora Point, Jindabyne, Cooranbong, Lennox Head, Murrumbateman |

a: A general description of the area operation is provided in this table. Detailed descriptions can be found in the respective licences and authorisations.

Note: The licence of Wesfarmers Kleenheat Gas Pty Ltd was cancelled on 1 August 2016.

Sources: Distributor licences, reticulator authorisations and information provided by licence/authorisation holders.

2.3 Information sources drawn on

For this report we have relied on information provided from licensees' self-reporting, from independent audits of the electricity networks, and our own records.

2.3.1 Licensees' self-reporting

Licensees are required to keep records relating to their activities, and to report any licence breaches to us. This information is primarily provided in licensees' annual compliance reports.

Electricity networks and gas reticulators are required (as a condition of their licence) to provide annual compliance reports in accordance with our published Reporting Manuals. We request gas distributors provide these reports, even though they are not required by law to do so. We have not published a reporting manual for these licensees as gas distribution authorisations are not standardised.

2.3.2 Audits of electricity networks

Certain electricity network operator licence conditions are subject to an annual independent audit:

- ▼ Compliance with the 'reliability and performance' licence conditions in the distributions networks' licences is subject to annual limited assurance audits.
- ▼ Compliance with the critical infrastructure licence conditions in the operators' licences of the transacted networks is subject to a full audit (ie, TransGrid, Ausgrid, and Endeavour Energy).

In addition, we can direct an audit of other electricity network operator licence conditions.⁶ We also have a role in monitoring compliance with other legislated obligations (beyond the licence conditions) of electricity network operators, and have the powers to conduct or request ad hoc compliance audits of:

- ▼ the *Electricity Network (Safety and Network Management) Regulation 2014*, and
- ▼ Schedule 4 of the *Electricity Networks Assets (Authorised Transactions) Act 2015*, which prescribes employment guarantee obligations.




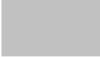
We have produced an Audit Guideline to inform the network operators and auditors of our expectations in the conduct of an audit, and this is available on our website.

2.3.3 Audit types and grades for electricity networks

Our audit guidelines provide for two types of audits – compliance audits and limited assurance audits. The majority are compliance audits, where compliance with certain licence conditions are tested and assessed. Table 2.3 presents the audit grades that are used in compliance audits.

⁶ Under Schedule 2, section 8A of the ES Act.

Table 2.3 Compliance Grades

| Grades of compliance | Description |
|---|--|
| Compliant  | Sufficient evidence to confirm that the requirements have been fully met. |
| Non-compliant (non-material)  | Sufficient evidence to confirm that the requirements have generally been met apart from a number of minor shortcomings which do not compromise the ability of the utility to achieve defined objectives or assure controlled processes, products or outcomes. |
| Non-compliant (material)  | Sufficient evidence has not been provided to confirm that all major requirements are being met and the deficiency adversely impacts the ability of the utility to achieve defined objectives or assure controlled processes, products or outcomes. |
| No Requirement  | The requirement to comply with the licence condition does not occur within the audit period or there is no requirement for the network operator to meet this assessment criterion. |

Source: IPART, Electricity Networks Audit Guideline, May 2017.

In contrast, a limited assurance audit is a reduction in assurance engagement risk to a level that is acceptable in the circumstances of the engagement. The audit opinion is expressed in a negative form of assurance, for instance a finding might be that “nothing has come to the auditor’s attention to suggest a breach of licence conditions”. We require the electricity licensees to undertake limited assurance audits of compliance with the distribution networks’ reliability and performance licence conditions, as specified in the licence conditions.

We do not have an audit function with the gas networks.

3 Electricity networks' compliance in 2016-17

The four major electricity network operators have been issued with operating licences that set out their conditions and standards of operation. Since our last report, both Ausgrid and Endeavour Energy have been partially leased to private operators and granted new operating licences. TransGrid was fully leased to a private operator in 2015.

Essential Energy continues to operate under the *Ministerially Imposed Licence Conditions for Distribution Network Service Providers* which has been in place for a number of years, and was required to comply with that licence for the full reporting year.

3.1 Compliance with licence conditions

Ausgrid, TransGrid and Essential Energy were found by the auditors to have non-material non-compliances with the licence conditions pertaining to 'critical infrastructure' and 'reliability and performance'. These particular licence conditions are subject to annual independent audits and are further discussed in the sections below.

