B2BWORKING GROUP

Discussion Paper

Minimising or solving the challenge of coincident service orders for de-energisation and re-energisations

Instructions to participants

This paper poses questions about a number of assumptions and potential solutions intended to assist in solving or minimizing the customer and participant cost risks from coincident service orders for de-energisation and re-energisation of meters in jurisdictions where remote services are now being completed.

For each of the potential solutions, questions have been posed to different participant categories. Please provide feedback to the questions and any additional comments in the attached response template (Attachment 1) and send your feedback to:

- mailto:b2bwg@aemo.com.au
- by close of business Friday 10th September 2021

The Information Exchange Committee (IEC) has asked AEMO to:

- Manage such information to avoid any confidentiality issues.
- Provide a de-identified analysis to the IEC and B2B-WG, to enable their decisions to be made impartially.

Please identify any parts of your submission that you wish to remain confidential and explain why.

Your feedback will be used to inform the B2B Working Group recommendations to the IEC and any future formal consultations on the proposed solution/s.

If you have any questions on this paper, please send them to mailto:b2bwg@aemo.com.au.

Background

The start of the Power of Choice (PoC) competition in metering reforms introduced (among other things) the ability for a retailer to request a remote de-energisation or re-energisation of a meter in jurisdictions where these services were / are permitted. At the time of the introduction of PoC these jurisdictions were limited to South Australia, ACT and Tasmania, noting that Victoria had a derogation in place relating to PoC given its earlier deployment of digital meters by their distribution businesses. Despite the ability for retailers to request these services from their non-regulated MPBs, a very limited subset of retailers is currently requesting these services outside Victoria.

Due to the low penetration of smart meters, the case for retailers to change their processes to utilise remote services has been marginal. However, that has now changed as the numbers of smart meters deployed has risen (Table 2).

Soon after the introduction of competition in metering, NSW introduced a moratorium on remote services which was only removed in late 2020. However, prior to the removal of the moratorium, it also introduced a jurisdictional requirement for participant to have Safety Management Plans (overseen by the NSW Office of Fair Trading (OFT)). This requirement applied to both retailers and MCs that wish to undertake remote services. At the time this paper was written, only eight retailers and four metering providers have been approved.

There are currently 101 retail authorities in NSW (source, AER website).

At this stage AEMO is aware a small number of participants in NSW using remote services, but more participants remain reticent to use remote services (at least at this stage) and are not obliged to do so under the NSW framework.

Coincident Services Orders – What are they?

A coincident service order (SO) is a situation where retailers request services from a Service Provider, either the Distribution Network Service Provider (DNSP) or the non-regulated metering provider (non-regulated MPB), in roughly the same period. These requests can relate to any type of service request, but most commonly relate to re-energisation and de-energisation services, and for the purposes of this paper the discussion is confined to managing these services.

Management of coincident service orders is currently performed by the service provider, the DNSP or the non-regulated metering provider. The service provider will 'match' service requests for work from different Retailers to occur at the same NMI within a five-day window and will determine the appropriate action. For conflicting re-energisation and de-energisation requests, customer 'on-supply' takes precedence and therefore the de-energisation request is not performed.

Because coincident service orders are managed by service providers, the Retailers are generally passive in this process. They raise SOs as required, and where the Service Provider receives conflicting requests, They will undertake the Service Order for the one Retailer which leaves the customer on supply and advise the other Retailer that their requested Service Order has been cancelled due to conflicting Service Orders. This process has occurred with the DNSPs for many years.

Current coincident SO logic in the B2B Procedure is designed to manage the scenario where competing service order requests (a de-energisation raised by the FRMP and a re-energisation raised by the incoming retailer) arrive at a single service provider and are managed accordingly.

The logic applied to these coincident Service Orders prioritises a re-energisation request over a de-energisation request delivering, in most circumstances, the desired outcome that a move-in customer has supply to the premises upon request. This arrangement works well where only one service provider can affect the de-energisation.

The issue – coincident service orders

Pre-PoC, all requests only went to a single Service Provider (the DNSP) and could be matched to determine the appropriate action. This is no longer the case. Under competition in metering, retailers can now request de-energisation services from either:

- a non-regulated MPB; or
- the relevant DNSP.

