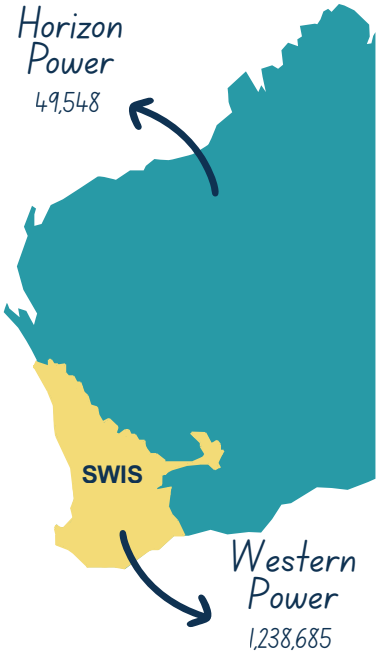
Economic Regulation Authority

2026 electricity and gas data

Electricity delivery reliability

2025/26 *at a glance*



Western Power is the distributor for more than 1.2 million customers in the SWIS. Horizon Power supplies the less populous areas of WA.

We licence energy utilities and monitor the reliability of electricity delivery. Poor reliability can have a major impact on customers. For businesses, outages mean lost trade. For households, outages disrupt daily life, especially for those who use life support equipment.

Customers experienced declining levels of reliability overall in 2025/26.

Average per connection	Western Power	Horizon Power
Time interrupted (SAIDI) Total of all outages	**580 minutes**	**583 minutes**
Interruptions (SAIFI) Number of outages	**2.98**	**2.95**
Restoration time (CAIDI) SAIDI ÷ SAIFI	**195 minutes**	**198 minutes**

Outage frequency and duration standards

Figures include all outages over the year (non-normalised)

Interruptions of over 12 hours	Connections with > 16 interruptions	Interruptions of over 12 hours	Urban connections with > 9 interruptions	Non-urban with > 16 interruptions
4,954	496	159,803	18,640	3,396
Horizon Power		Western Power		

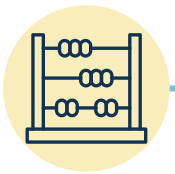
This report highlights reliability data from 2 licensed electricity distributors, Western Power and Horizon Power. More detailed distribution data from 2014 to 2026 can be found in the ERA's energy distributor dashboard.

A distribution connection can service many people. Apartment buildings, caravan parks, or commercial tenancy complexes often have a single connection. Data we collect from distributors counts each network connection as a single customer and includes both residential and business customers.

Key terms



System average interruption duration index (SAIDI). The average cumulative amount of time (in minutes) that individual customer connections experienced interruptions longer than one minute during the year. This shows how long, on average, a customer was without power over the year. When SAIDI is presented as normalised, a range of outages are excluded from the calculation.



System average interruption frequency index (SAIFI). The average number of times individual customer connections experienced an interruption longer than one minute during the year. This shows how often, on average, a customer was disconnected over the year. When SAIFI is presented as normalised, a range of outages are excluded from the calculation.



Customer average interruption duration index (CAIDI). The average duration (in minutes) of interruptions longer than one minute experienced by individual customer connections during the year. CAIDI is equal to SAIDI divided by SAIFI. This shows how long the average outage lasted for.



Explanation - Normalised Data

Western Power and Horizon Power provide reliability data in two formats – normalised data and non-normalised. The normalised figures are smaller as they exclude a range of outages.

