

ENFORCEABLE UNDERTAKING

Part 11

Work Health and Safety Act 2011

The commitments in this enforceable undertaking
are offered to SafeWork NSW

by

AGL Macquarie Pty Ltd

ACN 167 859 494

Privacy statement

SafeWork NSW respects your privacy and is committed to protecting personal information. The information provided on this document is for the purpose of making an undertaking to SafeWork NSW given for the purposes of part 11 of the WHS Act. This information will be managed within the requirements of the current state government privacy regime.

SafeWork NSW may publish the undertaking and the information contained in it for purposes identified in the undertaking or for other appropriate legal purposes in various publications such as newspapers and on its website. SafeWork NSW may be required to disclose personal information to other regulatory agencies in accordance with other law enforcement activities which may be conducted as part of an investigation. Further information on our privacy policy is available at www.SafeWork.nsw.gov.au

Enforceable Undertaking

Purpose

The purpose of this enforceable undertaking is to document the undertakings offered to SafeWork NSW pursuant to Part 11 of the *Work Health and Safety Act 2011* (NSW) (**WHS Act**) in connection with matters relating to alleged contraventions of the WHS Act.

Section 1 – General information

a. Details of the person proposing the undertaking

Registered Address:	Level 24 200 George Street Sydney NSW 2000
Postal address:	As above
Telephone contact:	[REDACTED]
Email address:	[REDACTED]
Legal structure:	Australian Proprietary Limited Company
Type of business:	Energy company
Commencement date of the entity:	4 February 2014
Number of workers:	Full-time: 609 Part-time: 8 Casual: 9
Products and/or services:	Energy supply and services

b. Details of the alleged contravention

It is alleged by SafeWork NSW that on 12 November 2015, AGL Macquarie Pty Ltd (**AGL Macquarie**) failed to discharge its obligations as a person conducting a business or undertaking under section 19(1) of the WHS Act in that it did not ensure, so far as is reasonably practicable, the health and safety of workers.

c. Details of the events surrounding the alleged contravention

On 12 November 2015, two workers employed by AGL Macquarie at the Liddell Power Station in New South Wales, were allocated the task of performing a maintenance inspection of Unit 2 Auxiliary Transformer 2B.

This task was performed on the incorrect transformer and during the 'test before touch – prove dead' procedure, an arc flash occurred and the workers sustained burn injuries.

d. An acknowledgement that SafeWork NSW alleged a contravention has occurred

It is acknowledged that SafeWork NSW has alleged that AGL Macquarie has contravened section 19(1) of the WHS Act.

e. The details of any injury that arose from the alleged contravention



f. The details of any enforcement notices issued that relate to the alleged contravention

Were notices received?

Yes ☒ Please provide details in the table below.

Date issued	Notice type	Notice number	Contravention	Action taken in response to notice
20/11/2015	Improvement Notice	7-285294 (supersedes 7-284352)	Section 19 of the WHS Act, and Clause 161 of the <i>Work Health and Safety Regulation 2011</i> (NSW) (WHS Regulation)	• Introduction of a requirement to wear arc flash Personal Protective Equipment when performing the 'test before touch – prove dead' task. • Installation of live line detectors on energised equipment (with covers) and the installation of an improved locking mechanism to transformer doors and increased security controls.

Date issued	Notice type	Notice number	Contravention	Action taken in response to notice
20/11/2015	Improvement Notice	7-285295 (supersedes 7-284379)	Section 19 of the WHS Act and/or Clause 147 of the WHS Regulation	- Implementation of new labelling and identification plates on equipment. - Amending the Preparation Restoration Instruction to clarify the procedure to identify the work area and identify equipment. - Amending the Permit To Work procedure to clarify the process for completing and checking equipment isolation prior to commencing work.

g. A statement of assurance about future work health and safety behaviour

AGL Macquarie is committed to complying with its obligations under the WHS Act and ensuring, so far as reasonably practicable, the health and safety of all workers and those who may be affected by its business or undertaking.

When an alleged contravention is associated with an injury/illness

h. The details of the type of workers compensation provided (if the injured person(s) is a worker of the person)

Injured Worker One

Injured Worker Two

i. The details of the support provided, and proposed to be provided, to the injured person(s) to overcome the injury/illness

Does the contravention involve injury to a person?

Yes ☒ The workers were employed by AGL Macquarie at the time of the incident.

In addition to the support provided to the injured workers, AGL Macquarie made available to all workers at the Liddell Power Station representatives from the AGL Macquarie Employee Assistance Program (EAP). The representatives from the EAP attended the Liddell Power Station in the weeks that followed the incident to continue to support all workers.

The following support has been provided to the worker and/or their family – Injured Worker One:

Date	Description of support	Comments
12/11/2015 to 23/11/2015	The injured worker was transported to and remains in hospital.	Whilst in hospital the injured worker was visited by and provided with support from AGL senior leaders.
11/12/2015 to 15/01/2016	AGL Macquarie prepared, coordinated and initiated the worker's Return To Work Plan and liaised with medical experts.	The worker's supervisor, colleagues, HSE Business Partner, Injury Claims Coordinator and HR Manager provided ongoing support to the worker during this time.
[REDACTED]		
[REDACTED]		

The following support has been provided to the worker and/or their family – Injured Worker Two:

Date	Description of support	Comments
12/11/2015	The AGL Injury Claims Coordinator met the worker at hospital on the date of the incident, remained with the worker until treated and arranged transport home.	On site face-to-face support (via the EAP) made available to all staff.
16/11/2015	AGL Macquarie prepared the injured worker's Return To Work Plan.	
[REDACTED]		

- j. If the matter involves a fatality or very serious injury¹, a claim to demonstrate that exceptional circumstances exist that the enforceable undertaking is a more appropriate response than pursuing prosecution

Does the contravention involve a fatality or very serious injury¹?

