



Economic Regulation Authority

Draft decision on proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27

Attachment 9: Service standard benchmarks and
adjustment mechanism

9 September 2022

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Note

This attachment forms part of the ERA's draft decision on proposed revisions to the access arrangement for the Western Power Network for the fifth access arrangement period (AA5). It should be read with all other parts of the draft decision.

The draft decision comprises all of the following attachments:

Draft decision on proposed revisions to the access arrangement for the Western Power network 2022/23 – 2026/27 – Decision Overview

Attachment 1 – Price control and target revenue

Attachment 2 – Regulated asset base

Attachment 3A – AA4 capital expenditure

Attachment 3B – AA5 capital expenditure

Attachment 4 – Depreciation

Attachment 5 – Return on regulated asset base

Attachment 6 – Operating expenditure

Attachment 7 – Other components of target revenue

Attachment 8 – Services

Attachment 9 – Service standard benchmarks and adjustment mechanism (this document)

Attachment 10 – Expenditure incentives and other adjustment mechanisms

Attachment 11 – Network tariffs

Attachment 12 – Policies and contracts

1. Summary

This attachment deals with:

- The adjustment to target revenue for service standard performance during AA4.
- The service standard benchmarks proposed for AA5.
- The service standard adjustment mechanism proposed for AA5.

The service standards adjustment mechanism ensures that efficiencies are not achieved at the expense of service standards and that improvements in service standards are made only where they are valued by customers.

Power outages over the summer across the electricity system have highlighted the importance of energy security and reliability for the community. Over the last few months, the ERA has engaged directly with regional customers to better understand their customer experience and any concerns they have. It is clear to the ERA that many regional customers are experiencing a very poor level of service.¹ This was also observed in the independent report conducted by Michelle Shepherd for the Minister for Energy.

Since AA3, the access arrangement has included “service standard benchmarks” (based on the 97.5th percentile of performance achieved over the previous five years) and “service standard targets” (based on the average performance over the previous five years).² Engagement with stakeholders indicates that including “service standard benchmarks” and “service standard targets” in the access arrangement creates confusion about what standard Western Power is expected to deliver.

To remove confusion and ensure the standards Western Power must meet are clear, the ERA has removed the service standard targets from the access arrangement. In addition, rather than setting the benchmarks at minimal performance levels as is currently done, they will be based on the average service standard performance over the AA4 period except in the case of rural long feeders.

Western Power has legislative reliability obligations under the *Electricity Industry (Network Quality and Reliability of Supply) Code 2005* (NQ&R Code). The current CBD, urban and rural short system average interruption duration index (SAIDI), which measures the average number of minutes per customer of outages, is well within the prescribed limits in the NQ&R Code. However, outage performance for rural long feeders is not. The ERA has required the service standard benchmark for rural long SAIDI to be set at the level required under the NQ&R Code.

¹ Approximately 100,000 customers are on rural long feeders. On average and after excluding planned outages and outages outside Western Power’s control, these customers experienced 713 minutes of outages compared with CBD, urban and rural short customers who experienced 14, 118 and 210 minutes respectively. Furthermore, many customers within the rural long customer group experienced significantly higher outages than the average with around 10% experiencing between double and up to 7 times the average reported performance. The average performance for the approximately 320,000 customers on rural short feeders is significantly better than for rural long feeders, however about 15 per cent experienced outages between double and up to 10 times the average.

² The rationale for setting the service standard benchmarks at such a low level of performance was on the basis that they were the minimum standard that should be achieved. The service standard targets were based on average performance achieved on the basis that it was the level of service customers were satisfied with.

During AA5, Western Power's performance will continue to be assessed based on the average performance for all customers included in the service standard performance measure. However, the ERA will increase reporting requirements to focus on specific areas of the network where performance is below average and require Western Power to explain the reasons for the under-performance and the measures it is taking to address the under-performance.

Summary of draft decision

- The adjustment to AA5 target revenue for service standard performance during AA4 will need to be updated to reflect actual performance in 2021/22.
- With the exception of rural long SAIDI, the transmission and distribution service standard benchmarks in AA5 must be calculated based on the average performance over the AA4 period adjusted for anticipated changes in service reliability and where individual penalty caps applied during the AA4 period. The rural long SAIDI must be no worse than the NQ&R Code standard of 290 minutes.
- The call centre service standard benchmark in AA5 must be set on average performance over the AA4 period.
- The service standard benchmarks for reference services D1 to D13 for AA5 must be amended to be consistent with the specific time periods specified in the Metering Code or Code of Conduct and apply to each individual performance of the relevant service.
- The service standard targets in the service standard adjustment mechanism must be removed and replaced with the service standard benchmarks (as amended in this draft decision). The call centre performance measure should be retained in the service standard adjustment mechanism.

