Date: Tuesday 18 June 2019	**Start time:** 11.30am	**Finish time:** 2.00pm	**Venue:** Whittaker Room Powerlink 33 Harold Street Virginia QLD 4014
Facilitator: Gerard Reilly (Powerlink)		**Minutes:** Nicole Maguire (Powerlink)	
Attendees: Georgina Davis (Queensland Farmers' Federation) Mark Grenning (Energy Users Association of Australia) Chris Hazzard (St Vincent de Paul Society) David Hiette (BMA) **Powerlink panel members:** Jenny Harris Narelle Fortescue **Powerlink attendees:** Jason Horan Julian Thomas Matthew Myers	**Powerlink presenters:** Mahesh Narotam **KPMG presenter:** Andrew O'Connor		
Attachments will include all documents provided to panel members at the meeting including: PowerPoint presentation and pre-reading document			

Item	Discussion	Action	Due date	Who
1	**Welcome to Powerlink and introductions** **–** Gerard Reilly, General Manager Communications			
2	**Overview of Asset Intervention Criteria - purpose and process for development** **–** Mahesh Narotam, Manager Portfolio Planning and Optimisation Summary: • Background to development of transmission network over time • Profile of ageing transmission network and requirement for asset intervention • Definition of intervention and process for developing draft criteria **Asset intervention proposed criteria and technical examples** - Andrew O'Connor, KPMG Summary: • Explanation of practical application of criteria on two different examples – transformers and secondary systems **Comments (C), questions (Q) and Powerlink response (R)** **Q:** Do you have data on network utilisation over time? **R:** We have some basic info, but not specific data as such. **C**: I know this is available for DNSPs, but not for TNSPs. **Q:** Can I suggest if you're able to provide that it would be helpful?			

	Q: Do you have costings for what it costs to manage your asset register? **R:** Do you mean the costs associated with managing the register, like the corporate costs of doing that? **R:** We would probably have to gather a bit of information for that. It's not something we have readily available. **C:** If it's information you can put together that would be helpful. **C:** We can make a note to get that information, but just be mindful that the information is not managed by just one part of the business, it's used and managed by lots of areas of Powerlink. We will certainly have a look, but it might be high level. **Q:** In your options analysis, do you have a 'do nothing' option? **R:** Yes, we do analyse that as an option. **C:** In that case, it's confusing because you've identified a need to intervene already? **R:** Asset intervention can have a capex element and an opex element. Doing nothing might mean you don't intervene in a capex sense, but you might spend some money in opex to meet that need. **C:** We take your point - we are talking about once we have established the need to do something. We're keen to share with you the process for working out the need to intervene in the first instance.	**Powerlink to prepare an overview of costs associated with managing its asset register.**	**Anticipate providing a high level overview at the next Panel meeting in early August.**	

	C: It's about getting us closer to that point where we're not replacing assets too early, and we're actually closer to a point in time when intervention is needed. We can talk you through the proposed framework for how we're proposing to establish that point. **Q:** So are you considering anything above non-compliance as your end of life? **R:** Technical end of life is one of the considerations in this framework yes. **Q:** And is the framework just about physical assets? It doesn't include your SCADA, software? **R:** Correct, yes. **C:** In the past, lots of decisions were in the technical realm, and were based on a technical argument. We wanted to develop a checklist where people are able to link through the value chain for decision making. This is not a linear process, it involves working through all aspects of the value chain or framework, in the order that's reflective of the need. We can talk through examples and the practical application of these. **C:** What we're saying is that as we collect more data and get better insights into what the technical limits of certain assets are, and as new technology comes in, we can change our process. In other words, we're not sticking with this as the framework and it can't change. We can adjust it as needed. **C:** It's definitely a framework that will service our needs in the future and work with change. It's not a linear, locked in process that cannot be adjusted in future. **Q:** What concerns me is that I don't want to see an asset management process that costs more than the actual assets. We're seeking that in another GOC in			