There are two different scenarios under which a coincident service order may occur:

Scenario 1	The Financially Responsible Market Participant (FRMP) requests a physical de-energisation from the DNSP for a move out customer, whilst an incoming retailer request a remote re-energisation for a move in customer from the non-regulated MPB.
Scenario 2	The FRMP requests a remote de-energisation from the metering provider for the move out customer, whilst an incoming retailer requests a physical re-energisation from the DNSP for the move in customer.

In both cases, the requests may come in at different times (i.e., de-energisation before re-energisation or de-energisation after re-energisation) to the different service providers.

Pre-PoC, there was only the DNSP as the single service provider who managed the service orders from the two participants and resolved them, to either leave the site on supply or restore supply to the site. Competition in metering introduced reforms which allow for the retailer involved in a move-in / move-out scenario to request services from either the DNSP or the non-regulated MPB (where a smart meter has been installed and a remote service is allowed within that jurisdiction). Accordingly, the current coincident SO logic (which is applied by the individual service providers) may no longer provide the intended consumer protections in certain circumstances.

These risks stem from a lack of visibility of inflight SO requests by participants other than the initiator or the recipient of the requests (refer to table below).

Table 1 - Service order visibility for participant type for each coincident service order type
(yes = visibility of the SO, No = no visibility)

	Scenario 1 FRMP requests physical de-energisation, incoming retailer requests remote re-energisation		Scenario 2 FRMP requests remote de-energisation, incoming retailer requests physical re-energisation	
Service Order Type	Physical de-energisation	Remote re- energisation	Remote de- energisation	Physical re- energisation
DNSP	Yes	No	No	Yes
Non-regulated MPB	No	Yes	Yes	No
FRMP	Yes	No	Yes	No
Incoming Retailer	No	Yes	No	Yes

How long will coincident service orders be a problem?

The B2B-WG is seeking feedback on whether the issues related to coincident service orders and multiple service providers will be a short-term issue or a longer-term challenge for participants and consumers. These considerations are also framed by the following matters:

1. The rollout of smart meters looks like it will take approximately 15 years (based on AEMC discussions in their Post PoC Review)
2. Any new retailers would have to have their Safety Management Plans approved in NSW by OFT in order to undertake a re-energisation
3. It's unclear what further jurisdictional barriers may be created (e.g., refer ACT position below), which may impact the broader move to remote services

Assumptions:

- All retailers will want to move exclusively to using remote service orders for de-energisation and re-energisation in all states where this is possible.
- Physical de-energisation requests by retailers will reduce to insignificant levels in the future.

Questions to retailers:

- Do you agree with the assumptions?
- Does your business intend to move to the exclusive use of remote service orders (i) in NSW; and (ii) in other NEM states (excluding Victoria)? If yes, how long until you plan to exclusively use remote service orders in each of these states (months/years)?
- Do you currently physically de-energise a site if a customer moves out of a premise where there is a smart meter? If 'no', then please specify why.
- Would you increase the use of move out de-energisation if remote services were widely available?
- If you intend to move to using remote services, do you intend to remotely de-energise a site if a customer moves out of a premise?

The ACT example – a jurisdictional position

AEMO understands that the ACT Government has indicated that it is not supportive of the use of remote de-energisation for non-payment[1]. Given this scenario, and if this position (or similar policy or position) was introduced in other jurisdictions (e.g., in NSW), then the need for physical de-energisation could continue indefinitely and therefore the risk of coincident service orders (and consequentially the risk of a customer being off supply) will also continue.

How many customers could be at risk of being off supply due to coincident service orders?

The B2B-WG has sought to understand how many customers may be at risk of being left of supply for a short period of time due to coincident service orders. Table 2 shows the current number of smart meters in July 2021 for each jurisdiction, and the number of meters yet to be converted.

Table 2 – Number of smart meters in each jurisdiction

Jurisdiction	Number of smart meters*	Number of meters yet to be converted	Total number of eligible meters	Percentage of meters converted to date (%)
ACT	48,356	152,458	200,814	24
NSW	748,973	2,838,022	3,586,995	21
QLD	495,007	1,725,094	2,220,101	22
SA	203,664	674,790	878,454	23
TAS	98,818	189,065	287,883	34
VIC[2]	2,991,426	22,705	3,014,131	99

*Source AEMO systems, July 2021

[1] The ACT Government has indicated that the Access Canberra Electrical team are comfortable with the technical issues with remote de-energisation and remote re-energisation, and supportive of this process for rental turnover and change of lease.

