Values of customer reliability methodology

Appendix A to revised draft determination:

2024 pilot questionnaires for residential and business customers

June 2024

A.1 Residential survey questionnaire

LONERGAN.



Lonergan Research is carrying out a survey on behalf of the Australian Energy Regulator (AER), Australia's national energy regulator. The survey will be used by the AER to determine how much customers value reliable electricity supply.

Why your view matters to us

Power reliability is important. Electricity interruptions can be costly, but it can be expensive to avoid them completely due to the cost of building and maintaining electricity poles and wires.

This survey is for you to share your thoughts on how unexpected power outages affect you and how far we should go to avoid them. The results of this survey will be used by the AER to help ensure electricity providers invest the right amount, balancing reliability and affordability to deliver power to energy consumers.

This survey should take about 15 to 20 minutes to complete. But please, take as long as you need because accurate responses are what matter.

Please be assured of complete confidentiality. Lonergan Research is bound by the Research Society Code of Professional Behaviour and the Privacy Act.

During the survey, please do not use your browser's FORWARD and BACK buttons. Instead, please always use the "Next" button below to move forward through the survey.



LONERGAN.	Australian Government Australian Government Australian Government
What is the postcode where you live?	
Please enter the 4-digit postcode below *	
Next	



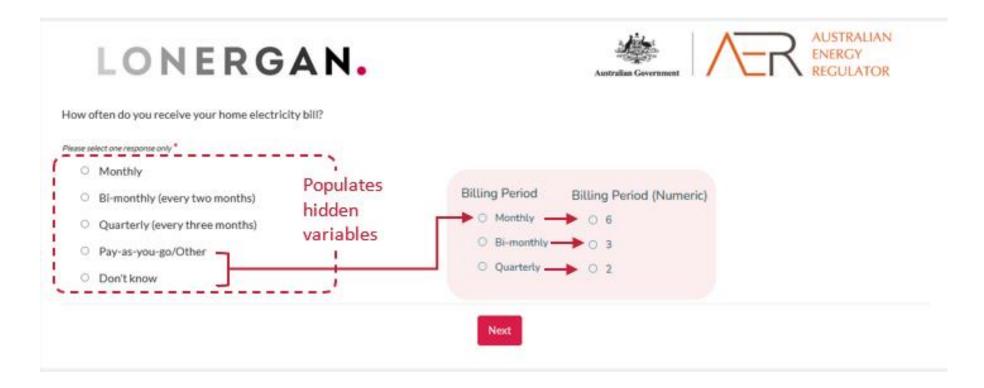
Which of the following best describes your current employment status?

Please select one response only

- Self-employed / business owner
- Employed full time
- Employed part time / casual
- Student
- Home duties (including maternity/paternity leave, full time carer)
- Retired
- Unemployed

LONERGAN.	Australian Government Australia Government A
Do you have any responsibility for paying or managing your business's electricity bill?	
Please select one response only* ○ Yes	
Next	

Attachment A to revised draft determination



LONERGAN.	Australian Government Australian ENERGY REGULATOR
Approximately how much was your last electricity bill for your household?	
Please enter amount below* S Don't know	
Next	





Which of the following best describes your local area?

Please select one response only *

- Most people live in units, townhouses or high rise apartments
- Most people live in standalone houses in a capital city suburb
- Most people live in a suburb in a regional town or city
- Most people live on acreage or a farm

LONERGAN.



Whenever we talk about a power outage in this survey, we mean an unexpected failure of the electric supply network occurring on average once in every six month period, which affects your household and areas nearby.

This section includes eight questions which we ask you to consider carefully. For each question, please choose your preferred option out of the three options. These questions may appear repetitive, but your choices will help us work out different customer preferences.

We ask you to make eight choices, one on each of the following eight screens.

