20 December 2024
Electricity Authority
PO Box 10041
Wellington 6143

Submitted via email to connection.feedback@ea.govt.nz

Consultation Paper – Network connections project: Stage one amendments

Introduction

1. Orion welcomes the opportunity to submit on the consultation paper 'Network connections project: Stage one amendments.'[1] Parts of this submission contain confidential, or commercially sensitive information, and a redacted version has been provided for public disclosure.
2. Orion owns and operates the electricity distribution infrastructure in central Canterbury, including Ōtautahi Christchurch city and Selwyn District. Our network is both rural and urban and extends over 8,000 square kilometres from the Waimakariri River in the north to the Rakaia River in the south; from the Canterbury coast to Arthur's Pass. We deliver electricity to more than 228,000 homes and businesses and are New Zealand's third largest Electricity Distribution Business (EDB).
3. We have reviewed the consultation paper, and our specific responses to the questions posed by the Authority as well as other feedback we consider appropriate to the consultation are set out in Appendix A.

Summary points

4. While we support efforts to improve connection processes, Orion has significant concerns about the practical implementation of the proposed amendments. Recent customer feedback indicates our current processes are working well and are effective, with nearly 90% of connecting customers[2] rating their experience as 'OK', 'good' or 'excellent'. Orion's largest connecting customers have all contributed to the Customer Journey Mapping project, led by the Future Network Forum (FNF) of the Electricity Networks Aotearoa (ENA), and endorsed the list of deliverables under the Streamlining Connections project.[3]
5. While we acknowledge that some stakeholders have raised concerns about connection processes directly with Ministers, these appear to represent a small minority of experiences. The Authority's proposals risk disrupting these largely successful processes, potentially compromising service for the majority of customers, to address isolated issues. We are concerned that such substantial regulatory change is being proposed without clear evidence of systemic problems or analysis of the broader benefits.

[1] Network connections project - stage one amendments consultation paper
[2] This survey was active from April 2021 to September 2023, and asked respondents who had submitted a connection application, about their experience with our application process.
[3] Please see the below links for more details on Customer Journey Mapping and Streamlining Connections:
https://www.ena.org.nz/fnf/
https://eea.co.nz/what-we-do/projects/streamlining-connections/

6. Our key concerns, which we outline in our response, are in the following areas:

   a. **Contractual framework deficiencies**: The Authority is not best placed to develop connection contracts, and merely repurposing the existing regulated terms contract for distributed generation and applying them to load applications is not sufficient. While the prescribed and regulated terms may be sufficient for smaller and medium-sized connections, they lack crucial commercial and technical provisions that are essential for larger-scale projects like grid-scale solar and data centres. These deficiencies make it difficult for applicants to reach commercial close for large scale projects and fail to adequately protect Orion's customers in terms of quality of supply and of assets vested.

   b. **Unrealistic timeframes**: The proposed framework creates an overly rigid process that fails to account for the natural variability in complexity of both generation and load connection applications. The requirement to hold final applications for 20 business days to ensure that no competing requests are received, the mandatory third-party notifications, and the complex interplay of technical studies makes the proposed timeframes impractical. [redacted] The proposed 30-business day window to negotiate connection contracts is therefore severely insufficient for complex commercial arrangements that often require detailed specifications and external legal review. Additionally, there is the potential for the accidental perverse incentives for load applicants to not engage in negotiating contracts in good faith. This rigid approach risks degrading, rather than improving, connection outcomes, and could have detrimental impacts on the overall network and negatively affect other connected customers.

   c. **Queueing and management policy overreach:** As the Authority is no doubt aware, the Electricity Networks Aotearoa's Future Networks Forum plans to consult with the industry to develop a queueing and management policy in FY25/26. As currently written, the Authority's prescriptive approach to queue management risks creating regulatory inconsistency and operational inefficiencies before industry-led solutions can be properly developed and implemented. The proposed requirements extend beyond establishing basic principles into detailed operational specifications, potentially constraining our ability to respond to unique regional needs and evolving market conditions.

   d. **Opportunity to improve network capacity information**: Rather than requiring distributors to publish a list of location and available capacity, including time of use capacity, of zone substation feeders and low voltage transformers, the Authority should consider developing a web-based mapping tool to provide this information to applicants. It would also be beneficial for the Authority to consider requiring Transpower and Generators to publish generation availability and transmission network capacity, and planned upgrade projects. It is critical that applicants see a holistic view of where constraints may exist, and upgrades planned to remediate those constraints, on either the Transmission or Distribution networks.

   e. **Ability to decline applications**: The amendments effectively remove our ability to decline load applications, even where connection may be impractical, uneconomic for network and customer, or pose network stability risks.

f. **Capital constraints and regulatory framework misalignment**: Orion plans to seek a customised price-quality path (CPP) to support increased spending on asset renewals and replacements. The proposals do not adequately consider how distributors will fund increased connection obligations within existing default price-quality fixed regulatory allowances. This creates an untenable situation where meeting rigid connection timelines could compromise our ability to deliver necessary asset renewals and maintain network reliability. Rather than requiring individual distributors to seek reconsideration of their price-quality paths, it would be more efficient for the sector for the Authority to initiate a comprehensive review with the Commerce Commission under section 54V(5) of the Commerce Act.[4]

7. These implementation challenges are not merely operational concerns - they reflect fundamental questions about whether the proposed framework will achieve its intended outcomes or create additional complexity and inter-regulator regulatory uncertainty for the sector.

Connection activity context

8. From September 2023 – December 2024, Orion processed a total of 10,244 load connection applications, which includes both new applications received during this period and applications closed that were received prior to this period. For the Authority's context, the data below demonstrates that while the proposed Process 4 and 5 requirements would affect only 3.8% of applications, they would create significant administrative burden and system changes across all connection processes. Of these applications:
   a. 9,844 connections are below 69kVA (96.2% of load applications).
   b. 262 connections are between 69kVA – 300kVA (2.5% of load applications).
   c. 141 connections are above 300kVA (1.3% of load applications).

9. From September 2023 – December 2024, Orion processed a total of 2,136 distributed generation applications, which includes both new applications received during this period and applications closed that were received prior to this period. For the Authority's context, the data below demonstrates that while the proposed Process 2 and 3 requirements would affect only 6.93% of applications, they would create significant administrative burden and system changes across all connection processes. Of these applications:
   a. 1,986 connections are below 10kW (92.97% of distributed generation applications).
   b. 130 connections are between 10kW – 300kW (6% of distributed generation applications).
   c. 20 connections are above 300kW (<1% of distributed generation applications).

Concluding remarks

10. Thank you for the opportunity to provide feedback on this consultation. We look forward to working constructively with the Authority to develop practical solutions that enhance connection processes while maintaining operational efficiency and existing customer service quality.

11. While we support the overall direction of reform, we strongly encourage the Authority to consider international experience and best practices, particularly the OFGEM Queue Management User Guide[5] and the National Energy System Operator's recent consultation on Connections Reform.[6] Their experience highlights two areas that the Authority should address proactively in this first round of reforms to avoid future issues:

[4] https://www.legislation.govt.nz/act/public/1986/0005/latest/DLM1940060.html
[5] OFGEM Queue Management User Guide
[6] Great Britain's Connections Reform

a. Queue management for stalled projects to release capacity – allowing for contract termination if milestones are not met, and
b. Network capacity allocation and transparent prioritisation parameters.