[2] Victorian DNSPs were not permitted to commence remote services until there was a significant penetration of smart meters, and the retailer signed the Energy Safe Victoria (Safety Regulator) Memorandum of Understanding. Only at this time were remote services progressively introduced. However, the Victorian DNSPs were able to manage the coincident process as they were the single service provider and could complete both manual and remote services internally.

Currently in NSW, only 21% of customers have smart meters, and given these low numbers, the relatively slow rate of installation of smart meters, coupled with the small number of retailers currently with an SMP in place and who are using remote de-energisation and re-energisation service orders, there is currently a low (but growing) risk that a customer may be left off supply.

Of concern also is the potential for a reduction in retail competition in NSW if a retailer who is not using remote service orders does not make an offer to a customer whose current retailer does use remote service orders.

What are the options to resolve the coincident service order solutions?

A number of potential solutions to resolve (or significantly reduce the risk) of the impacts of coincident service orders on customers and participants have been identified by the B2B Working Group. Feedback is sought on the following options and the questions associated with each of these options. Please use the response template found at Attachment 1.

Option 1 - Extend visibility of SO Requests to Service Providers so they can continue to manage Coincident Orders

Under this option, visibility of SOs would be extended via Notified Party (NP) transactions to allow service providers to receive some visibility of the requests being made to other service providers. Service providers will be required to incorporate Notified Party transactions into their Coincident Service Order logic. Two potential solutions using Notified Parties have been identified and are discussed in the following sections.

Option 1a – Single service order NP proposal

The single service order NP proposal includes that:

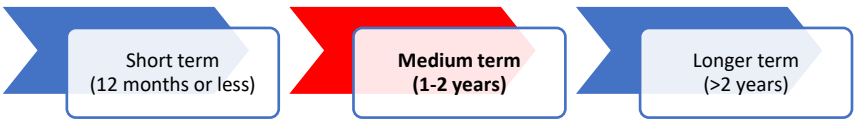
- NPs, which are available for all SOs, be made mandatory for all re-energisation and de-energisation SOs; and
- Recipients of a NP transaction treat that notification as an input into determining if coincident SO logic should be applied.

In the instance that a DNSP completes a physical de-energisation of a site, a remote re-energisation cannot occur. This will mean that a physical re-energisation by the DNSP will still be required at a site. If a meter has been bypassed by the DNSP because the winning Retailer has no Safety Management Plan in NSW and the meter was remotely de-energised:

- The non-regulated MPB can go out to undo the bypass.
- The non-regulated MPB cannot re-energise the meter as they are prevented by the guidelines.
- To keep the site energised, the non-regulated MPB will have to exchange the meter instead.

This circumstance is both inefficient for customers and high cost for participants with at least one (or more) truck rolls required by the DNSP/non-regulated MBP along with an interruption notice for the metering installation to be returned to service. The single service order MP proposal would reduce significantly the impact on customers and participants.

Time to implement Option 1a – Single service order NP proposal



Question to DNSPs:

- In the above scenario where a meter bypass may occur, is there a better solution that could be identified?
- Would you be willing to receive and make calls/emails to non-regulated MPBs or retailers if you knew the site had been remotely de-energised due to coincident timing?

Some retailers as well as non-regulated service providers have already invested in undertaking the required system modifications to enable the NP transaction to be included in service order logic. This means that if they receive both a de-energisation SO request and a NP transaction indicating that a re-energisation request has been sent to the DNSP, they will not action the de-energisation. However, to ensure that this is to be fully effective, DNSPs in jurisdictions where remote services are allowed and used by retailers will be required to update their systems to include this logic.

Although the single service order NP solution will significantly reduce the risk of a customer being without supply, due to the timing of when transactions are sent, received and processed, there will remain a small risk. In this instance, the customer will be required to contact their retailer (FRMP) to tell them that they are without supply, and then their FRMP will raise a SO for reconnection.