The reasons for the ERA's draft decision in respect of the matters relevant to service standards and details of required amendments are set out in this attachment.

2. Adjustment to target revenue for service standard performance in AA4

The current access arrangement includes service standard benchmarks and service standard targets. The service standard targets are used in the service standard adjustment mechanism contained in section 7.5 of the current access arrangement to determine whether Western Power should receive a reward or penalty for its performance.

If actual performance is better than the target, Western Power receives a reward. If actual performance is worse than the target, Western Power incurs a penalty. The reward and penalty rates that apply for each service standard are set out in the access arrangement and were based on the value of customer reliability. During the current access arrangement period the service standard adjustment mechanism applied from 2019/20 as the access arrangement came into effect from 1 July 2019.

2.1 Western Power's proposal

Western Power is forecasting a cumulative positive adjustment of \$2.4 million for transmission network services, a net deduction of \$44.1 million for distribution network services and a net reward of \$0.2 million for the call centre performance in respect of the AA4 period in its proposal for AA5.

Table 1, Table 2 and Table 3 below summarise performance for the transmission, distribution and call centre service performance measures respectively. The tables include the service standard target, actual performance and the total reward or penalty payable for each performance measure in the service standard adjustment mechanism.

Table 1 AA4 transmission service standard performance, \$ million real June 2022

		2017/18	2018/19	2019/20	2020/21	2021/22 f/cast	Total reward or penalty
Circuit availability (% of total time)							
Target	%	N/A	N/A	98.5	98.5	98.5	
Actual	%	99.1	98.7	98.8	98.5	98.5	
(Penalty) / reward	\$	N/A	N/A	1.5	0.0	0.0	1.5
Loss of supply event frequency >0.1 and <= 1.0 system minutes							
Target	No.	N/A	N/A	17	17	17	
Actual	No.	11	13	15	14	14	
(Penalty) / reward	\$	N/A	N/A	0.2	0.3	0.3	0.8

		2017/18	2018/19	2019/20	2020/21	2021/22 f/cast	Total reward or penalty
Loss of supply event frequency >1.0 system minutes							
Target	No.	N/A	N/A	3	3	3	
Actual	No.	6	2	3	2	2	
(Penalty)/reward	\$	N/A	N/A	0.0	0.2	0.2	0.4
Average outage duration (minutes)							
Target	minutes	N/A	N/A	784	784	784	
Actual	minutes	560	523	751	976	976	
(Penalty)/reward	\$	N/A	N/A	0.2	(0.3)	(0.3)	(0.4)
Total transmission (penalty)/reward	\$	N/A	N/A	1.9	0.2	0.2	2.4

Source: Western Power, Access arrangement information: Access arrangement revisions for the fifth access arrangement period.

Table 2 AA4 distribution service standard performance, \$ million real June 2022

		2017/18	2018/19	2019/20	2020/21	2021/22 f/cast	Total reward or penalty
SAIDI - CBD (minutes)							
Target	minutes	N/A	N/A	17.7	17.7	17.7	
Actual	minutes	1.3	14.7	22.8	14.1	14.1	
(Penalty) / reward	\$	N/A	N/A	(0.2)	0.1	0.1	0.0
SAIDI - Urban (minutes)							
Target	minutes	N/A	N/A	106.8	106.8	106.8	
Actual	minutes	104.5	104.2	134.3	118.0	118.0	
(Penalty) / reward	\$	N/A	N/A	(11.6)	(5.5)	(5.5)	(22.6)
SAIDI – Rural short (minutes)							
Target	minutes	N/A	N/A	188.6	188.6	188.6	
Actual	minutes	151.9	178.3	218.3	210.2	210.2	
(Penalty) / reward	\$	N/A	N/A	(4.2)	(3.4)	(3.4)	(11.0)

		2017/18	2018/19	2019/20	2020/21	2021/22 f/cast	Total reward or penalty
SAIDI - Rural long (minutes)							
Target	minutes	N/A	N/A	677.7	677.7	677.7	
Actual	minutes	718.1	663.5	737.5	713.5	713.5	
(Penalty) / reward	\$	N/A	N/A	(3.4)	(2.1)	(2.1)	(7.6)
SAIFI – CBD (number of instances)							
Target	No.	N/A	N/A	0.12	0.12	0.12	
Actual	No.	0.04	0.11	0.20	0.26	0.26	
(Penalty) / reward	\$	N/A	N/A	(0.3)	(0.3)	(0.3)	(0.9)
SAIFI – Urban (number of instances)							
Target	No.	N/A	N/A	1.09	1.09	1.09	
Actual	No.	1.03	0.95	1.14	1.13	1.13	
(Penalty) / reward	\$	N/A	N/A	(1.6)	(1.3)	(1.3)	(4.2)
SAIFI – Rural short (number of instances)							
Target	No.	N/A	N/A	1.96	1.96	1.96	
Actual	No.	1.59	1.78	2.11	1.94	1.94	
(Penalty) / reward	\$	N/A	N/A	(1.5)	0.2	0.2	(1.1)
SAIFI – Rural long (number of instances)							
Target	No.	N/A	N/A	4.29	4.29	4.29	
Actual	No.	3.96	3.83	3.77	4.25	4.25	
(Penalty) / reward	\$	N/A	N/A	2.9	0.2	0.2	3.3
Total distribution (penalty)/reward	\$	N/A	N/A	(19.9)	(12.1)	(12.1)	(44.1)

