

31st October 2016

1. Introduction

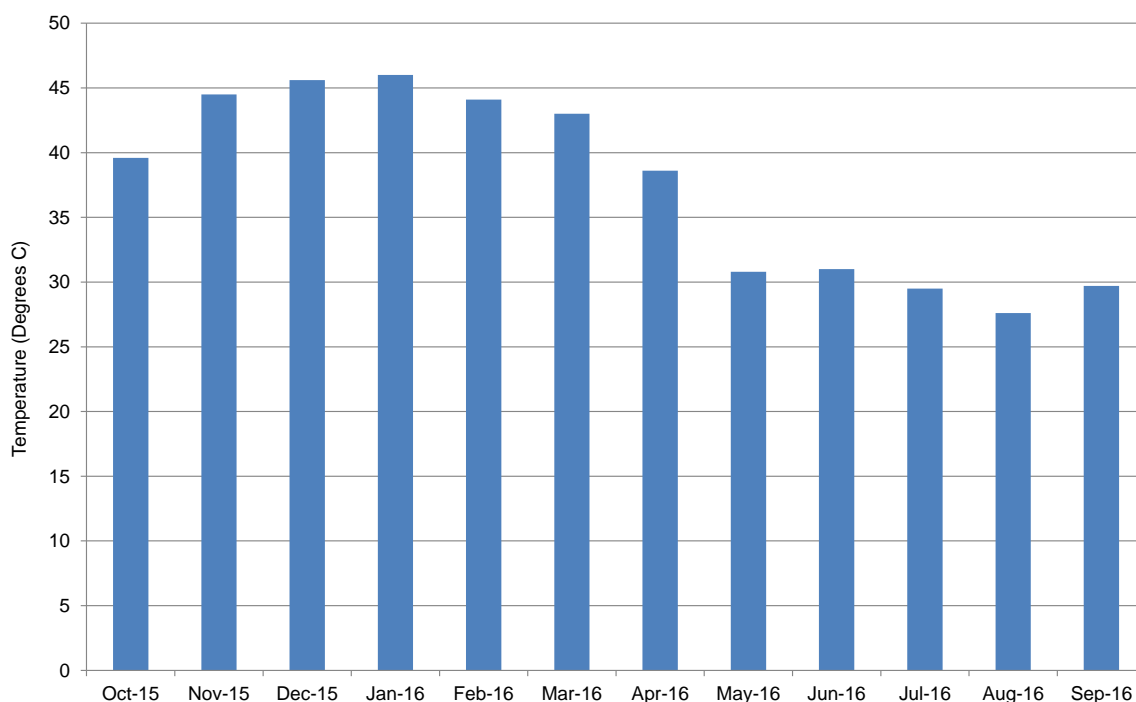
This Annual Bush Fire Risk Management Report has been prepared to meet TransGrid's Electricity Networks Reporting Manual requirements, specifically the Chapter 4 requirements for Bushfire Preparedness reporting. It is based on the reporting template in Annexure 2 of IPART's Electricity Networks Reporting Manual.

The report covers the 12-month period 1st October 2015 to 30th September 2016.

2. Climate conditions

Climate factors relating to bush fire risk include temperature, humidity, wind and the dryness of the landscape. These factors are reflected in Fire Danger Ratings and Total Fire Bans issued by the Rural Fire Service. Of these factors, historical data is available for temperature.

New South Wales Monthly Maximum Temperature



TransGrid's existing procedures respond to the applicable Fire Danger Ratings and Total Fire Bans as issued by the Rural Fire Service when assessing risk for work to be undertaken on a day-to-day basis, such as hot work.

While there were early predictions of a "long and difficult" bushfire season in summer due to a strong El Nino weather pattern, New South Wales experienced timely rainfall across the season. This resulted in a relatively quiet bush fire season.¹

¹ Rural Fire Service, *Bush fire season draws to a close*, 31 Mar 2016, http://www.rfs.nsw.gov.au/_data/assets/pdf_file/0007/39328/Media-Release-End-of-Bush-Fire-Danger-Period-2015-16.pdf.

The climate factors observed in the reporting period were within ranges previously experienced. As such, no specific steps were taken to compensate for changed climate conditions.

3. Statistical Reporting

This section provides statistics on the current bush fire season's risk management works as well as providing detail of outstanding works from previous seasons.

Table 1: Data on bush fire preparation works

Criteria	Target this season	Actual this season	Outstanding from previous seasons	Outstanding from previous seasons	Actual from previous seasons
Line route length of the ENO's network inspected in bush fire prone areas within the reporting year.	5,483 km	5,483 km	0	0	5,483 km
Private lines checked by the ENO's in pre-season inspections by the conclusion of the reporting year.	0	0	0	0	0
Number of HV customers advised to undertake preseason bush fire checks in accordance with ISSC 31 ^a .	N/A	N/A	N/A	N/A	N/A

^a New South Wales Department of Industry, *ISSC 31 Guideline for the Management of Private Overhead Lines*, 1 July 2004. Refer further comments in section 4.