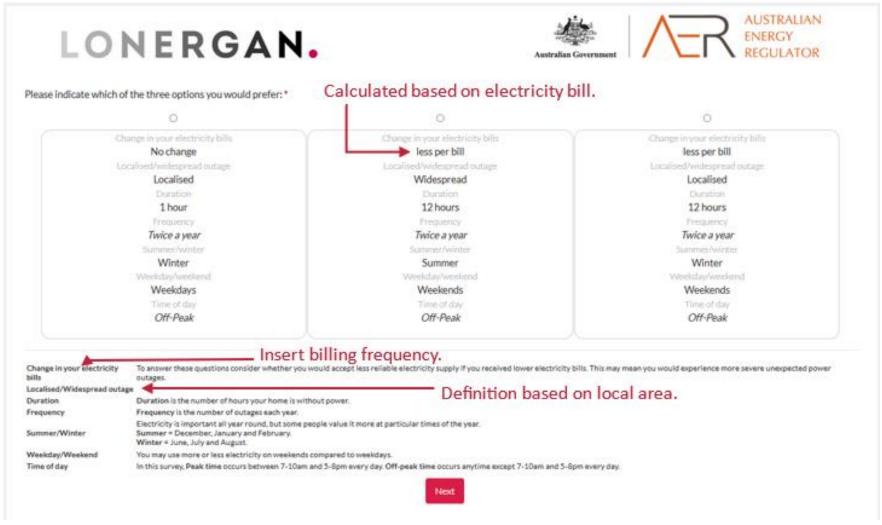
To answer these questions consider whether you would accept less reliable electricity supply if you received lower electricity bills. This may mean you would experience more severe unexpected power outages.

Note: Italicised text like this means this particular characteristic is the same in all three options.

Definitions for the terms used in the question are included below. Insert billing frequency.

_	0 1 7	
Change in your electricity bills	To answer these questions consider whether you would accept less reliable electricity supply if you received lower electricity bills. This may mean you would experience more severe unexpected power outages.	
Localised/Widespread outage	Definition based on local area.	
Duration	ration is the number of hours your home is without power.	
Frequency	requency is the number of outages each year.	
Summer/Winter	Electricity is important all year round, but some people value it more at particular times of the year. Summer = December, January and February. Winter = June, July and August.	
Weekday/Weekend	You may use more or less electricity on weekends compared to weekdays.	
Time of day	In this survey, Peak time occurs between 7-10am and 5-8pm every day. Off-peak time occurs anytime except 7-10am and 5-8pm every day.	

The below screenshot presents one set of three hypothetical outage scenarios and asks respondents to select their preferred outage scenario. In the pilot survey, respondents were given eight different sets of three hypothetical scenarios.



Attachment A to revised draft determination

2024 pilot questionnaires for residential and business customers



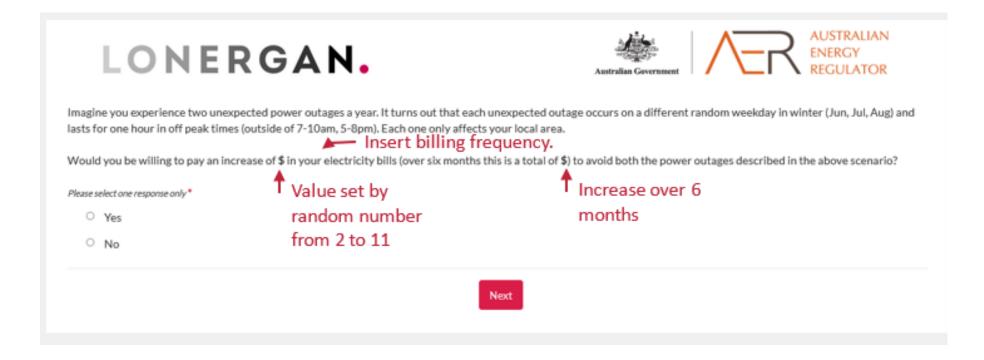




Many outages could mostly be avoided if the electricity network was improved. However, improvements would be funded by higher electricity bills.

To answer the following questions there is no 'right answer'.

When considering your responses please take into account how much you value a reliable electricity network. You could consider, for example, the inconvenience of having to reset your clocks, not being able to watch TV or access the internet/wi-fi during an outage and interruption to other at-home activities requiring electricity.





Imagine you experience two unexpected power outages a year. It turns out that each unexpected outage occurs on a different random weekday in winter (Jun, Jul, Aug) and lasts for one hour in off peak times (outside of 7-10am, 5-8pm). Each one only affects your local area.

