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Submission on Real-time Data for Consumers - Draft Rule Determination

Introduction

1. Bluecurrent welcomes the Australian Energy Market Commission's (AEMC) draft determination on the draft electricity rule and draft retail rule on *Real-time data for consumers* (the "draft rule"), dated 11 September 2025.
2. We appreciate the AEMC's engagements with stakeholders on the draft rule via an online public forum on 2 October 2025 and an online forum with metering parties on 8 October 2025. We also appreciate the engagement by the Australian Energy Market Operator (AEMO) with stakeholders through an online briefing on its *Draft High Level Implementation Assessment* of the draft rule (Draft HLIA) on 17 October 2025. These engagements have informed our submission.
3. We remain committed to working collaboratively with the AEMC, AEMO, and stakeholders to refine the implementation pathway and ensure the long-term success of the real-time data framework. We look forward to ongoing engagement and welcome the opportunity to contribute further as the process advances.

Achieving the AEMC's objective with a practical implementation pathway

4. Bluecurrent strongly supports the AEMC's intent to empower consumers, foster innovation and competition, and enable a more transparent and efficient energy system. Our commitment to these objectives is unchanged, and we continue to believe that universal access to real-time data is a critical enabler for a more dynamic and consumer-centric market.
5. In addition to engaging with regulators, we have engaged and continue to engage with metering suppliers and manufacturers, retailers, and other stakeholders on the draft rule. This has enabled us to refine our views and provide more informed recommendations to help facilitate the effective introduction of a real-time data access framework that delivers efficient outcomes for consumers.
6. We make recommendations in five key areas we believe will help achieve the above outcome. These are in relation to timeframe, stock management, technology solutions, flexibility for technology adaptation, and cost considerations, which we discuss below.

Timeframe: Link commencement to 24 months post-AEMO procedures

7. In our February 2025 submission on the directions paper, we supported local connectivity over remote access in enabling real-time data access for consumers. We advocated for a practical approach that would allow the industry to leverage existing technology, minimise immediate disruption, and balance affordability with sustainable investment.
8. Our position was grounded in the expectation that the implementation horizon would extend to 2040, which we considered appropriate for the scale of technical and operational change required. This longer timeframe would have enabled orderly product redesign, certification and supply chain adaptation, while also allowing for the development and adoption of robust interoperability standards and consumer protections.
9. In contrast, the implementation timeframe in the draft rule is too short and would create negative outcomes for the *Legacy Metering Replacement Plan* (LMRP) rollout and consumers. A safe and reliable

metering fleet requires meters that are appropriately designed for safety, properly tested, and meet compliance requirements – which would take longer than the draft rule's current timeframe.

10. Based on engagement with our suppliers, an estimated period of 18 months is needed from the release of the final AEMO procedures for compliant meters to be designed, tested, re-certified, and manufactured. A further 6 months is then required for Metering Providers (MPs) to manage the supply chain and ensure stock is available for installation.
11. We therefore recommend that the final rule set the commencement date to 24 months following the release of the final AEMO procedures.
12. We note that AEMO's Draft HLIA, published on 17 October 2025, has also indicated that the compressed timeframe proposed in the draft rule presents substantial risks to successful delivery. AEMO's own timeline indicates their procedures will not be finalised until late November 2026. Adding our required 24-month implementation window to AEMO's procedural timeline results in a realistic commencement date of **November 2028 at the earliest**. This confirms the 1 January 2028 start date in the draft rule is unachievable.

Stock management: Adopt grandfathering by manufacture date

13. Changing the minimum services specifications ("minimum specifications") to introduce real-time data access and imposing a hard cut-off date based on the meter's installation date carries the risks of stranded inventory for MPs, increased costs, and delays in deployment. This would have a negative impact on metering parties, retailers, and ultimately consumers.
14. We are greatly concerned that a hard date relating to stock management could also delay or disrupt the implementation of the LMRP as stock is optimised to allow for the rule change. A hard date would also create unnecessary electronic waste and costs if existing meters cannot be refurbished or used due to obsolescence from this rule change.
15. To minimise these risks, we recommend a **grandfathering approach based on the date the meter was manufactured** (rather than installation date) be adopted such that meters already in the supply chain (including refurbished meters) can be used, even after the effective date of the new minimum specifications. This would minimise waste, avoid asset stranding, and minimise costs and disruption for consumers.