	Queensland. They are spending more on managing the asset register than the cost of actually managing their assets – I believe somewhere in the order of 350% more. **R:** We'll definitely take note of your interest in that area and factor that into our discussions from here. **C:** It's not just about the condition of an asset, it's also about the functionality that those assets perform within the system. We have to consider all those other connecting elements within the system as well. **Q:** I understand that you're starting with customer value in this process, but there's a lot of technical steps after that. How do you feed that engineering based decision back through to the customer? I'll also be interested to see how you measure things like customer value. **R:** A large part of this engagement process is considering how best we can do that. **C:** I'd like to make the comment again that I would like to see that cost element. We want to make sure that this intervention process isn't costing more than the intervention itself. **C:** We can look at which option might minimise cost, but meet the timing requirement for the network to manage the risk as well. We do consider customer value as well. We can certainly make that aspect more explicit in the framework. **C:** We also have the Regulatory Investment Test for Transmission (RIT-T) process that considers these elements.			

	C: Also be aware that when we go through the revenue reset process this is the sort of discussion we have with the Australian Energy Regulator (AER). In regards to the methodologies and asset management framework, we have lots of discussion with the AER and its consultants to explain our approach and process. But this is our first real discussion with customers on this piece of work. **Q:** How are other network businesses doing this? Is anyone else consulting on this type of asset intervention work? **R:** Not aware of anyone else engaging on asset intervention approaches. It's well worth you looking at other GOCs. There are some examples of how not to manage your asset register, and there are others who have articulated this well through their revenue reset. **C:** We are definitely seeing it as a challenge in terms of how we communicate the customer value when you're looking at potential interventions. **Q:** Compliance is a very black and white story. There are no shades of grey it seems, so is there no option for Powerlink to do anything different in regards to those? **R:** What we're looking at here is Powerlink's interpretation of those regulations. **Q:** I'll give an example. Ausgrid just completed their revenue determination and had identified an environmental risk around oil-filled cables in Sydney Harbour. The company decided not to put that cost onto customers and bear the cost of the work required themselves. Would you consider that? **R:** We are only looking at the need to intervene here. Not what action will be taken or options considered post that.			

	Q: Where does the level of risk sit in that? Surely the level of risk is driving the desire to do something? **R:** We have an obligation to meet an N-1-50 planning criteria but in theory we could decide to do something different in negotiation with direct connect customers. **C:** The rules and regulations around this process can be subjective. We're trying to be transparent about how we identify other layers on top that also come into the decision making. **C:** The customer focus I'm looking for is Powerlink deciding to take risks. That you are making decisions based on accepting risk. I'll tell you what customer focus is for me. It's about having an obligation to meet but doing that in varying ways. I'm talking about decisions based on risk and not pushing that risk all back on customers. It's about saying I can decide not to do anything for five years. The chances of there being an impact will be low, so I make a decision not do anything. **Q:** So the red line on the graph *(regulatory non-compliance limit)* is a subjective judgement? **R:** Based on a number of factors, the red line is the compliance limit for an asset. **C:** However, we might take a risk-based decision depending on the situation. **Q:** So in reality the red line is both objective and subjective – both things make up the red line? **R:** Yes, correct.			

	C: The issue for customers will be around how much of each. If it's 5% objective, then they're not going to be happy with your framework. **R:** The idea is that following the degradation curve trajectory you will intersect the regulatory non-compliance limit so you start considering your options before that happens. It's a trigger for us to look what we might do to manage the risk rather than the trigger to reinvest. **Q:** How does this asset intervention criteria get applied? At what point will it look at asset life cycle? I mean looking at a selection of assets, how they're managed, what operations and maintenance is required through to end of life. **R:** We will include these principles throughout its life cycle. What I'm hearing you ask is if we bought Asset A and expect its life to be 40 years, then we find out it's really only 25 years, how do we factor in that we shouldn't buy that asset again? Correct? **Q:** Similarly, what happens if your expert in the field says it will actually last longer? **R:** We adapt based on past experience and empirical evidence. We currently work on our own empirical data and experience, as well as experiences from other utilities and OEMs (original equipment manufacturers). We're trying to get better information but we work with what we have. **C:** Where we don't have some of that data ourselves, we are basing decisions on best practice based on examples of this throughout the world. We have seen examples of these same assets being run past a point and suffering catastrophic failure. **Q:** So it's not based on manufacturer's life at start of life cycle?			