Insert billing frequency.

Would you be willing to pay an increase of \$ in your electricity bills (over six months this is a total of \$) to avoid both the power outages described in the above scenario?

Please select one response only

Original value * 2

Tincrease over 6 months

Yes

O No





Imagine you experience two unexpected power outages a year. It turns out that each unexpected outage occurs on a different random weekday in winter (Jun, Jul, Aug) and lasts for one hour in off peak times (outside of 7-10am, 5-8pm). Each one only affects your local area.

Insert billing frequency.

Would you be willing to pay an increase of \$ in your electricity bills (over six months this is a total of \$) to avoid both the power outages described in the above scenario?

Please select one response only*

Toriginal value / 2

T Increase over 6 months

Yes

O No

LONERGAN.



Imagine you experience two unexpected power outages a year. It turns out that each unexpected outage occurs on a different random weekday in winter (Jun, Jul, Aug) and lasts for one hour in off peak times (outside of 7-10am, 5-8pm). Each one only affects your local area.

Insert billing frequency.

What is the maximum increase in \$ you would be willing to pay in your electricity bill to avoid both the power outages described in the above scenario?

Please e	iter the amount below.*			
\$				
		Next		





How many people live in your household?

Please select one response only *

- Just me
- 2-3 people
- More than 3 people

LONERGAN.	Australian Government Australian ENERGY REGULATOR
Does your household have a pool i.e. one not covered by strata or a body corporate?	
Please select one response only *	
O Yes	
O No	
Next	





Does your home use mains gas?

Please select one response only*

- Yes
- O No
- Unsure



Does your home have under-floor or slab heating?	
Please select one response only *	
O Yes	
O No	
O Unsure	





Do you speak a language other than English at home?

Please select one response only*

- Yes, always
- Yes, sometimes
- O No
- Prefer not to say





Which of the following apply to you now?

Please s	elect all that apply *
0	You own/drive a fully electric vehicle (excludes hybrid vehicles and electric bikes/scooters)
	Your house has a home automation system (controlling appliances and devices in your home over the internet)
0	You work from home at least one day per week (please state how many days)
	Your house has a battery (connected to your solar system or your electricity supply)
	Your house has rooftop solar panels
0	None of the above

LONERGAN.	Australian Government Australian Government Australian Government	
Which of the following do you think might apply to you in five years from now?		
Please select all that apply*		
☐ You will work from home at least one day per week (please state how many days)	*	
$\ \Box$ Your house will have a home automation system (controlling appliances and devices in yo	ur home over the internet)	
☐ Your house will have rooftop solar panels		
$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $		
You will own/drive a fully electric vehicle (excludes hybrid vehicles and electric bikes/scool	eters)	
□ None of the above		
Next		





Imagine a company could install a backup power system at your premises. The system will readily provide electricity at your premises for one hour if an outage occurs. The total cost of the system, including installation, would be \$32 per month.

Would you get the company to install the backup system at your premises at a cost of \$32 per month?

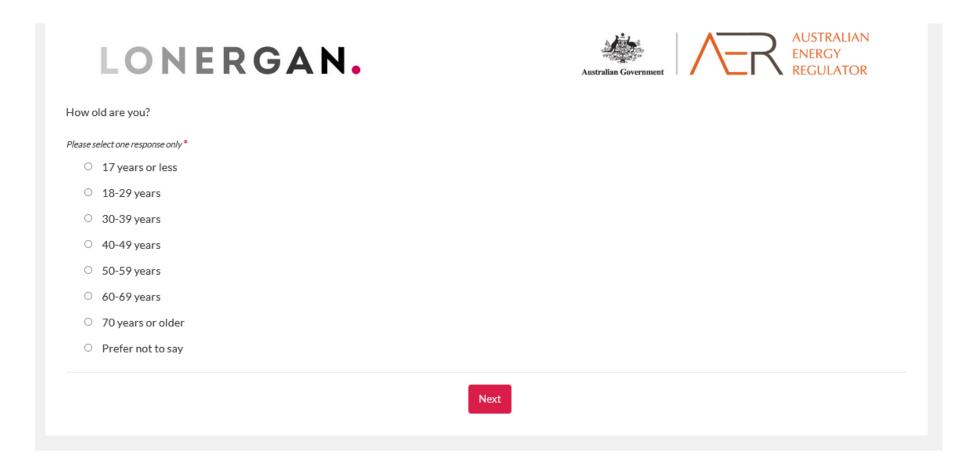
Please select one response only *

Yes Skip to Gender demo

O No.