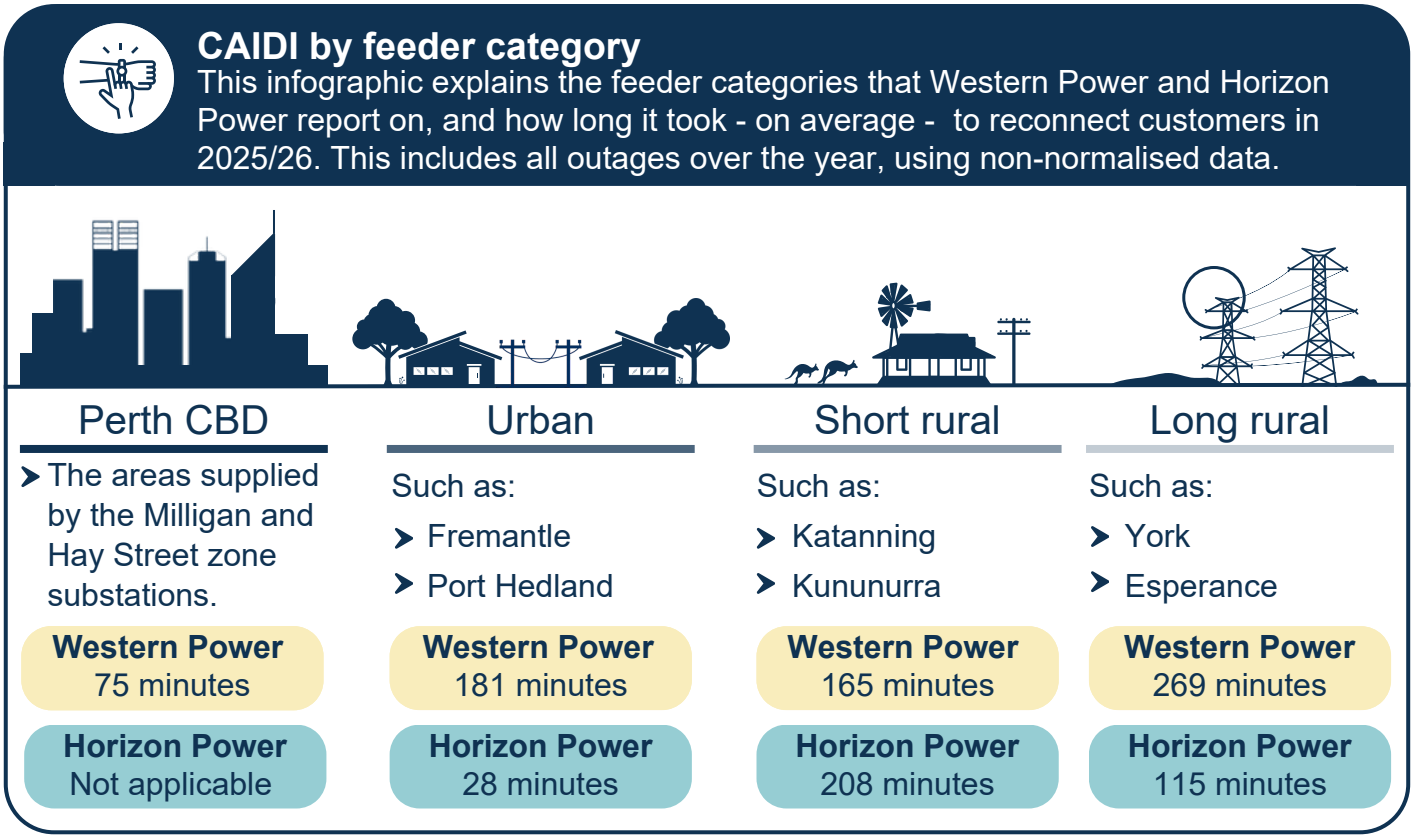
To illustrate how often customers experience outages and how long the outages last, this report focuses on non-normalised data. Non-normalised data better demonstrates customer experience – for a customer an outage has the same effect whether it was caused by the distributor or a major storm.

Normalised data excludes planned outages, those caused by a third party and outages on a ‘major event day’ – such as a significant storm or bushfire. Normalised data allows us to compare reliability between the years without fluctuations caused by natural disasters and other unpredictable events.

The reliability data is presented with respect to overall electricity connections for Western Power and Horizon Power, and for four electricity feeder categories:

- Perth CBD: Areas supplied by Western Power via the Milligan Street or Hay Street substations.
- Urban (excluding Perth CBD) feeders: Metropolitan areas designated in regulation (clause 3).
- Short rural: Feeder route length less than 200 kilometres.
- Long rural: Feeder route length greater than 200 kilometres.

The majority of customers across Western Australia are in the urban (66.7 per cent) or the short rural (24.9 per cent) feeder categories. Approximately 8 per cent of customers are connected to long rural feeders while 0.5 per cent are in the Perth CBD feeder category.