	R: No, it's based on examples and evidence. **Q:** If you say on the basis of an asset's international standard that you have to do a potential intervention, but your experience is different then you can look at that and make a decision not to do anything for another five years? The flexibility is there? Bearing in mind that a bit of kit in Cairns will have a different life to one in Toowoomba. **R:** In the transformers example, the DP (*depolymerisation*) value of 200 is the actual limit for non-compliance, so we want to make sure we catch it at that point. In this example, when the transformer reaches a DP of 450, and considering the intervention lead time of five years, we will start considering what we might do. We might look at it, consider factors and make a decision to look back at an intervention in 5-8 years, or not at all. It will depend on the asset and the circumstances. **C:** There will also be certain assets in some areas where we might need to bring that point forward. **C:** In terms of failure events, consideration should be given to having a customer line in the table as well. **C:** I think you need to explain the Powerlink intervention limit. So a DP value of 450 is when you start thinking about investigating – it's the initiation point for investigating, not the point where you decide whether there's a need to intervene. **C:** A DP value of 450 at that point in time is a forecast of degradation. It's when we need to start thinking about investigating. **C:** Again, this links back to my point about costs in relation to managing your asset register.			

	Q: In all of these steps where have costs been considered? **R:** The least cost option is considered in the options analysis. **Q:** Is it a constrained efficiency? Rather than a cost benefit analysis, look at it as 'is this the best option'? **R:** That consideration is done in the options analysis. That's where we look at benefit and cost. **Q:** My question is around when you make your decision that you need to take action, it's a technical one not an economic one. I'm wondering why that is? That's why we have VCR (value of customer reliability).It's great to replace an asset because an engineer says so, and then assume the customer gets the best value because an engineer said so. What I'm getting at is that the customer might be able to accept variability in reliability. But you don't know because you haven't factored that in. **C:** I have a very different view – reliability and 100% power availability is critical. **C:** My experience is that even in smelters, they are prepared to accept a certain amount of interruption. There is a price at which they are prepared to accept interruptability. Customers might accept the same intervention. That's where the importance of VCR comes in. **R:** We are talking to our directly connected customers regularly and make them aware of interventions that are coming up. We talk to them and say 'here's what we're considering' and they are very upfront about what they are willing to accept.			

	C: If BHP were paying all those costs then it'd be fine. But they're not, all customers are. If a structure was in place for big users to pay for better reliability then great. But the rest of Powerlink's customers who aren't directly connected customers are paying – the cost is smeared across the postage stamp. **C:** If different pricing zones could be in the next regulatory proposal, then that might resolve the issue. **C:** A requirement of the RIT-T is the need to consider customer impacts. In other words, if we were to do this, what is the impact on our customers? **C:** The key thing here is that we're trying to make a framework that some consider could be subjective, into a more objective and transparent process. **C:** I think a big part of the issue here is language. I think that's where we are seeing the disconnect. There is really never a 'do nothing' option. You always do something but it differs in cost and what you actually do. Maybe don't use BAU as part of the terminology? That could be the issue in communicating this. What does BAU mean, because I think what it means to you will mean something different to someone else. **Q:** In relation to the secondary systems example, how much is this criteria going to drive your inventory strategy going forward? **R:** If a secondary system asset life is 20 years, we replace on fail with an equivalent component and buy inventory accordingly. In the options analysis, we look at availability of spares as well. **Q:** So five years is variable based on the asset? **R:** It will change asset to asset, it will definitely vary.			

