

# Values of customer reliability methodology

Appendix B to  
revised draft determination:  
2019 direct cost survey  
questionnaire

June 2024

## Appendix B to revised draft determination 2019 direct cost survey questionnaire

Please note, the survey is formatted differently when presented to participants. However, the below provides stakeholders with access to the survey for comment. We have intentionally removed space provided for responses.

### Direct cost survey

Insync is carrying out a study on behalf of the Australian Energy Regulator (AER). As Australia's national energy regulator, the AER's role includes economic regulation of energy networks and markets to drive competition, and provide regulation where competition is not feasible.

This study will be used by the AER to help determine how much customers value a reliable supply of electricity from the grid.

#### a) Why your view matters to us

You have been contacted to complete this survey because we are interested in understanding how unplanned interruptions to the supply of electricity from the grid (unexpected power outages) affect large business sites in Australia.

We would like to hear from you about how unexpected power outages affect your business and how far we should go to avoid or mitigate them. The results of this survey will be used by the AER to help ensure electricity providers invest in the right amount in electricity infrastructure, balancing reliability and cost to deliver power to businesses.

Even if your business has installed back-up supply options to enable business operations to continue as usual through a power outage limiting the cost of an outage for your business, it is still important your views are captured by filling out this survey because the costs of electricity network investment are shared by all customers.

Please take as long as you need because accurate responses are what matters.

#### b) Privacy

[Intentionally omitted]

#### c) About this survey

**You have been asked to complete this survey because we want to understand how unexpected power outages affected your large business site(s).** We define a large business site as one that has used more than 10 megavolt amps (10 MVA) of electricity at a moment in time, sometime during the previous 12 months. We understand your business has one or more site locations which may meet these criteria.

Please complete this survey in relation to the site locations identified in the email originally notifying you of this survey. **Please note, the questions in this survey are designed to be answered in relation to a single large business site.** If the email identifies more than one site, please complete a separate survey for each large business site. Instructions for how to

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do this are included in the email.

We would really appreciate it if you could provide a survey response for **each** of your large business sites identified in the email originally notifying you of this survey. This will help improve the accuracy of our results and contribute to ensuring there is no unnecessary customer-funded expenditure (via electricity bills) on networks. However, if you are only able to complete the survey once, if possible, please answer in relation the site which consumes the largest amount of electricity.

In this survey, a **power outage** is a complete loss of electricity supply from the grid affecting your site. This survey relates to outages that are unexpected, or which you find out about shortly before they happen.

A summary of the survey questions has been provided to you in an email to assist you in collating the information needed to answer the questions before you respond in this online survey. You may also wish to collect information from colleagues or external service providers to help you answer the questions.

To complete the survey in one session, we suggest you collect all information necessary before commencing the survey, though you can complete the survey in several sessions if needed, by saving any changes each time. Please submit the survey once you have completed all questions.

Please ensure you submit your response by the survey closing date: **[date]**.

**d) Your large business site**

Please provide the **name of the company** that owns the site you are answering this survey in relation to.

Company name: .....

Please provide the **name of the large business site** which you are answering this survey in relation to.

Site name: .....

In this survey, when we refer to **your business site** we mean the site you have entered here and which appears at the top of each page of this online survey.

Does your business operate (continue its core functions) 24 hours a day, 7 days a week at *your business site*?

Choose one of the options below

- Yes, *my business site* operates 24 hours a day, 7 days a week.
- No, *my business site* **does not** operate 24 hours a day, 7 days a week.

**e) Worst-case power outage scenarios**

Describe the core business processes that are carried out at *your business site* which are

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critically reliant on continuous energy supply.

Is there a time of **day / week / year** that is worse for *your business site* to experience an unexpected outage, or is the impact of an outage the same regardless of when it happens?

Choose one of the options below

- No, the impact of an outage is the same, regardless of the day / week / year.
- Yes, the impact of an outage differs depending on the time of day, day of the week or time of year.

If you answered 'yes' to question 2, please specify when is the worst time (of the **day / week / year**) for an outage to occur at *your business site*.

(For example, the worst time may be: '10am-2pm, on a weekday in summer')

Is there an ambient temperature that is worse for *your business site* to experience an outage, or is the impact of an outage the same regardless of the temperature?

- No, the impact of an outage is the same, regardless of the temperature.
- Yes, the impact of an outage is worse depending on hot or cold temperatures.

**f) Costs of power outage**

**Provide a description** of the types of costs your business would incur (i.e. lost production, damage to plant or equipment, overtime labour costs, damaged goods etc.), if an unexpected outage of 10 minutes occurred at *your business site*.

Please **do not** include in your description of types of costs of any loss of production that is simply deferred and will be made up for later. Where you expect that production would be made up for later, please **do** include a description of any **extra** costs in making up for the production later.