Customer experience – South West Interconnected System

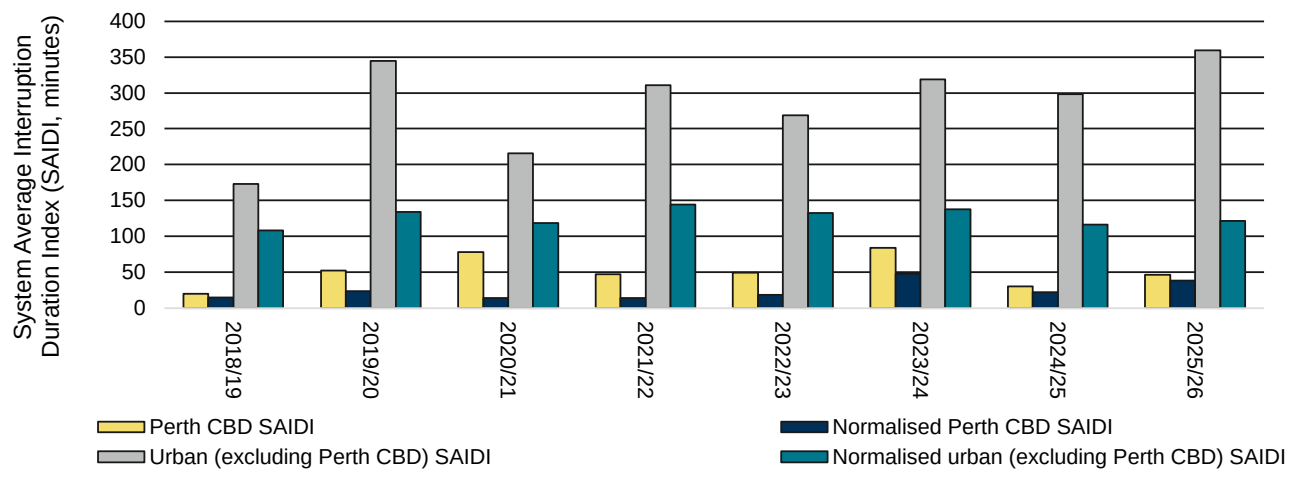
Generally, the number and length of outages increased in 2025/26 for most customers in the South West Interconnected System (SWIS).

The following 4 figures highlight the number and frequency of outages experienced by customers in each of the 4 feeder categories over the past 8 years. By including normalised data, the figures show the gap between all outages and the 'normalised' data which excludes outages caused by a third party, planned outages and those on a 'major event day'.

The total outage time on average is shown in Figure 1 and Figure 2 (SAIDI). Both figures illustrate how the normalised data fluctuates less from year to year than the actual outages experienced by the customer. For each feeder type, the taller bars indicate the customer experience and the corresponding shorter bars show the normalised data.

The majority of Western Power's connections are to urban feeders. Figure 1 shows how the outage duration has fluctuated over the past 8 years for these customers (light grey bar). Urban feeders experienced an average cumulative outage of 360 minutes, the highest recorded since 2019/20. The year prior had the lowest average cumulative outage (173 minutes). By excluding a range of outages, the normalised figures were more stable, ranging from 108 minutes in 2018/19 to 144 minutes in 2021/22 (teal bar).

Figure 1: Western Power – Average cumulative outage (SAIDI) for urban feeder categories