	Q: Do you get info from suppliers re new products or the sale of items stopping? **R:** We do get info from suppliers. They usually give us enough notice to be able to replace what's required. It's important to again remember that we're talking about identification of a need to look closer at an asset, not when we need to actually replace or intervene on the asset. **C:** We obviously have to get better at explaining this, including to the AER and their consultants. We need to better explain at what point we would take action. **C:** I think the examples we've gone through here today will be good for showing stakeholders what you're talking about. **C:** I also think it'd be good to clarify what's an intervention and what's BAU. **R:** For us BAU is doing something outside the usual maintenance cycle. **Q:** Does the definition of intervention we're using capture it adequately? **C:** It doesn't say what the trigger is. **R:** Normally we would separate capex and opex out. Capex is basically works that are going to extend an asset's life, and opex is BAU. But I can see that sometimes it's not as straightforward as that. Sometimes we can get lost in the terms. **C:** This is where benchmarking comes in. The AER's benchmarking is not treating TNSPs as like for like in some areas. There's expenditure on opex to meet required functionality and achieve its life, and capex spending to extend			

	an asset's life. But some TNSPs are calling things like this capex, whereas we call it opex. It's not like for like. This is one of the reasons we do not benchmark the same as other TNSPs. **C:** The terminology is not right. Saying 'the need to intervene' is misleading. Maybe it's that you assess the possibility of a need to intervene? **C:** I agree, it's about that these are the triggers to assess the possible need for intervention. That might be better words? You're not hitting that green line and then intervening and investing in an option. You're just starting the investigation. **C:** That's right, it's a trigger to have a look to see if we need to do anything. **Q:** Are we over-complicating or over-simplifying? **C:** I think we've given you some pointers around language and better understanding in communications. This will help not just with consumer advocates, but with the AER as well. Also, I see customer value in terms of cost, so I'd be keen to see you implanting costs at each stage in the process. **Final questions or concerns?** **R:** We need to see more info on the management of your assets and what it costs. **Q:** I'd be interested in how it all fits into the RIT-T or regulatory submission. If you've identified a need, is that need included in the revenue determination or is it just in planning? Also, is intervention the right word? It implies that you're running something down to zero and need to intervene. I think you'll find people get stuck on that word.			

	Q: Is intervention used in the International Organisation for Standardisation (ISO)? **R:** All transport utilities and some water utilities use intervention in these circumstances. **R:** Maybe we need to look at the wording. It's the limit that we're trying to identify. It's the point we need to do something different to BAU. In other words, we're talking about the trigger that says 'I'm going to have to do something more than BAU in future'. So you can look at that and decide what needs to be done. **C:** If we just continue on the current trajectory of the degradation curve, then that's BAU. But an intervention will take it off that course and shift timings. **C:** If we take tower condition for example, if we have corroded bolts, rusted members etc we can intervene and replace bolts and then the condition of the asset goes back up. It's not 100% but it is in better condition than it was. Then the curve lifts. **Q:** If there are multiple interventions required in a regulatory period, do you ask for more money or just manage it? **R:** Capex is based on when we need to invest, not when we have a look at it. **Q:** How does this feed into the repex model? **R:** The business will look at this and our assets, and feed it into that process.			

	Key takeaways **C:** For me it is a bit over-simplified. I was looking for more detail, so for me you've taken too much away from the model. But at the end of the day, maybe a simpler model works better for other stakeholders. **C:** A key comment for me is 'who do you want to communicate this to'? That needs to be the key thing you keep in mind. **R:** Once this is finalised, we want to give certainty and confidence to stakeholders that we're applying a robust process. We want to be able to say to stakeholders that this is our overarching approach but we're not wanting to give a case by case run through to stakeholders for all reinvestments. **C:** In that case, I think it will be important to pull out that customer value thing. Explain that the replacements you're doing are cost effective and timely. It's a robust process. **C:** The difficulty will be in explaining this to different people. Normally you get better at it each time, but I'm not sure that's the case here. So we need to think about that language and how we're talking this through. **C:** Our commitment from here is to provide an updated document with the pre-reading and check in on whether we've accurately captured your thoughts and views. We need to ensure we've incorporated your feedback from today into updating the document.			
3	**Meeting closed at 1.40pm**			