

**LCN Fund Second Tier Full Submission
Spreadsheet**

(version 2.0)

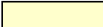






Appendix A

DNO Name:

SSEPD - SSET204 non confidential

Submission Date:

17/08/2012

	Input cells
	Totals cells (of formula within worksheet)
	Referencing to other worksheets
	Check cells
	No Input
	Descriptions and pack data
	Ofgem Input cells

Second Tier Funding Request

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Cost	<i>From Project Cost Summary sheet</i>						
Labour	291.63	1,667.56	1,354.28	993.58	594.89	429.49	5,331.43
Equipment	25.00	370.08	909.70	121.49	11.49	7.77	1,445.52
Contractors	118.87	1,951.76	3,331.96	1,505.98	457.83	335.22	7,701.61
IT	-	344.38	920.34	88.35	91.89	47.09	1,492.05
IPR Costs	-	-	-	-	-	-	-
Travel & Expenses	-	5.14	5.32	5.52	5.74	-	21.72
Payments to users & Contingency	1,426.50	2,979.87	1,181.90	870.40	859.78	304.69	7,623.14
Decommissioning	-	-	-	-	-	-	141.28
Other	36.67	107.94	111.72	115.96	120.60	86.34	579.23
Total	1,898.66	7,426.73	7,815.22	3,701.28	2,142.21	1,351.87	24,335.98

External funding	<i>Any funding that will be received from Project Partners and/or External Funders - from Project Cost Summary sheet</i>						
Labour	-	-	-	-	-	-	-
Equipment	-	-	-	-	-	-	-
Contractors	16.87	1,054.32	1,091.22	1,132.68	58.12	39.71	3,392.92
IT	-	-	-	-	-	-	-
IPR Costs	-	-	-	-	-	-	-
Travel & Expenses	-	-	-	-	-	-	-
Payments to users & Contingency	1,250.00	1,320.00	204.00	124.00	124.00	-	3,022.00
Decommissioning	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Total	1,266.87	2,374.32	1,295.22	1,256.68	182.12	39.71	6,414.92

DNO extra contribution	<i>Any funding from the DNO which is in excess of the DNO Compulsory Contribution - from Project Cost Summary sheet</i>						
Labour	-	-	-	-	-	-	-
Equipment	-	-	-	-	-	-	-
Contractors	-	-	-	-	-	-	-
IT	-	-	-	-	-	-	-
IPR Costs	-	-	-	-	-	-	-
Travel & Expenses	-	-	-	-	-	-	-
Payments to users & Contingency	-	-	-	-	-	-	-
Decommissioning	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-

Initial Net Funding Required	<i>calculated from the tables above</i>						
Labour	291.63	1,667.56	1,354.28	993.58	594.89	429.49	5,331.432
Equipment	25.00	370.08	909.70	121.49	11.49	7.77	1,445.524
Contractors	102.00	897.44	2,240.74	373.29	399.71	295.50	4,308.688
IT	-	344.38	920.34	88.35	91.89	47.09	1,492.055
IPR Costs	-	-	-	-	-	-	-
Travel & Expenses	-	5.14	5.32	5.52	5.74	-	21.725
Payments to users & Contingency	176.50	1,659.87	977.90	746.40	735.78	304.69	4,601.138
Decommissioning	-	-	-	-	-	-	141.276
Other	36.67	107.94	111.72	115.96	120.60	86.34	579.225
Total	631.79	5,052.41	6,520.00	2,444.60	1,960.09	1,312.16	17,921.063

Check Total = to Initial Net Funding request in Project Cost Summary
OK

Direct Benefit	<i>from Direct Benefits sheet</i>						
Total	-	-	-	-	-	-	-

DNO Compulsory Contribution / Direct Benefits	<i>from Project Cost Summary sheet</i>						
Labour	29.16	166.76	135.43	99.36	59.49	42.95	533.14
Equipment	2.50	37.01	90.97	12.15	1.15	0.78	144.55
Contractors	10.20	89.74	224.07	37.33	39.97	29.55	430.87
IT	-	34.44	92.03	8.84	9.19	4.71	149.21
IPR Costs	-	-	-	-	-	-	-
Travel & Expenses	-	0.51	0.53	0.55	0.57	-	2.17
Payments to users & Contingency	17.65	165.99	97.79	74.64	73.58	30.47	460.11
Decommissioning	-	-	-	-	-	14.13	14.13
Other	3.67	10.79	11.17	11.60	12.06	8.63	57.92
Total	63.18	505.24	652.00	244.46	196.01	131.22	1,792.11

of Total Initial Net Funding Required
OK
Check that Total is = or > than Total Direct Benefits
OK