12. Orion supports the ENA's submission.

13. Orion thanks the Authority for allowing a cross-submission opportunity for this critical consultation. In our next response, we will provide a detailed analysis of the operational impacts of these proposals, including:
    a. Estimated costs for required system and process upgrades.
    b. Analysis of resource requirements and capability gaps.
    c. Implementation timeline considerations, and any system integration challenges.

14. If you have any questions or queries on aspects of this submission which you would like to discuss, please contact us on 03 363 9898.

Yours sincerely,

Connor Reich

Regulatory Lead – Electricity Authority

Appendix A

Submitting organisation	**Orion New Zealand Limited ("Orion")**
Contact person	**Connor Reich**
Contact email	**Connor.Reich@oriongroup.co.nz**

Proposal A questions: Amend the application processes for larger-capacity DG applications
A) What are your thoughts on the proposal to replace nameplate capacity with maximum export power?
Orion supports the proposal to replace nameplate capacity with maximum export power.
B) Do you support the proposed Process 2 for medium DG (>10kW and <300kW), including the proposed requirements and timeframes? What are your thoughts on the proposed size threshold? What other changes would you make to the medium DG application process, if any?
Orion submits that it does not support Process 2 as currently drafted. While we recognise the importance of medium-sized DG connections, these applications face many of the same challenges we detail in our Process 3 response. Rather than duplicate our detailed concerns, we refer to our Process 3 response which outlines fundamental issues with: • Application time limits, • Contractual framework deficiencies, • Queueing and management policy, • Ability to decline applications, and • Notice to third parties. These concerns apply equally to Process 2 applications, and in some cases may have even greater impact given the higher volume of applications in this category. **We recommend the Authority consider our Process 3 feedback in its entirety when revising Process 2 requirements.**
C) Do you support the proposed Process 3 for large DG applications (≥300kW), including the proposed requirements and timeframes? What are your thoughts on the proposed size thresholds? What other changes would you make to the large DG application process, if any?
Orion submits that it does not support Process 3 as currently drafted. While we acknowledge the intent to improve connection processes for DG applications, several significant issues need to be addressed: **Application time limits** The proposed timelines in Schedule 6.1, Appendix 3, are impractical for all complex DG connections. *Initial applications*

The requirement in clause 2(5) to review applications to assess completeness[7] within five business days, combined with initial application timeline commencement from application submission, rather than confirmation of completeness, is not appropriate. This means that for a complete application submitted on day 1, reviewed and confirmed complete on day 4, Orion staff would then only have 36 business days remaining for assessment (rather than a full 40-business day period starting from confirmation of completeness). We have included proposed Code language adjustment in response to Question Z.

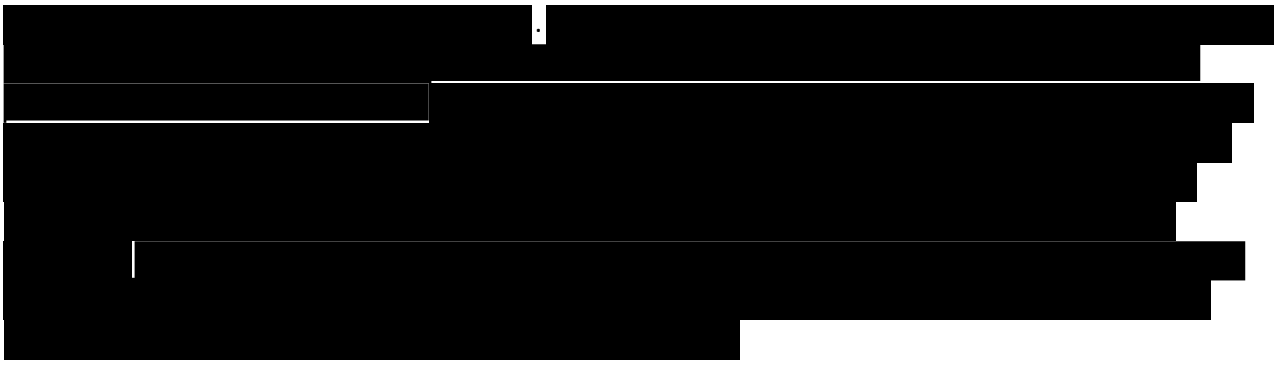
The misalignment between the information provision and distributor decision timelines creates practical challenges. Specifically, clause 3 requires us to provide information to applicants within 30 business days, while clause 6 requires an approval decision within 40 business days. This 10-business day window (or five-business day window, if we did not assess an application as "complete" until business day five) is insufficient for applicants to meaningfully incorporate our information into their application, and for Orion to properly assess any material changes that may result.

We recommend that the Authority:

1. Implement a clock-start/stop mechanism when substantial information is provided to applicants, to allow for sufficient review time.
2. Require applicants to notify the distributor within five business days whether the provided information will result in material changes to their application. This approach would ensure efficient processing while allowing appropriate time for both applicants to revise their applications, and distributors to assess any material changes to that application.
3. Clarify whether all information under clause 2(3) is required before an application can be considered "complete" by a distributor.
4. Require applicants to provide a plan showing the site location and layout, showing the properties that need to be connected and the meter position.
5. Require applicants to provide a letter of authority from the landowner, which contains the landowner's permission for the applicant and distributor to complete the work.

Interim applications

The extension provisions in clause 10(2-5) are insufficient for complex projects requiring grid studies[8],



[7] Orion notes that the Authority has not defined what minimum information is required for an initial application to be considered "complete". While clause 2(3) of Appendix 3 outlines information that is to be provided by an applicant, it does not outline what is the minimum amount of information that needs to be provided for an application to be considered "complete". This may lead to disputes where Orion considers an application as "incomplete", while the applicant may consider the application to be "complete" because they have misinterpreted the information requirements. Clear guidance on minimum information requirements would help avoid such misunderstandings and ensure more efficient processing of applications.

[8] Orion has provided a detailed table in Appendix B that lists required studies for connection to our network.

Under the proposed framework, distributors would be incentivised to direct applicants to undertake their own grid studies under clause 3(e)(i) to avoid timeline breaches, potentially compromising the quality and consistency of technical assessments. Additionally, clause 10(6-7) appears to only apply if a distributor requests, or requires, further information from the distributed generator applicant. This leaves clause 3(e)(i) as the only satisfactory option for distributors that would ensure that full, and necessary, assessments are carried out in the appropriate manner. Is this the Authority's regulatory intent?

Final applications and contract negotiation

The mandated timeline sequence for final applications creates inefficiencies. Under the current proposal:

- Clause 13 requires distributors to notify third parties who have submitted an application within 10 business days.
- Clause 14(b) requires distributors to wait 20 business days to ensure that no other final application is received for that same area of the network.
- Clause 16(1) requires distributors to approve or decline the application within 20 business days (for applications with a maximum export power of less than 1MW).