Source: Western Power, Access arrangement information:

Table 3 AA4 call centre performance service standard adjustment mechanism adjustments, \$ million real June 2022

		2017/18	2018/19	2019/20	2020/21	2021/22 f/cast	Total reward or penalty
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Call centre performance (% calls responded to within 30 seconds)

		2017/18	2018/19	2019/20	2020/21	2021/22 f/cast	Total reward or penalty
Target	%	N/A	N/A	92.0	92.0	92.0	
Actual	%	91.7	91.7	92.6	91.9	91.9	
(Penalty) / reward	\$	N/A	N/A	0.2	0.0	0.0	0.2

Source: Western Power, Access arrangement information: Access arrangement revisions for the fifth access arrangement period.

2.2 Submissions

No submissions were received in relation to the performance data for all AA4 service standard benchmarks and targets, or the calculation of amounts under the service standard adjustment mechanism proposed for AA5.

2.3 Considerations of the ERA

The ERA has reviewed the adjustment amounts to ensure they have been calculated correctly, consistent with and in accordance with the service standard adjustment mechanism in the current access arrangement.

Western Power has based the calculation for the 2021/22 year on forecast performance. As actual performance will be available later this year, an adjustment will be made in the final decision to reflect actual performance.

Required Amendment 1

The service standard adjustment mechanism adjustment to target revenue in AA5 must be amended to reflect actual service standard performance for 2021/22.

3. Service standard benchmarks for AA5

The access arrangement must include service standard benchmarks for each reference service.³ The service standard benchmarks must be reasonable and sufficiently detailed and complete to enable a user or applicant to determine the value represented by the reference service at the reference tariff.⁴

The current access arrangement includes the following service standard benchmarks:

- Transmission entry and exit reference services:
 - Circuit availability, which measures the availability of the transmission network. Circuit availability is based on the actual circuit hours available for transmission circuits divided by the total possible defined circuit hours available. It includes planned and unplanned outages.
 - Loss of supply event frequency, which measures the frequency of events where loss of supply occurs (except due to planned outages) to transmission connected customers on reference services and is reported separately for events exceeding 0.1 system minutes and 1.0 system minute.
 - Average outage duration, which measures the average duration in minutes of all unplanned outages on the transmission network for customers on transmission reference services.
- Distribution entry, exit, bi-directional, capacity allocation, and remote direct load control/limitation reference services:
 - System average interruption duration index (**SAIDI**) for urban areas, rural-short and rural-long feeders and the Perth central business district, which measures the average number of minutes per customer of outages on the distribution network in a year.
 - System average interruption frequency index (**SAIFI**) for urban areas, rural-short and rural-long feeders and the Perth central business district, which measures the average number of interruptions per customer in a year.
 - Call centre performance, which measures the percentage of calls responded to in 30 seconds or less.

The AA4 service standard benchmarks for the transmission and distribution network reference services set out above in Table 2 and Table 3 were based on the 97.5th (or 2.5th) percentile of actual performance over the previous access arrangement period (AA3).

Streetlighting service standard benchmarks are:

- relevant service standards that apply to all distribution network reference services; and
- relate to repair times in respect of the relevant reference services relating to streetlighting.

³ Section 5.1(c) of the Access Code.

⁴ Section 5.6 of the Access Code.

A range of exclusions from the AA4 service standard benchmarks are included in the current access arrangement as follows:

- Transmission network reference services:
 - Outages and peak demand for customers receiving a non-reference service.
 - Planned interruptions (except transmission circuit availability which includes planned outages but capped at 14 days).
 - *Force majeure* events.
 - Interruptions caused by a fault or other event on a third-party system.
 - Momentary interruptions (less than one minute).
 - The duration of each interruption is capped at 14 days.
- Distribution network reference services SAIDI/SAIFI:
 - Interruptions caused by a fault or other event on the transmission system.
 - Planned interruptions.
 - A day on which the major event day threshold, applying the “2.5 beta method”, is exceeded.⁵
 - *Force majeure* events.
 - Interruptions caused by a fault or other event on a third-party system.
- Call centre:
 - Calls abandoned by a caller in four seconds or less of their postcode being automatically determined or when a valid postcode is entered by the caller.
 - Calls abandoned by a caller in 30 seconds or less of the call being placed in the queue to be responded to by a human operator.
 - All telephone calls received on a major event day which is excluded from SAIDI and SAIFI.
 - A fact or circumstance beyond the control of Western Power affecting the ability to receive calls to the extent that Western Power could not contract on reasonable terms to provide for the continuity of service.