No ☒

1. An injury that has caused nervous system damage liable to lead to mental incapacity or permanent restriction of mobility or involves a major amputation of a limb or parts of the body, for example, amputation above the knee or elbow. This term is not defined in the WHS Act; it is used within this document to identify certain circumstances that will trigger additional steps in the enforceable undertaking process.

k. The details of any existing occupational health and safety management system (OHSMS) at the workplace including the level of auditing currently undertaken

AGL Macquarie has an existing OHSMS compliant with AS/NZS 4801:2001. Third party auditing of the workplace against AS/NZS 4801:2001 is conducted independently on an annual basis and self-assessments are completed quarterly on an internal basis across a sample of sites.

l. The details of any consultation undertaken within the workplace regarding the proposal of an enforceable undertaking

A working group was formed to consider proposed strategies that may benefit the workers, industry and the community (**Working Group**). The Working Group consisted of the AGL Macquarie Electrical Subject Matter Experts, General Manager, Head of Operations, the Health and Safety Business Partner, and the Communications Business Partner.

The AGL Macquarie Working Group's initial proposals were formally discussed and refined with the AGL Head of Safety, Office of the Chief Engineer, the AGL Macquarie Business Improvement Manager and Training Delivery Manager. In addition, consultation was undertaken with the AGL Health Safety and Environment Lead Team and the Executive General Manager Group Operations.

Representatives of AGL Macquarie have discussed the enforceable undertaking with the injured workers and, where appropriate, sought their feedback on the proposed initiatives in this enforceable undertaking.

In developing the initiatives, consultation has also been carried out with external parties including the Safety Institute of Australia and the Australian Energy Council Generators OHS Working Group.

AGL Macquarie has also engaged in dialogue more broadly with AGL Macquarie workers regarding improvements made and proposed to be made at the site. More recently, AGL Macquarie has held consultation meetings for AGL Macquarie workers to discuss the initiatives proposed under this enforceable undertaking.

m. A statement of regret that the incident occurred (i.e. not an admission of guilt)

AGL Macquarie sincerely regrets that the incident on 12 November 2015 occurred and that workers sustained injuries as a result of the incident.

n. Any rectifications made as a result of the alleged contravention

Description	\$ Amount
AGL Macquarie reviewed its processes for maintaining safe electrical systems of work and undertook a number of actions, including:	
• Electrical Safety advice, procedural development, and compliance training	\$108,699.00
• Installation of live-line detectors and purchase of voltage wands	\$22,590.00
• Arc Flash studies and modifications to plant to allow for access	\$729,880.43
• Arc Flash PPE and Clothing	\$273,188.00
• Plant switch room locks, barricades, line-marking zones	\$84,561.76
• Electrical Safety Awareness feedback session	\$4,950.00
• Identification and labelling of electrical plant	\$7,099.00
TOTAL AMOUNT SPENT ON RECTIFICATIONS	\$1,230,968.19

- o. A commitment that the behaviour that led to the alleged contravention has ceased and will not reoccur**

AGL Macquarie commits that the behaviour that led to the alleged contravention has ceased and that it will take all reasonably practicable steps to prevent recurrence of this type of incident.

- p. A commitment to the ongoing effective management of work health and safety risks**

AGL Macquarie commits that it will exercise its best endeavours to the ongoing effective management of work health and safety risks.

- q. A statement of ability to comply with the terms of the enforceable undertaking**

AGL Macquarie acknowledges that it has the financial ability to comply with the terms of this enforceable undertaking and has provided evidence with this undertaking to support this declaration.

- r. The person is required to provide information regarding any prior work health and safety convictions**

SafeWork NSW requests a list outlining details of any prior work health and safety convictions or findings of guilt under work health and safety legislation² or work health and safety related legislation.

No ☒ AGL Macquarie has had no prior work health and safety convictions.

2 Subject to any local legal constraints such as spent conviction legislation.

- s. Statement regarding relationships with beneficiaries**

AGL Macquarie acknowledges that it and other AGL entities have ongoing memberships with HunterNet, the Safety Institute of Australia and the Australian Energy Council, together with memberships that it holds with other industry bodies. Otherwise, there are no known current relationships with any of the beneficiaries outlined in this enforceable undertaking.

- t. Intellectual property licence**

AGL Macquarie grants SafeWork NSW a permanent, irrevocable, royalty-free, worldwide, non-exclusive licence to use, reproduce, distribute, electronically transmit, electronically distribute, adapt, and modify any materials developed as a result of this enforceable undertaking.

- u. A commitment to participate constructively in all compliance monitoring activities of the undertaking**

AGL Macquarie acknowledges that the responsibility for demonstrating compliance with this undertaking rests with the person who has given this undertaking. Evidence to demonstrate compliance with the terms will be provided to SafeWork NSW by the due date for the term.