[Question for customers operating 24 hours a day, 7 days a week]

**What is the cost** (i.e. lost production, damage to plant or equipment, overtime labour costs, damaged goods etc.), of a 10-minute outage that occurs unexpectedly at *your business site*?

Please **do not** include in your estimate of costs any loss of production that is simply deferred and will be made up for later. Where you expect that production would be made up for later, please **do** include in your estimate any **extra** costs in making up for the production later.

[Question for customers who **do not** operate 24 hours a day, 7 days a week]

**What is the cost** (i.e. lost production, damage to plant or equipment, overtime labour costs, damaged goods etc.) of a 10-minute outage that occurs unexpectedly and **starts between** 7am and 10am, or 5pm and 8pm on a weekday at *your business site*?

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Please **do not** include in your estimate of costs any loss of production that is simply deferred and will be made up for later. Where you expect that production would be made up for later, please **do** include in your estimate any **extra** costs in making up for the production later.

[Question for customers who **do not** operate 24 hours a day, 7 days a week]

**What is the cost** (i.e. lost production, damage to plant or equipment, overtime labour costs, damaged goods etc.) of a 10 minute outage that occurs unexpectedly and **starts anytime outside of the hours** of 7am and 10am, or 5pm and 8pm on a weekday at *your business site*?

Please **do not** include in your estimate of costs any loss of production that is simply deferred and will be made up for later. Where you expect that production would be made up for later, please **do** include in your estimate any **extra** costs in making up for the production later.

[Question for customers who **do not** operate 24 hours a day, 7 days a week]

If the outage was **longer** than 10 minutes, would your business incur any additional costs at *your business site* (i.e. in addition to those identified in question 6 / questions 7 and 8)?

Choose one of the options below

- No, the cost of an outage is the same, regardless of the length
- Yes, the cost of an outage differs depending on the length. Please fill out:
  - Table 1 if you **operate** 24 hours a day, 7 days a week, or
  - Table 1.1 and 1.2 if you **do not operate** 24 hours a day, 7 days a week.

State the estimated total cost (rounded to the nearest thousand) your business would incur if you experienced outages of particular lengths/occurring at particular times at *your business site* as set out in Table 1 / 1.1 and 1.2. if you do not incur any additional costs from what you indicated in questions 6 , / 7 and 8, please enter '0'.

**Table 1**

[Table 1 is for customers who operate 24 hours a day, 7 days a week]

<b>Outage length</b>	<b>Costs (\$)</b>	<b>Comments</b> <i>Please describe what the costs are for</i>
Outage extended to 1 hour	\$.....	.....
Outage extended to 3 hours	\$.....	.....
Outage extended to 6 hours	\$.....	.....
Outage extended to 12 hours	\$.....	.....
Outage extended to 24 hours	\$.....	.....
Outage extended to 48 hours	\$.....	.....

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**Table 1.1 – Outages up to 6 hours**

[Table 1.1 is for customers who **do not** operate 24 hours a day, 7 days a week]

<b>Time of outage</b>	<b>Outage length</b>	<b>Costs (\$)</b>	<b>Comments</b> <i>Please describe what the costs are for</i>
Between 7am and 10pm, or 5pm and 8pm on a weekday (peak hours)	Outage extended to 1 hour	\$.....	.....
Anytime outside of peak hours	Outage extended to 1 hour	\$.....	.....
Between 7am and 10pm, or 5pm and 8pm on a weekday (peak hours)	Outage extended to 3 hours	\$.....	.....
Anytime outside of peak hours	Outage extended to 3 hours	\$.....	.....
Between 7am and 10pm, or 5pm and 8pm on a weekday (peak hours)	Outage extended to 6 hours	\$.....	.....
Anytime outside of peak hours	Outage extended to 6 hours	\$.....	.....

**Table 1.2 – Outages 12 to 48 hours**

[Table 1.2 is for customers who do not operate 24 hours a day, 7 days a week]

The following outages may occur anytime of the day.

<b>Outage length</b>	<b>Costs (\$)</b>	<b>Comments</b> <i>Please describe what the costs are for</i>
Outage extended to 12 hours	\$.....	.....
Outage extended to 24 hours	\$.....	.....
Outage extended to 48 hours	\$.....	.....

Momentary outages are outages **shorter** than 3 minutes. Momentary outages could be reduced by investing more in the network.

- a. Do momentary outages cause disruption to your business at *your business site*?

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Choose one of the options below

- No, momentary outages (less than 3 minutes) **do not** disrupt business processes
- Yes, momentary outages (less than 3 minutes) **do** disrupt business processes in some way

b. If you answered 'yes' to question 10a. describe what business processes are disrupted when a momentary outage (less than 3 minutes) occurs.

Have you made any changes to your business operations or any investments to reduce the risk/impact of momentary outages on your business at *your business site*?