As set out in the framework and approach document published on 9 August 2021, the ERA decided that:

⁵ This method excludes events which are more than 2.5 standard deviations greater than the mean of the log normal distribution of five financial years of SAIDI data. The major event day threshold is determined at the end of each financial year for use in the next financial year. The data set comprises daily unplanned SAIDI calculated over the five immediately preceding financial years after exclusions are applied. Where the logarithms of the data set are not normally distributed, the Box-Cox transformation can be applied to reach a better approximation of the normal distribution.

If Western Power applies the Box-Cox transformation it must:

- Demonstrate that the natural logarithm of the data set is not normally distributed.
- Provide the calculations that demonstrate the application of the Box-Cox transformation method.
- Demonstrate that the resulting data set is normally distributed or that the normality of the data set is improved.

The method for calculating the loss of supply event frequency, average outage duration, SAIDI, SAIFI and call centre performance benchmarks should continue to be based on the 97.5th (or 2.5th) percentile of actual performance over the previous period.

Western Power must include in its access arrangement proposal details of any planned disruptions, new investment or changes to maintenance activities that would affect service standard performance, so that the service standard benchmarks can be adjusted if appropriate. For example, any forecast improvements in SAIDI and SAIFI due to the installation of stand-alone power systems.

The following changes must be made to specific measures:

- Circuit availability must be removed.
- Western Power must commence preparation for a new service standard based on the market impact component of the AER's service standard performance incentive scheme.
- Transmission unplanned outages affecting distribution connected customers must be included in SAIDI and SAIFI. The transmission service standards must be reviewed to ensure they only include outages affecting transmission connected customers.
- The *force majeure* exclusion must be deleted from the SAIDI and SAIFI service standards.
- A new clause must be added to the relevant measures to exclude load interruptions caused or extended by a total fire ban or direction from a local or state government body or state or federal emergency services, provided that a fault in, or the operation of the network did not cause, in whole or part, the event giving rise to the direction.

3.1 Western Power's proposal

Western Power has proposed the following amendments to its current service standard benchmarks:

- Transmission outages affecting customers on the distribution network will be included in the distribution SAIDI and SAIFI measures.
- Transmission service standards will include only outages affecting transmission-connected customers.
- The force majeure exclusion will be removed, and new exclusions will be added to distribution SAIDI and SAIFI measures for total fire bans and directives from emergency services.
- Circuit availability measures have been removed.

Western Power proposes to base the service standard benchmarks on the 97.5th percentile of actual performance over the AA4 period as required by the framework and approach, except in the case of the benchmark for call centre performance.

In relation to the call centre, Western Power proposes to set the service standard benchmark at the same level as the AA4 service standard benchmark. Western Power also proposes to remove the measure for call centre performance from the service standard adjustment mechanism.

Western Power submits that, if it were to set the service standard benchmark for call centre performance based on actual performance over the AA4 period, the service standard

benchmark would increase compared with the AA4 service standard benchmark. Western Power considers this would require investment to achieve improved call centre performance in the AA5 period.

Western Power submits that the findings of its consumer engagement program identified that customers are not willing to pay more for better call centre response times compared to the response times currently experienced. Instead, most customers (75 per cent) prefer to experience slightly longer call centre response times in exchange for an improvement in other service channels available to them such as digital (e.g. Western Power website, Facebook), provided that there is no overall increase in their bills to achieve this improvement.

Western Power also notes that its data on customer engagement demonstrates a significant increase in digital engagement. It notes that in the past two years, website traffic has increased 76 per cent, from 4.6 million page views in 2018 to 8.2 million in 2020 and social media channel engagement (likes, shares, comments, inbound enquiries, link clicks) have increased 349 per cent from 235,000 in 2018 to more than 1.05 million in 2020.

Western Power indicates that it will collect performance data from both phone and digital service channels over the AA5 period that will enable it to propose relevant customer service performance measures in the AA6 period.

Western Power's proposed service standard benchmarks are set out in Table 4. As the revised access arrangement will not commence until 1 July 2023, the AA4 service standard benchmarks have been retained for the 2022/23 year.