Technology: Focus on service outcomes, not mandated technology

16. The draft rule requires compliant meters to support both wired and wireless real-time data solutions by 1 January 2028. This accelerates the implementation timeframe and significantly changes the delivery challenge for market participants. This new timeframe compresses the delivery window and introduces a range of risks that could have been addressed within the original timeframes.
17. Attempting to deliver both wireless and wired interfaces on the shortened timeframe risks installation delays, repeated site visits, stranded inventory, higher costs for all parties, and poor consumer experience.
18. Our current suppliers confirmed that while there is currently no meter that supports both interfaces, this dual capability *can* be engineered. However, it requires significant hardware redesign, testing, and meter re-certification. This complex process is what drives the 18-month design and certification window we have identified.
19. Wired also introduces significant safety and compliance risks (as detailed in our response to Question 9) and locks in technology. Rather than mandating specific 'wired and wireless' hardware, we recommend that the final rule embed flexibility. The final rule should focus on the service outcome (real-time data access) and authorise AEMO to manage the specific technical solutions and grant exemptions via its procedures.
20. This flexibility should include the ability for AEMO to grant exemptions where installation is not practical or cost-effective. We recommend AEMO's procedures provide for exemptions for reasons relating to specific customer circumstances, physical premises constraints, and safety or technology issues.

21. This is consistent with the existing arrangements for the ongoing deployment of smart meters, which focuses on service outcomes that ensure a minimum level of service for all consumers, rather than focusing on technical functionalities.

Flexibility for technology adaptation

22. For the reasons stated above and in the cost section below, we further recommend that the final rule provide AEMO the flexibility in drafting the real-time data procedures to ensure the most cost-effective approach for consumers is undertaken. This should allow for adaptation as technology evolves and include the ability to grant specific exemptions (for reasons of safety, premise or technology constraints).

23. The inability to fully cost the rule changes until the AEMO procedures are finalised would also benefit from this flexibility.

Metering costs: Allow cost recovery for non-meter support

24. We are concerned that the cost-benefit analysis (CBA) in the draft rule does not capture the full scope of costs and may understate the impact on consumers and the market.

25. The CBA does not appear to capture significant costs associated with potential hardware upgrades, retooling, re-certification, customer churn, consent changes, the impact on increased call centre demand, digital platform development, and the testing required to ensure the changes do not impact market settlement. Furthermore, the suggested $15 incremental cost for each meter does not align with current supplier indications we have received, which are higher per module for wireless capability alone. These discrepancies further underscore the need for a cautious and evidence-based approach.

26. Technology also evolves, and costs tend to decrease over time. Mandating a specific technology solution now (as discussed in the section above) locks in today's costs and risks preventing the adoption of more cost-effective solutions in the future.

27. Given these understated costs and the evolving nature of technology, we recommend the final rule should provide flexibility. While we support a single, reasonable enablement charge for pre-2028 installations (where applicable) and that ongoing data provision be free of charge, we must ensure all costs are fairly recovered.

28. Activities such as security key resets, diagnostics and fault investigations will continue after initial enablement. We recommend that the final rule support retailers and metering providers (MPs) being able to charge a customer for support services where the issues are found to be unrelated to the meter (e.g. issues with the customer's device or home Wi-Fi). This approach avoids cross-subsidisation and ensures consumer charges remain transparent and fair, while also protecting retailers and metering parties from unfunded ongoing obligations.

Responses to the consultation questions

29. We set out below our responses to the questions in the draft rule determination, which include suggestions in support of the above recommendations.

Question 1: Would our draft rule encourage consumers and energy service providers to access real-time data from smart meters? What is the benefit of this?