This creates an impractical situation where a distributor cannot begin a meaningful final assessment of the application until after the 20-day notification period, as any work done before this point may need to be entirely redone if additional applications are received. For example, if Orion were to process a final application within 10 business days, but receives another application on day 19, we would be required to restart our assessment to consider both applications simultaneously under clause 14(2). This would likely cause us to breach the 20-business day requirement for the first application under clause 16(1), which would result in the application being deemed as "approved."

The prescriptive nature of these timeline requirements would be better addressed through an industry-developed queueing and management policy that can accommodate the practical realities of application assessment, rather than overprescription in the Code. Further details can be found in our response to the queueing and management policy below.

The 30-business day window specified in clause 18(1) to negotiate a connection contract is inadequate for complex commercial [redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

This timeline reflects the reality of large-scale connection projects where multiple stakeholders, internal and external approvals, and complex technical requirements must be carefully coordinated. The proposed 30-business day window fails to account for these essential elements of the connection process.

We recommend that the Authority:

1. Implement a clock start/stop mechanism at all application stages, if further information is required from any external party (including contractors, consultants, or the applicant themselves). We encourage the Authority to review OFGEM Connections GSOP Guidance, and include clock start/stop mechanisms within the proposed amendment.

2. Implement our suggested Code changes, as described in our response to Question Z.
3. Implement our suggested recommendations for the queueing and management policy.

Contractual framework deficiencies

The regulated terms approach does not align with the complexity of large DG connections.

The proposed regulated terms in Schedule 6.2[9] lack essential elements for bespoke complex DG connections, such as technical requirements, asset vesting provisions, liability frameworks, and quality of supply obligations that protect both parties and ensure successful project delivery. The requirement in clause 20(1) to default to regulated terms if negotiations exceed 30 business days inappropriately substitutes sophisticated commercial agreements with simplified terms that may not provide adequate protection for any party.

Furthermore, the 30-business day negotiation window fails to recognise that every large connection requires multiple interrelated agreements, each requiring separate negotiation and legal review. These agreements cannot be viewed in isolation - terms must be carefully coordinated across all documents to ensure proper risk allocation and project delivery. The proposed default to regulated terms creates significant risk by potentially forcing projects to proceed without necessary commercial and technical safeguards.

We recommend that the Authority:

1. Removes the 30-business day negotiation window for large DG connections, recognising that complex commercial arrangements require appropriate time for proper negotiation.
2. Supports the co-creation of flexible industry-standard contracts (that can adapt to differing situations) through the ENA, or similar body, and customer representatives, rather than mandating not-fit-for-purpose regulated terms.
3. Until industry-standard contracts are developed, allow distributors and applicants to continue using their existing, proven, contract frameworks that appropriately address technical and commercial requirements.
4. If the Authority decides to maintain regulated terms, it should limit their application to smaller, standardised connections (for example, Processes 1 and 2), where simplified terms are more appropriate.

Queueing and management policy

[9] Orion notes that this schedule is mistakenly labelled as "Schedule 6.2A" in the consultation Code amendment document.

The Authority's prescriptive approach to queue management extends beyond the necessary regulatory scope and risks creating operational inefficiencies. We note that the ENA is working towards developing a comprehensive queueing and management policy for distributor adoption, with expected completion in FY25/26. This industry-led initiative will draw on international experience from Australia, the UK, and US markets, while ensuring consistency across New Zealand distributors.

The Authority's prescriptive approach appears throughout Schedule 6.1, Appendix 3:

- Clause 8: Notice to third parties.
- Clause 9: Grouping of applications.
- Clause 13: Notice to third parties.
- Clause 14: Priority of applications, and criteria for assessing applications.
- Clause 21: Detailed requirements for milestone management.
- Clause 22: Prescribed approach for handling applications at the same network location.

Priority of applications

The requirement for EDBs (clause 14(2)(c)) to evaluate "optimal use of the distribution network while achieving the most long-term benefit for consumers" introduces subjective criteria into what should be an objective technical assessment and is problematic without clear guidance. It also creates a greater risk for disputes and creates uncertainty for applicants about how their projects will be evaluated. Rather than placing this evaluation burden on distributors, we encourage the Authority to follow international best practice, as demonstrated in the recent UK Connections Reform.[10]

The proposed grouping of applications (clause 14) fundamentally misunderstands commercial dynamics. Private companies and developers make connection decisions based on their own commercial imperatives and competitive positioning, not societal benefit. [redacted]

Milestone Compliance

[10] See the Gate 2 Criteria Methodology: https://www.neso.energy/industry-information/connections/connections-reform

The removal of the 18-month construction requirement from Schedule 6.2, combined with clause 22(2) allowing applicants to retain queue positions despite missing milestones, risks creating capacity hoarding. Recent UK experience demonstrates that without clear requirements and enforcement mechanisms, developers may reserve capacity indefinitely without progressing projects which is not in the long-term interests of consumers.[11]

We strongly recommend that the Authority focus on three key elements to improve queue management:

1. Require distributors to publish their queueing and management policy,
2. Ensure distributors and applicants comply with the published policy, and
3. Develop transparent prioritisation parameters that align with the Government's Policy Statement on Electricity to ensure that there is a clear, consistent framework for assessing application priority based on strategic energy priorities.[12]

We also recommend that the Authority:

1. Support the ENA-led development of a consistent queueing and management policy.
2. Either retain the 18-month construction requirement, with appropriate reference to the queueing and management policy, or explicitly allow distributors to include this requirement in our queueing and management policy.

Ability to decline applications

Schedule 6.1, Appendix 3 does not allow for a distributor to make discretionary assessments of DG applications. Under clause 15(2), we must approve a final application if it has been properly made in accordance with Part 6, and the information provided would reasonably support an assessment that the applicant will comply with basic requirements. This creates a concerning shift from ensuring appropriate technical outcomes, to what appears to be simply checking process compliance. While the clause includes consideration of network stability and compliance with connection and operation standards, the threshold for declining applications appears to be extremely high.

We seek clarification from the Authority whether this was the intended outcome. As currently drafted, it appears that we may be unable to decline applications even for areas outside our network territory. This creates potential jurisdictional issues with other distributors and risks inefficient allocation of connection resources. Additionally, clause 15(4)(d) allows non-participant DG applicants to submit claims to the Authority – this seems inappropriate given that any DG connection above 300kW should, by definition, be considered a participant.

We recommend that the Authority:

1. Explicitly confirm a distributor's ability to decline applications outside of our network areas.
2. Review the non-participant provisions for large DG connections.
3. Consider adding specific decline criteria related to distribution network stability and security.
4. Remove clause 15(4)(d).

Notice to third parties

[11] Kona Energy's response to the recent UK Connection Reform consultation identifies a clear issue with the UK's queue management policy – which the Authority appears to have lifted and is attempting to apply in New Zealand. There are projects that have been sitting idle for years in the current connections queue – the existing queue management has not removed those projects. Further details can be found in this response: https://www.konaenergy.co.uk/news-1/kona-energys-seven-point-plan-for-connection-reform.

[12] Government Policy Statement to the Electricity Authority

The notification requirements found in clauses 8 and 13 create an unnecessary administrative burden on distributors and consumes valuable time within an assessment period. The requirement in both clauses to not only notify "all persons that have made an initial…interim…and final application" relating to that part of the distribution network, but also require the notification of all existing connected distributed generators with a maximum export power of 10kW or more is particularly problematic and inefficient.

