



3 December 2021

Anna Collyer
Chair
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Submitted online: www.aemc.gov.au

Dear Ms Collyer

DWGM distribution Connected Facilities – Consultation Paper

Origin Energy Limited (Origin) welcomes the opportunity to provide comments on the Australian Energy Market Commission's (AEMC) Declared Wholesale Gas Market (DWGM) distribution connected facilities (DCF) Consultation Paper.

Origin supports the overarching intent of the rule change proposal, which is to facilitate the transparent and efficient trading of hydrogen and other renewable gases in Victoria. We note the rule change proponent has taken the view that this would most effectively be achieved by enabling DCFs to participate in the DWGM. While conceptually we are not opposed to this approach, this should not involve augmenting any core aspects of the existing market framework (e.g. bid limits or scheduling horizons) at this point. This is due to the likely disruption to existing market settings / systems and contractual arrangements; and uncertainty around the level of participation of hydrogen and other renewable gases in the DWGM in the near term given their current economics, as acknowledged by the AEMC.¹

It would therefore be prudent for the AEMC to explore the minimum scope of changes that would be required to enable DCFs to participate in the DWGM. We have provided our view on key changes that would be required to support such an assessment in Attachment 1.

If you wish to discuss any aspect of this submission further, please contact Shaun Cole at shaun.cole@originenergy.com.au or on 03 8665 7366.

Yours Sincerely,

A handwritten signature in blue ink, appearing to read "Steve Reid".

Steve Reid
Group Manager, Regulatory Policy

¹ AEMC, 'Review into extending the regulatory frameworks to hydrogen and renewable gases', 21 October 2021, p.g. 34.

Area	Feedback
Market operations	
Facility registration	It would be preferable to establish a new registration category for DCFs rather than expand existing categories. As noted by the AEMC, DCFs are likely to have different characteristics to other large supply sources injecting into the declared transmission system (DTS), which could impact the manner in which they participate in the market (e.g. there may be a need to impose localised blending constraints on DCF facilities to manage gas quality). Establishing a separate registration category would allow any requirements/arrangements specific to DCFs to be transparently applied.
Requirement to submit bids and gas scheduling	We agree all relevant bidding and scheduling rules would need to be updated to enable DCFs to participate in the DWGM on an equivalent basis to existing facilities injecting gas into the DTS. Conceptually, there do not appear to be any fundamental market design issues that would preclude such an approach. However, as discussed further below with respect to the application of bid limits and scheduling horizons, we do not consider it appropriate to augment any core aspects of the existing market framework to facilitate the entry of DCFs at this stage, particularly given the level of uncertainty around the timing of development and penetration/scale of such facilities. As noted by the AEMC, in the absence of some form of economic support (at least initially), natural gas equivalents are unlikely to be cost competitive with natural gas and therefore derive any benefit from participating in the DWGM bidding/scheduling process. ²
Demand forecast	Market participants are currently required to provide AEMO with hourly forecasts of uncontrollable withdrawals from the DTS to inform scheduling outcomes, with the assumption being that gas withdrawn from the DTS is equal to gas withdrawn from the Declared Distribution Systems (DDS). Where injections into the DDS are enabled, we therefore agree it would be necessary to update demand forecasting requirements to account for those injections and ensure supply/withdrawals from the DWGM balance for scheduling/settlement purposes.
Determination of market price	Any constraints applicable to DCFs (e.g. blending constraints) should be treated on an equivalent basis to existing supply-side constraints, and therefore included in the operating schedule rather than the market price schedule. This approach would ensure the costs associated with scheduling out of merit order injections and/or withdrawals to accommodate any DCF constraints are allocated on a causer pays basis and not reflected in a higher ex-ante market price. It would also support market transparency and likely improve AEMO's ability to manage gas quality in impacted distribution networks through the scheduling process, which may be important in the context of managing the aggregate impact of multiple facilities on gas quality.
Operating schedules	
Capacity certificates	Origin generally agrees DCFs should be permitted to access capacity certificates where they value the associated tie-breaking rights as a tool for managing scheduling risk. This would assist with ensuring DCFs can participate in the DWGM on an equivalent basis to other market participants. Given the capacity certificate framework is currently only designed to capture zones on the DTS, it would be useful for the AEMC to explore what changes would practically be required to accommodate DCFs. At a minimum, we consider system capability modelling undertaken by AEMO to determine the volume of certificates available for allocation through capacity certificate auctions would need to account for the inclusion of any new DCFs.
Market outcomes	

² Ibid.