Ausgrid reported six non-compliances across the licence conditions, TransGrid reported two non-compliances with its critical infrastructure licence conditions, while Endeavour Energy and Essential Energy reported full compliance with their licence conditions. Audits conducted to check compliance with these particular licence conditions further confirmed one of Ausgrid's non-compliances and both of TransGrid's non-compliances. Auditors also found that Essential Energy also had one non-compliance with its reliability and performance licence conditions.

TransGrid and Ausgrid both reported full compliance with environmental assessment obligations under the NSW Code of Practice for Authorised Network Operators in a separate self-report for the calendar year 2016. For Ausgrid, this obligation only applied from 1 December 2016, when it became a transacted entity, and it accordingly reported its compliance from this date.

We also identified some failures by all licensed networks to comply with IPART's reporting requirements, and by TransGrid to comply with an audit reporting requirement. This is summarised in section 3.1.3 and further discussed in section 3.2.2.

3.1.1 Critical Infrastructure licence conditions

The three electricity network operators that have been partially or wholly leased in recent years, Ausgrid, Endeavour Energy and TransGrid, are subject from the point of sale, to new licence conditions regarding the protection of critical infrastructure. These vary between the

operators but generally pertain to maintaining operation and control from within Australia, and data security. Their licences require compliance to be audited each year.

Ausgrid reported one non-compliance with its critical infrastructure licence conditions and this was confirmed by independent audit. This occurred because an external individual gained unauthorised access to its systems without prior approval as required by the licence condition. It was considered by the auditor to be non-material in nature because:

- ▼ The incident was a one-off occurrence, and was not indicative of a systematic failing of process or policy.
- ▼ While the individual involved was not explicitly approved, the individual was employed by an approved vendor and the work was appropriate for the role.
- ▼ Work undertaken was in remediation of a known issue.
- ▼ The auditor assessed the Ausgrid response as appropriate and proportionate.

Ausgrid has taken steps to prevent re-occurrence. On balance, the Tribunal accepts the auditor's findings with regard to materiality and acknowledges Ausgrid's response was appropriate and proportionate to the potential seriousness of the non-compliance.

TransGrid reported two non-compliances during the period, with condition 6.1(b) and 7.1(a). These both continued from the previous year. TransGrid reported both non-compliances were fully rectified by 6 December 2016, which was confirmed by an independent auditor. Both non-compliances related to the system being accessible from offshore by its technical support services contractor.

We note that in 2016-17, the independent auditor (Hivint) assigned TransGrid an audit grade of non-material non-compliance against condition 7.1(a). However in 2015-16, a different independent auditor assigned TransGrid an audit grade of material non-compliance for the same non-compliance. Hivint considered the non-compliance as non-material because TransGrid "has been in a compliant state since [1 December 2016] and, as the ability for [the vendor] to access load data from outside Australia was a potential threat only and not evidenced to have occurred during the audit period, the non-compliance has been assessed to be non-material in nature." The Tribunal considers:

- ▼ the period over which a non-compliance occurred is not relevant in the consideration of the materiality of a non-compliance such as this
- ▼ contrary to the condition, TransGrid's technology support services contractor could access load data from overseas, and
- ▼ the licence condition refers specifically to the accessibility of the load data, rather than whether or not it was accessed.

The Tribunal has decided that the nature of TransGrid's non-compliances for 2016-17 were the same as those non-compliances in 2015-16 and were rectified by 6 December 2016.

TransGrid has previously advised us that it faces some practical difficulties in complying with its critical infrastructure licence conditions, due to the unavailability of specific relevant expertise within Australia. We note that a review of the licence conditions by the NSW Minister for Energy and Utilities in response to this matter is in progress.

Endeavour Energy did not report any non-compliances in its self-report, noting that the compliance with its critical infrastructure licence conditions is subject to the three-year transition plan allowed in its licence. As Endeavour Energy was only subject to these critical infrastructure conditions for the final two weeks of 2016-17, we decided to defer the independent audit until next year.

We will continue to monitor the networks' compliance in this area.

3.1.2 Distribution network operators' compliance with reliability and performance standards

The distribution network operators report separately on their compliance with the reliability standards set out in their respective licences. All three reported that their networks met the overall reliability standards for 'system average interruption duration index' (SAIDI) and system average interruption frequency index (SAIFI) in 2016-17.