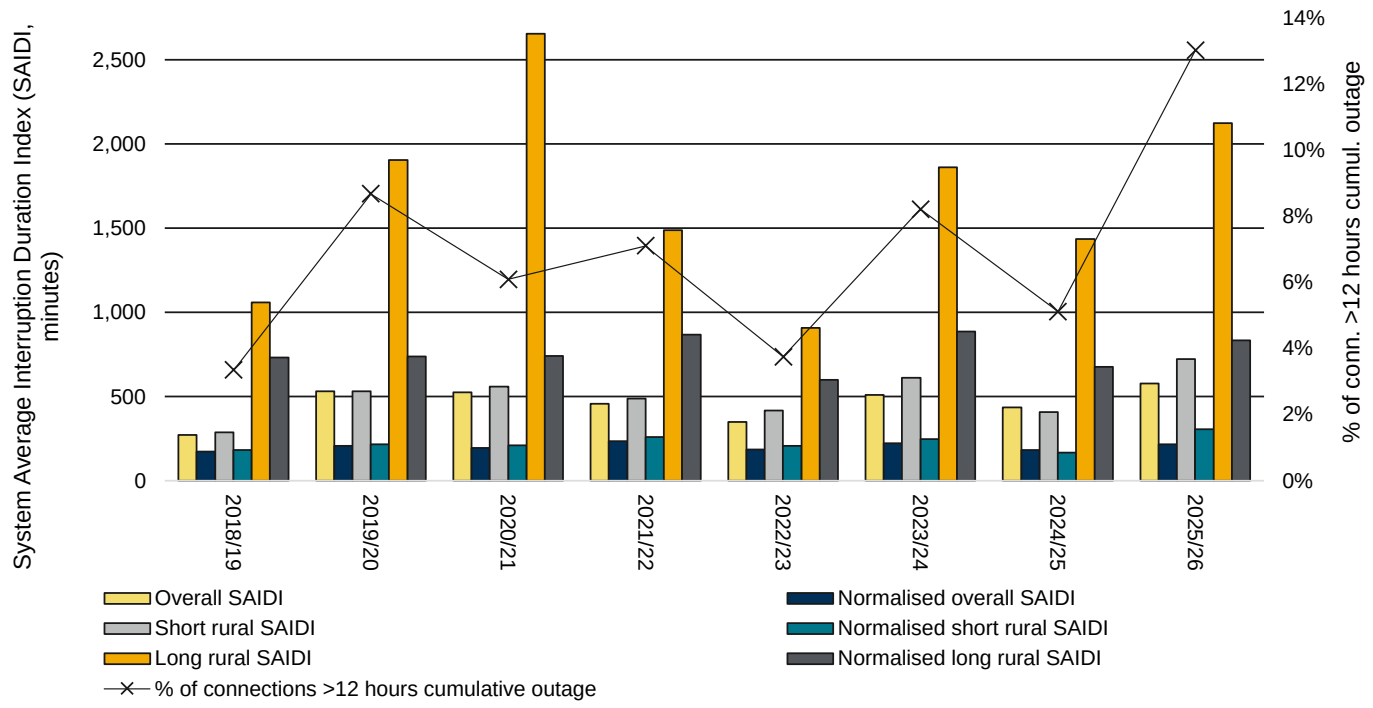


Source: SAIDI and normalised SAIDI by feeder category indicators (FC1b, FC1c, FC4biii, FC4ciii).

In 2025/26 the average cumulative outage time across all connection types in the SWIS was over nine hours (580 minutes) (pale yellow bar, Figure 2). There were large variations in the outage time depending on feeder type. The average cumulative outage time ranged from 46 minutes for the Perth CBD (dark blue bar, Figure 1) to almost 48 hours for connections to long rural feeders (2,124 minutes, orange bar, Figure 2).

A historically small proportion of customers in the SWIS experience more than 12 hours of outages in total over the year. The line on Figure 2 combines total outage data from all feeder types to illustrate that this has fluctuated from a low of 3.35 per cent of customers in 2018/19 to 13.01 per cent of customers in 2025/26 (right axis), almost 3 times the previous year. Western Power attributed this increase to significant events, for example, from 13 to 17 December 2025 almost 170,000 customers were without power for an average of 10 hours and 50 minutes due to lightning and bushfire activity around the Mid-West and Wheatbelt that damaged the transmission and distribution network. In addition, on 11 June 2026 the 220kV line tripped due to equipment issues and over 16,000 customers were interrupted in the City of Kalgoorlie-Boulder, and the Shires of Coolgardie and Yilgarn, for an average time of nearly 3 hours.

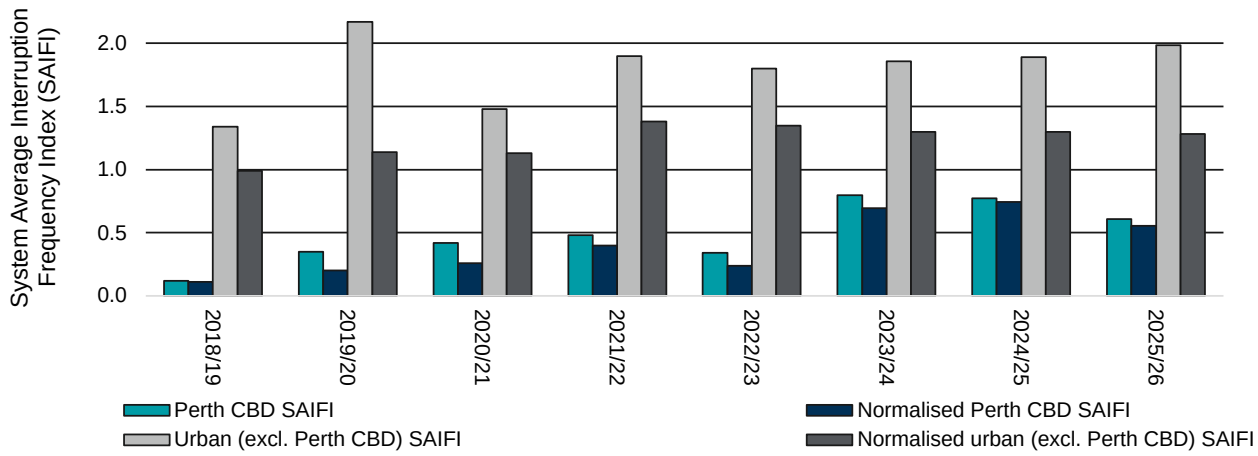
Figure 2: Western Power - Average cumulative outage (SAIDI) for overall and rural feeder categories



Source: SAIDI and normalised SAIDI overall and by feeder category indicators (FC1, FC1d, FC1e, FC4iii, FC4diii, FC4eiii); occurrences of electricity supply interruptions longer than 12 hours, and number of connections indicators (NQR1, CCD7).