30. Bluecurrent sees universal real-time data access from smart meters as part of the evolution of data access frameworks to meet rising consumer expectations and would broadly benefit consumers over time. Real-time data provides energy service providers visibility of consumer behaviours relating to customer energy resources (CER) that would allow them to develop innovative services such as time-varying tariffs that reward consumption at times of the day when the network is less congested. Consumers who subscribe to CER services could use a Home Energy Management System (HEMS) that delivers their consumption data via app, or enrol in a virtual power plant programme that allows them to pull their data from the cloud in real time.

31. Universal consumer access of real-time data is therefore an important part of the transition to an energy system that is “smarter, more flexible, responsive to consumer needs and more affordable”.

Question 2: Should the min specs be changed to require all new meters installed from 2028 to be able to communicate real-time data both wirelessly and through a wired connection? Would changing the min specs increase benefits whilst imposing low costs on all consumers?

32. In this submission, we recommend that the final rule embed flexibility to better manage technology evolution/transition and authorise AEMO to grant exemptions where installation is not practical or cost-effective. This would mean dropping the mandated 'wireless and wired' solutions in the minimum specifications. We are confident that a solution can be put in place for the enablement of real-time data access without mandating a technology solution.
33. We also recommend that the final rule adopt a grandfathering approach based on the date the meter was manufactured (rather than the installation date) such that meters already in the supply chain, including refurbished meters, can be used even after the effective date of the new minimum specifications. This would avoid asset stranding and minimise costs to consumers.
34. The proposed drafting of the minimum specifications in chapter 7 of the *National Electricity Rules* (NER) to introduce real-time data access requirements will mean the currently deployed smart meters will become non-compliant. We suggest that the final rule address this with date base clauses or a transition clause in chapter 11 of the NER.

Question 3: Do you agree with the costs the CBA estimates would be incurred to implement our draft rule? Would these costs decrease over time?

35. In our view, the CBA does not capture the full scope of the costs of enabling universal real-time data access. The CBA does not capture costs associated with hardware upgrade, retooling, certification, customer churn, consent changes, and digital platform development. As a metering data provider (MDP) that is required to provide data to the market, we also need to perform robust testing to ensure the changes do not impact market settlement.
36. The CBA cost of $15 for a wireless module is well below current supplier quotes, which are closer to $50 per module for wireless capability alone. This discrepancy highlights the importance of a cautious and evidence-based approach.
37. While we support a single, reasonable enablement charge for pre-2028 installations (where applicable) and acknowledge the reform's intent for ongoing real-time data provision to be free of charge, we must ensure all costs are fairly recovered.
38. To further ensure a cost-effective rollout, we suggest that type 4A meters be exempt from complying with the new minimum specifications. Should type 4A meters remain in the minimum specifications, meter manufacturers will face higher costs to develop the technical solutions to support enablement. The costs for the site visits required to remove real-time data access functionality (in the case of type 4A meters where the customer refuses to access the service) or establish real-time data functionality (in the case of type 4A meters where a telco service is non-existent) should be allowed to be recovered from the customer.
39. Given that the cost of evolving technology tends to decline over time, we recommend that the final rule embed flexibility rather than mandate technology solutions. This would allow the adoption of more cost-effective and innovative technology solutions in the future (and avoids technology lock-in and lock-out) which would be in the long-term interest of consumers.

Question 4: Our draft approach is to progressively enable consumers with new meters installed from 2028 to access real-time data at no charge. What is the benefit of enabling more consumers to access real-time data from smart meters, at no charge, sooner?

40. Progressively enabling more consumers to access real-time data sooner than the directions paper timeframes will bring forward its anticipated benefits to consumers who own CERs, and consumers more generally through reduced electricity system costs. CER service providers will be able to develop and offer new and innovative services, enabled by real-time data, that benefit consumers sooner. For example, innovative tariffs could more dynamically and closely reflect the cost/benefit to the system

of the electricity that consumers use or generate (using their CER), or inject to the network based on the time of the day or their location.