Ausgrid reported the following non-compliances:

- ▼ It did not meet the SAIDI standard for its 'long rural' feeders category. Ausgrid found this was largely due to an unusual amount of external interference, including bushfires and storms and has taken no action, expecting the performance to return to be compliant.
- ▼ On two occasions, it failed to undertake feeder performance investigations within the timeframe stipulated in the licence conditions. In one case this led to an inaccurate quarterly report to IPART.
- ▼ On two occasions it was late in notifying IPART of serious electricity works accidents in accordance with the timeframes in our Reporting Manual. It provided a number of reasons for the delay, including consideration of legal privilege when reporting and uncertainties surrounding one of the incidents. It proposes to establish a work practice by 30 September to facilitate the timely delivery of reports.

We will continue to monitor Ausgrid's compliance in these areas.

All three distributors also reported that a number of their network's individual feeders did not meet the reliability standard required for these feeders. When a feeder does not meet the standard, the network operators are required to investigate the reason for poor reliability and take appropriate action to improve reliability.

All three distributors reported an increase in the number of feeders not meeting the standard compared to last year. For Ausgrid and Endeavour Energy this continues an upward trend of the previous five years. Essential Energy reported a similar proportion of feeders not meeting the standard as in the previous two years, following its longer term trend of improvement.

The number of individual feeders not meeting the standard is presented in Table 3.1.

Table 3.1 Individual feeders not meeting reliability standard

| | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|-------------------------------------|---------|---------|---------|---------|---------|
| Ausgrid | | | | | |
| No. of feeders not meeting standard | 28 | 34 | 38 | 40 | 52 |
| % of all feeders | 1.3% | 1.6% | 1.8% | 1.8% | 2.4% |
| Endeavour Energy | | | | | |
| No. of feeders not meeting standard | 11 | 15 | 33 | 25 | 28 |
| % of all feeders | 0.8% | 1.0% | 2.3% | 1.7% | 1.9% |
| Essential Energy | | | | | |
| No. of feeders not meeting standard | 171 | 124 | 73 | 52 | 72 |
| % of all feeders | 11.8% | 8.6% | 5.0% | 3.6% | 5% |

Source: Ausgrid, Endeavour Energy and Essential Energy reported figures for the respective period.

Compliance with the reliability licence conditions is subject to annual independent, limited assurance audits.⁷ The audits for 2016-17 found one additional instance of non-material non-compliance by Essential Energy against its customer service standards. For five poor reliability compensation claims (out of 58), Essential Energy failed to meet the one-month deadline to inform the customers of the outcome of their claim. The auditor noted the five instances incidentally occurred at the same time as a storm event resulting in late notifications.

We will continue to monitor Essential Energy's compliance in this area.

3.1.3 Licence conditions relating to reporting and auditing

We also identified the following non-compliances with our reporting manual and audit guidelines, which constitute non-compliances with licence conditions. Some of these are reporting non-compliances relating to late submission of reports.

All four networks had reporting non-compliances where they failed to meet certain requirements of our Reporting Manual. Section 3.2.2 provides some more discussion on this matter. The non-compliances are with the following licence conditions:

- ▼ Condition 7 of the distribution network service provider's licence, applicable to Essential Energy, as well as Ausgrid for the period 1 July 2016 to 30 November 2016, and Endeavour Energy for the period 1 July 2016 to 13 June 2017.
- ▼ Condition 14 of the Ausgrid licence and the Endeavour licence.
- ▼ Condition 11 of TransGrid's licence.

TransGrid failed to submit an audit report of its compliance with critical infrastructure licence conditions for 2015-16 by the due date, having already been granted an extension, which is a non-compliance with condition 12 of its licence. Condition 12 requires it to comply with Audit Guidelines issued by IPART. The audit report was subsequently submitted.

⁷ See section 2.3.3 for more information about limited assurance audits.

3.2 Compliance with other legislated obligations

IPART began monitoring the electricity network operators' compliance with their legislated obligations in relation to safety management systems, reporting of safety incidents and compliance with employment guarantees in 2015-16. We take this opportunity to present compliance information regarding these obligations.

The safety management system obligation applies to all network operators in NSW. These include:

- ▼ the four licensed networks - TransGrid, Ausgrid, Endeavour Energy and Essential Energy
- ▼ the non-licensed distribution network operators in NSW - Sydney Trains, Metro Trains Sydney and Lord Howe Island
- ▼ the non-licensed transmission network - Directlink, and
- ▼ networks from other jurisdictions with an incursion to NSW - ActewAGL Distribution ACT, Ausnet Services Victoria, PowerCor Victoria and Energy Queensland.