Table 4 Proposed service standard benchmarks for AA5

Performance measure	Unit	AA4	2022/23	From 2023/24 onwards
Distribution				
System average interruption duration index (SAIDI)				
CBD	Minutes	33.7	33.7	35.2
Urban	Minutes	130.6	130.6	138.9
Rural short	Minutes	215.4	215.4	236.9
Rural long	Minutes	848.3	848.3	812.5
System average interruption frequency index (SAIFI)				
CBD	Number of events	0.21	0.21	0.44
Urban	Number of events	1.27	1.27	1.33
Rural short	Number of events	2.34	2.34	2.28
Rural long	Number of events	5.70	5.70	4.71
Calls responded to in 30 seconds	Per cent	86.8	86.8	86.8
Transmission				

Performance measure	Unit	AA4	2022/23	From 2023/24 onwards
Loss of supply event frequency				
>0.1 and ≤1 system minutes	Number of events	26	26	4
>1 system minutes	Number of events	7	7	2
Average outage duration	Minutes	1,234	1,234	1,746
Street lighting				
Repair times for Perth Metropolitan area	Days	5	5	5
Repair times for major regional towns	Days	9	9	9
Ancillary services				
Streetlight LED Replacement Service	Note ⁶			
Supply abolishment service	Days	15	15	15
Remote de-energise service	Days	1	1	1
Remote re-energise service	Days	1	1	1
Site visit to support remote re-energise service				
Standard response time				
Metropolitan area	Days	N/A	N/A	1
Regional area	Days	N/A	N/A	5
Urgent response time				
Perth Metropolitan area	Hours	N/A	N/A	3
Metropolitan area	Days	N/A	N/A	1
Regional area	Days	N/A	N/A	1
Manual de-energise				
Metropolitan area	Days	MSLA ⁷	MSLA	1
Regional area	Days	MSLA	MSLA	5

⁶ As soon as reasonably practicable in accordance with good electricity industry practice.

⁷ Model Service Level Agreement. Service standards are defined in Metering Code Model Service Level Agreement.

Performance measure	Unit	AA4	2022/23	From 2023/24 onwards
Manual re-energise				
Standard response time				
Metropolitan area	Days	MSLA	MSLA	1
Regional area	Days	MSLA	MSLA	5
Urgent response time				
Perth Metropolitan area	Hours	MSLA	MSLA	3
Metropolitan area	Days	MSLA	MSLA	1
Regional area	Days	MSLA	MSLA	1

3.2 Submissions

Submissions relevant to the proposed service standard benchmarks and service standard adjustment mechanism for AA5 were received from the Australia Microgrid Centre of Excellence, Australian Energy Council, Collgar Wind Farm, Perth Energy, WALGA, WACOSS, Shire of Mingenew and the WA Expert Panel.

Matters raised included:

- A lack of data, information transparency and accountability for Western Power regarding network performance in regional areas.
- Performance measures focussed on reliability in those parts of the network consistently delivering less reliable supply should be considered.
- Ensuring network reliability is appropriately incentivised and improved in poor reliability areas of the network.
- Investment requirements to improve reliability should take into consideration the future evolution of the network (for example, areas identified for future stand-alone power systems), to understand the opportunity cost of the investment and whether funds would be better allocated elsewhere.
- Service standards should not exceed a consumer's willingness to pay for service quality levels. It would not be a desirable outcome should service standards be raised to the point where it leads to more consumers disconnecting due to financial hardship or being forced to ration their electricity use to the point where it affects their health and well-being.
- Policies and processes for power restoration during fire season, including the network settings during fire season and policies on physical inspections prior to re-energisation after a fault, particularly if there is a Total Fire Ban in place.
- Ensuring service standard incentives do not discourage innovative ways to restore power during a Total Fire Ban.
- Communications with customers during outages, including how long the outage will last.

- The proposed service standard benchmarks for reference services D1 to D13 are not consistent with the requirements under the Code of Conduct.⁸

3.3 Considerations of the ERA

As required under the Access Code, Western Power has included a service standard benchmark for each reference service.

Western Power has amended the definitions of the current service standard benchmarks in accordance with the framework and approach:

- Transmission outages affecting customers on the distribution network will be included in the distribution SAIDI and SAIFI measures. This will ensure that customer outages caused by transmission outages (for example faults on the single circuit transmission line to the Goldfields) are included in SAIDI and SAIFI.
- The force majeure exclusion has been removed from SAIDI and SAIFI. As set out in the framework and approach, the force majeure exclusion is not required as it is already adequately dealt with under the calculation of major event days.
- A new exclusion applies to distribution SAIDI and SAIFI measures that allows Western Power to exclude time when it is unable to access a site due to a total fire ban or directions from emergency services. Following on from the Shepherd report, the ERA understands Western Power has been required to review how it can better manage the network during total fire bans to minimise the duration of outages for customers. The ERA considers that this exclusion for SAIDI and SAIFI will improve information and increase transparency around when total fire bans have extended the duration of outages. The ERA will require Western Power to provide specific details of any time claimed under this exclusion in the annual service standards report. This should include evidence that Western Power has done everything it could to restore power as quickly as possible.