We recommend that the Authority:

1. Require distributors to keep an up-to-date network connections pipeline, without specific customer information (e.g. name and GPS coordinates) that shows all large applications received on the network, and their application stage.
2. Remove the requirement for distributors to proactively notify third party applicants and existing connected DG when an application is received.

D) Do you think the Authority should apply any of the proposed changes for large DG to medium DG applications also?

Orion submits that the Authority should not apply proposed changes for large DG to medium DG applications but instead the Authority should apply our recommendations submitted for the large DG applications to the medium DG applications.

E) What are your thoughts on industry developing the detailed policies to complement the Code changes proposed in this paper?

Orion submits that it supports industry-led development of detailed operational policies. However, the Authority's proposed Code amendment must better recognise the distinction between high-level regulatory principles and detailed operational requirements.

The ENA is progressing work on a comprehensive queueing and management policy, with expected completion in FY25/26. This industry-led initiative will draw on international experience, while ensuring consistency across New Zealand distributors. However, the Authority's current proposal contains overly prescriptive requirements that would constrain the effectiveness of these industry-developed solutions.

The prescriptive approach appears throughout Schedule 6.1, particularly in areas that should be addressed through industry policies rather than Code requirements. For example, the detailed timeline requirements for application processing create operational conflicts that could be better managed through flexible industry policies. As demonstrated in our above response to queueing and management, the rigid 20-day waiting period combined with technical assessment requirements creates impractical and inefficient situations for distributors.

Similarly, the requirements for evaluating "optimal use of the distribution network while achieving the most long-term benefit for consumers" introduces subjective criteria into what should be objective technical assessments. These evaluations would be better guided by industry-developed frameworks that can accommodate the practical realities of network operations and commercial dynamics.

We recommend that the Authority:

- Focus Code requirements on establishing clear principles and objectives that support, rather than constrain operational effectiveness.
- Remove prescriptive operational requirements from the Code.
- Allow the industry-led ENA initiative to co-develop a detailed queueing and management policy.

F) What are your thoughts on the Authority's summary of capacity rights allocation?

Orion submits that it does not support the summary of capacity rights allocation, until further clarification is provided by the Authority.

Enforcement and codification concerns

Orion submits that there is a lack of clarity regarding where and how these capacity rights would be established in the Code – or whether these capacity rights would exist within a queueing and management policy. This distinction is critical for enforcement and dispute resolution.

The concept of "conditional capacity rights" at the interim approval stage also presents challenges. The requirement that final applications "must not deviate significantly" from interim approval conditions introduces subjective criteria that could be difficult to assess and enforce consistently – particularly if these capacity rights are included in the Code. The proposal does not define what constitutes a "significant" deviation, leaving room for interpretation and potential disputes.

Network investment capacity rights

The proposal introduces a complex framework for network investment capacity rights, but fails to address several aspects:

- The mechanism for determining fair compensation when capacity rights are forfeited.
- The process for resolving competing claims to capacity when network upgrades affect multiple applicants.
- The duration and transferability of those rights.
- The interaction between DG and load capacity rights, when both are present in the same network area, are part of the same application, or when assessing whether an earlier application for medium DG should have priority over a later application for large load.

We recommend that the Authority:

1. Clearly specify whether capacity rights allocation processes will be incorporated into the Code, or left to the ENA and industry co-developed queueing and management policy.
2. Develop clear criteria (or allow the ENA to co-develop this with distributors and customers) for what constitutes a 'significant' deviation between interim and final applications.
3. Allow the ENA and distributors to establish specific mechanisms for resolving competing capacity claims, and define clear parameters around the duration, transfer and forfeiture of capacity rights.

Proposal B questions: Add application processes for larger-capacity load

G) For Process 4 for medium load (>69kVA and <300kVA) applications:

- **Do you support the proposed process and why?**
- **What are your thoughts on the proposed requirements, size thresholds and timeframes?**
- **What changes would you make to the medium-load application process, if any?**

Orion submits that it does not support Process 4 as currently drafted. While we recognise the importance of medium-sized load connections, these applications face many of the same challenges we detail in our Process 5 response.

Rather than duplicate our detailed concerns, we refer to our Process 5 response which outlines fundamental issues with:

- Application time limits,
- Contractual framework deficiencies,

- Regulatory alignment and capital constraints,
- Ability to decline applications,
- Queueing and management policy, and
- Notice to third parties.

These concerns apply equally to Process 4 applications, and in some cases may have even greater impact given the higher volume of applications in this category.

We recommend the Authority consider our Process 5 feedback in its entirety when revising Process 4 requirements.

H) For Process 5 for large load (≥300kVA) applications:

- **Do you support the proposed process and why?**
- **What are your thoughts on the proposed requirements, size thresholds and timeframes?**
- **What changes would you make to the large load application process, if any?**

Orion submits that it does not support Process 5 as currently drafted. While we acknowledge the intent to standardise connection processes, and bring load into the Code, several significant issues must be addressed:

Application time limits

The proposed timelines in Schedule 6.1, Appendix 5, are impractical for complex load connections. The mandated timeline sequence will create impractical and inefficient situations:

Initial applications

Clause 2(3) requires distributors to review applications to assess completeness within five business days, combined with initial application timeline commencement from application submission rather than confirmation of completeness. This means that for a complete application submitted on day 1, reviewed and confirmed complete on day 4, Orion staff would then only have 36 business days remaining for assessment (rather than a full 40-business day period starting from confirmation of completeness). We have included proposed Code language in response to Question Z.

The misalignment between the information provision and distributor decision timelines creates practical challenges. Specifically, clause 3 requires us to provide information to applicants within 30 business days, while clause 6 requires an approval decision within 40 business days. This 10-business day window is insufficient for applicants to meaningfully incorporate our information into their application, and for Orion to properly assess any material changes that may result.

We recommend that the Authority implement a clock-start/stop mechanism when substantial information is provided to applicants, coupled with a requirement for applicants to notify the distributor within 5 business days whether the provided information will result in material changes to their application. This approach would ensure efficient processing while allowing appropriate time for both applicants to revise their applications, and distributors to assess any material changes to that application.

Interim applications

[redacted]

Under the proposed framework, distributors would be incentivised to direct applicants to undertake their own grid studies under clause 3(e)(i) to avoid timeline breaches, potentially compromising the quality and consistency of technical assessments. Additionally, clause 10(6-7) appears to only apply if a distributor requests, or requires, further information from the load applicant. This leaves clause 3(e)(i) as the only satisfactory option for distributors that would ensure that full, and necessary, assessments are carried out in the appropriate manner. Is this the outcome that the Authority intends?

Final applications

The mandated timeline sequence for final applications creates inefficiencies. Under the current proposal:

- Clause 13 requires distributors to notify third parties who have submitted an application within 10 business days.
- Clause 14(1)(b) requires distributors to wait 20 business days to ensure that no other final application is received for that same area of the network.
- Clause 16(1) requires distributors to approve or decline the application within 20 business days (for applications with a maximum export power of less than 1MVA).