For the networks primarily based in other jurisdictions and having an incursion to NSW, IPART only imposes reporting requirements relating to their safety management systems. However, for the NSW based networks, IPART strictly imposes its regulatory requirements including auditing the safety management systems from time to time.

Sydney Trains and Metro Trains Sydney are considered to have an electricity distribution network and hence fall under the safety regulatory regime of IPART.

During 2016-17, Ausgrid, Endeavour Energy, Essential Energy, TransGrid and Sydney Trains were found to be non-compliant with clause 7 of the *Electricity Supply (Safety and Network Management) Regulation 2014* (ESSNM Regulation). Safety management systems audits related to bushfire risk mitigation carried out during this period found certain non-material non-compliances. These non-compliances continued from the previous year when they were first established. We found that each of the networks had shown that they improved their systems and were moving toward achieving compliance.

3.2.1 Networks are required to have safety management systems that meets certain specifications

All four of the licensed electricity network operators, as well as non-licensed electricity network operators in NSW, are obliged to have safety management systems.⁸ The primary objectives of a network's safety management system are: to support the safety of the public and people working on its network, the protection of property, and the management of safety risks arising from the protection of the environment and the loss of electricity supply. Appendix A provides more detail on these requirements.

Background

IPART became the regulator of these safety management obligations in June 2015.⁹ In this role, we are able to direct audits of the network operators' safety management systems, and based on the results, we can direct the networks to amend their safety management systems within a specified timeframe.

In 2015, we audited the electricity network safety management systems of six network operators as they relate to bushfire risk. Ausgrid, Endeavour Energy, Essential Energy, TransGrid, and Sydney Trains were all found to have a number of areas of non-compliance with regulatory requirements and the Australian Standard AS 5577 - Electricity Network Safety Management Systems. Directlink was found to be compliant.

The level of compliance has improved during 2016-17

In August 2016 we issued enforceable directions¹⁰ to the five non-compliant network operators, compelling them to amend their safety management systems in three stages, and to submit a total of three audit reports each to verify each stage had been completed. This was timed in order to achieve compliance by 30 September 2017, before the nominal start of the bushfire season. This has been largely achieved during 2016-17.

In April 2017, independent audits found Endeavour Energy and TransGrid to have adequate formal safety assessment frameworks related to bushfire risk, and adequate processes and procedures to implement the selected risk controls. Independent audits also found Ausgrid and Essential Energy to have some outstanding non-material non-compliances. For Ausgrid, the non-compliances related to consultation and systems around vegetation management and prioritising defects that present bushfire risk. For Essential Energy the non-compliance related to the adequacy of processes regarding defects that aren't rectified before the start of the bushfire season.

An audit completed September 2017 found Sydney Trains to have outstanding areas of inadequacy with its formal safety assessment related to bushfire risk. The material inadequacies related to risk analysis and assessment of risk mitigation options. Non-material inadequacies related to risk assessments of grassland ignitions, and decommissioning of the network. This audit also concluded that numerous non-compliances found in an audit of January 2017 had been rectified or improved, indicating that Sydney Trains is working to achieve compliance.

⁸ Under Part 2 of the ESSNM Regulation.

⁹ They were previously administered by the Department of Industry.

¹⁰ Under clause 13 of the ESSNM Regulation.

The final stage for all five network operators is to implement the processes and procedures and undertake an audit to confirm completion. This is ongoing at the time of completion of this report.

The networks failed to comply with Tribunal directions to amend their safety management systems

As mentioned above, we directed five network operators to rectify their safety management systems in three stages, and to submit a total of three audit reports each to verify each stage had been completed. The first stage audits found Ausgrid, Endeavour Energy and TransGrid had not completed the required work, and we issued them a second direction.

By not completing the work by the due dates, the networks failed to comply with the Tribunal directions. The only significant failure to comply was by Sydney Trains which submitted its second stage audit report over four months past the due date and the audit showed its safety management system had not been amended in accordance with the Tribunal direction and the inadequacies were material in nature. Ausgrid failed to comply with the first and second directions given, by not achieving full compliance by the due dates, whilst Endeavour Energy, Essential Energy and TransGrid failed to comply with one direction each.

A failure to comply with a Direction issued by the Tribunal constitutes a non-compliance with clause 13 of the Regulation. All five network operators mentioned above are continuing to work to achieve compliance. The Tribunal will continue to monitor the progress of outstanding amendments to safety management systems and will take appropriate action should we deem it necessary.