Assumption:

- System changes required for the NP logic are (i) costly and (ii) complex

Questions to retailers and non-regulated MPBs:

- What were the approximate costs associated with the system updates to introduce the NP logic?
- Were these changes complex?
- Please provide any additional comments.

Questions to DNSPs:

- Have you already introduced the NP logic in your systems?
- If no, what is the earliest that you could undertake the upgrade?
- Do you believe the changes to NP logic will be (i) costly, and (ii) complex for your business?

Questions to retailers, non-regulated MPBs and DNSPs:

- Given that some participants have built for this solution, whilst others have not, is it a feasible to have this solution included in the B2B Guide as soon as possible, with the procedures to transition in 'x' years?
- If there was a transition period ('x') through to this change being adopted in all NEM states (aside from Victoria), at what point should this be?

It is important to note that not all DNSPs will be required to update their systems in the near future, but rather, only those DNSPs in states where remote services have been allowed. Currently this is NSW, ACT and South Australia.

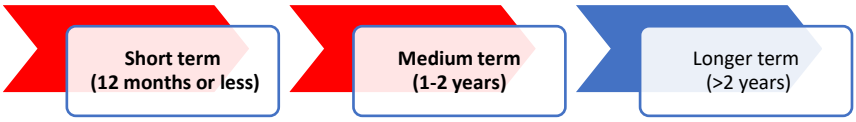
Option 1b – Two-service order NP proposal

In this option, the incoming retailer raises both a physical re-energisation and remote re-energisation SO and sends them to the DNSP and non-regulated MPB respectively. This means that both the DNSP and the non-regulated MPB will need check whether the status of the meter and / or NMI status is "D" before any action is taken.

These service orders already exist in the B2B system, however, AEMO understands that retailer systems may require changes to apply the two-service order logic. Additionally, the service provider responses are inconsistent and would require further logic development in the retailer systems or more work by DNSPs to make their responses consistent.

Finally, this logic is unable to be mandated, therefore this could only be included in the B2B Guide as best practice.

Time to implement* Option 1b – Two-service order NP proposal



*Time dependent on the extent of changes to participant systems

Questions to retailers and non-regulated MPBs:

- Have you built for the two-service order NP logic?
- If you have built for this logic, what were the approximate costs associated with the system updates to introduce the two-service order NP logic?
- Were these changes complex?
- Please provide any additional comments here.

Questions to DNSPs and non-regulated MPBs:

- Do you currently check the status of a meter and / or NMI status before a truck roll is performed?

Questions to retailers, non-regulated MPBs and DNSPs:

- Is this solution feasible to introduce?
- Is it an option to introduce the two-service order NP process (as a transitional step) prior to the introduction of the single NP process?
- Please provide any comments.

Option 2 – Retailers to become more 'active' in the management of coincident service orders

Currently retailers are passive in the management of coincident service orders, i.e., they do not need to undertake any actions themselves because service providers do this for them. Option 2 requires retailers to take a more active role in the future management of coincident service orders.

FRMP's requiring a de-energisation (usually after a customer move-out) would be required to check if a re-energisation is inflight and would not send the de-energisation SO, and incoming retailers would check if a de-energisation had been raised and ensure their re-energisation SO was directed at that service provider. All retailers that plan to utilise remote services would need to introduce new processes into their businesses.

Option 2a – New permission rules - retailers to check for inflight SO requests before requesting a service

Retailers would perform a new process - 'check B2B Hub' - before submitting a SO request. Existing B2B processes do not allow for visibility of work requested on a NMI by other participants, therefore an incoming retailer is unable to see that a premise for their new customer is about to be, or has just been, de-energised.

This option requires retailers to be able to check for inflight service orders and represents a fundamental change to B2B and MSATS systems for AEMO, and in turn, participant systems.

This option is a far more significant than a schema change for the B2B system with the need for visibility of inflight de-energisation and re-energisation SOs. AEMO does not believe this is achievable in the near future given the existing regulatory pipeline of work, the complexity of the solution, and the inability of the current B2B platform to support this functionality.