Consistent with the framework and approach, Western Power's proposed benchmarks are based on the 97.5th percentile of actual performance during AA4 adjusted for anticipated changes in service reliability and where individual penalty caps applied during the AA4 period.

However, in light of the concerns arising from significant outages over the summer and the independent inquiry conducted by Michelle Shepherd for the Minister for Energy, the ERA has given further consideration to the service standards in the access arrangement and considers that a departure from the framework and approach is necessary.

Stakeholder submissions on the ERA's issues paper raised concerns about a lack of data, information transparency and accountability for Western Power regarding network performance in regional areas. Stakeholders considered the performance measures should focus on reliability in those parts of the network consistently delivering less reliable supply and should ensure Western Power is appropriately incentivised to improve performance in poor reliability areas of the network.

⁸ The services are supply abolishment, remote load/inverter control service, remote de-energise and re-energise services, site visit to support remote re-energise service, and manual de-energise and re-energise.

Since AA3, the access arrangement has included “service standard benchmarks” (based on the 97.5th percentile of performance achieved over the previous five years) and “service standard targets” (based on the average performance over the previous five years).

The service standard targets are used in the service standard adjustment mechanism discussed in the next section. If Western Power exceeds the service standard target it receives a financial reward. If performance falls below the target, Western Power incurs a financial penalty.

The rationale for setting the service standard benchmarks at the 97.5th percentile of performance achieved over the last five years was on the basis that they were the minimum standard that should be achieved. The service standard targets were based on average performance achieved on the basis that it was the level of service customers were satisfied with.

The Access Code requires the access arrangement to include service standard benchmarks but does not specify a requirement for service standard targets. Having both benchmarks and targets is causing confusion for customers about what level of service Western Power is expected to deliver.

To remove confusion and make clear what service standard Western Power is expected to deliver, the ERA considers it would be better to discontinue the current practice of including both service standard benchmarks and service standard targets in the access arrangement. Instead, only service standard benchmarks should be included in the access arrangement.

However, rather than setting the benchmarks at minimal performance levels as is currently done, they should be based on the current service standard performance. This can be achieved by using the method currently used to set the service standard targets (i.e. average performance over the previous five years). Removing the confusion caused by having both service standard benchmarks and service standard targets will ensure the standards Western Power must meet are clear and Western Power can be held accountable.

The ERA has also had regard to the legislative reliability obligations Western Power has under the *Electricity Industry (Network Quality and Reliability of Supply) Code 2005* (NQ&R Code). In particular, Section 13 sets out standards for power interruption duration that the network operator must, so far as is reasonably practicable, ensure is not exceeded.

- Perth CBD – 30 minutes
- Urban areas other than Perth CBD – 160 minutes
- Any other area of the State – 290 minutes.

The current average performance for CBD, urban and rural short SAIDI is well within the prescribed limits in section 13 of the NQ&R Code.⁹ However, average outage performance for rural long feeders is not.

The rural long service performance has deteriorated over AA3 and AA4 and is much worse than the prescribed limit in the NQ&R Code of 290 minutes.¹⁰ Furthermore, many customers

⁹ Reported SAIDI in 2020/21 for the CBD, urban and rural short feeders was 14.1, 118 and 210 minutes respectively.

¹⁰ Reported SAIDI in 2020/21 for rural long was 713 minutes.

on rural long feeders are experiencing a much lower level of service than the average SAIDI reported for rural long feeders.

As the NQ&R Code is a legislative obligation, the ERA considers the service standard benchmarks in the access arrangement should not be set below the standard of NQ&R Code requirements. Consequently, the ERA proposes the AA5 service standard benchmark for rural long feeders should be set at 290 minutes rather than basing it on actual performance during AA4.

As with any legislative obligation related to providing covered services, Western Power can seek funding for those costs in its access arrangement. It will likely need to review its cost estimates in its response to the draft decision. As raised in submissions, affordability may be an issue if a significant increase in expenditure is required.

Required Amendment 2

With the exception of rural long SAIDI, the transmission and distribution service standard benchmarks must be calculated based on the average performance over the AA4 period adjusted in AA5 for anticipated changes in service reliability and where individual penalty caps applied during the AA4 period. The rural long SAIDI must be no worse than the NQ&R Code standard of 290 minutes.

The current service standards are set and measured on an average basis. Consequently, within each feeder category there will be customers who experience better and worse performance than the average. This is particularly the case for rural feeders.

Approximately 100,000 customers are on rural long feeders. In 2020/21, on average and after excluding planned outages and other exclusions, these customers experienced 713 minutes of outages with around 10 per cent experiencing between double and up to seven times the average reported performance. The average performance of 211 minutes for the approximately 320,000 customers on rural short feeders is significantly better than for rural long feeders, however about 15 per cent experienced outages between double and up to 10 times the average.