The average frequency of outages is illustrated in Figure 3 and Figure 4. Figure 3 shows data for the Perth CBD and urban feeders while Figure 4 contains data for overall and rural feeder categories and includes the average length of interruptions (CAIDI on the right axis).

Figure 3: Western Power – Average outage frequency (SAIFI) for urban feeder categories



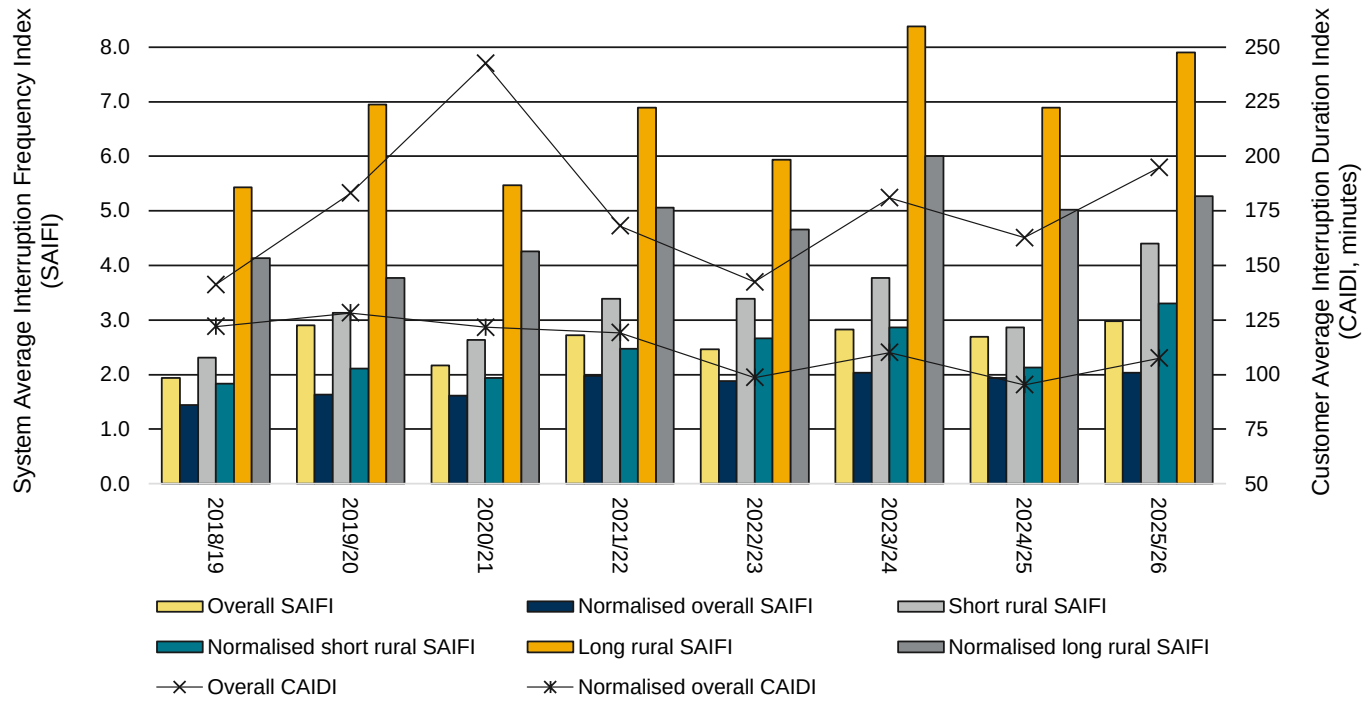
Source: SAIFI and normalised SAIFI by feeder category indicators (FC5b, FC5c, FC8biii, FC8ciii).

In total, customers experienced an average of 3 interruptions across all connections in 2025/26. The frequency of interruptions varied depending on the feeder type and ranged from 0.6 for the Perth CBD to 7.9 interruptions for connections to long rural feeders. After removing planned, third-party and major event day outages, the normalised data shows interruptions across all connections - ranging from 0.6 interruptions for the Perth CBD to 5.3 for long rural feeders in 2025/26 (Figure 3 and Figure 4, left axes).

