



TransGrid

**TransGrid Revenue Proposal
2018/19 – 2022/23**

Appendix W

Depreciation Schedule

Depreciation Schedule

Inputs for Post-Tax Revenue Model

Asset Class	Opening WDV	Ave Lives Remaining	Standard Life	Forecast Net Capital Expenditure – As Commissioned (\$m Real 2017/18)				
				2018/19	2019/20	2020/21	2021/22	2022/23
Transmission Lines (pre 2004-05)	896.96	14.1						
Underground Cables (pre 2004-05)	190.36	26.3						
Substations including Buildings (pre 2004-05)	561.65	12.5						
Transmission Lines (2004-09)	203.29	40.1						
Underground Cables (2004-09)	8.54	32.4						
Substations including Buildings (2004-09)	919.27	29.8						
SCADA and Communications (2004-09)	36.03	4.8						
Transmission Lines & Cables (09-14)	467.14	44.6						
Substations (09-14)	983.64	34.2						
Secondary Systems (09-14)	71.11	29.5						
Communications (09-14)	95.81	29.4						
Minor Plant, Motor Vehicles & Mobile Plant (2009-14)	11.54	2.2						
Transmission Lines (2014-18)	147.72	49.5						
Underground Cables (2014-18)	8.12	43.6						
Substations (2014-18)	469.42	38.2						
Secondary Systems (2014-18)	105.45	13.6						
Communications (short life) (2014-18)	73.19	9.0						
Business IT (2014-18)	35.85	3.1						
Minor Plant, Motor Vehicles & Mobile Plant (2014-18)	26.65	6.8						
Transmission Line Life Extension (2014-18)	5.60	24.1						
Residual - other	-	1.41	1.0					
Transmission Lines (2018-23)			50.0	25.54	10.48	0.38	1.44	167.63
Underground Cables (2018-23)			45.0	0.00	0.00	0.00	0.26	58.17
Substations (2018-23)			40.0	116.17	110.59	91.89	54.42	380.03
Secondary Systems (2018-23)			15.0	19.31	38.69	61.32	39.92	92.60
Communications (short life) (2018-23)			10.0	8.40	6.30	8.07	5.50	7.34
Business IT (2018-23)			4.0	13.79	28.42	28.01	14.88	17.57
Minor Plant, Motor Vehicles & Mobile Plant (2018-23)			8.0	10.24	11.96	9.97	8.09	8.71
Transmission Line Life Extension (2018-23)			25.0	10.48	7.16	14.55	79.71	118.12
Land and Easements	893.58	n/a	n/a	3.12	0.89	0.21	-	5.77
NSCAS Assets			35.6	25.66	-	-	-	-
Equity raising costs	1.30	32.6	31.2					
Total	6,210.82			232.72	214.50	214.40	198.44	869.08

Based on these inputs, the PTRM will calculate the amount of straight-line depreciation annually. These amounts will then be entered into the depreciation schedule below.