3.2.2 Electricity networks report electricity works safety incidents to IPART

The network operators have a legislated requirement to report serious electricity works accidents (SEWAs) to IPART within seven days of them occurring, under section 63R of the *Electricity Supply Act*. Serious electricity works accidents are defined as accidents “involving electricity works” and as a consequence of which “a person dies or suffers permanent disability, is hospitalised, receives treatment from a health care professional or is unable to attend work for any period of time.”

In addition to this legislated requirement, we have some incident reporting requirements in our Electricity Network Reporting Manual (Reporting Manual). This covers the content of reports of the serious works accidents mentioned above as well as requiring investigation reports, and reporting requirements (timing and content) of less serious incidents and near misses. There can be up to three reports required following an incident – initial notification, a preliminary investigation report and a full investigation report.

It is a licence condition that the networks adhere to the requirements in our Reporting Manual. We requested that the non-licensed network operators also adhere to this, but there is no specific requirement on them to comply our Reporting Manual.

Some incident reporting obligations were not met

In general, the networks reported electricity works incidents in accordance with the requirements of section 63R for SEWAs and our Reporting Manual for all other incidents.

However, some network operators failed repeatedly to report in accordance with the section 63R timeline, and the timelines in our Reporting Manual. Those that missed the Reporting Manual deadline constitute a licence condition breach. We note that in some of these cases, the network may not have been able to identify whether reporting was required until information became available.

We introduced the reporting requirements in our Reporting Manual in October 2016, and note that the level of compliance has improved since the requirements began. Table 3.2 presents the number of late SEWA reports and Table 3.3 present the total number of late reports.

Table 3.2 Number of times SEWA 7-day report deadline (under s63R) was missed

| | Number of reports that missed the s63R deadline | Total number of reports made under s63R | Percentage of reports that were late |
|------------------|---|---|--------------------------------------|
| Ausgrid | 3 | 34 | 9% |
| Endeavour Energy | 2 | 6 | 33% |
| Essential Energy | 15 | 33 | 45% |
| TransGrid | 0 | 1 | 0% |
| Sydney Trains | 0 | 1 | 0% |

Source: IPART data

Table 3.3 Total number of reporting deadlines missed (licensed networks only)

| | Number of reports that missed Reporting Manual deadlines ^a | Total number of reports made | Proportion of reports that were late |
|------------------|---|------------------------------|--------------------------------------|
| Ausgrid | 11 | 383 | 3% |
| Endeavour Energy | 12 | 69 | 17% |
| Essential Energy | 149 | 640 | 23% |
| TransGrid | 1 | 16 | 6% |

Source: IPART data

^a This table includes is all late reports, including those listed in Table 3.2.

Note: Unlicensed networks are not required to comply with our Reporting Manual requirements.

3.2.3 Ausgrid, Endeavour Energy and TransGrid reported full compliance with employment guarantee obligations

On 1 July 2015, certain employment guarantee obligations commenced for Ausgrid, Endeavour Energy and TransGrid.¹¹ The network operators reported full compliance with

¹¹ Under Schedule 4 of the *Electricity Network Assets (Authorised Transactions) Act 2015*

the employment guarantees provisions in 2016-17.¹² We are currently auditing compliance with the obligations relating to employee numbers, forced redundancies and apprentices. We will continue with our quarterly reporting regime to monitor compliance with employment guarantees.

The obligations relate to minimum employee numbers and some conditions of employment such as restrictions on changes to workplace locations and, for continuing employees, protections for the pre-sale employment conditions.

During 2016-17, TransGrid was required to employ at least five apprentices, because its total number of full time equivalent employees during the fourth quarter of 2015-16 was less than 110% of the minimum legislated requirement. It reported having employed sufficient apprentices. This same obligation will apply to TransGrid for 2017-18.

Table 3.4 shows the reported number of full time equivalent staff in the final quarter of 2016-17, compared to the minimum number required.

Table 3.4 Reported full time equivalent staff numbers

| | Required minimum FTE ^a staff | FTE staff reported for Q4, 2016-17 |
|------------------|---|------------------------------------|
| Ausgrid | 3,570 | 4,448 |
| Endeavour Energy | 2,100 | 2,404 |
| TransGrid | 1,000 | 1,057 |

^a FTE means 'full time equivalent'.

Source: Electricity Network Asset (Authorised Transaction) Act 2014 and Quarterly compliance reports submitted to IPART.

