DMIAM – Customer Panel response

This document has been prepared as a brief response to a question from our Customer Panel about projects Powerlink considered to date for the Demand Management Innovation Allowance Mechanism (DMIAM) and why these projects are appropriate to be progressed under other mechanisms.

Our Revenue Proposal noted that the scale of electricity transmission infrastructure and the large quantities of energy being transported across the transmission network can mean there are fewer opportunities for demand management to provide a suitable alternative to network investment[1].

Given this, we stated that our initial thinking is to explore how we might be able to harness demand management capability to extend existing transmission network limits sometime in the future[2], and that we want to ensure that such initiatives are not already captured or better catered for under our operating expenditure or other relevant incentive schemes[3].

Our Revenue Proposal further identified some conceptual demand management projects that we may explore further[4]. At our Customer Panel meeting on 12 May 2021, we also identified the potential to explore initiatives to address minimum demand issues, such as research of incentive structures to encourage electric vehicle charging to fill demand troughs[5]. We have grouped these conceptual ideas into three broad categories to explain how and why we think they could be progressed outside of the DMIAM.

Category		Potential identified projects
1	Harness very fast acting resources, such as batteries, to extend existing transmission network limits	• Co-ordinate charging and discharging of batteries at either end of a transmission line or transmission corridor to operate as a virtual transmission line • Trigger a mode change on a battery as part of a System Integrity Protection Scheme (SIPS), as an alternative to tripping other generation or load • Co-ordinate fast acting batteries with slower response resources, such as embedded generation, to facilitate slower response resources contributing to address power system stability limits.
2	Access demand management resources on distribution networks to improve transmission network outcomes	• Establish high speed two-way communications between existing transmission network control schemes and distribution connected resources.
3	Addressing minimum demand	• Investigate pricing and other incentives to encourage electric vehicle charging to fill demand troughs.

Projects in category one may be suitable to be progressed through the Network Capability Component (NCC) of the Service Target Performance Incentive Scheme (STPIS) as a source of additional operating and/or capital expenditure funding, and we would consider such projects within the 2023-27 regulatory period. Extending transmission network limits can be expected to deliver immediate benefits to customers through improved wholesale market outcomes, such as reduced congestion. The NCC encourages Transmission Network Service Providers (TNSPs) to identify suitable low cost one-off operational and capital expenditure projects that improve the capability of the transmission network at times when it is most needed[6].

[1] 2023 – 27 Powerlink Queensland Revenue Proposal, p167
[2] *Ibid*
[3] *Ibid*
[4] *Ibid*
[5] Presentation available at: www.powerlink.com.au/customer-panel
[6] Electricity TNSP service target performance incentive scheme, Final Decision, September 2015, AER, p7

Projects in category two may need to occur in any event to provide ourselves and the Australian Energy Market Operator (AEMO) with the tools needed to maintain power system security in a rapidly evolving energy transition. It is increasingly important to enhance TNSP and AEMO visibility of key resources within distribution networks. Communications facilities to provide visibility will likely also allow for two-way communication across network boundaries. If that is the case, we will prioritise these activities against other capital and operating expenditure within our overall allowances.

Projects in category three would be likely to be progressed jointly with Energy Queensland, either as part of our normal joint planning and development activities, or separately funded and researched through the Australian Renewable Energy Agency (ARENA), a Cooperative Research Council (CRC) or similar.