Time to implement Option 2a – New permission rules - retailers to check for inflight SO requests before requesting a service

Option 2b - Retailers rely on a non-regulated service provider to alert them to the presence of two SOs for move-in / move-out scenarios

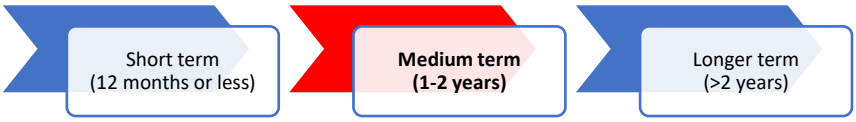
Under this option, retailers would request a non-regulated service provider to advise them of the presence of a SO request for a particular NMI. This would be required where the non-regulated service provider receives a request for a remote re-energisation and the also receives a NP transaction for a SO request to the DNSP for a physical disconnection. This option will only work when FRMPs requesting a physical de-energisation makes the non-regulated service provider a notified party.

This option would require:

- new processes for non-regulated service providers and retailers to be developed
- likely modification of retailer systems
- development of new transaction and service order responses (NP response) from the non-regulated service provider to the retailer
- changes to the B2B-hub, including the introduction of a new schema

Given no B2B transactions are currently available to support this process, if it were to be implemented sooner, non-regulated service providers and retailers would need to use non-B2B processes (email etc).

Time to implement Option 2b – Retailers rely on a non-regulated service provider to alert them to the presence of two SOs for move-in / move-out scenarios



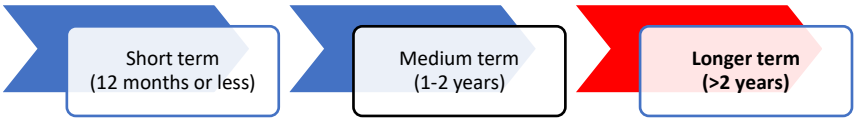
Option 2c – SO alert

This option would provide the incoming retailer with an alert when they initially raise a re-energisation service order that would indicate if a de-energisation for the NMI had already been raised and was still open / just completed and which party was processing this SO.

This alert process could also occur if a de-energisation was raised after the initial re-energisation service. A retailer could use this alert to identify any gaps where the re-energisation was sent and enable a new service order to be sent to the correct party. The benefit of this option is the removal of the need for a customer needing to identify the issue (off-supply) and raise their FRMP – and will enable the re-connection to occur sooner in most cases

As with Option 2a, this option represents a system change more significant than the schema. AEMO does not believe this is achievable in the near future given the existing regulatory pipeline of work, the complexity of the solution and the inability of the current B2B platform to support this functionality.

Time to implement Option 2c – SO alert



Question to retailers:

- Are Options 2a, 2b or 2c viable solutions which will reduce the likelihood of coincident service orders?
- Are there any potential contractual issues with this solution for working with multiple non-regulated service providers?
- Is this process something that you could introduce within your business?
- Which option is more viable (Option 2a, 2b or 2c)?
- Do you have any other feedback relating to Options 2a, 2b or 2c?

Option 3 - Non-system interim solutions which could assist in managing the risk of coincident service orders until more effective solutions can be delivered

Three further options have been identified which may assist participants in managing some of the risk relating to coincident service orders for retailers, non-regulated service providers and customers.

Option 3a – Phone call to DNSP (LNSP) by a non-regulated MPB prior to attending site

Under the case of Scenario 1 (where the FRMP requests a physical de-energisation and an incoming retailer requests a remote re-energisation, refer Table 1), neither the incoming retailer nor their non-regulated MPB has visibility that the DNSP has physically de-energised the site for up to five business days. This is because the DNSP (and any other participant) has up to five business days to update the MSATS NMI status fields. In practice, updates to MSATS are generally completed in 1-2 days, however, there still remains the delay in visibility of the NMI status fields.

In this instance, if the non-regulated MPB attempts to remotely re-energise the site, it does not have visibility that the site has been physically deenergised. In this instance the non-regulated MPB would assume that the meter communications are not working and attempt to attend site, which involves a more costly physical visit.

If a non-regulated MPB was able to contact the DNSP to confirm that the site had been physically de-energised prior to the site visit, this would save both an unnecessary site visit by the non-regulated MPB and allow the incoming retailer to immediately send a physical re-energisation request to the DNSP. This would also enable the customer to be put back on supply more quickly.