This creates an impractical and inefficient situation where a distributor cannot begin a meaningful final assessment of the application until after the 20-day notification period, as any work done before this point may need to be entirely redone if additional applications are received. For example, if Orion were to process a final application within 10 business days, but receives another application on day 19, we would be required to restart our assessment to consider both applications simultaneously under clause 14(2). This would likely cause us to breach the 20-business day requirement for the first application under clause 16(1), and this application would be deemed as "approved."

The prescriptive nature of these timeline requirements would be better addressed through an industry-developed queueing and management policy outside of the Code that can accommodate the practical realities of application assessment. Further details can be found in our response to the queueing and management policy below.

We recommend that the Authority:

1. Implement a clock start/stop mechanism at all application stages, if further information is required from any external party (including contractors, consultants, or the applicant themselves). We encourage the Authority to review OFGEM Connections GSOP Guidance, and include clock start/stop mechanisms within the proposed amendment.
2. Implement our suggested Code changes, as described in our response to Question Z.
3. Implement our suggested recommendations for the queueing and management policy.

Contractual framework deficiencies

[13] Orion has provided a detailed table in Appendix B that lists required studies for connection to our network.

The proposed regulated and prescribed terms fundamentally misunderstands the established contractual norms for load connections. For most small and medium connections, where customers have an established relationship with a retailer, the Default Distribution Agreement (DDA) already provides an appropriate contractual framework – thus negating the need for new contract terms for small and medium load connections. Direct contractual relationships between Orion and large load customers are only established for significant loads exceeding 4MVA in rural areas, or 10MVA in urban areas.[14]

Our existing approach of tailored agreements for large capacity connecting customers has proven effective, as this allows both parties to address the customer's specific operational requirements. These large loads have fundamentally different needs that require distinct contractual approaches – for example, data centres would likely require specific provisions around uninterrupted power supply and cooling systems, while a new stadium would require specific arrangements for managing peak demand during events. Manufacturing facilities would need different guarantees around power quality for sensitive equipment. A one-size-fits-all regulated or prescribed approach cannot adequately address these diverse requirements.

The Authority's approach of essentially repurposing the distributed generation regulated terms and applying them for load connections fails to recognise how load connections fundamentally differ in their technical and commercial requirements. As outlined in our response to Question C, large capacity connections require multiple interconnected agreements, and both the prescribed and regulated terms lack appropriate provisions for technical requirements, asset vesting, liability frameworks, and quality and security of supply obligations that protect both parties.

Unlike the DG process, in Appendix 5 clause 18(1), there is no requirement for applicants to negotiate connection contracts in good faith within the 30-business day window. This creates concerning asymmetry and could create a perverse incentive for applicants to default to inadequate, and hastily drafted, regulated and prescribed terms.

The requirement in clause 20(1) to default to regulated terms if negotiations exceed 30 business days inappropriately substitutes sophisticated commercial agreements with simplified terms that may not provide adequate protection for either party. Furthermore, this timeline fails to acknowledge that every large connection requires multiple interrelated agreements, each requiring separate negotiation and legal review. These agreements cannot be viewed in isolation - terms must be carefully coordinated across all documents to ensure proper risk allocation and project delivery.

The Authority has not included, or referenced, the regulated terms found in Schedule 6.2A within Appendix 5. This raises broader concerns about whether other aspects of the proposal have received adequate consideration and scrutiny, and whether the resulting framework will achieve its intended outcomes or create additional complexity and uncertainty for the sector.

We recommend that the Authority:

1. Remove the requirement to default to regulated or prescribed terms if contractual agreement cannot be reached within 30 business days – recognising that complex commercial arrangements require appropriate time for proper negotiation.
2. Support the co-development of industry-standard contracts via the ENA and customers, rather than attempting to adapt distributed generation contracts for load connections.

[14] Please see our Pricing Methodology for further details on Orion's approach to managing non-standard large capacity connection contracts: https://www.oriongroup.co.nz/assets/Our-story/Pricing/Orion-pricing-methodology-2024.pdf, pages 24 – 26 & 59.

3. Until industry-standard contracts are developed, allow distributors and applicants to continue using existing, proven, contract frameworks that have been developed through years of commercial practice and legal refinement.
4. If the Authority decides to retain the regulated and prescribed terms within the Code, it should engage in a focussed consultation to develop a fit-for-purpose contract that works for applicants and distributors.

Regulatory alignment and capital constraints

The Authority's proposal creates a fundamental misalignment between the regulatory frameworks that govern distributor investments and operations. Orion is currently preparing a customised price-quality Path (CPP) application due to significant investment needs across our network, but remains on the default price-quality path (DPP) until the Commission has received and considered our application. The proposed connection requirements would create competing demands for limited capital within the DPP allowances set in November 2024, forcing trade-offs between maintaining existing infrastructure and enabling new connections.

Our network faces critical investment needs across multiple areas:

- A significant proportion of our assets were built in the 1960s and 1970s and require renewal in the next 5-7 years. For instance, around 25% of our power poles are at least 50 years old and reaching end of serviceable life.
- Significant regional growth especially in the Selwyn district, the fastest growing district in New Zealand, and through in-fill housing in Christchurch City.
- Increasing natural hazard and climate change risks, including a 75% probability of an Alpine Fault earthquake in the next 50 years.
- Growing operational demands that require new technology platforms and new technologies connecting to our network alongside evolving customer needs.

The Authority's decision to add load into the Code will have particularly problematic impacts on regulatory incentives:

- Incremental rolling incentive scheme (IRIS) mechanisms penalise expenditure above regulatory allowances, creating disincentives for connection investments.
- Changed connection requirements might force deferral of critical renewals investments and any associated impact on quality standards and incentives
- Lack of alignment with asset management obligations under the regulatory framework.

The Authority must recognise that network investment decisions cannot be made in isolation. A regulatory framework that forces prioritisation of connections without corresponding adjustments to capital allowances and quality incentives will ultimately drive project prioritisation and could lead to impacts on network performance and existing customer quality outcomes. If distributors are required to prioritise connections under rigid timelines, this will necessarily impact our prioritisation and reprioritisation of projects and resource allocation in order to stay within DPP or CPP allowances. Rather than requiring individual distributors to seek reconsideration of their price-quality paths, it would be more efficient for the Authority to initiate a comprehensive review with the Commerce Commission under section 54V(5) of the Commerce Act

We recommend that the Authority:

1. More fully consider, alongside the Commerce Commission, the broader regulatory impacts of the Authority's connection objectives and the Commerce Commission's quality standards and investment incentives.

2. Work with the Commerce Commission to develop an integrated regulatory approach that recognises the relationship between connection investments and broader network investment and IRIS incentives. For instance, distributors have consistently submitted on removal of customer connections from inclusion in the IRIS mechanism.[15] If the Authority's connection objective in conjunction with its connection pricing reform governs distributor behaviour for connections, then should the Commission remove customer connections from the IRIS mechanism?
3. Defer implementation of prescriptive load connection requirements until regulatory alignment is achieved between Part 6 and the Commerce Commission's price-quality regulation, and initiate a reconsideration of section 52P determination under 54V of the Commerce Act.