AGL Macquarie acknowledges that SafeWork NSW may undertake other compliance monitoring activities to verify the evidence that is provided and compliance with the relevant term. The evidence provided to demonstrate compliance with the undertaking will be retained by the person who has given this undertaking until advised by SafeWork NSW that the undertaking has been completely discharged.

AGL Macquarie acknowledges that SafeWork NSW may initiate additional compliance monitoring activities, such as inspections, as considered necessary at SafeWork NSW's expense.

v. Acknowledgement of enforceable undertakings overview and guidelines

AGL Macquarie has read and understood 'Enforceable undertakings – an overview', and 'Enforceable undertakings – guidelines for proposing an enforceable undertaking'.

Section 2 – Enforceable Terms

a. An acknowledgement that the enforceable undertaking will be published and publicised

AGL Macquarie acknowledges that the enforceable undertaking will be published on SafeWork NSW's Internet site and may be referenced in SafeWork NSW's publications.

AGL Macquarie will, within 30 days of the date of acceptance of this enforceable undertaking, cause a public notice to be published in the Sydney Morning Herald, which will be drafted using the script provided in Annexure 1.

It is also agreed that any publicly facing material branded by AGL Macquarie and published as part of the enforceable undertaking will include an acknowledgement that those materials have been produced as part of an enforceable undertaking with SafeWork NSW.

b. A commitment regarding linking the strategy and promotion of benefits to the enforceable undertaking

AGL Macquarie is committed to ensuring that any promotion of a benefit arising from this enforceable undertaking will clearly link the benefit to the undertaking and that the undertaking was entered into as a result of the alleged contravention.

c. A commitment to disseminate information about the undertaking to workers, and other relevant parties (which may include work health and safety representatives), and in the annual report (if applicable)

AGL Macquarie agrees to disseminate information about the enforceable undertaking within the workplace, including to the members of any health and safety committee, health and safety representatives and all subcontractors working for AGL Macquarie. This information will be disseminated through the regular and business wide HSE communications and through the HSE Lead and Executive teams, and will be completed within 30 days from the date of acceptance of the enforceable undertaking.

AGL Macquarie commits that it will publish details of the enforceable undertaking in the first annual report due after the date the undertaking is accepted.

Strategies that will deliver benefits to the workplace, industry and the community

d. Strategies that will deliver workplace benefits

INITIATIVE 1 - Critical risks – working on or in the vicinity of electrical apparatus program

Scope:

Develop and deliver a 'Critical risks – working on or in the vicinity of electrical apparatus program' for licensed AGL Macquarie electrical workers and any other relevant workers, including maintenance and operations personnel (the **Relevant Workers**).

Target issue:

The 'Critical risks – working on or in the vicinity of electrical apparatus program' will be aimed at Relevant Workers as a means of further developing their knowledge and skills.

The AGL Macquarie 'Critical risks – working on or in the vicinity of electrical apparatus program' is targeted towards eliminating / minimising the risk of one of the high impact harm areas "Working Live – Electric Shocks / Electrocution" as identified in the SafeWork NSW 'Work Health and Safety Roadmap for NSW 2022'.

Tangible outputs / deliverables:

Developing a training program for AGL Macquarie Relevant Workers.

AGL Macquarie will produce a summary report for SafeWork NSW of the training program that includes:

- a copy of the training program materials developed;
- the progress of the training delivery; and
- the number of workers who have completed or are completing the training.

The summary report will be made available to SafeWork NSW within 12 months from the date of acceptance of the enforceable undertaking. A further summary report will be provided to SafeWork NSW 24 months after acceptance of the enforceable undertaking to confirm the completion of the training.

Audience / beneficiaries:

The 'Critical risks – working on or in the vicinity of electrical apparatus program' is for Relevant Workers based at the Liddell and Bayswater Power Stations. The Relevant Workers that will benefit from the training program are approximately:

- 260 maintenance workers; and
- 124 operations workers.

Delivery method:

The 'Critical risks – working on or in the vicinity of electrical apparatus program' will be implemented in four stages:

Stage 1

AGL Macquarie will establish an Electrical Safety Forum consisting of representatives of the Relevant Workers and subject matter experts who will be responsible for proposing initiatives for the improvement of skills and competencies of Relevant Workers.

An Engineer will be responsible for undertaking a comprehensive literature review of arc flash studies, reviewing arc flash incidents and the statistics available on arc flash incidents to form part of the training (**Arc Flash Expert**).

Stage 2

AGL Macquarie will engage external consultants to work with AGL Macquarie, the Arc Flash Expert and the Electrical Safety Forum, to develop the 'Critical Risks Electrical Skills and Competency Training Program' so that it is aligned with the 'Electricity Supply Industry – Generation Sector Training Package' and to the prescriptive requirements of the Australian Industry and Skills Committee (**AISC**). The training program will enhance worker competency beyond trade and industry level training.

Prior to the implementation of the training program, AGL Macquarie will arrange for an independent audit of the training materials for compliance with the electricity safety standards. AGL Macquarie will provide a copy of Audit Report to SafeWork NSW.

Stage 3

AGL Macquarie will, in consultation with the external consultant, coordinate the implementation of the 'Critical risks – working on or in the vicinity of electrical apparatus program'.