¹² We required the three network operators to report to us quarterly on their compliance with the employment guarantees, starting from the quarter January to March 2016. Fact Sheets on the IPART website provide summary of each licensee's quarterly compliance reports.

4 Gas networks' compliance

The gas network operators have each been issued with either a reticulator authorisation or a distributor licence. A reticulator authorisation is for the operation of a distribution pipeline for the purpose of conveying natural gas. A distributor licence is for the operation of a distribution system for LPG and other gases.¹³ This authorisation/licence sets out their conditions of operation.

4.1 Natural gas reticulators' compliance with authorisation conditions

The natural gas reticulators had no non-compliances in 2016-17.

The reticulators are also required to provide their operating statistics as part of their annual compliance reports. Table 4.1 summarises these statistics for 2016-17.

In total, the operating statistics for 2016-17 indicate there were:

- ▼ 1,411,489 customers supplied with natural gas compared to 1,410,856 in 2015-16.
- ▼ 1,407,787 customers supplied with less than 1 terajoule (TJ) of natural gas compared to 1,407,172 customers the previous year.
- ▼ 3,702 customers supplied with more than 1 TJ of natural gas compared to 3,682 customers the previous year.
- ▼ 29,568 kilometres of mains supplying natural gas compared to 29,550 kms the previous year.

¹³ Gas transmission pipelines are regulated under the *Pipelines Act (NSW) 1967*.

Table 4.1 Overview of natural gas reticulator operating statistics, 2016-17

| Reticulator | Number of customers | | | Kilometres of gas mains |
|--------------------------------------|--|----------------------------|----------------------------|-------------------------|
| | DPIs ^a supplied as at 30 June | DPIs taking less than 1 TJ | DPIs taking more than 1 TJ | |
| Allgas Energy Pty Ltd | 1,222 | 1,210 | 12 | 33 |
| Australian Gas Networks (Albury) Ltd | 28,014 | 27,917 | 97 | 738 |
| Australian Gas Networks (NSW) Ltd | 29,534 | 29,462 | 72 | 1,227 |
| Central Ranges Pipeline Pty Ltd | 3,352 | 3,313 | 39 | 241 |
| Jemena Gas Networks (NSW) Ltd | 1,330,788 | 1,327,363 | 3,425 | 26,682 |
| ActewAGL Distribution Ltd | 18,579 | 18,522 | 57 | 647 |
| Total | 1,411,489 | 1,407,787 | 3,702 | 29,568 |

a Delivery Point Identifier.

Source: Gas reticulator 2016-17 annual compliance reports.

4.2 LPG distributors' compliance with licence conditions

Origin LPG reported no non-compliances for the year.

Elgas Ltd (Elgas) reported one non-compliance that related to unlicensed distribution. It has applied for a licence amendment to add this district to its licence and this application is currently under assessment.



Appendices



A Overview of safety management system obligations and employment guarantees

A.1 Summary of safety management system obligations

Under Part 2 of the *Electricity Supply (Safety and Network Management) Regulation 2014*:

- ▼ A network operator must take all reasonable steps to ensure that the design, construction, commissioning, operation and decommissioning of its network (or any part of its network) is safe.
- ▼ A network operator must have and implement a safety management system in place that is in accordance with Australian Standard (AS) 5577, takes into account the primary objective of a safety management system and any code, standard or guideline specified by the Minister, and deals with:
 - the safety and reliability of the network
 - safety of electrical installations of customers connected to the network
 - advice to the public about electrical hazards related to the network, and
 - bush fire ignition risk management, where electricity lines and other assets are capable of initiating bush fire.
- ▼ The primary objective of a safety management system is to support:
 - the safety of the public and of people working on the networks
 - the protection of property, and
 - the management of safety risks arising from the protection of the environment, and from loss of electricity supply.
- ▼ A network operator is to measure performance against its safety management system and publish the results, giving prior notice to IPART of its intention to publish the results.
- ▼ Apart from an initial audit of the safety management system, (that was due by April 2015), audits must be carried out as directed by IPART in writing to the network operator. IPART may require the audit concerned to relate to either specified aspects of a network operator's safety management system, or to the safety management system as a whole.

A.2 Summary of the employment guarantees

The employment guarantees are under Schedule 4 of the *Electricity Network Assets (Authorised Transactions) Act 2015*.

They set out provisions relating to minimum employee numbers and some conditions of employment such as restrictions on changes to workplace locations and, for continuing employees, protections for current employment conditions during the transfer from a State-owned corporation to a private operator.