41. The early availability of real-time data provides consumers greater visibility of their electricity usage patterns, giving them earlier control over their power bills or the choice of their service provider. For example, consumers could enrol in a demand response programme that automatically shifts some of the electricity they use to times of the day when the price is lower/lowest.

42. Early and greater uptake of CERs such as solar PV, residential battery storage systems, and electric vehicles that inject electricity generated by renewable energy into the network will help accelerate long-term emissions reduction.

Question 5: What information would be useful for consumers to help them determine if accessing real-time data is beneficial and if any charge to them, to upgrade the meter, is reasonable?

43. It would be useful for consumers who wish to access real-time data before the commencement date to know the cost of retrofitting or replacing their meter. It may be more cost-effective for a consumer to pay this charge than use alternative ways of accessing real-time data such as through the Consumer Data Right (CDR) framework or via another technology.

44. Consumers are best placed to make the above cost and timing decisions.

45. We support the proposal for the recovery of 'reasonable costs' for the provision of real-time data through commercial negotiations.

46. We acknowledge the reform's intention for the ongoing costs related to enabling and supplying real-time data to be socialised according to the new rule. However, where customers require additional support from the retailer to resolve issues that are not related to a meter problem, we believe it is appropriate that those costs are borne by the individual customer. There may be instances where customers require a field visit by a metering technician to assist in re-connecting their device to the meter. In these cases, where the meter is functioning correctly, the costs of this support should be borne by the customer. This approach is similar to an accepted model where a distribution network service provider (DNSP) will charge a customer should they be called out to address a supply problem that is found to be caused by issues outside the DNSP's responsibility.

Question 6: Would any other regulatory mechanisms better enable all consumers to access real-time data from smart meters, at low cost to the market?

47. The evolution and maturity of data technology and services to meet rising consumer expectations could enable the development of other mechanisms that allow all consumers to access real-time data from smart meters at low cost. For example, some retailers already provide 5-minute consumption data to their consumers via apps, or VPPs via cloud services – which may evolve into more real-time services as the market for near-real-time data for consumers matures.

48. Bluecurrent supports the AEMC's draft decision not to require the Australian Energy Regulator (AER) to report charges for real-time data access. This shift in the AEMC's position would avoid additional cost and allow the reporting parties to focus on implementing the real-time data framework in a cost-effective and timely manner, rather than focusing on regulatory compliance.

49. For the same reason above, and to support energy affordability, we suggest the removal of the proposed penalty provisions for MCs, MPs, and MDPs in the final rule. Metering and other relevant parties should focus on ensuring the efficient and timely implementation of the real-time data framework. The large-scale deployment of real-time data enabled meters is a complex undertaking that overlays the accelerated deployment of smart meters in the National Electricity Market (NEM) until 2030 – an already complex process on its own. These two processes combined represent an unprecedented volume of rollout of new technology in the NEM, and would require full focus from the implementing parties.

50. To further streamline implementation costs, we suggest that the AEMC and/or AEMO provide clear guidance how physical constraints/challenges should be addressed during the rollout. For example, the enablement of one or more meters in a multi-occupancy building would require the coordination of

a few parties even for the enablement of only one of the meters in the building. Another scenario is a site that has multiple meters, and the customer needs real-time data for only one of those meters to avoid infrastructure duplication costs.

Question 7: We proposed a definition of real-time data and a requirement on AEMO's real-time data procedures. Would these provide industry with sufficient clarity on what real-time data is, and how real-time data would be made accessible from smart meters?