Tightening the requirement for average performance for rural long feeders will also better incentivise Western Power to target those poor performing areas. The ERA has considered disaggregating the benchmarks further to target poor performing areas. However, as the NQ&R Code standards are specified at an aggregate level (rather than applying to individual customers) and the disaggregated data that the ERA has been able to obtain is not robust, it is not proposed to do so for AA5. This is a policy matter and the ERA will take it up with Energy Policy WA.

Although, for the reasons above, the ERA has disaggregated the benchmarks for AA5, the ERA will increase reporting requirements for the annual service standard report to focus on specific areas of the network where performance is below average and require Western Power to explain the reasons for the under-performance and the measures it is taking to address the under-performance.

In relation to Western Power's proposal to reduce the service standard benchmark for call centre performance, the ERA recognises that customers are communicating in different ways but telephone calls remain an important means of communication for many customers. The ERA does not consider it would be appropriate at this stage to reduce the call centre service

performance. Similar to the required amendment for transmission and distribution service standards, the call centre service standard benchmark should be based on average performance over AA4.

Required Amendment 3

The call centre service standard benchmark in AA5 must be set on average performance over the AA4 period.

Synergy raised concerns about the service standard benchmarks for some services that are dealt with under the Metering Code or Code of Conduct, for example de-energise and re-energise times. Western Power has proposed the service standard benchmarks are based on an averaged number of business days calculated over a 12-month period. This is not consistent with the requirements in the Metering Code or Code of Conduct, which specify a time period for each de-energise or re-energise process. The service standard benchmarks must be consistent with any legislative obligations.

Required Amendment 4

The service standard benchmarks for reference services D1 to D13 for AA5 must be amended to be consistent with the specific time periods specified in the Metering Code or Code of Conduct and apply to each individual performance of the relevant service.

4. Service standard adjustment mechanism

The access arrangement must include a service standard adjustment mechanism that will apply at the next access arrangement review.¹¹

The amendments discussed in the previous section on service standard benchmarks are also relevant to the service standard adjustment mechanism.

The current service standard adjustment mechanism includes the following performance measures:

- Transmission network services:
 - Circuit availability.
 - Loss of supply event frequency.
 - Average outage duration.
- Distribution network services:
 - System Average Interruption Duration Index (SAIDI) for urban areas, rural-short and rural-long feeders and the Perth central business district.
 - System Average Interruption Frequency Index (SAIFI) for urban areas, rural-short and rural-long feeders and the Perth central business district.
 - Call centre performance.

The current distribution network service adjustment rates (penalties and rewards) were determined based on values of customer reliability published by AEMO in 2014 for South Australia.

The transmission network service adjustment rates are based on a percentage of revenue (one per cent) that are allocated across the transmission service standard measures.

Under section 7.5 of the current access arrangement the total target revenue adjustment under the service standard adjustment mechanism may be positive (net reward) or negative (net penalty). The target revenue adjustment under the service standard mechanism is subject to the following caps under sections 7.5.8 and 7.5.9 of the current access arrangement:

- The sum of the rewards or penalties for the transmission network each year is capped at one per cent of total transmission revenue.
- The sum of the rewards for the distribution network each year is capped at one per cent of total distribution revenue and the sum of the penalties is capped at 2.5 per cent.

As set out in the framework and approach document published on 9 August 2021, the ERA's decision on the service standard adjustment mechanism to apply in AA5 was:

The current service standards adjustment mechanism with the following amendments will apply for the AA5 period.

- The service standards targets must be set at the average annual level of performance achieved in the AA4 period, adjusted for anticipated changes in service reliability and where individual penalty caps applied during the AA4 period.

¹¹ Section 6.30 and 6.32 of the Access Code.

Western Power must include details of any planned disruptions, new investment or changes to maintenance activities that would affect service standard performance, in its access arrangement proposal so that the service standard targets can be adjusted if appropriate. For example, any forecast improvements in SAIDI and SAIFI due to the installation of stand-alone power systems.

- The relevant changes to the method for calculating service standard benchmarks must be included in the service standard adjustment mechanism.
- Rewards and penalties for SAIDI and SAIFI must be based on the latest Value of Customer Reliability report prepared by the AER.
- Rewards and penalties for transmission service standards must be based on the revenue attributable to customers connected to the transmission network and receiving reference services.
- The individual caps on penalties must be removed.
- The overall caps for rewards and penalties are one per cent of target revenue.

4.1 Western Power's proposal

Western Power's proposed service standard targets are set out in Table 5.