Application decline criteria

Schedule 6.1, Appendix 5 provides insufficient clarity regarding distributors' ability to decline load applications. Under clause 15(2), distributors must approve a final application if it has been properly made in accordance with Part 6 and the information provided would reasonably support an assessment that the applicant will comply with basic requirements.

We seek clarification from the Authority whether this is the intended outcome. As currently drafted, it appears that we may be unable to decline applications even for areas outside our network territory. This creates potential jurisdictional issues with other distributors and risks inefficient allocation of connection resources.

In practice, distributors face legitimate scenarios where declining an application may be necessary. For instance, when a connection requires significant capital contribution and the customer costs outweigh the benefit, the application should be declined rather than leaving it in an unresolved state. Similarly, where a customer's property is effectively islanded due to lack of easement access, or is located more than 30 meters from existing network assets without viable connection options, the distributor should have clear ability to decline the application. These scenarios represent practical realities of network operations that the current framework fails to address.

We recommend that the Authority:

1. Explicitly confirm distributors' ability to decline applications with a reason and consider adding specific decline criteria.

Queueing and management policy

The current proposal's requirements around application grouping and prioritisation fundamentally misunderstands commercial dynamics. Private companies and developers make connection decisions based on their own commercial imperatives and competitive positioning, not societal benefit.

Please refer to our response to Question C – queueing and management policy for suggested improvements to the proposed queueing and management requirements for load within the Code.

Notice to third parties

The notification requirements found in clauses 8 and 13 create an unnecessary administrative burden on distributors and consumes valuable time within an assessment period. The requirement in both clauses to notify "all persons that have made an initial…interim…and final application" relating to that part of the distribution network is particularly problematic.

We recommend that the Authority:

[15] Orion submission on EDB DPP4 Reset, pages 5 and 8.

1. Require distributors to keep an up-to-date network connections pipeline that shows all large applications received on the network, and their application stage.
2. Remove the requirement for distributors to proactively notify third party applicants when an application is received.

I) Do you think the Authority should apply any of the proposed changes for large load to medium-load applications also? If so, which ones and why?

Orion submits against adoption of the Authority's proposed changes for large load to medium load applications. The Authority should instead apply our recommendations detailed in the section on large load applications to the medium load applications.

J) What are your thoughts on the Authority's summary of capacity rights allocation?

Please see our response to Question F for our recommendations on ways to improve capacity rights allocation.

K) What else does the Authority need to consider beyond the proposals in this paper and why?

We recommend that the Authority:

1. Consider developing a unified application process (Appendix 6) for large, grid-scale, connections that require both load and generation capacity.

Proposal C questions: Require distributors to publish a 'network connections pipeline' for large-capacity DG and load, and provide information on this pipeline to the Authority

L) Do you support the proposed network connections pipeline, why, why not? What changes would you make, if any? What are your thoughts on the scope of the information to be published?

Orion submits that it partially supports the proposed network connections pipeline.

As written, the Code does not specify how frequently the pipeline must be updated, and there is no clarity about whether updates are required when applications are "received" versus when they are "approved."

Clause 6.3(4) of Schedule 6.1 also does not address whether this pipeline must be maintained as a "live" list, or whether it can be updated on a periodic basis.

We recommend that the Authority:

1. Define trigger points for when pipeline updates are required (receipt vs. approval of applications).
2. Establish reasonable timeframes for reflecting changes in the published pipeline.

M) What are your thoughts on the proposal for distributors to provide information directly to the Authority on an ongoing basis?

Orion submits that it does not wholly support the proposal for distributors to provide information directly to the Authority.

We recommend the following amendments to the information provision framework:

1. Strengthen protections for applicant confidentiality by removing the requirement to share applicant names and specific GPS coordinates.

2. Address conflicts with existing confidentiality obligations. Schedule 6.1 clause 6.3C(2) allows the Authority to publish information that a distributor consider confidential. This creates a direct conflict with legally binding non-disclosure agreements (NDAs) and commercial contracts that many applicants require during their project development phase. Distributors should not be forced to choose between complying with confidentiality agreements or failing to comply with Code obligations. The Authority should create specific provisions for managing information covered by NDAs.
3. Consider developing an integrated connection pipeline across distributors and Transpower, as described in our response to Proposal D, while ensuring this integration maintains appropriate confidentiality protections.

Proposal D questions: Require distributors to provide more information on network capacity

N) What do you think of the proposal to publish more information on network capacity? What challenges do you see with providing the data? What changes would you make, if any?

Orion submits in agreement with the intent of publishing more information on network capacity, however we disagree with the method suggested as it does not take a whole of system view and is static in nature. The current proposal creates practical challenges while failing to deliver meaningful improvements, or benefits, for the sector.

Integration and accessibility challenges

The fundamental issue is the fragmented approach to capacity information across the electricity sector. Rather than requiring individual distributors to publish isolated datasets, in list format, we need an integrated solution that provides a comprehensive view across distribution networks, Transpower, and the Authority's Generation Pipeline. The Scottish & Southern Electricity Networks' Generation Availability and Network Capacity network mapping tool[16], or the UK's National Grid Research Assistant Tool[17] provide excellent models for this approach, offering sector participants a single source of truth for network capacity information and generation availability.

The Authority's current proposal creates significant inefficiencies. For example, distributors often lack visibility of Transpower constraints, leading to potential misalignment between transmission and distribution planning. This disconnected approach to information sharing undermines the effectiveness of connection planning and creates unnecessary complexity for both DG and load applicants.

Network capacity information requirements and implementation

The requirement to publish detailed capacity information at both the zone substation feeder and low voltage transformer levels presents significant commercial and practical challenges. [redacted]

[16] https://network-maps.ssen.co.uk/
[17] https://customer.nationalgridet.com/s/pre-application

The Authority has not demonstrated how providing granular data in a tabular, list format would benefit stakeholders. Our experience suggests that static capacity data provides limited value. In addition, meaningful capacity analysis requires sophisticated asset management software that are another significant cost borne by consumers.

We recommend that the Authority:

1. Develop an integrated, sector-wide approach to network capacity information sharing, by creating a single interactive network mapping platform covering distribution, transmission and generation.
2. Ensure that distributors have access to low voltage network data, at a reasonable cost, to support new connections to our networks.

O) What are your thoughts on the scope and granularity of the information to be published?

Orion submits in disagreement with the scope and granularity of the information the Authority seeks us to publish. The Authority should instead focus on developing requirements that support meaningful network visibility through interactive tools and real-time data access. This would provide more value to stakeholders while avoiding unnecessary costs associated with gathering and maintaining granular static data that offers limited practical benefit.

Proposal E questions: Update the regulated terms for DG

P) What are your thoughts on the proposed changes to the regulated terms?

Orion submits in disagreement to the proposed changes to the regulated terms and considers them not fit-for-purpose. As detailed in our response to Question C regarding contractual framework deficiencies, **we strongly recommend removing regulated terms entirely rather than attempting to modify them**. Large connections require sophisticated suites of interconnected legal agreements. A standardised regulated terms contract cannot adequately address the technical requirements, asset vesting provisions, liability frameworks, and quality of supply obligations necessary for successful project delivery.