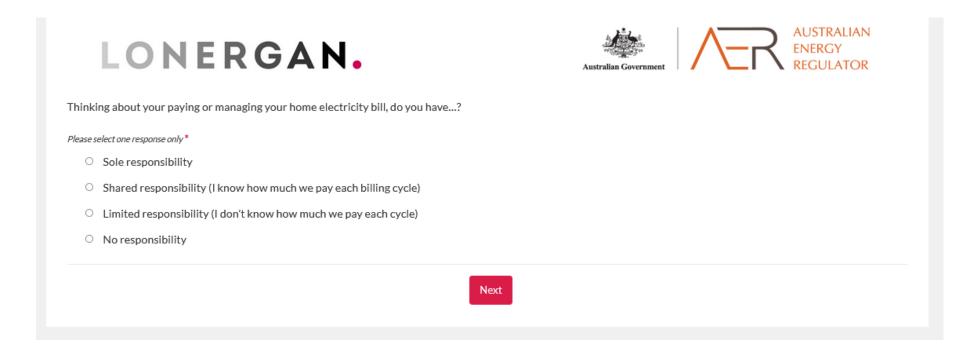
LONERGAN.	Ask if unwilling to pay at \$32 p/month	Australian Government	AUSTRALIAN ENERGY REGULATOR
What is the maximum \$ you would be willing to pay per month for this syst	bem ³		
Please enter the around below* \$			
Next			

LONERGAN.	Australian Government Australian Government Australian Government Australian Government
What is your gender?	
Please select one response only *	
○ Female	
○ Male	
Prefer to self-describe (Please specify)	
O Prefer not to say	
Next	



Which of the following best describes your current financial situation? Please select one response only* Live comfortably Meet basic expenses with a little left over for extras Just meet basic expenses Don't have enough to meet basic expenses Prefer not to say

Attachment A to revised draft determination



LONERGAN.





We included the next questions on request from the Reliability Panel

The Reliability Panel monitors, reviews and reports on the safety, security and reliability of the national electricity system. By responding to these questions, you will help the Reliability Panel make informed decisions.

Imagine a series of one-hour power outages that affected your home and local area, every day for one week every winter.

What is the maximum increase, in \$ per month, you would be willing to pay in your electricity bill to avoid these power outages?

Please enter the amount below*

;

LONERGAN.	Australian Government Australian Government Australian Government
What is the maximum increase, in \$ per month, you would be willing to pay if there was	just a 1 in 10 chance of this happening <u>in any year</u> ?
Please enter the amount below* \$	
Next	

B.1 Business survey questionnaire

LONERGAN.



Lonergan Research is carrying out a survey on behalf of the Australian Energy Regulator (AER), Australia's national energy regulator. The survey will be used by the AER to determine how much customers value reliable electricity supply.

Why your view matters to us

Power reliability is important. Electricity interruptions can be costly, but it can be expensive to avoid them completely due to the cost of building and maintaining electricity poles and wires.