Table 5 Proposed service standard targets for AA5

Performance measure	Unit	Target
Distribution		
System average interruption duration index		
CBD	Minutes	13.7
Urban	Minutes	118.5
Rural short	Minutes	197.9
Rural long	Minutes	704.3
System average interruption frequency index		
CBD	Number of events	0.17
Urban	Number of events	1.23
Rural short	Number of events	2.02
Rural long	Number of events	4.33
Transmission		
Loss of supply event frequency		
>0.1 and ≤1 system minutes	Number of events	1
>1 system minutes	Number of events-	1
Average outage duration	Minutes	852

Western Power has proposed to remove call centre performance from the service standard adjustment mechanism. This is discussed in more detail in section 3.1 of this document.

As required by the framework and approach document, Western Power has updated the value of customer reliability based on the latest report published by the Australian Energy Regulator. A comparison of Western Power's updated customer reliability estimates which incorporate the AER measures with the values used for AA4 is shown in Table 6.

Table 6 Value of customer reliability estimates, real \$ at 30 June 2022, per kWh

	AA4	AA5
CBD	55.7	43.3
Urban	47.2	42.3
Rural short	45.8	40.9
Rural long	47.1	40.4

Table 7 shows Western Power's proposed adjustment rates for the distribution network service standards.

Table 7 Proposed service standard adjustment mechanism rates for AA5 period distribution network service standards, \$ real at 30 June 2022

Performance measure	Unit	AA4		AA5 proposed	
		Reward	Penalty	Reward	Penalty
System average interruption duration index					
CBD	Minutes	\$33,022	\$33,022	\$21,195	\$21,195
Urban	Minutes	\$488,162	\$488,162	\$393,457	\$393,457
Rural short	Minutes	\$156,416	\$156,416	\$159,066	\$159,066
Rural long	Minutes	\$57,381	\$57,381	\$48,918	\$48,918
System average interruption frequency index					
CBD	Number of events	\$31,939	\$31,939	\$11,175	\$11,175
Urban	Number of events	\$317,708	\$317,708	\$253,131	\$253,131
Rural short	Number of events	\$100,351	\$100,351	\$103,786	\$103,786
Rural long	Number of events	\$60,483	\$60,483	\$53,056	\$53,056

Table 8 shows Western Power's proposed adjustment rates for the transmission network service standards.

Table 8 Proposed service standard adjustment mechanism rates for AA5 period transmission network service standards, \$ real at 30 June 2022

Performance measure	Unit	AA5	
		Reward	Penalty
Loss of supply event frequency			
>0.1 and ≤1 system minutes	Number of events	\$254,899	\$84,966
>1 system minute	Number of events	\$254,899	\$254,899
Average outage duration	Minutes	\$507	\$380

Consistent with the ERA's final decision in the framework and approach document, individual caps on the penalties have been removed from the service standard adjustment mechanism in Western Power's proposal and the overall caps for rewards and penalties for AA5 are proposed as:

- for the distribution service standard benchmarks, based on one per cent of the distribution reference service customer target revenue
- for the transmission service standard benchmarks, based on one per cent of the transmission reference service customer target revenue.

4.2 Submissions

The submissions received that are relevant to the proposed service standard benchmarks and service standard adjustment mechanism for AA5 are set out in section 3.2 of this document.

4.3 Considerations of the ERA

As discussed in the section on service standard benchmarks, for AA5 the service standard targets in the current service standard adjustment have been removed and replaced with the service standard benchmarks.

As the method for setting the service standard benchmarks has been amended to be consistent with the method previously used to set the service standard targets, Western Power will continue to be incentivised to maintain current service standard performance. If it fails to meet current service standard performance (the benchmark) it will be penalised and if it exceeds current service standard performance (the benchmark) it will be rewarded.

The ERA acknowledges the service standard adjustment mechanism is a relatively blunt instrument that is designed to incentivise Western Power to maintain performance. The penalties and rewards are based on a high-level assessment of the value of customer reliability taken from a study performed by the AER that may be different from the value specific customers place on reliability. Furthermore, any rewards and penalties from the mechanism are included in overall target revenue and shared equally across all network customers.

With the adjustments that have been made in the draft decision, the ERA considers the mechanism will more effectively incentivise Western Power to maintain reliability that is currently satisfactory and improve areas of poor reliability.

However specific compensation for customers affected by poor performance falls outside the scope of the access arrangement. Customer compensation for poor performance is dealt with under the NQ&R Code that specifies the payments Western Power must make to customers. This is a policy matter and the ERA will take it up with Energy Policy WA.

Western Power has proposed to remove the call centre performance measure from the service standard adjustment mechanism. As discussed in section 3.3, although many customers are using different communication channels, telephone calls are still an important customer communication channel. The ERA considers it is premature to remove it from the service standard adjustment mechanism.

Required Amendment 5

The service standard targets in the service standard adjustment mechanism must be removed and replaced with the service standard benchmarks (as amended in this draft decision). The call centre performance measure should be retained in the service standard adjustment mechanism.