The AGL Group Operations Training Delivery Manager will be responsible for ensuring the delivery of the training program to the AISC guidelines over time.

The Electrical Safety Forum and the AGL Group Operations Training Delivery Manager will be responsible for reviewing the effectiveness of the training program over time.

Stage 4

To evaluate the effectiveness of the training program, AGL Macquarie will:

- Hold regular meetings between the Electrical Safety Forum and the Arc Flash Expert to monitor the progress of the training, any feedback received from the training and determine if there is any way to improve the training program.
- Document the key items and actions relating to the 'Critical Risks Electrical Skills and Competency Training Program' agreed during meetings of the AGL Macquarie Electrical Safety Forum (**Initiative Minutes**).
- Track the progress of the training program by way of quarterly updates to the Training Matrix.
- Request feedback from the participants who complete the training program by way of a Training Evaluation Form.
- Review the effectiveness of the training program outcomes on completion.

At 12 months and 24 months following the commencement of this enforceable undertaking, AGL Macquarie will provide to SafeWork NSW a copy of the following documents: the Initiative Minutes, the Training Matrix tracking the implementation of the training program and a summary report reviewing the effectiveness of the program.

Timeframes:

Timeline	Proposed Activity
April 2018 – May 2018	• Stage 1 – establish the Electrical Safety Forum • Stage 1 – Arc Flash Expert to complete literature review
July 2018 – September 2018	• Stage 2 – consultants to develop training program • Stage 2 – independent auditor to assess the training program for compliance with electricity safety standards
January 2019 – December 2019	• Stage 3 – consultants to deliver training program • Stage 3 – Electrical Safety Forum to review the effectiveness of training program outcomes

Work health and safety outcome:

To increase worker currency of knowledge, skills and competency with the aim of improving worker awareness and management of hazards when working on or in the vicinity of electrical apparatus.

Cost Breakdown:

Description	\$ Amount
Consultancy fees - Developing and delivering the 'Critical risks – working on or in the vicinity of electrical apparatus program'	\$350,000.00

Total estimated cost: \$350,000.00

INITIATIVE 2 – Safety Leadership and Culture Program

Scope:

To implement a contemporary safety leadership and culture program for AGL Macquarie managers, supervisors, relevant business partners and relevant representatives of AGL Macquarie contractors.

Target issue:

To improve consistency in leadership and management of workplace health and safety.

Tangible outputs / deliverables:

The AGL Macquarie 'Safety Leadership and Culture Program' will comprise:

- the introduction of the Global Safety Index;
- site mapping using the Hudson Safety Culture Maturity Model; and
- safety leadership training.

Audience / beneficiaries:

AGL Macquarie leaders and workers will participate in, and benefit from, the 'Safety Leadership and Culture Program'. In addition, the program will be implemented across the wider AGL business.

Delivery method:

The AGL Macquarie safety leadership and culture program has three framework areas outlined below:

1. The Global Safety Index (**GSI**)

Introduction of the GSI at AGL Macquarie to report on and benchmark safety culture and leadership scores annually for three years. AGL Macquarie will utilise this tool to establish a baseline to track and measure improvements in safety culture, leadership, and performance.

2. Hudson Safety Culture Maturity Model

Developing the 'Hudson Safety Culture Maturity Model' and mapping of the existing AGL Macquarie safety culture, with the assistance of a consultant. The 'Hudson Safety Culture Maturity Model' mapping of AGL Macquarie, once developed, will involve progressive programs for a period of three years.

3. Executives, Leaders and Manager safety culture and safety leadership training

A Safety leadership training program will be delivered to selected AGL Macquarie leaders and workers.

To evaluate the effectiveness of the three stages, AGL Macquarie will:

- Undertake a comparison of GSI safety culture and leadership scores and mapping to the 'Hudson Safety Culture Maturity Model' at annual intervals during the 2.5 years following the acceptance of this enforceable undertaking.
- Request feedback from participants by way of Training Evaluation Forms and review the feedback provided by participants.

AGL Macquarie will provide to SafeWork NSW a report that includes the following information within 6 months of the commencement of this enforceable undertaking:

- confirmation that the first baseline results of the first GSI survey of the AGL Macquarie workforce have been completed;
- confirmation that mapping using the 'Hudson Safety Culture Maturity Model' has commenced; and
- confirmation that Safety leadership training has commenced with AGL Macquarie leaders.

At 18 months and 30 months following the commencement of this enforceable undertaking, AGL Macquarie will provide a further report that confirms the progress of the GSI survey, the safety leadership training and the Hudson mapping.

Timeframes:

Timeline	Proposed Activity
April 2018 - June 2018	• Executives, Leaders and Manager safety culture and safety leadership training completed
July 2018 – December 2018	• Mapping using the 'Hudson Safety Culture Maturity Model' completed
January 2019	• Global Safety Index year 1 activity
July 2019 – December 2019	• Mapping using the 'Hudson Safety Culture Maturity Model' continued and year 1 programs completed
January 2020	• Global Safety Index year 2 activity
February 2020 – June 2020	• Mapping using the 'Hudson Safety Culture Maturity Model' completed and year 2 programs completed.
June 2020	• Program review and final evaluation to SafeWork NSW.

Work health and safety outcome:

The 'Safety Leadership and Culture Program' will develop AGL Macquarie leaders' and workers' capabilities to assist them in better understanding, managing, participating in and leading workplace health and safety initiatives.