Proposal F questions: Add regulated and prescribed terms for load applications and amend dispute resolution requirements

Q) What are your thoughts on the proposed regulated and prescribed terms for load? What changes would you make, if any?

As detailed in our response to Question H, we submit in strong opposition to the introduction of regulated and prescribed terms for load connections. As outlined in our response regarding contractual framework deficiencies, the Authority's approach of essentially repurposing the distributed generation framework for load connections fails to recognise the fundamental differences between these connection types, and risks creating confusion as the DDA would apply to most load applicants, who purchase electricity from a retailer.

R) What are your views on the proposed dispute resolution changes for Part 6? In what ways could dispute resolution be further improved? What are your thoughts on the alternative options to deliver dispute resolution discussed in this paper? Do you have any feedback on the 20-business day timeframe proposed?

Orion submits in support of efforts to improve dispute resolution processes; however we have concerns about the proposed framework.

The proposal to involve the Rulings Panel in specific disputes about conditions, measures, or charges payable raises concerns about expertise and appropriateness.

The proposal fails to address how the dispute resolution process would interact with dispute resolution mechanisms already established in existing commercial contracts. Creating a parallel dispute resolution pathway for these scenarios could create uncertainty about which process takes precedence.

The proposal also lacks clarity about whether an application timeline pauses when a dispute is raised over conditions or measures, or if a distributor declines an application.

We recommend that the Authority:

1. Explicitly state whether and how application timelines are affected by dispute notifications.
2. Consider whether the Rulings Panel is best placed to assess technical and commercial disputes between distributors and participants.

S) Do you consider the alternative contractual terms option discussed in this paper (and in the Distribution connection pricing consultation paper) would be better than the proposal without contractual terms? What are your thoughts on the other alternative options referred to?

As outlined in our response to Question C and Question H, Orion has a strong preference for the Authority to not provide regulated or prescribed terms for both load and distributed generation applicants.

We strongly support an industry-led approach to developing standard contractual terms rather than regulated or prescribed terms.

Proposal G questions: Increase record-keeping requirements for distributors

T) Do you support the proposal to increase the record-keeping requirements for distributors and why? What changes would you make, if any?

Yes, Orion supports the proposal to increase record-keeping requirements. However, the Authority should consider implementing 'sunset' provisions for historical records to manage administrative burden while maintaining meaningful oversight. The requirements should focus on information that provides genuine value for regulatory oversight and process improvement.

Proposal H questions: Introduce new Part 1 definitions and amend existing definitions (Part 1 only)

U) What are your thoughts on the proposed new definitions and amended definitions for Part 1 of the Code? What changes would you make, if any?

Orion submits in support of the proposed new definitions and amendments to existing definitions in Part 1 of the Code as they appear appropriate and provide adequate clarity for implementation. However, we have identified a significant issue regarding the definition of energy storage systems.

The Authority has proposed to change the definition of "generating plant" to include "energy storage systems." However, the current definition of "energy storage systems" specifies that the battery must take "electricity from a network." This creates a scenario where batteries charging exclusively from DG (rather than the network), but that are connected to the network, would not be considered an energy storage system, and thus be exempt from Part 6.

We recommend that the Authority remove the words "from a network" from the definition of "energy storage system". However, there may be other unintended consequences that may arise in the Code.

V) What other terms do you think the Authority should define and what definitions do you propose for those terms?

The Authority should provide detailed definitions of each application stage (pre-application, initial, interim, and final) to ensure consistent interpretation across the sector and reduce potential disputes about application completeness and state of progression. We propose the following definitions:

- **Pre-application** means a stage where an applicant has expressed interest in connecting to the distribution network but has not yet submitted any formal documentation. This may include initial discussions about connection feasibility, preliminary capacity checks, high-level technical guidance, and information gathering about connection requirements. No binding obligations exist on either party at this stage.
- **Initial application**, for the purposes of Part 6, means the formal commencement of the connection process where an applicant has submitted information as required in clause 2 of appendices 2, 3, 4 and 5 of Schedule 6.1.
- **Interim application**, for the purposes of Part 6, means a stage where the applicant has completed initial technical studies, provided preliminary design documentation, submitted initial load and/or generation modelling data, identified key project parameters, and received preliminary network connection requirements, but requires additional technical studies or design refinements, as required in clause 7 of appendices 3 and 5 of Schedule 6.1.
- **Final application**, for the purposes of Part 6, means a complete application package ready for final approval, where all technical studies have been completed and accepted, design documentation has been reviewed and approved, any required network upgrades have been identified and agreed, and all other distributor and third-party requirements have been met, as required in clause 7 of appendices 2 and 4 of Schedule 6.1, and clause 12 of appendices 3 and 5 of Schedule 6.1.

Proposal I question: Make minor and incidental amendments to Part 6

W) What are your thoughts on the proposed minor and incidental changes to Part 6? What minor and incidental changes has the Authority missed and what changes would you make, if any?

While the proposed minor and incidental changes to Part 6 are generally acceptable in principle, the consultation paper contains grammatical issues, formatting inconsistencies, and errors that should be addressed before implementation. These technical drafting issues, while minor individually, could create confusion or interpretation challenges if not corrected. We recommend a thorough review of the document to ensure accuracy throughout.

Transitional arrangement questions

X) What are your thoughts on the transitional arrangements for the proposals in this paper? Submitters can consider individual proposals when responding to this question.

Orion submits, while understanding the Authority's desire to implement changes simultaneously to minimise Code disruption, that the proposed 12-month transition period fails to account for the complexity of implementing these significant operational changes. The Authority's approach appears focused on speed rather than ensuring successful implementation.

We propose a phased compliance approach for connection timeframes that would better serve both distributors and customers:

- Year 1: Achieve compliance with timeframes in 80% of applications.
- Year 2: Increase to 90% compliance.
- Year 3: Reach 100% compliance.

This graduated approach would allow distributors to develop and refine robust processes, implement system changes, and train staff effectively to enable compliance with strict timeframes.

The Authority should also consider implementing a transitional provision that allows existing DG connection applications under Part 6, and all load applications, to continue under the existing framework. Clause 6.13 of Schedule 6.1 only applies to completed application processes that are already connected to our network.

The Authority must also engage with the Commerce Commission to understand how these requirements align with existing price-quality regulation. The proposed timeframes could create tension between connection obligations and broader regulatory requirements, particularly regarding:

- Expenditure allowances,
- Quality standards,
- IRIS incentive mechanisms, and
- Asset management obligations.

Y) What proposals do you consider the most important? How long do you think is needed to implement these?

The development of a comprehensive queueing and management policy through the ENA represents the highest priority initiative. Effective queue management is fundamental to ensuring fair, transparent, and efficient connection processes. The ENA's industry-led approach will draw on international experience while ensuring consistency across New Zealand distributors. This work is already underway with expected completion in FY25/26, and should be allowed to progress and inform the way forward without being constrained by a premature prescriptive regulatory approach.

The implementation of appendices 4 and 5 for load connections should be considered a lower priority. Orion already manages load connections effectively. Our experience with recent major load connections demonstrates that existing frameworks can successfully deliver customer outcomes when allowed appropriate flexibility. Rushing to implement new requirements risks disrupting processes that are currently working well.