Choose one of the options below

- No, my business **has not** made any changes to business processes or any investments to reduce the risk/impact of momentary outages (less than 3 minutes) at *my business site*.
- Yes, my business **has** made changes to business processes and/or investments to reduce the risk/impact of momentary outages (less than 3 minutes) at *my business site*.

If you answered 'yes' to question 11 describe what business processes you have changed and/or what investments you have made (include dollar cost and description of what you invested in) to reduce the risk/impact of momentary outage (less than 3 minutes) at *your business site*.

### **g) Your power outage history**

The questions in this section are about your business' experience of power outages at *your business site*.

How many times, if any, has *your business site* experienced an unexpected outage for 10 minutes or more in the last 12 months? (enter '0' if none)

How long ago was your last experience of an unexpected outage for more than 10 minutes at *your business site*? (enter 'never' if you have not experienced an outage)

Did you receive any information from your distribution/transmission company about the outage and its expected length? (enter 'n/a' if not relevant)

If you received information about the outage, did this information help you manage or reduce the cost of the outage for your business? If so, how did it help? (enter 'n/a' if not relevant)

### **h) Your electricity expenditure**

On average, how much does your business spend on electricity per month for electricity consumed at *your business site*?

To answer this question, only include costs of energy you buy from the grid, not costs associated with any on-site generation or clean energy initiatives. Also, do not include money you earn from supplying energy to the grid.

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Approximate values are sufficient.

\$.....per month.

How satisfied are you with the reliability of your electricity supply? (Circle one option below)

<b>Very unsatisfied</b>	<b>Slightly unsatisfied</b>	<b>Neutral</b>	<b>Somewhat satisfied</b>	<b>Very satisfied</b>
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**i) Alternative electricity supply and monitoring devices**

Does your business site use any of the following backup power systems to maintain business operations in the event of a power outage, or does your business plan to introduce them within the next five years?

Please indicate the type of back-up power supply available at the site. For each type of back-up power supply, indicate approximately how much of the site’s power requirements it can service and for how many hours (for example, back-up power supplies 50% of the site for 2 hours).

Form of back-up supply	Currently installed	Plan to install	No plan to install
<b>Back-up generator</b>			
<b>Battery system</b>			
<b>Other (i.e. switch to alternative energy source). Please specify:</b>			

If you currently have, or intend to install backup power systems can you describe how you use backup supply? For example, do you/will you use it operating as usual, or only to run particular processes, such as completing current production line process or winding down the plant?

Does *your business site* routinely generate any of its own electricity?

To answer this question, exclude occasions when you generated electricity on-site because of a network outage.

Yes                       No

Are there *any* other impacts on your business due to unexpected power outages that have not be addressed above and that you think should be considered?



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**j) Request for permission in relation to business NMI(s)**

We ask you to provide the National Meter Identifier (**NMI**) code(s) for *your business site*. The NMI(s) will be used by the AER to identify how much electricity Australian businesses generally consume in a year. This data is important to help better understand survey responses and improve the accuracy of results. You may have one or more NMIs depending on the number of grid facing electricity meters at the site (i.e. there is one NMI per meter).

The AER may disclose the NMI(s) to the business' electricity distributor or transmission company, and the Australian Energy Market Operator so they can provide the energy consumption data (Energy Data) for *your business site* to the AER. By providing the business NMI(s) you consent to the AER disclosing the business' NMI(s) to these parties and obtaining the business' energy consumption data.

Please provide each NMI associated with the business site:

NMI 1: .....

NMI 2: .....

If you are unaware of what your NMI(s) are, you can provide your consent for the Australian Energy Market Operator and your distribution or transmission company to provide these to the AER on your behalf. As stated above, the AER may disclose NMI(s) to the business' electricity distributor or transmission company, or the Australian Energy Market Operator so they can provide the business' energy consumption data to the AER. By providing your consent for these other parties to disclose your NMIs to the AER on your behalf, you consent to the AER obtaining the business' energy consumption data.

- a. Do you consent for the Australian Energy Market Operator, your distribution or transmission company to provide the business' NMI(s) to the AER?

Yes, I give consent for the Australian Energy Market Operator, my business' distributor and transmission company to provide the business' NMI(s) to the AER.

No, I do not give consent for the Australian Energy Market Operator, my business' distributor and transmission company to provide the business' NMI(s) to the AER.

- b. Please provide a name and telephone number in case the AER needs to confirm your consent.

**k) Confidentiality**

Your energy consumption data will be used together with your survey responses to determine how much customers in aggregate are willing to pay for reliability. The AER may also retain your energy consumption data for research purposes including to benchmark future VCR figures. The information you provide will not be used for marketing or similar purposes.

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The AER intends to publish the results of the survey on its website. It may publish survey responses and energy consumption data by removing identifying information in relation to you and your business.

The AER will treat any confidential information in line with our [Information Policy](#). The AER will not publish data that is confidential.

Please outline what confidential information (if any) you have provided.