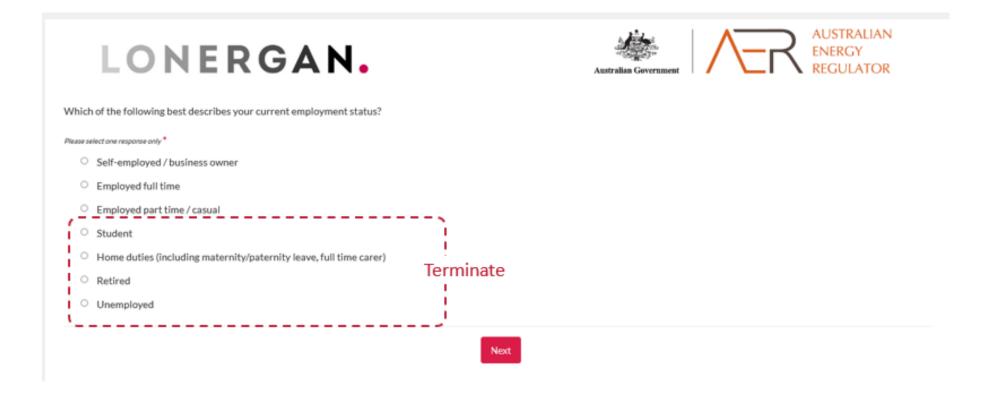
This survey is for you to share your thoughts on how unexpected power outages affect you and how far we should go to avoid them. The results of this survey will be used by the AER to help ensure electricity providers invest the right amount, balancing reliability and affordability to deliver power to energy consumers.

This survey should take about 15 to 20 minutes to complete. But please, take as long as you need because accurate responses are what matter.

Please be assured of complete confidentiality. Lonergan Research is bound by the Research Society Code of Professional Behaviour and the Privacy Act.

During the survey, please do not use your browser's FORWARD and BACK buttons. Instead, please always use the "Next" button below to move forward through the survey.









Which of the following categories best describes the business you work for?	
If you'd like more information on the types of businesses that fit into these categories, this link will provide a detailed breakdor	wn beca
Reservoire for removements	Link tohttps://www.dcceew.gov.au/sites/default/file s/documents/anzsic-code-hierarchy.pdf
O Wholesale trade	
O Retail Trade	
Accommodation and Food Services	
Transport, Portal and Warehousing	
Information Media and Telecommunications	
Financial and Insurance Services	
Rental, Hiring and Real Estate Services	
Professional, Scientific and Technical Services	
Administrative and Support Services	
Public Administration and Safety	
Education and Training	
Health Care and Social Assistance	
Arts and Recreational Services	
Other (Please specify)	

LONERGAN.



The questions in this survey are designed to be answered in relation to a single business site in Australia. Please exclude overseas business locations.

If your business has multiple locations within Australia, choose one location, and answer the questions in this survey in relation to this location only. Choose the location that you know the most about how much is spent on electricity or how much electricity is consumed. If you are familiar with electricity usage and costs at multiple locations, where possible pick the location that uses the most electricity.

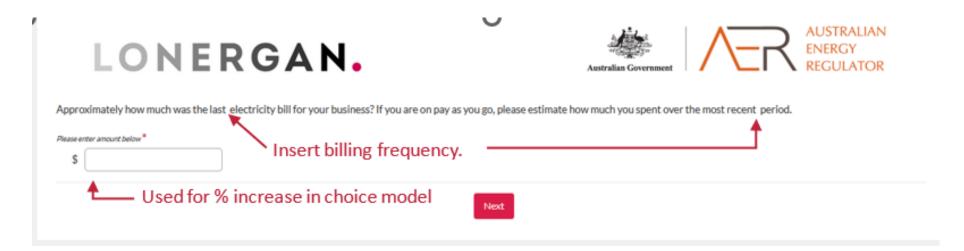
To complete this survey you may need a copy of a recent electricity bill for the business location you have chosen to answer the survey about.

You will need to refer to the bill to answer some questions in this survey.

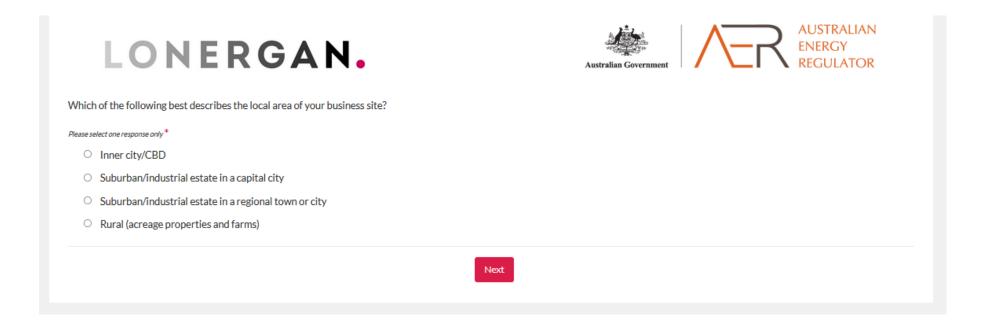
Whenever we refer to your business site in this survey, we mean the single business location you have chosen to answer for in this survey.