Cost Breakdown:

Description	\$ Amount
Consultancy fees - Global Safety Index	\$30,000.00
Consultancy fees – including consultant for mapping	\$120,000.00

Total estimated cost: \$150,000.00

e. Strategies that will deliver industry benefits

INITIATIVE 3 – Arc Flash Guidance Material for Industry

Scope:

To develop a suite of materials in different mediums on electrical arc flash hazards and best practice control measures to eliminate or minimise the risk of an arc flash for the benefit of AGL Macquarie workers, the Australian Electricity Generation Industry, electrical workers and the safety profession.

Target issue:

In Australia, there is a need for greater education within the energy and safety industries to eliminate or minimise the risk of an arc flash.

The guidance material on the elimination or minimisation of arc flash across Australian workplaces is not developed, is not available in an accessible or a practical form and is not available free of charge. Currently, there are several lengthy and highly technical international standards and guidelines published by large organisations and employer associations that have not been consolidated and are not readily accessible to the electrical industry or to electrical workers.

The guidance material on the elimination or minimisation of arc flash in Australia does not consider how "human factors" (that being the interaction of individuals with each other, with equipment/facilities and with management systems) can be influenced to eliminate or minimise the risk associated with arc flash. Producing material that focuses on human behaviour and qualities/traits, together with workplace safety culture and attitudes and the specific requirements of young and vulnerable workers will advance and develop the current arc flash literature.

Tangible outputs / deliverables:

AGL Macquarie will publish the following material:

- one written publication on electrical arc flash for the Australian Energy Council, Generators OHS Working Party;
- an electrical arc flash hazard Appendix to Chapter 23 'Physical Hazards: Electricity' of the OHS Body of Knowledge for Generalist OHS Professionals; and
- an online arc flash hazard video.

Audience / beneficiaries:

Each of the mediums identified to publish arc flash hazard guidance material will be for the benefit of AGL workers, electrical workers more broadly, the wider electricity generation industry, the safety profession and SafeWork NSW.

Delivery method:

The delivery methods will be as follows:

1. AEC Generators OHS Working Party

AGL Macquarie will collaborate with the AEC Generators OHS Working Party to prepare at least one written publication on electrical arc flash hazards.

2. OHS Body of Knowledge Appendix

AGL Macquarie will join the OHS Body of Knowledge Topic Specific Technical Panel who are responsible for the development and review of the OHS Body of Knowledge content.

Working with the Topic Specific Technical Panel, AGL Macquarie will prepare an electrical arc flash hazard appendix to Chapter 23 'Physical Hazards: Electricity' (the **Appendix**).

AGL Macquarie has selected the OHS Body of Knowledge to publish the Appendix as:

- it is a free and open source of current research and practice in the safety industry;
- there is a gap in the information contained within the 'Physical Hazards: Electricity' chapter in that arc flash hazards and controls are not specifically addressed; and
- the OHS Body of Knowledge forms part of the accreditation requirements for OHS professional education and is increasingly being used in the Vocational Education & Training sector.

3. Online arc flash hazard video

AGL Macquarie will apply its subject matter expertise to develop an online video on electrical arc flash hazards and potential control measures to reduce or eliminate the risk of an arc flash occurring.

The video will be uploaded onto the AGL Energy website and shared with the AEC and OHS Body of Knowledge.

AGL Macquarie will promote the release of the video across AGL, within the Australian Generation Industry and the Hunter region.

AGL Macquarie will provide to SafeWork NSW, within 24 months of the commencement of the enforceable undertaking the following:

- a copy of the arc flash hazard publication prepared with the AEC;
- a copy of the electrical arc flash hazard Appendix to Chapter 23 'Physical Hazards: Electricity' of OHS Body of Knowledge; and
- a copy of the online video and a link to where the video is available on the AGL Energy website.

Timeframes:

Timeline	Proposed Activity
April 2018 – June 2018	• Arc Flash Expert to collaborate with AEC Generators OHS Working Party to draft written publication on electrical arc flash hazards • Arc Flash Expert to join the OHS Body of Knowledge Topic Specific Technical Panel

	Arc Flash Expert to commence development of content for the online video
June 2018 – December 2018	- Consultation with SafeWork NSW on publications and online video - Sharing the draft publication and online video with AEC member associations and other members of the OHS Body of Knowledge Topic Specific Technical Panel for feedback and acceptance
January 2019 – March 2019	Promoting the publications and online video through the AEC member associations (to industry) and the OHS Body of Knowledge (to the OHS profession and the Vocational Education and Training Sector)
March 2019 – April 2019	Program review and final evaluation report to SafeWork NSW

It is estimated that the publications and the online video will be released within 24 months of the commencement of this enforceable undertaking.

Work health and safety outcome:

The production of this guidance material will increase awareness of arc flash hazards and methods of reducing the risk of an arc flash through control measures within the Australian Electricity Generation Industry, electrical workers through the Hunter Industries Electrical Safety Network and the Workplace Health & Safety industry.