Depreciation Schedule

Asset Class	Straight-line Depreciation (\$m Real 2017/18)					Total
	2018/19	2019/20	2020/21	2021/22	2022/23	
Transmission Lines (pre 2004-05)	63.47	63.47	63.47	63.47	63.47	317.33
Underground Cables (pre 2004-05)	7.24	7.24	7.24	7.24	7.24	36.19
Substations including Buildings (pre 2004-05)	45.02	45.02	45.02	45.02	45.02	225.11
Transmission Lines (2004-09)	5.07	5.07	5.07	5.07	5.07	25.36
Underground Cables (2004-09)	0.26	0.26	0.26	0.26	0.26	1.32
Substations including Buildings (2004-09)	30.87	30.87	30.87	30.87	30.87	154.35
SCADA and Communications (2004-09)	7.54	7.54	7.54	7.54	5.87	36.03
Transmission Lines & Cables (09-14)	10.47	10.47	10.47	10.47	10.47	52.34
Substations (09-14)	28.77	28.77	28.77	28.77	28.77	143.86
Secondary Systems (09-14)	2.41	2.41	2.41	2.41	2.41	12.06
Communications (09-14)	3.26	3.26	3.26	3.26	3.26	16.31
Minor Plant, Motor Vehicles & Mobile Plant (2009-14)	5.32	5.32	0.90	-	-	11.54
Transmission Lines (2014-18)	2.99	2.99	2.99	2.99	2.99	14.93
Underground Cables (2014-18)	0.19	0.19	0.19	0.19	0.19	0.93
Substations (2014-18)	12.28	12.28	12.28	12.28	12.28	61.41
Secondary Systems (2014-18)	7.76	7.76	7.76	7.76	7.76	38.78
Communications (short life) (2014-18)	8.14	8.14	8.14	8.14	8.14	40.68
Business IT (2014-18)	11.66	11.66	11.66	0.88	-	35.85
Minor Plant, Motor Vehicles & Mobile Plant (2014-18)	3.90	3.90	3.90	3.90	3.90	19.50
Transmission Line Life Extension (2014-18)	0.23	0.23	0.23	0.23	0.23	1.16
Residual - other	-	1.41	-	-	-	-
Transmission Lines (2018-23)	-	-	0.52	0.74	0.77	2.77
Underground Cables (2018-23)	-	-	0.00	0.00	0.01	0.01
Substations (2018-23)	-	-	2.96	5.78	8.13	26.39
Secondary Systems (2018-23)	-	-	1.31	3.95	8.12	10.83
Communications (short life) (2018-23)	-	-	0.86	1.50	2.32	2.88
Business IT (2018-23)	-	-	3.52	10.77	17.91	21.71
Minor Plant, Motor Vehicles & Mobile Plant (2018-23)	-	-	1.31	2.83	4.10	5.14
Transmission Line Life Extension (2018-23)	-	-	0.43	0.72	1.31	4.57
Land and Easements	-	-	-	-	-	-
NSCAS Assets	-	-	0.74	0.74	0.74	2.95
Equity raising costs	0.04	0.04	0.04	0.04	0.04	0.20
Total Depreciation	255.47	268.52	279.49	284.16	294.39	1,382.03

Schedule 6A.1.3(7) of the Rules requires TransGrid to provide the depreciation schedules which categorise the relevant assets for these purposes by reference to well accepted categories such as:

(i) asset class (eg transmission lines and substations); or

(ii) category driver (eg regulatory obligations or requirements, replacement, reliability, net market benefit, and business support), and also by location, together with:

(iii) details of all amounts, values and other inputs used by the Transmission Network Service Provider to compile those depreciation schedules;

(iv) a demonstration that those depreciation schedules conform with the requirements set out in clause 6A.6.3(b); and

(v) an explanation of the calculation of the amounts, values and inputs referred to in subparagraph (iii).

To address the above Rules requirements:

(i) & (ii) the depreciation schedule has been categorised by asset classes. The network map in "TransGrid-Reset RIN Transmission Map – 0117 - PUBLIC" and the forecast capex discussed in Chapter 5 of the revenue proposal indicate the location of the assets where depreciation has occurred;

(iii) the details of amounts, values and other inputs to calculate the depreciation are included in TransGrid's PTRM. The capital expenditure forecast that is used to calculate the depreciation is provided in the Capital Accumulation Model;

(iv) the depreciation schedule has used the calculation output from the AER's RFM and PTRM submitted with the revenue proposal, and conforms with the requirements set out in Clause 6A.6.3(b) of the Rules; and

Clause 6A.6.3(b) - The depreciation schedules referred to in paragraph (a) must conform to the following requirements:

(1) except as provided in paragraph (c), the schedules must depreciate using a profile that reflects the nature of the assets or category of assets over the economic life of that asset or category of assets;

(2) the sum of the real value of the depreciation that is attributable to any asset or category of assets over the economic life of that asset or category of assets (such real value being calculated as at the time the value of that asset or category of assets was first included in the regulatory asset base for the relevant *transmission system*) must be equivalent to the value at which that asset or category of assets was first included in the regulatory asset base for the relevant *transmission system*; and

(3) the economic life of the relevant assets and the depreciation methodologies and rates underpinning the calculation of depreciation for a given *regulatory control period* must be consistent with those determined for the same assets on a prospective basis in the *transmission determination* for that period.