Title, custody and risk	We agree a more detailed assessment is required to understand whether co-mingling of gas injected at the distribution level can already be accommodated under existing rules/laws and how title/custody transfer of gas injected by DCFs could be managed. Regarding the latter, the AEMC should also seek to clarify whether title/custody of gas injected from DCFs would need to reside with the individual DDS service providers, and if so, whether an equivalent version of rule 220 (1) would still need to apply to allow AEMO to give effect to any transfer of title through the scheduling process.
Participant compensation fund	The existing mechanism would need to be expanded to include contributions from DCFs to ensure costs associated with the participant compensation fund are recovered on an equitable basis from all relevant market participants.
Allocations and determination of fees payable	Origin's preference would be to expand the existing framework to allow for the allocation of injections from DCFs to market participants. This would ensure injections into the DTS and DDS are treated on an equivalent basis for the purpose of settlement and fee application. It would also avoid any additional complexity associated with revising the current withdrawal allocation methodology to treat DCF injections as negative demand.
Default notices and market suspension	We agree the existing rules governing the application of default notices and market suspension should apply to all relevant market participants and therefore be expanded to included DCFs.
System operations	
Application of the connections framework	We agree the connections framework would need to be expanded to cover distribution injections. However, it would be important to ensure any associated changes do not materially impact connections agreements / contractual rights associated with existing facilities connected to the DTS. This would most effectively be achieved by only applying any changes to the connections framework to new connections (i.e. not retrospectively applying changes to existing facilities).
Obligations of the declared system service providers	Origin is generally supportive of adopting an approach to managing DCF connections that is consistent with the existing framework applied to DTS connections. I.e.
AEMO's obligations in assessing and approving connections	<ul style="list-style-type: none"> ▪ DDS service providers would be responsible for facilitating the DCF connections application process; and ▪ AEMO would be responsible for approving the connections application, having regard to any broader system operation and security issues. <p>To the extent the AEMC considers the DDS service provider would be best placed to approve connections given its role in operating the network, the DDS service provider should still be required to consult with AEMO as part of the connections process to ensure any broader system operation and security issues can be adequately considered.</p>
Connected parties' obligations	It would be appropriate to update the rules to require DCFs to comply with all requirements and conditions set out in the connection agreement with the respective DDS service provider and any other relevant obligations for connected/connecting parties, consistent with the framework applied to DTS connections.
Gas quality	Origin is generally supportive of Option 1 as proposed (i.e. expanding AEMO's role to set the gas quality standards for DCFs, approve monitoring systems/plans and actively monitor gas quality at distribution injection points). This approach would ensure DCFs are treated on a consistent basis across different networks and likely improve AEMO's ability to manage any potential gas quality issues through the imposition of blending constraints if necessary.
Metering	We agree the rules should be updated to establish metering accuracy and calibration requirements for DCFs and are supportive of requiring approved

	metering installations to be registered with AEMO. Regarding the latter, the current requirement for market participants injecting/withdrawing gas into a DDS to seek approval from the relevant service provider prior to installing their own compliant metering seems appropriate.
Threats and interventions	Origin agrees AEMOs intervention powers should apply equally to DTS facilities and DCFs, with DCFs also permitted to claim compensation for losses incurred due to AEMO directions. Any gas quality / safety issues that could emerge as a result of AEMO directing the injection of blended gas could likely be more easily managed where AEMO has oversight of DCF gas quality standards and monitoring.
Other issues	
Alternative solution 1 – supply from distribution connected facilities managed contractually	The alternate options proposed would allow supply from DCFs to be managed contractually, rather than through the DWGM. A key limitation with this approach is that it would reduce the level of transparency around the operation of DCFs and their impact on supply/withdrawals from the DTS. Requiring supply from DCFs to be managed as negative demand to offset supply from the DTS (as proposed under option 2) could also have implications for market efficiency, given it could distort bidding/scheduling outcomes in the DWGM.
Alternative solution 2 – supply from distribution connected facilities managed as negative demand	
Materiality threshold	As noted in the Consultation Paper, the implicit 1 GJ bid limit could potentially create a barrier to entry for smaller DCFs. However, we do consider it would be appropriate to revise the limit at this time (i.e. to allow for decimal place bidding), given: <ul style="list-style-type: none"> ▪ system changes would be required to enable such bidding; and ▪ there is significant uncertainty around the future penetration and size of DCFs and by extension, the benefits of pursuing such a change. A more prudent approach would be to assess whether a reduced set of bidding requirements could be applied to DCFs. Consideration could also be given to allowing DCFs to aggregate supply from different sources to meet the 1 GJ bid limit.
Scheduling intervals	Consistent with our view on bid limits discussed above, we do not believe it would be appropriate to increase the number of scheduling intervals in the DWGM. This would represent a fundamental change to the existing market framework and therefore need to be predicated on addressing a material market inefficiency, rather than seeking to provide a new participant category with additional flexibility to rebid injections into the market. It is also unclear whether the four hourly scheduling horizons would materially impede the flexible operation of DCFs in practice.
Impact on contracts market	It is difficult to evaluate the potential impact of the proposed rule at this stage of the process given many of the concepts discussed are yet to be fully defined. However, we agree with the AEMC's view that changes to the gas specification under the rules/law could trigger changes to existing transportation/supply agreements depending on the terms of those contracts. Existing contracted positions for off-take from the DTS into the DWGM could also be subject to additional delivery risk, given DCFs may impact how constraints are applied, the level of congestion and scheduling outcomes more broadly.