LONERGAN.	Australian Government Australian Government Australian Government Australian Government	
Describe the nature of your business site (for example, is it a head office, manufacturing site, farm site?) Please be as specific as possible *		
Next		





Attachment A to revised draft determination



LONERGAN.	Australian Government Australian Government Australian Government
What is the post code of your business site? Please enter the 4-digit postcode below*	
Next	t

LONERGAN.	Australian Government Australian Government Australian Government
How many sites does your electricity bill cover?	
Please enter the number of sites *	
Next	

LONERGAN.





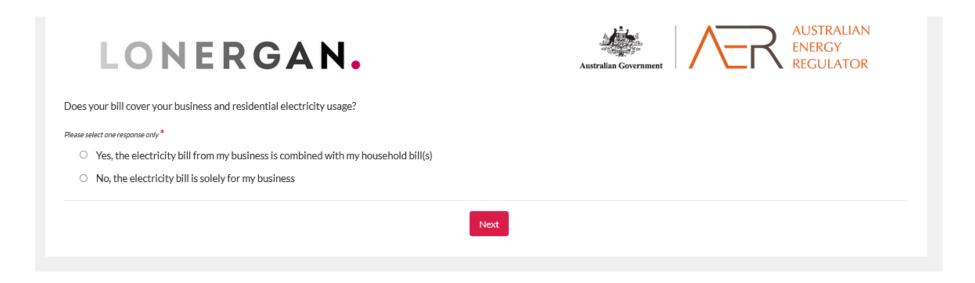
How many employees work at your business site?

Please select one response only*

- 0
- 0 1-10
- 0 11-20
- 0 21-100
- 0 101-200
- More than 200

Next

Attachment A to revised draft determination



LONERGAN.	Australian Government Australian Government Australian Government Australian Government Australian Government
Power outage description: Whenever we talk about a power outage in this survey, we mean an unexpected failure of the electricity	y supply network which affects your business site and areas nearby.
To the best of your knowledge, how many times has your business site experienced power outages in th	e last 12 months?
Please select one response only *	
○ 0	
○ 1	
O 2	
○ 3	
O 4	
O 5	
○ 6	
O More than 6 times	
Next	

LONERGAN.	Australian Government Australian Government Australian Government
On a scale of 1to 7, where 1is not disruptive at all and 7is extremely disruptive, how disruptive have	these outages been to your business site?
Please select one response only *	
○ 1 - Not disruptive at all	
O 2	
○ 3	
○ 4	
O 5	
○ 6	
O 7 - Extremely disruptive	
Next	

LONERGAN. Australian Government Australian Government Australian Government Australian Government
Please think about the potential losses you may incur during a power outage. Such losses can vary greatly across different business operations. Please select any that may apply to your business site.
Please select all that apply *
□ Downtime from expensive equipment kept idle
□ Lost production
☐ Additional time and labour beyond usual duties in response to power outage
□ Dissatisfied customers
□ Spoilage or loss of perishable goods
☐ Additional time and labour to check activities/restart systems
□ Overtime wages incurred
□ Damage to processes and equipment
□ Lost revenues from fewer sales
□ Loss of work from paid staff
□ Loss of livestock
□ Other (Please specify) *
□ None of the above
Next

LONERGAN.	Australian Government Australian Government Australian Government
Thinking of your business operations, is there a time of day that is worse for you to experience a p	power outage at your business site?
Please select one response only *	
○ Yes (Please elaborate)	
○ No	
	Next

LONERGAN.	Australian Government Australian Government Australian Government
Is there a particular month or season in the year that is worse for you to experience a power outage at you	ur business site?
Please select one response only *	
○ Yes (Please elaborate)	
O No	
Next	

LONERGAN.