This may not be an efficient solution from a participant perspective, however, it is focussed on reducing the time that a customer is potentially without supply.

Time to implement Option 3a – Phone call to DNSP (LNSP) by a non-regulated MPB prior to attending site

Question to DNSPs:

- Would the DNSPs (LNSPs) be open to receiving a call (enquiry) from a non-regulated MPB before it attends a site to confirm if the LNSP has performed a physical de-energisation?

Option 3b – Phone call or email to DNSP (LNSP) by a non-regulated MPB to withdraw pending physical de-energisation

Similar to Option 3a, if a non-regulated MPB is aware of a coincident service order, this solution proposes that it phones or send an email to the DNSP (LNSP) and request that the pending physical de-energisation is withdrawn. The DNSP would then send a 'not completed' SO to the FRMP, advising of the reason.

Time to implement Option 3b – Phone call to DNSP (LNSP) by an MC to withdraw pending physical de-energisation

Question to DNSPs and non-regulated MPBs:

- Would the DNSPs (LNSPs) and non-regulated MPBs be open to this process?
- Could this be implemented immediately?
- Is a phone call or email process preferred?
- What might the gaps be in this approach?
- Is the non-regulated MPB the most appropriate party to make the phone call, or should the call come from the retailer?

Option 3c - Reducing the number of business days to update MSATS NMI status and meter status fields

Participants currently have five business days to update the MSATS NMI status and meter status fields should their status change. This could be reduced to two business days which would be another partial solution to minimising customers being off-supply but would still leave a higher risk of an off-supply than previously identified solutions.

This may provide a benefit in the instance where a move-out customer and the move-in customer at a premise do not happen on the same day. This option on its own may not provide a significant benefit to customers, however, in conjunction with other options, it may improve the visibility of the meter status and / or NMI status for an incoming retailer and their non-regulated MPBs. This option could be implemented (either as a stand-alone option or combined with any of the other options presented in this paper).

AEMO could propose a change request to the Electricity Retail Consultative Forum (ERCF) on this issue if there is support. There are no AEMO system changes required to make this change – it is a procedural change. However, any participant system and process impacts would need to be determined during the consultation.

Time to implement Option 3c – Reducing the number of business days to update MSATS NMI status and meter status fields

*the timeframe to implement would be determined by any requirements for participant system changes

Question to all participants:

- Do you support the reduction from five to two business days to update the MSATS NMI status and meter status fields?
- If the update period is reduced, should the coincident period window (also five days) be reduced or remain at five days?

Summary of options and affected participant(s)

Table 3 provides a summary of options, the likely implementation period and the affected participants for each of the solutions discussed in this pre-consultation paper.

Table 3 – summary of options, implementation period and affected participants

		Affected Participant(s)*			
Option	**Implementation Time**	**DNSP**	**Non-reg MPB**	**Retailer**	**AEMO**
1a – Single SO NP proposal	1-2 years	Yes	Yes	No	No
1b - Two SO NP proposal	Up to 2 years dependent on retailer systems	No	No	Yes	No
2a – New permission rules - retailers to check for inflight SO requests before requesting a service	>2 years	Yes	Yes	Yes	Yes
2b – Retailers rely on a non-regulated service provider to alert them to the presence of two SOs for move-in / move-out scenarios	1-2 years	Yes	Yes	Yes	Yes
2c – SO Alert	>2 years	Yes	Yes	Yes	Yes
3a – Phone call to DNSP (LNSP) by a non-regulated MPB prior to attending site	Immediate	Yes	Yes	No	No
3b – Phone call or email to DNSP (LNSP) by a non-regulated MPB to withdraw pending physical de-energisation	Immediate	Yes	Yes	No	No

		Affected Participant(s)*			
Option	**Implementation Time**	**DNSP**	**Non-reg MPB**	**Retailer**	**AEMO**
3c – Reducing the number of business days to update MSATS NMI status and meter status fields	Up to 2 years dependent on participant systems	Yes	Yes	No	No

*Note if a schema upgrade is required for the B2B system, it is assumed that all participants are affected.

Question to all participants:

- Do you have a preferred option of those that have been presented in this paper?
- Are there other viable solutions that have not been presented in this paper? If so, please describe.
- Do you have any other comments you would like to provide?