Code drafting question

Z) Do you have comment on the Authority's drafting of the proposed Code changes? What changes would you make, if any?

Orion submits suggested drafting changes as follows:

3 Distributor must give information to distributed generator

A distributor must give a distributed generator that makes an initial application the following within 30 business days of ~~receiving the completed~~ confirming that the initial application is complete:

6 Distributor's decision on initial application

*(1) A **distributor** must, within 40 **business days** of ~~receiving the completed~~ confirming that the **initial application** is complete, give notice in writing to the **distributed generator** stating whether the **initial application** is approved or declined.*

3 Distributor must give information to applicant

A distributor must give an applicant that makes an initial application the following within 30 business days of ~~receiving the completed~~ confirming that the initial application is complete:

6 Distributor's decision on initial application

*(1) A **distributor** must, within 40 **business days** of ~~receiving the completed~~ confirming that the **initial application** is complete, give notice in writing to the **applicant** stating whether the **initial application** is approved or declined.*

Orion submits suggested drafting changes to appendix 3, which takes into account our feedback in this consultation response. This should be applied as well to appendix 5.

8 Notice to third parties

A distributor that receives a complete interim application must, within 5 business days:

(a) Update its network connections pipeline to reflect that the application is under interim assessment; and

(b) Make the updated pipeline available in accordance with Clause 6.3(4).

10 Time within which distributor must decide interim applications

(1) A notice required by clause 9 must be given by a **distributor** to a **distributed generator** no later than—

(a) 45 **business days** after ~~the date of~~ confirming receipt of a complete ~~the~~ **interim application**, in the case of **distributed generation** with **maximum export power** of less than 1 **MW**; or

(b) 60 **business days** after ~~the date of~~ confirming receipt of a complete ~~the~~ **interim application**, in the case of **distributed generation** with maximum export power of 1 **MW** or more but less than 5 **MW**; or

(c) 80 **business days** after ~~the date of~~ confirming receipt of a complete ~~the~~ **interim application**, in the case of **distributed generation** with **maximum export power** of 5 **MW** or more.

(2) The **distributor** may seek up to two extensions of the time specified in subclause (1).

(3) The timeframe will pause when the **distributor**:

(a) requires grid studies to decide the **interim application**; or

(b) has requested further information from the distributed generator applicant; or

(c) requires external consultation or review with the system operator or grid owner.

(3) The timeframe will resume on the **business day** after the **distributor** has:

(a) received the completed grid studies; or

(b) received the requested information from the distributed generator applicant; or

(c) completed external consultation or review with the system operator or grid owner.

13 Notice to third parties

A **distributor** that receives a complete **final application** must, within 5 **business days:**

(a) Update its network connections pipeline to reflect that the application is under final assessment; and

(b) Make the updated pipeline available in accordance with Clause 6.3(4).

14 Priority of final applications

(1) When managing multiple final applications that relate to the same part of the distribution network, the distributor must:

(a) assess applications in accordance with its prioritisation parameters published in its queueing and management policy that:

(i) align with the Government Policy Statement on Electricity;

(ii) consider contribution to security of supply;

(iii) support efficient network development; and

(iv) promote competition in the electricity industry;

16 Time within which distributor must decide final applications

(1) A notice required by clause 15 must be given by a **distributor** to a **distributed generator** no later than—

(a) 45 **business days** after ~~the date of~~ confirming receipt of a complete ~~the~~ **final application**, in the case of **distributed generation** with **maximum export power** of less than 1 **MW**; or

(b) 60 **business days** after ~~the date of~~ confirming receipt of a complete ~~the~~ **final application**, in the case of **distributed generation** with maximum export power of 1 **MW** or more but less than 5 **MW**; or

(c) 80 **business days** after ~~the date of~~ confirming receipt of a complete ~~the~~ **final application**, in the case of **distributed generation** with **maximum export power** of 5 **MW** or more.

18 Timeframe for negotiating connection contract if distributed generator gives notice of intention to negotiate

(1) If a distributed generator whose final application is approved gives notice to a distributor under clause 17(1), the distributor and distributed generator have 90 business days, starting on the date on which the distributor receives the notice, during which they must negotiate a connection contract.

21 Approved applications must meet milestones to retain priority position in distributor's network connections pipeline

(4) If a **distributed generator** exceeds stated tolerances found within a **distributor's queueing and management policy**, the distributed generator shall not retain its place in a **distributor**'s **network connections pipeline**, unless upon agreement by the **distributor**.

22 Treatment of approved applications at the same network location

(1) ~~A **distributed generator** may miss milestones and retain its place in a **distributor**'s **network connections pipeline** if no other **final application** is received in respect of that part of the **distributor's network**.~~

~~(2) If a **distributed generator** misses a milestone and another **final application** is approved for that part of the **network**, the **distributor** must inform the **distributed generator** within five **business days** and work with the **distributed generator** to set renegotiated milestones.~~

~~(3) If a project fails to meet any renegotiated milestones after following the process in subclause (2) above, the **distributor** may prioritise another application ahead of this project. The **distributor** must consider the purpose of Part 6 of this Code when making this decision.~~

~~(4)~~ A **distributor** must adhere to its **queueing and management policy** when making decisions on the priority positions of projects at the same network location in its **network connections pipeline**.

Appendix B – Required studies for approval of proposed connections

Task/Activity	Required tasks and outcomes
Model creation	Create a combined power system model for proposed generating systems to facilitate network studies.
Power flow study	Undertake load flow studies, confirming the proposed HV switchgear and cable and grid connection topology are suitable, and the proposed generation output can be achieved at the point of connection (PoC).
Short circuit study	Undertake short circuit studies, confirming the short circuit ratio at the point of connection, and any requirements for the reactive plant to remediate system strength shortfall.
Reactive power study	Undertake reactive power flow studies, confirming the proposed inverter system can provide the required reactive power at the PoC.
Protection study and report	Undertake a protection coordination study, confirming the distribution network protection co-ordination requirements between distribution network and solar farms. Provide a protection settings report.
Fault ride-through study	Undertake fault a ride-through study, confirming the proposed inverters can remain connected to the grid under typical transmission and distribution network disturbances.
Voltage regulation & tuning study	Confirm generation system voltage control strategies so that network voltages can be maintained within acceptable limits. Model the effects of generation changes caused by cloud cover. Define a control strategy to prevent the hunting of tap change systems on the network.
Transient stability study	Confirm whether the generating system can remain stable and connected under credible system contingencies. Define generation control strategy requirements during fault contingencies that result in distribution network line overload or over- or under-voltage.
Frequency regulation & tuning study	Confirm the ability of the generating system to respond to network frequency disturbances and to maintain compliance with the Code requirements.
Wide Area Protection Study & Report	Confirm protection coordination requirements between the transmission system and the distribution network, and requirements for any special protection schemes. Provide a protection settings report.
Modelling report	Investigate Code requirements and provide a report describing the performance of the solar farm that includes including a summary of any compliance requirements (including effects on instantaneous reserve requirements).
Harmonic distortion study	Confirm harmonic injection at the point of connection is within acceptable tolerance bands as defined by the System Operator and Orion's Network Code and whether harmonic filters are required.