This section includes eight questions which we ask you to consider carefully.

For each question, please choose your preferred option out of the three options. These questions may appear repetitive, but your choices will help us work out different customer preferences.

We ask you to make eight choices, one on each of the following eight screens.

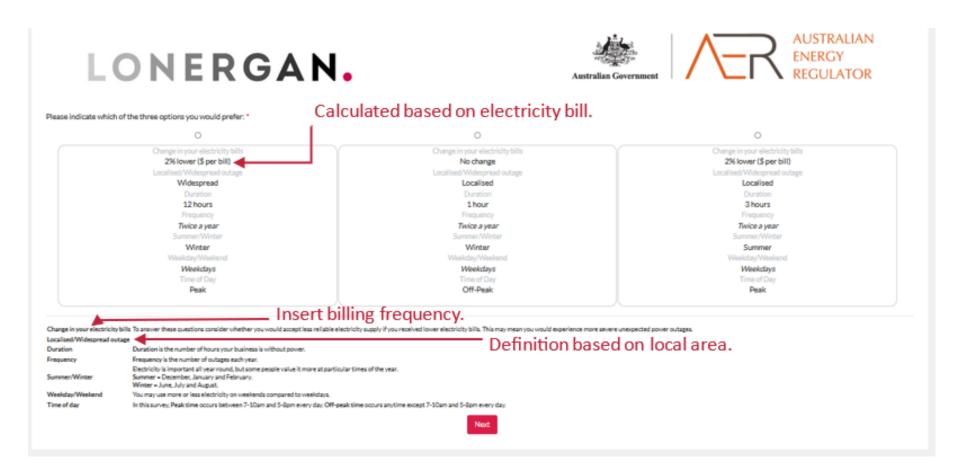
To answer these questions consider whether you would accept less reliable electricity supply if you received lower electricity bills. This may mean you would experience more severe unexpected power outages.

Note: Italicised text like this means this particular characteristic is the same in all three options.

Definitions for the terms used in the question are included below.

Change in your electricity bill	Insert billing frequency. To answer these questions consider whether you would accept less reliable electricity supply if you received lower electricity bills. This may mean you would experience more severe unexpected power outages.
Localised/Widespread outage	Definition based on local area.
Duration	Duration is the number of hours your business is without power.
Frequency	Frequency is the number of outages each year.
Summer/Winter	Electricity is important all year round, but some people value it more at particular times of the year. Summer = December, January and February. Winter = June, July and August.
Weekday/Weekend	You may use more or less electricity on weekends compared to weekdays.
Time of day	In this survey, Peak time occurs between 7-10am and 5-8pm every day. Off-peak time occurs anytime except 7-10am and 5-8pm every day.

The below screenshot presents one set of three hypothetical outage scenarios and asks respondents to select their preferred outage scenario. In the pilot survey, respondents were given eight different sets of three hypothetical scenarios.



LONERGAN.





Many outages could mostly be avoided if the electricity network was improved. However, improvements would be funded by higher electricity bills.

To answer the following question there is no 'right answer'.

When considering your response please take into account how much you value a reliable electricity network for your business. You could also consider losses you may incur during a power outage.

Next

LONERGAN.



Imagine you experience two unexpected power outages a year. It turns out that each unexpected outage occurs on a different random weekday in winter (Jun, Jul, Aug) and lasts for one hour in off peak times (outside of 7-10am, 5-8pm). Each one only affects your local area.

Insert billing frequency.

Would you be willing to pay an increase of \$ in your electricity bills (over six months this is a total of \$) to avoid both the power outages described in the above scenario?