The average length of all interruptions across all connections in 2025/26 was 195 minutes (Figure 4, right axis). Customers in the Perth CBD were again the least affected by outages with an average length of 75 minutes. In contrast, connections to long rural feeders experienced an average interruption length of almost 4.5 hours (269 minutes).

By excluding a range of outages, the normalised data shows the average length of interruptions was 108 minutes across all connections (Figure 4, right axis), ranging from 69 minutes for the Perth CBD to 159 minutes for long rural feeders.

Figure 4: Western Power – Average outage frequency (SAIFI) for overall and rural feeder categories



Source: SAIFI and normalised SAIFI overall and by feeder category indicators (FC5, FC5d, FC5e, FC8iii, FC8diii, FC8eiii); CAIDI equals SAIDI divided by SAIFI.

More information on Western Power's reliability in 2025/26 can be found on its website in the Annual Reliability and Power Quality Report. You can also find information on Western Power's reliability in the Service Standard Performance Report – published by the ERA each year.

Customer experience – Outside the SWIS

There was an overall increase in the number and length of outages for most customers served by Horizon Power in 2025/26.

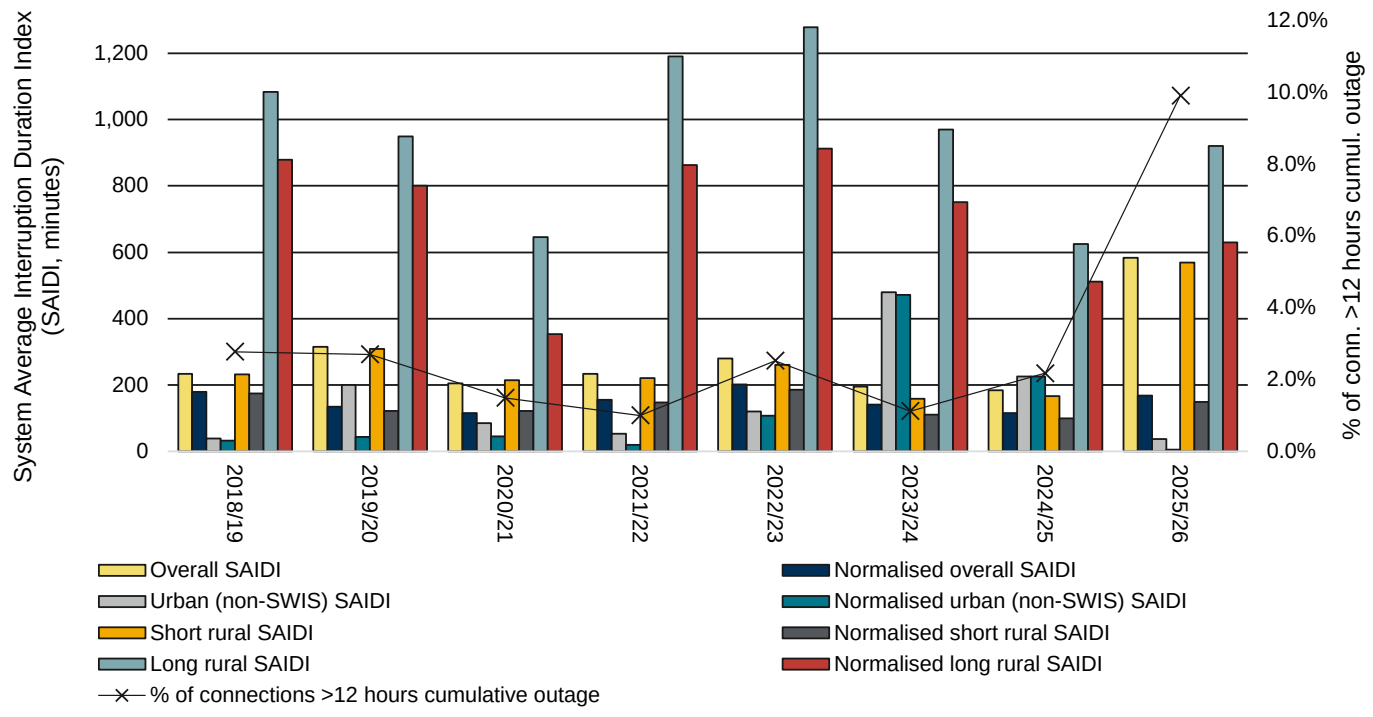
The following 2 charts compare normalised and non-normalised average cumulative outage and outage frequency for Horizon Power customers over the past 8 years.