Cost Breakdown:

Description	\$ Amount
Consultancy fees - OHS Body of Knowledge	\$60,000.00
Costs of development of materials and collaboration with the AEC Generators OHS Working Group	\$160,000.00

Total estimated cost: \$220,000.00

f. Strategies that will deliver community benefits

INITIATIVE 4 – Community Electrical Safety Awareness campaign

Scope:

AGL Macquarie will:

- generate increased awareness of electrical safety principles and practices, and the major causes of incidents and fatalities caused by electricity;
- target young workers, business owners and managers in industries where exposure to electrical hazards may exist, in order to increase and improve their awareness of electrical safety;
- increase community engagement and awareness about potential electrical safety risks; and
- provide support for safety events and initiatives, and safety awards in the Hunter region which focus on electrical safety.

To achieve these objectives, the Community Electrical Safety Awareness (**Community ESA**) campaign will identify electrical risk factors, the barriers to safety commitment, and behavioural improvement strategies

related to exposure to electrical hazards. The campaign will deliver targeted electrical safety messaging via printed materials, social media content, paid digital and traditional advertising as well as tailored public relations activities and high profile community engagement events.

Target issue:

The Community ESA campaign will target the high impact harm area "Working Live – Electric Shocks / Electrocution" as identified in the SafeWork NSW 'Work Health and Safety Roadmap for NSW 2022' and educate young workers, who are identified by SafeWork NSW as vulnerable in the community.

AGL is uniquely placed to assist NSW workplaces increase hazard awareness specific to electrical safety, with capacity to focus on the education of young workers and managers in industries where exposure to electrical hazards may exist.

Tangible outputs / deliverables:

AGL Macquarie will:

- Facilitate a series of electrical safety focus groups to assist in preparing campaign messages and materials.
- Produce a suite of electrical safety educational content, that may include video production, printed materials, social media content and paid traditional and digital advertising, based on focus group campaign messages.
- Deliver a three month engagement campaign, targeting younger workers (through regional industry bodies eg HunterNet), business owners and managers in industries where exposure to electrical hazards may exist.
- Deliver a secondary three month engagement campaign targeting AGL customers (home and business owners) and members of the AGL Macquarie supply chain.
- Provide support for safety initiatives and safety awards in the Hunter region, including in partnership with HunterNet.
- Create an "online hub" that will store all content created as part of this initiative.

These deliverables will be evaluated and quantified based on audience reach and level of engagement during and following the electrical safety campaign.

The following metrics will be measured during the Community ESA campaign and assessed at completion:

- Exposure – to be measured by number of impressions across social media and paid digital advertising campaigns, known audience of targeted traditional advertising, traffic to the content hub and the number of people exposed to the campaign public relations activities.
- Engagement – will be measured by the amount of traffic to the content hub (evidenced by time spent on pages, downloads, clicks to additional content and number of likes / shares of campaign material on social media channels) and to the number of people exposed to the campaign across the Hunter Region. The secondary audience will be measured by the number of people who received printed and online material and the number of opportunities they had to encounter campaign messaging.
- Community engagement – support for safety initiatives and safety awards in the Hunter region and via HunterNet will be measured by the number of people who participated in the safety awards, as well as the number of people who attended the NSW Regional Safety Conference & Expo and via HunterNet.
- Commitment to or actual behaviour change – will be measured in collaboration with HunterNet via a 'before' and 'after' survey of apprentices.

AGL Macquarie will provide a copy of the Final Evaluation Report to SafeWork NSW, within 24 months of the commencement of the enforceable undertaking.

Audience / beneficiaries

The primary target audience of the Community ESA campaign is younger workers and managers in NSW that work in industries where exposure to electrical hazards may exist.

It is also intended that the Community ESA campaign will reach the secondary audience of AGL customers (home and business owners), and members of the AGL Macquarie supply chain.

There is also a focus on engaging the Hunter Region via HunterNet and support for Hunter based safety awards and the 2019 NSW Regional Safety Conference & Expo.

Delivery Method:

AGL Macquarie will engage the services of a specialist educational campaign agency, to work in partnership with AGL Macquarie employees and in consultation with SafeWork NSW, to develop, implement and monitor the Community ESA campaign. AGL Macquarie will deliver the initiative as follows:

1. Development

Working with HunterNet member organisations, TAFE or Registered Training Organisations, AGL Macquarie's Electrical Subject Matter Experts and the specialist educational campaign agency will:

- Review the features of past safety awareness campaigns in Australia to identify features of successful campaigns.
- Facilitate a series of electrical safety focus groups to discuss:
 - the reasons why workers may not commit to safe working practices;
 - electrical safety principles;
 - the major causes of incidents and fatalities caused by electricity;
 - key messages and how these should be developed to engage and reach workers; and
 - communication mediums preferred by workers.
- Based on the information obtained in the steps above, reflect on how electrical safety education and messaging has been delivered and how it could be improved to achieve greater exposure, engagement and commitment to or actual behaviour change of the target audience (young workers, business owners and managers).
- Develop campaign materials that may include: online and video content, printed materials, social media content, paid traditional and digital advertising and public relations materials.
- Develop the campaign schedule to ensure high level exposure and engagement with campaign content, increased awareness of electrical safety and commitment to behaviour change.
- Develop an online content hub to store and make accessible the materials from the campaign.

Once the campaign materials are developed, they will be provided to SafeWork NSW for review and comment. The materials will also be shared with younger workers and business owners where exposure to electrical hazards may exist, for review and feedback before the campaign commences. AGL Macquarie will also share the proposed campaign materials with the Hunter Industry Electrical Safety Network (**HIESN**) for their comments.