Please select one response only

Yes

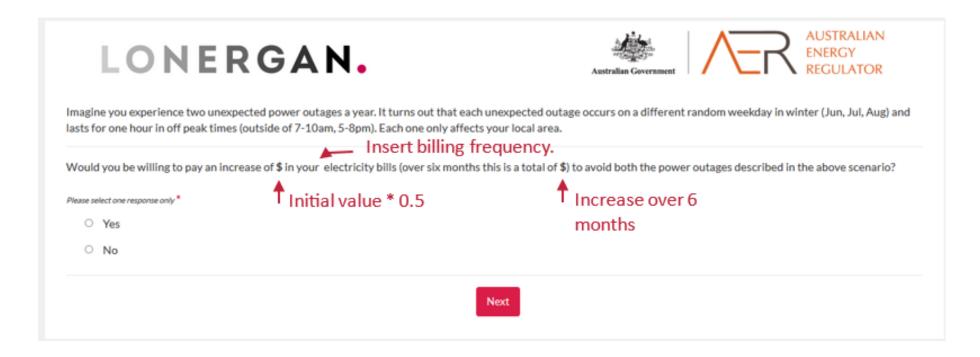
O No

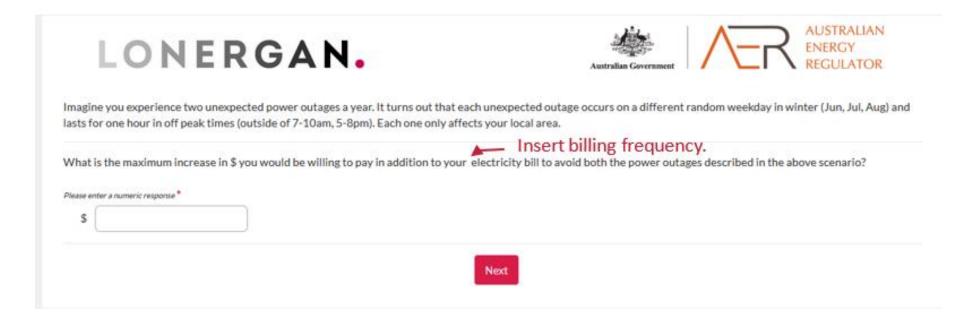
Value set by random % from 1% - 10%

1 Increase over 6 months

Next

LONE	RGAN.	Australian Government Australian ENERGY REGULATOR
	pected power outages a year. It turns out that each us (outside of 7-10am, 5-8pm). Each one only affects year. Insert billing free	
Would you be willing to pay an inc	A	his is a total of \$) to avoid both the power outages described in the above scenario?
Please select one response only *	T _{Value above} * 2	T Increase over 6
O Yes		months
O No		
		Next





Attachment A to revised draft determination

LONERGAN.	Australian Government Australian Government Australian Figure Australian ENERGY REGULATOR
The following section asks general questions relating to your business which will help us bet they are applicable to your business.	tter understand your responses in this survey. Please answer these questions if
Does your business use monitoring devices to indicate energy performance and usage?	
Please select all that apply *	
□ Smart meters	
□ Appliance consumption gauge	
Other energy monitoring devices	
□ Don't know/Prefer not to answer	
Next	

LONERGAN.



During a power outage, does your business have any back-up options (e.g. on-site generation, battery cells, back-up fuel, etc.) that can be used to supply power to your business?

Please se	ect one response only *
•	Yes -
0	No
0	Don't know/Prefer not to answer If Yes, show
Please	estimate how long these back-up options can supply your business's energy needs for.
Please er	ter the amount of time below.*
	Hours Minutes
	Next

LONERGAN.	Australian Government Australian Government Australian Government REGULATOR
ow much electricity did your business site consume for the period covered by you	illing frequency. ur most recent electricity bill?
ectricity consumption is measured in 'kilowatt hours', or 'kWh'. This will likely app	ear on the back of your bill.
ease enter amount below*	
O Don't know	
	Next

We included the next questions on request from the Reliability Panel. The Reliability Panel monitors, reviews and reports on the safety, security and reliability of the national electricity system. By responding to these questions, you will help the Reliability Panel make informed decisions. Imagine a series of one-hour power outages that affected your business and local area, every day for one week every winter. What is the maximum increase, in \$ per month, you would be willing to pay in your electricity bill to avoid these power outages? Please enter the amount below.* Next

LONERGAN.	Australian Government Australian Government Australian Government
What is the maximum increase, in \$ per month, you would be willing to pay if there was just a 1 in 10 chance of this happening <u>in any year</u> ? Please enter the amount below* \$	
Next	