Figure 5 shows the average cumulative outage time (583 minutes non-normalised) outside the SWIS, and the average cumulative outage by connection type, as normalised and non-normalised data. Using non-normalised data to illustrate customer experience, the average cumulative outage was 583 minutes across all types of connections in 2025/26. Customers on short rural feeders experienced an average cumulative outage of 569 minutes while customers on long rural feeders had an average cumulative outage time of 921 minutes (Figure 5, left axis).

Using normalised data, the average cumulative outage SAIDI was 168 minutes across all connections, ranging from 149 minutes for short rural feeders to 630 minutes for long rural feeders (left axis).

Each year, a small proportion of customers experience more than 12 hours of outages in total. The line graph on Figure 5 (right axis) combines data from all feeder types to illustrate how this percentage has changed over the past eight years.

Figure 5: Horizon Power – Average cumulative outage (SAIDI) for all feeder categories



Source: SAIDI and normalised SAIDI overall and by feeder category indicators (FC1, FC1c, FC1d, FC1e, FC4iii, FC4ciii, FC4diii, FC4eiii); occurrences of electricity supply interruptions longer than 12 hours, and number of connections indicators (NQR1, CCD7).

Horizon Power's reclassification of some connections between urban and short rural feeder categories based on electricity consumption has affected the comparison of cumulative outage for urban feeders to short rural feeders over time.

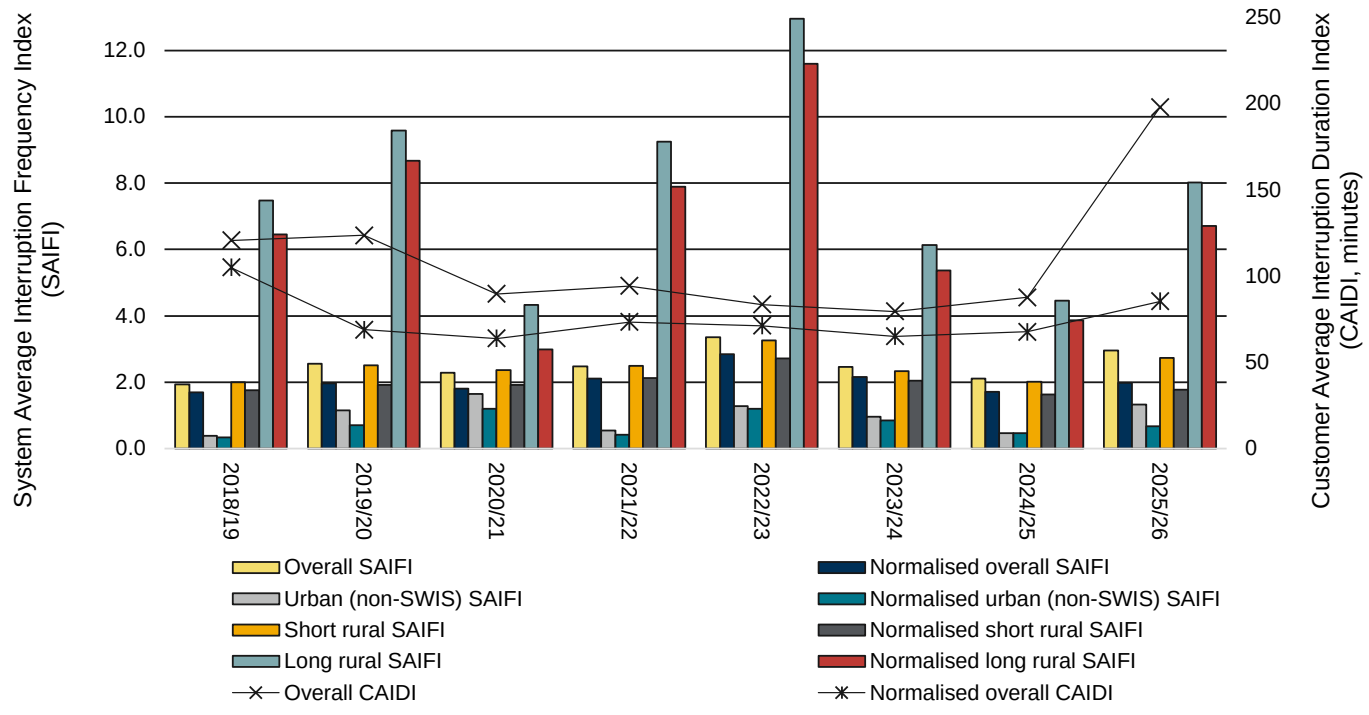
Figure 6 shows the frequency of outages, averaged across all connections as normalised and non-normalised. Using non-normalised data, in 2025/26 there was an average of 2.9 interruptions across all connections. For urban feeders, the average outage frequency was 0.7 and for long rural feeders the average was much higher at 8 interruptions (left axis).