51. Bluecurrent believes the definition of real-time data, as proposed in the draft rule, will provide some clarity on what real-time data is. However, as recommended in this submission, the final rule should embed flexibility that would allow better management of technology evolution and transition. This should include authorising AEMO to grant exemptions, e.g. for reasons of safety or technology constraint, rather than mandate technology solutions.
52. We support the definition of real-time data and additional requirements being included in AEMO's real-time data procedures. We believe this will help provide clarity regarding implementation timeframes, technical standards, cyber security settings, and other requirements that make real-time data securely accessible from smart meters.
53. We support the adoption of widely agreed industry standards that would support an efficient and timely rollout of this scale and within compressed schedules (relative to the directions paper timeframes). This should, however, not prevent parties from using other ways of accessing/delivering real-time data such as directly entering into data agreements for the provision of customised real-time data services that meet consumers' unique needs.
54. We generally support the requirements on MCs (including where MCs' obligations end) set out in the draft rule, which we discuss in our response to Question 8. We particularly support the rule not preventing MCs from offering devices as a solution for customers whose meters are not yet enabled for real-time data access.
55. Following engagements with major meter suppliers, including our existing supplier, we have learned about their significant concerns in meeting the proposed timeframes in the draft rule. They indicated they would need 18 months from the date the technical requirements are finalised by AEMO to complete the re-engineering and re-certification/pattern approval of the meters to meet compliance requirements. MPs would then need a further 6 months for supply chain management to ensure that compliant meters are available for installation. This means a total of 2 years from the date the technical requirements are finalised. We therefore recommend a commencement date of November 2028 at the earliest.

Question 8: Our draft rule would introduce a range of requirements on different parties to enable customers to access real-time data. Do you consider that our draft rule would support a good customer experience for customers requesting access?

56. Bluecurrent generally supports the range of requirements proposed for MCs to enable consumer access to real-time data which provide clear demarcations of responsibilities. This helps ensure that support and cost recovery arrangements are transparent and fair for all parties.
57. We agree with the following requirements or arrangements outlined in the draft rule determination:
    a. The definition of real-time data and requirements to be specified in the real-time data procedures would clarify that the MC is not responsible for issues beyond the meter.[1]
    b. The extent of retailers' obligation to facilitate access to real-time data ends once the MC makes the real-time data accessible from the smart meter and the retailer confirms completion of the request with the customer.[2]

[1] Draft rule determination, page 42
[2] *Ibid.*, page 34

c. MCs and retailers would not be required to deliver or transport data to the requesting party. Instead, they would only be required to ensure that data can by pulled by the requesting party from the smart meter.[3]

d. Retailers are not required to translate real-time data from raw data values.[4]

e. MCs are not required to store, validate, translate, or deliver real-time data.[5]

f. Once real-time data is made available from the smart meter, such that another device can connect to an ongoing stream of real-time data, MCs would be considered to have facilitated access to real-time data.[6] (As indicated in this submission, we recommend that the final rule does not mandate technology solutions.)

g. How real-time data is delivered from the smart meter to a customer, or the customer's appointed representative, is not the responsibility of the MC. MCs are not responsible for supplying devices to extract, receive, or translate data.[7]

h. MCs are not responsible for increases in latency to receive data that may be caused by devices other than the smart meter. Whilst any access solution the MC develops must be capable of enabling real-time data to be received within 5 seconds, the real-time data procedures may specify circumstances where the latency may be longer, for example, due to factors outside the MC's control, such as Wi-Fi connectivity issues.[8]

58. In relation to arrangement 'g' above, we particularly support the AEMC's draft determination that:

> . . .[the] draft rule would not prevent MCs from offering. . .devices to facilitate access to real-time data as a potential solution for customers who do not have meters with the new min specs.[9]

59. We support the AEMC's response to concerns raised in bilateral discussions with some stakeholders that the regulatory framework enables MCs to control and manage consumers' CER.[10] These concerns point to MCs' exclusive control of the meter which may give them a competitive advantage in the market for CER services.[11] The reason given is that MCs could exclusively leverage smart meter technology to provide CER services.[12] We support the AEMC's opinion, in response to these concerns, that:

> Under our draft rule, any existing competitive advantage MCs may have through cheaper access to real-time data would be eroded. This is because third parties would be able to access real-time data, at no charge, with any new meter installed from 2028, where they have the customer's consent. In the longer term, this would ensure MCs are on an equal footing with other potential service providers in terms of access costs.[13]
>
> Any interoperability standards as part of our draft rule would also support competition, as access to real-time data would not be restricted by proprietary software.[14]

60. We agree with the AEMC that competition issues relating to metering and CER services are broader than the real-time data rule change and that the regulatory framework should facilitate competition in the market:

> We have sought further information to substantiate these concerns but as yet, we have not seen any evidence to suggest this scenario is occurring or will occur.[15]

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[3] Draft rule determination, page 24
[4] *Ibid.*, page 34
[5] *Ibid.*, page 42
[6] *Ibid.*
[7] *Ibid.*
[8] *Ibid.*
[9] *Ibid.*
[10] *Ibid.*, page 20
[11] *Ibid.*, page 19
[12] *Ibid.*
[13] *Ibid.*
[14] *Ibid.*
[15] *Ibid.*, page 20

> . . .The Commission considers that issues relating to competition in the market for metering and CER services are broader than this rule change.[16]
>
> . . .The regulatory framework should facilitate effective competition, and we will continue to monitor the state of competition in the market.[17]

61. In our view, and contrary to the above concerns, not limiting which parties can provide CER services to meet consumers' needs would enhance competition in real-time data services and consumer choice – promoting good consumer experience.
62. Furthermore, we support the AEMC's draft decision that disputes related to real-time data access should be raised through existing dispute resolution processes as much as possible. Establishing new arrangements for the purpose of resolving consumer complaints solely relating to real-time data would be administratively costly – a disproportionate response that would raise cost for consumers. We take any consumer complaints made to the Ombudsman that are referred to us very seriously, and use our existing arrangements with the relevant retailer to help address these complaints expeditiously.
63. The draft rule determination indicates that the AEMC has determined that *Real-time data authorised recipients* must obtain informed consent from each customer to gain access to their data.[18] We note that the proposed drafting changes to the *National Energy Retail Rules* (NERR) refer only to consent rather than explicit informed consent – a term defined under the *National Energy Retail Law* (NERL). We recommend that the final rule explicitly include this requirement.

Question 9: Would our draft rule introduce appropriate security measures to protect customer information from being accessed by unauthorised parties?

64. Bluecurrent considers the proposed requirement for customer appointed representatives to be accredited by AEMO to be an appropriate security measure. This would help ensure that only parties that have the systems and processes that can ensure they can connect to, and access real-time data from, the smart meter securely are allowed to perform such role with the consent of the customer.
65. In relation to technology solutions, there are safety and cost implications associated with wired solutions that are not present in wireless alternatives, including the requirement for customers or their representatives to interact directly with the meter. Although the likelihood of incidents is low, there have been instances where individuals were exposed to electrical hazards near the meter; as such, it is Bluecurrent's policy to advise customers not to interact with their meter. Including a physical port in the meter which requires customer interaction would be counter to this safety mechanism.
66. We note the AEMC's statement:

> . . .that wired communication would likely require an accessible data communications port. . . access to these ports is restricted for security reasons. To satisfy security obligations under the draft rule, new ports would have to be designed and added to the meter such that they can be easily accessed without compromising the security and integrity of the meter.[19]

Concluding comments

67. The rollout of smart meters that are enabled for real-time data access at a scale proposed in the draft rule is a highly complex undertaking that is untested in the rapidly evolving electricity market. We encourage the AEMC to keep engaging with stakeholders as it develops the final rule to provide greater certainty and instil confidence in the market as this process unfolds.

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[16] Draft rule determination, page 20
[17] *Ibid.*
[18] *Ibid.*, pages 37-38
[19] *Ibid.*, page 9

68. We are happy to discuss any aspects of our submission with the AEMC. Please contact Paul Greenwood (Industry Development AU) at Paul.Greenwood@bluecurrent.com.au.
69. This submission does not contain confidential information, and we are happy for the AEMC to publish it in its entirety.

Yours sincerely

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