Table 2: Bush fire starts and risk management

Criteria	Inside bush fire prone areas	Outside bush fire prone areas
Number of reported bush fire ignitions by private installations (High Voltage and Low Voltage) ^c .	0	0
Number of reported bush fire ignitions by the ENO's electricity network.	2	0
Number of identified vegetation defects open at the conclusion of the reporting year within bush fire prone areas.	38	5
Number of directions for bush fire risk mitigation issued to private LV customers by the ENO that are outstanding as of 30 September.	0	0
Number of directions for bush fire risk mitigation issued to private LV customers by the ENO that are outstanding by more than 60 days.	0	0
Number of HV customers providing statements of compliance in accordance with ISSC 31 by 30 September ^d .	N/A	N/A

^c A private installation has the same meaning as electrical installation as defined by the Electricity Supply Act 1995 (NSW).

^d Refer notes in section 4 of report.

Table 3: Asset defects impacting bush fire risk

Criteria	Inside bush fire prone areas				Outside bush fire prone areas			
	Cat 1 ^c	Cat 2 ^d	Cat 3 ^e	Cat 4 ^f	Cat 1 ^c	Cat 2 ^d	Cat 3 ^e	Cat 4 ^f
Number of identified asset defects impacting bush fire risk within bush fire prone areas that were open at the conclusion of the reporting year.	0	0	3	0	0	0	0	0
Number of directions for bush fire risk mitigation work on private land issued to LV customers by the ENO.	0	0	0	0	0	0	0	0

^c Category 1 Defects: Defects that pose a direct and immediate risk to the safety of the public/staff and requiring immediate rectification.

^d Category 2 Defects: Defects that pose a risk to the safety of the public/staff and require rectification with one month.

^e Category 3 Defects: Defects that pose a predictable future risk to the safety of the public/staff and require rectification within 6 months.

^f Category 4 Defects: Defects that pose a predictable future risk to the safety of the public/staff but can be rectified through planned maintenance.

4. ENO comments

4.1 Commentary on Statistical Reporting Section 3

TransGrid has marked as Not Applicable the questions in table 1 and 2 relating to the compliance with ISSC 31 – Guideline for the Management of Private Overhead Power Lines as this guideline does not apply to TransGrid as a transmission operator. Notwithstanding TransGrid has written to its directly connected customers to advise them of the risks associated with the upcoming bushfire season in the course of prudent business practice.

The forty-three outstanding vegetation defects open at the end of the reporting period as noted in table 2 are being addressed with a high priority. These will be all be rectified by mid November 2016.

The three transmission line defects noted in table 3 are currently scheduled for completion mid December 2016. This is the earliest these defects can be addressed due to access delays associated with wet weather. They are relatively minor defects and are considered a low risk of fire start.

4.2 Bushfire Risk Management Actions

In addition to the activities reported on in section 3, the following activities have been undertaken by TransGrid in preparation for the upcoming Bushfire Season:

- TransGrid's Bushfire Risk Management Plan has been updated as part of it's annual cycle and to incorporate findings from Ecological Australia's audit of April 2016.
- All transmission line protection systems maintenance tasks have been completed in accordance with the plan for these systems.
- All substation and radio repeater site buffer zones, gutters and compounds have been checked for any issues prior to the bushfire season.
- A review of System Adequacy for the expected summer peak loads has been undertaken with no significant issues identified. This review considered the expected demand / generation capacity, the risk associated with losing key network elements during peak times and the current availability and operational issues associated with critical network plant.
- All operational systems used by the TransGrid control room are in place ahead of the bushfire season. These systems include the RFS Incident Control Online Notification (ICON) system which provides a real time interface on fire activity with the RFS and the Indji Watch spatial information system which provides rain, wind, lightning and storm tracking capability.

4.3 Audit Reports on the ENSMS

One audit report on bushfire risk management was completed during the reporting period. IPART engaged EcoLogical Australia to complete a review of TransGrid's Bushfire Risk Management. The final report was received in April 2016. Four non-compliance (minor) against the Electricity Network (Safety and Network Management) Regulation 2014 were noted.

TransGrid submitted an action plan to rectify these issues was provided to IPART in July 2016 and the actions proposed were completed by the end of the reporting period.

4.4 Compliance with any Direction from IPART

IPART issued a Notice of Direction Amend Safety Management System in August 2016 following on from EcoLogical's bushfire audit issued April 2016. As of the end of the reporting period work had been completed as required to meet the Notice of Direction and sent for independent audit verification as per the requirement of the notice.