Using normalised data, there were 2.0 interruptions across all connections, ranging from 0.7 interruptions for urban feeders to 6.7 interruptions for long rural feeders in 2025/26 (left axis).

When taking into account all outages, the average length of an interruption in 2025/26 for all connections (CAIDI) was 198 minutes across all connections (right axis). This average duration ranged from 28 minutes for urban areas (excluding Perth CBD) to 209 minutes for short rural feeders.

Normalised data on the average length of an interruption was 85 minutes across all connections (right axis), ranging from 94 minutes for long rural feeders to 7 minutes for urban connections.

Figure 6: Horizon Power – Average outage frequency (SAIFI) for all feeder categories



Source: SAIFI and normalised SAIFI overall and by feeder category indicators (FC5, FC5c, FC5d, FC5e, FC8iii, FC8ciii, FC8diii, FC8eiii); CAIDI equals SAIDI divided by SAIFI.

More information on Horizon Power's reliability in 2025/26 can be found on its website: Network Quality and Reliability of Supply Code 2025/26 Performance Report.

Regulated reliability levels 2025/26

The *Electricity Industry (Network Quality and Reliability of Supply) Code 2005* (NQ&R Code) sets area-based (urban and non-urban) standards for outage duration and frequency that apply to Western Power and Horizon Power. This reliability data includes all outages customers experience, including planned outages and major event days caused by severe weather – this means that the data in this section is not normalised.

Including all interruptions is important to understand customer experience - even planned interruptions can be disruptive for customers, who may be unable to trade or work remotely.

This section outlines 2 distributors' performance against 3 NQ&R Code standards.

1. **Customers who consume not more than 50 MWh of electricity per year that experience a supply interruption of longer than 12 hours may apply for compensation (Section 19)**

- There were 159,803 occurrences of Western Power customers experiencing an interruption of longer than 12 hours in 2025/26 – this is more than double the number of occurrences in 2024/25. The number of these outages fluctuates from year to year and can be caused by extreme weather events.
    - 159,803 occurrences represent approximately 13 per cent of total connections (Figure 2 right axis). As a connection may have multiple long interruptions over the year, it is likely that fewer than 13 per cent of connections were affected by interruptions longer than 12 hours in 2025/26.
    - Mini report 3 lists the number of payments claimed by customers for outages over 12 hours.
- There were 4,954 occurrences of Horizon Power customers experiencing an outage of longer than 12 hours. This is the highest number of occurrences since 2014/15 when 6,382 occurrences were reported which represented 14 per cent of total connections. In 2025/26, approximately 10 per cent of total connections were affected by interruptions longer than 12 hours (Figure 5 right axis).

2. **For small use customers (who consume not more than 160 MWh of electricity per year), the maximum number of supply interruption events during the reporting year should be 9 for urban areas (including the Perth CBD), and 16 for all other areas (Section 12)**

- 18,640 urban Western Power connections had more than 9 interruptions (more than double the number of interruptions compared to 2024/25), and 3,396 non-urban Western Power connections had more than 16 interruptions (a decrease of 27 per cent compared to 2025/26).
- 496 Horizon Power connections had more than 16 interruptions (an increase of 64 per cent compared to 2025/26).

3. 4-year average SAIDI (outage duration) should not be greater than 30 minutes for the Perth CBD, 160 minutes for other urban areas, and 290 minutes for non-urban areas (Section 13)

- Western Power's 4-year average SAIDI for the Perth CBD was 52 minutes, the same result as 2024/25).
- Western Power's 4-year average SAIDI for urban areas excluding the Perth CBD was 354 minutes (an increase of 6 per cent compared to 2024/2025).
- Western Power's 4-year average SAIDI for non-urban areas was 1,105 minutes (an increase of 6 per cent compared to 2024/25).
- Horizon Power's reported 4-year average overall SAIDI was 311 minutes (an increase of 39 per cent compared to 2024/25).The ERA's calculations of Horizon Power's 4-year average SAIDI for urban, short rural and long rural feeder categories for 2025/26 are, respectively, 216 minutes (an decrease of 2 per cent compared to 2024/25), 289 minutes (an increase of 43 per cent compared to 2024/25) and 948 minutes (a decrease of 7 percent compared to 2024/25) – accordingly the NQ&R Code requirement was satisfied for short rural feeder connections.