MURRAYLINK FORECAST REVENUE

Presentation to the Murraylink Stakeholder Engagement Group

ACKNOWLEDGEMENT OF COUNTRY

 We begin today by acknowledging the Traditional Custodians of the land on which we meet today, and pay our respects to their Elders past and present. We extend that respect to Aboriginal and Torres Strait Islander peoples here today.

FORECAST REVENUE

 Forecast Revenue for FY 24 to 28

Forecast Revenue (\$m Real FY23)	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Revenue	12.7	13.1	13.5	13.9	14.4	67.7

 Comparison to current period revenue

Revenue comparison (\$m Real FY23)	Revenue
Current	80.8
Forecast	67.7
Difference	- 13.1
Percentage	- 16%

MOST SIGNIFICANT IS REDUCTION IN RETURN

Forecast return	Forecast Return (\$m Real FY23)	2023-24	2024-25	2025-26	2026-27	2027-28	Total
bollang block	Return on Capital	4.9	4.9	4.8	4.6	4.4	23.6

- Rate of Return comparison
- Noting that current year is FY2022 (5.4%). Forecast starts FY 2024

Rate of return	Current	Forecast	Difference
Return on Capital	5.7%	4.3%	-1.4%

OTHER BUILDING BLOCKS

Debt Raising Costs

Total

 Forecast depreciation 	Forecast Reg Depn (\$m Real FY23)	2023-24	2024-25	2025-26	2026-27	2027-28	Total
	Reg Depn	3.0	3.5	4.6	4.8	5.0	20.8
 Forecast operating expenditure 	Forecast Opex (Sm Real FY23)	2023-24	2024-25	2025-26	2026-27	2027-28	Total
	Controllable	3.7	3.7	3.7	3.7	3.7	18.3
 Forecast tax 	Uncontrollable	0.8	0.8	0.8	0.8	0.8	3.9

0.1

4.5

0.1

4.5

allowance \$0

4.5

0.0

0.2

22.5

0.0

4.5

0.1

4.5

FORECAST CAPITAL EXPENDITURE

Forecast Capital Expenditure						
(\$m Real FY23)	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Forecast Capital Expenditure	4.7	4.7	2.4	1.4	1.3	14.5

Forecast Opening Asset Base (\$m					
Real FY23)	2023-24	2024-25	2025-26	2026-27	2027-28
RAB	117.2	115.7	110.9	104.9	98.8

IGBTS

• Forecast Capital Expenditure for increasing spare IGBTs

	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Obsolete IGBTs	0.4	0.4	0.4	0.4	0.4	1.9

Revenue Forecast (excluding additional IGBTs)

Forecast Revenue (\$m Real FY23)	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Revenue	10.5	10.9	11.4	11.8	12.2	56.9

Revenue Forecast (including additional IGBTs)

Forecast Revenue (\$m Real FY23)	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Revenue	10.5	11.0	11.4	11.8	12.3	57.0

IGBTS - ANALYSIS

 Given the low cost of the spare IGBTs; the low failure rate; the low cost of storage; and the cost of replacing gen 2 IGBTS on a phase of Murraylink, the NPV analysis strongly supports acquiring enough IGBTs to last the converter to the end of its life (26 years). Maximum net benefits are derived if all IGBTs are brought in the first year of next transmission determination period(NPV Benefit \$5.4m).

Modelling assumes:

- the number of replacement IGBTs needed to maintain operation- 28 per annum (current purchases of spares)
- Expected cost of replacing a phase of IGBTs \$20-30m
- Discount Rate Proposal WACC
- The weakness of this analysis is that only factors that can be quantified can be included. Examples of unknowns are:
 - Probability of catastrophic loss of stored IGBTs (Fire, flood etc)
 - Warranty conditions from Hitachi regarding stored IGBTs
 - How many IGBTs Hitachi will sell to Murraylink
- Estimate of remaining spare generation two IGBTs in the world is 500-600. At current failure rates Murraylink needs 445 additional IGBTs to enable converter to reach end of regulatory life. Hitachi refused to allow <u>Directlink</u> to buy more than half of the remaining IGBTs (two known users of gen 1 IGBTs) after announcing obsolescence. There are more users of Gen 2 IGBTs (2 HVDC lines and Multiple Static Var Compensators). Expectation is that Hitachi will allow Murraylink to buy less than half of outstanding IGBTs after announcing obsolescence.
- The proposal currently has 22 additional IGBTs purchased each year for total annual purchases of 50 (250 IGBTs to be bought in the next transmission determination period of which 140 will be used in the next period for a net gain of 110 IGBTs).
 - Balances the benefit of early purchases of IGBTs with the risk that ABB will limit the number of IGBTs Murraylink can purchase below the level Murraylink needs

What are Stakeholders views on the suggested approach by Murraylink?

REVENUE ALLOCATION

- Currently revenue is allocated to 55% to AEMO and 45% to ElectraNet (55% of the cable length is in Victoria).
- Simple alternative allocators could be:
 - Weighted asset location (Vic: 52% SA 48%)
 - Cable and Easements \$46.2m (Vic :55% SA 45%)
 - Other assets \$57.0 (Vic:50% SA 50%)
 - Total all assets \$103.2m (Vic: 52% SA 48%)
 - Historical electricity flows (variable year on year but more would be allocated to ElectraNet than AEMO)
 - Total volumes (Kwh)
 - Peak Level (Kw)
 - Value weighted (spot price x volume)
- Is there an appetite amongst stakeholders to explore approaches to revenue allocation further?