The final campaign materials for the target (primary) audience will be further refined and the messages re-shaped to suit the secondary audience of AGL customers (home and business owners) and members of the AGL Macquarie supply chain. This may include content on or with AGL customer bills, messages from call-centre staff, marketing and branding materials and on invoices through the AGL Macquarie the supply chain.

2. Implementation

As outlined above, implementation will commence with electrical safety message development via focus groups and targeted interviews. Campaign content will then be generated based on findings of the focus groups. The focus groups will also identify preferred methods of content delivery, and potential campaign spokespeople.

Once the campaign messages, preferred delivery methods and campaign talent is identified, AGL Macquarie will work with the specialist educational campaign agency to develop the detailed campaign implementation plan.

It is proposed to deliver the Community ESA campaign during the second half of 2018 (see timetable below). These dates are suggested so that the Community ESA campaign coincides with Safe Work Month, but are subject to change depending on the schedule of content development.

The plan will include detail of the following;

- Target audiences and anticipated reach.
- Public Relations activities – spokespeople, key messages, media release development and target media outlets and channels.
- Video Content – spokespeople, key messages, safety awareness videos, training videos and online content.
- Advertising – traditional and digital, key messages, design and schedules.
- Printed Materials – key messages, design and delivery focus.
- Social Media – channels, key messages and content.

The implementation plan will be provided to SafeWork NSW for consultation and approval.

3. Support for safety initiatives and safety awards in the Hunter Region

AGL Macquarie will:

- Be Platinum sponsor of the 2019 NSW Regional Safety Conference and Expo;
- Fund a proportion of AGL Macquarie electrical workers as attendees to the 2019 NSW Regional Safety Conference & Expo;
- Fund a proportion of members of HunterNet as attendees to the 2019 NSW Regional Safety Conference & Expo; and
- Promote and support safety initiatives and safety awards in the Hunter region which focus on electrical safety including funding the:
 - HunterNet Chairman's Business Award for Excellence in WHS; and
 - HunterNet Apprenticeship Award for Excellence in Safety.

Timeframes:

Within 12 months of the commencement of this enforceable undertaking, AGL Macquarie will report to SafeWork NSW on:

- progress on development, implementation and evaluation of the Community ESA campaign; and
- progress in further developing AGL Macquarie's partnership with HunterNet and the dates of all Hunter region safety initiatives and the safety award events.

The proposed timeline for the Community ESA campaign is outlined in the table below:

Timeline	Proposed Community ESA campaign
Pre-launch	- Focus groups and interviews - Developing campaign plans - Developing and tailoring the education materials and messaging content for the campaign - Developing the online content hub to store and make available all campaign materials
Month 1 - 3 (June – August 2018)	- Community ESA campaign launch - Direct outreach through HunterNet and selected Hunter based member organisations by: - sponsoring up to four (4) HunterNet WHS & Training Forums - sponsoring up to forty (40) HunterNet member company trainees & apprentices to attend WHS & Training Forums - sponsoring up to two (2) Business Value Group WHS Leadership Forums
Month 4 - 6 (September – November 2018)	- Review tactics and engagement - Secondary Community ESA campaign – AGL customers and supply chain
Post campaign	- Review effectiveness of the campaign - Discuss with SafeWork NSW an optional extension to the campaign
December 2018 December 2019 December 2020	2018 – 2020 HunterNet Chairman's Awards 2018 – 2020 HunterNet Apprenticeship Award for Excellence in Safety
March 2019	2019 NSW Regional Safety Conference and Expo

A completion date for the entire program is not expected for at least 18 months from commencement of this enforceable undertaking.

Work health and safety outcome:

The initiative will:

- Increase knowledge and awareness of electrical hazards within the community;
- Increase awareness of electrical hazards that are specific to young workers;
- Take steps towards ensuring that there is a commitment to or actual change in the electrical safety practices of young workers and business owners or managers in industries where exposure to electrical hazards may exist;
- Improve safety attitudes within the broader community towards the real safety risks associated with electricity;
- Result in a change in attitudes toward electrical safety awareness within the secondary audience of AGL customers (home and business owners) and members of the AGL Macquarie supply chain;
- increase AGL Macquarie's engagement in the Hunter region by supporting safety initiatives and safety awards with HunterNet and NSW Regional Safety Conference & Expo; and
- provide the community with free access all campaign content via an online hub.

Cost Breakdown:

Description	\$ Amount
Community ESA campaign	\$350,000.00
HunterNet work health and safety initiatives	\$25,000.00
2019 NSW Regional Safety Conference & Expo	\$35,000.00

Total estimated cost: \$410,000.00

TOTAL ESTIMATED VALUE OF THE UNDERTAKING \$1.13M

Where appropriate (g-j)

g. A commitment to establish and maintain (or maintain if a system already exists) an OHSMS

AGL Macquarie is committed to ensuring their existing OHSMS complies with the principles of AS/NZS 4804: 2001 Occupational health and safety management systems – General guidelines on principles, systems and supporting techniques and ensuring compliance from the date the enforceable undertaking is accepted.