Outstanding Funding required	<i>calculated from the tables above</i>						
Labour	262.47	1,500.80	1,218.85	894.22	535.40	386.54	4,798.29
Equipment	22.50	333.07	818.73	109.34	10.34	6.99	1,300.97
Contractors	91.80	807.70	2,016.67	335.96	359.74	265.95	3,877.82
IT	-	309.94	828.31	79.52	82.70	42.38	1,342.85
IPR Costs	-	-	-	-	-	-	-
Travel & Expenses	-	4.63	4.79	4.97	5.17	-	19.55
Payments to users & Contingency	158.85	1,493.89	880.11	671.76	662.20	274.22	4,141.02
Decommissioning	-	-	-	-	-	127.15	127.15
Other	33.00	97.15	100.55	104.37	108.54	77.70	521.30
Total	568.61	4,547.17	5,868.00	2,200.14	1,764.09	1,180.94	16,128.96

Check that Total is = to Total Outstanding Funding required
OK

balance	15,587.52	0.00	10,471.73	4,864.32	2,817.54	1,130.27	(11.19)	15,587.52
interest	0.00	260.59	153.36	76.82	39.48	11.19	541.44	
							16,128.96	

click this button to calculate the Second Tier Funding Request

		SECOND TIER FUNDING REQUEST £							15,587.52
Bank of England interest rate		0.5%							
interest rate used in calculation		2.0%							
RPI adjustment	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	
Index	244.6	251.4	260.2	269.9	280.8	287.8	295.0	302.4	
Annual inflation	3.10%	2.80%	3.50%	3.80%	4.00%	2.50%	2.50%	2.50%	

n.b the Second Tier Funding Request calculation should use the Bank of England Base rate plus 1.5% on 31 June of the year in which the Full Submission is made.

Direct Benefits

Direct Benefit: Any benefits of the Project accruing to the DNO during the Project Implementation and include the following

- Revenue included in the DNO's Full Business Plan Questionnaire (FBPQ) for DPCR5 which will be saved through undertaking the project
- Incentive payments generated as a result of the Project for the duration of the Project

Description of Direct Benefit	Value of Direct Benefit		
	2012/13	2013/14	2014/15
n/a			-
n/a			-
Total Direct Benefits	-	-	-
			Total

n.b. These are Direct Benefits associated with the Project itself, not the wider deployment of the Solution and therefore should not exceed beyond the project or the DPCR5 period

Net Benefits

DNDI can provide notes alongside costs in order to aid understanding of why these costs are required. This should be supplemented by a fuller qualitative account of the Base Case method and Method in the appendices.

Method 1 - Improve access for renewable generation on the distribution network by active local energy management and energy transfer

(a)

Base Case costs	
Description of cost	Cost (£)
Capex costs	1,437,000
Opex base line costs	1,028,000
Opex benefits	(1,028,000)
Operation	(6,631,000)
Total	(6,252,000)

These base case costs are the average counterfactual network upgrade costs to accommodate protected average generator sizes. More details are provided in the appendices from EAT.

(b)

Method costs	
Description of cost	Cost (£)
Electricity	6,000,000
Balance of Plant	1,000,000
Grids	1,000,000
Grid extension	1,500,000
Opex of new assets	1,000,000
Opex of resources	(1,000,000)
Total	(7,500,000)
Net financial benefit	(12,752,000)

These method costs are for the average PATHS system, using the same method cost calculation as set out in appendix A1. The method costs include the NPV of ongoing opex costs, and NPV of revenue.

(c)

Average capacity released (MW)	10000
Base Case time (months)	30
Method time (months)	24

This is the average windfarm capacity associated with the method

This is taken from current expectations for the windfarm in Aberdeen, linked to the PATHS project

(f)

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
Total sites where method replicates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: The average replication potential is taken from EAT analysis. Due to limited data, this goes out to 2030. Further replication is expected post 2030, but limited data prevents a quantitative analysis.

Method 2 -

(a)

Capacity released (MW)	
Base Case time (months)	
Method time (months)	

(b)

Base Case costs	
Description of cost	Cost (£)
Total	0

(c)

Method costs	
Description of cost	Cost (£)
Total	0
Net financial benefit	0

(f)

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
Total sites where method replicates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0