AGL Macquarie acknowledges that the OHSMS will be maintained in accordance with the standard.

h. A commitment to ensure the OHSMS is audited by third party auditors

AGL Macquarie commits to ensuring their WHSMS will be audited by accredited third party auditors to meet the requirements of AS/NZS 4801: 2001 Occupational Health and Safety Management Systems – Specification with guidance for use, in accordance with established timeframes as set by SafeWork NSW.

AGL Macquarie acknowledges that the third party auditors selected to perform OHSMS audits must be certified by a certification body accredited by JAS-ANZ to ISO/IEC 17024: 2004 General requirements for bodies operating certification of persons.

The auditors' qualifications against the stated requirements will be provided with audit reports submitted to SafeWork NSW.

AGL Macquarie acknowledges that a third party audit will be undertaken within 12 months of the commencement of this enforceable undertaking, and two further third party audits will be undertaken during the course of this enforceable undertaking.

In addition, an independent audit program of the AGL Macquarie electrical safety procedures will be carried out during the term of the EU. The scope of the audit will specifically include:

- Work conducted on transformers and live electrical installations;
- Adequacy of permit to work systems relating to working on live electrical installations;
- Management of young and vulnerable workers who work on electrical installations, including their training and competency; and
- Security and access restrictions to transformers.

The purpose of the independent audit program is to enable AGL Macquarie to provide evidence of their implementation of electrical safety procedures and of the significant and sustained improvements to their electrical safety practices as a result of the 'Critical Risks – working on or in the vicinity of electrical apparatus program' Initiative and of the 'Arc Flash Guidance Material' Initiative outlined within this enforceable undertaking.

The independent audit program will take place across the Liddell and Bayswater Power Stations and will be carried out by a RABQSA certified, independent and competent / skilled electrical safety auditor. The most suitable method for independent auditing will involve desktop review of AGL Macquarie electrical safety procedures, followed by a verification of evidence within all relevant operational business units at the Liddell and Bayswater Power Stations. Verification activities will include discussion with workers on the effectiveness of the electrical safety procedures.

The independent audit program will involve two audits at approximately 12 months and 24 months from the commencement of this enforceable undertaking. A copy of the two audit reports and AGL Macquarie's response to the findings/recommendations will be provided to SafeWork NSW.

i. A commitment to provide a copy of each finalised OHSMS audit report to SafeWork NSW

AGL Macquarie acknowledges that OHSMS audit reports received from the auditor will be sent to SafeWork, within 2 months of the audit, along with a letter certifying that the report has not been altered from the copy provided to the person by the auditor.

AGL Macquarie acknowledges that within 2 months of receipt of the auditor's written report, SafeWork NSW will be advised of the intended action in addressing each of the report's recommendations.

j. A commitment to implement the recommendations from these audits (unless otherwise negotiated with SafeWork NSW)

AGL Macquarie commits to fully implementing the intended actions arising from the OHSMS audit within the corrective action timeframe allocated by the auditor outlined within the audit report from the OHSMS auditor, unless otherwise agreed by SafeWork NSW.

Section 3 – Offer of undertaking

As a duly authorised person of AGL Macquarie Pty Ltd, I offer this undertaking and commit to the terms herein.

Signed: [Redacted Signature]

Name: [Redacted Name]

Position: General Manager, AGL Macquarie

Dated at *Muswellbrook* this 6th day

of April, 2018

Section 4 – SafeWork NSW's acceptance of undertaking

The duration of an enforceable undertaking is determined by the content of the agreed terms. An enforceable undertaking commences and is enforceable once accepted by SafeWork NSW. The enforceable undertaking will be concluded on written advice from SafeWork NSW when all requirements of the undertaking have been satisfactorily executed.

I accept this undertaking as an enforceable undertaking under section 216 of the WHS Act.

Signed: [Redacted Signature]

Name: Jodie Deakes

Position: A/Executive Director SafeWork NSW

Dated at *Gosford* this *16* day of *April* *2018*
[suburb] [month] [year]

Annexure 1 – Public Notice of SafeWork NSW’s acceptance of undertaking

Notice of Acceptance of an Enforceable Undertaking under Part 11 of the Work Health and Safety Act 2011.

On 12 November 2015, two workers employed by AGL Macquarie at the Liddell Power Station in New South Wales, were tasked with performing a maintenance and general inspection involving the disconnect of the high voltage cable on the Unit 2 Auxiliary Transformer B.

This task was performed on the incorrect transformer during the ‘test before touch – prove dead’ procedure, an arc flash occurred which resulted in burn injuries.

The WorkCover Authority of NSW (now SafeWork NSW) investigated the incident and subsequently alleged that AGL Macquarie Pty Ltd contravened section 19(1) of the Work Health and Safety Act 2011.

This notice has been placed under the terms of an enforceable undertaking and acknowledges acceptance of an undertaking, that is enforceable under the Act, from AGL Macquarie Pty Ltd, ABN 18 167 859 494, as finalisation of the abovementioned alleged contravention.

The undertaking requires the following actions:

- implementing a skills and competency program for workers
- benchmarking and tracking of safety culture at AGL Macquarie
- safety leadership training for AGL Macquarie leaders
- developing publications that focus on electrical arc flash
- sharing electrical safety awareness with the broader community
- supporting safety awards and initiatives within the Hunter Region
- undertaking an independent audit program

The full undertaking and general information about enforceable undertakings is available at www.safework.nsw.gov.au.