	Cost	Notes
Base Cost for Market Failure based on 7% failure rate		
LV Feeder Reinforcement		
Cost of reinforcing feeders (£ per metre)	£200	Typical costs
Average length of lv feeder (metres)	100	
Average number of feeders per substation	4	
Total number of feeders	18388	
Total cost of reinforcing feeders	£110,328,000	Based on My Electric Avenue findings of 30% circuits needing intervention
LV Substation Reinforcement		
Cost of reinforcing lv substation	£60,000	Typical costs
Total number of substations	4597	Projected number of networks overloaded in SSEN areas only (from 2023 when SEC Mod may be implemented, to 2028)
Total cost of reinforcing substations - assume 50% of Tx	£137,910,000	
Total Reinforcement		
Total cost of reinforcing all feeders and substations	**£248,238,000**	Accuracy dependent on above assumptions
Future IIS Costs		
Average time taken to replace blown fuse (mins)	100	
Average number of customers per feeder	35	
CI cost per customer	£11.64	
CML cost per customer	£0.28	
Number of feeders	18388	
Percentage of feeders affected	30%	Based on My Electric Avenue findings of 30% circuits needing intervention
Number of feeders prone to fuse ruptures	5517	
Number of customers affected by fuse ruptures(33%)	128730	2 out of 3 phases expected to be overloaded accounting for imbalance
Number of fuse ruptures prior to reinforcement	8	Don't invest ahead of need so several faults expected before reinforcement triggered
Number of customers affected by fuse ruptures prior to reinforcement	1029840	Taking average of 2 months to reinforce a network, 4 outages per month
Total CI cost	£11,987,338	
Total CML cost	£29,178,800	
Total CI CML cost	£41,166,138	
Future Labour Costs		
Number of anticipated faults	44136	
Cost of labourer per hour	£32	
Average time taken to replace blown fuse (hours)	1.67	
Average labour cost to replace one fuse	£53	
Average operational cost of replacing fuses	£11,585,700	
Total Base Costs		
Total Reinforcement, IIS & Labour costs (7% factor applied)	**£21,069,288.63**	
Method Cost		
Flexibility services for Last Resort (anticipated as 7% failure of flexibility)		
Share of £560,000 DCC Costs (12.8%)	£71,680	SSEN's costs would be 12.8%
Average number of customers per LV substation	140	
Contacting affected customers (50% per substation) - Customer contact staff already employed and engaging customers	£675,759	1 hour per customer, £30/hour, all customers with an LCT would be signed up even though they don't actually need to use the last resort. Expecting 50% of all customers to have LCT.
Average number of customers with LCT per substation	70	Expecting 50% of all customers to have LCT.
Total number of substations monitored	4597	
Installation costs of connecting LCT to HCALC (£100/property)	£1,126,265	Estimate 50% would already be connected
Total Market Failure Costs	**£1,878,511**	
Total Last Resort Costs		
Total Last Resort Costs	£1,878,511	
Traditional Reinforcement Deferment Savings		
Total number of years reinforcement is deferred	1	Proposed sunset clause in governance of max use of 1 year of last resort function if necessary
Deferment saving	£9,333,749	Deferment NPV
Deferment, IIS & Labour Savings		
Deferment saving plus avoided CI/CML & labour costs - 7% factor applied	£4,345,991	
Non Quantifiable Benefits		
Reputational benefit - broader measures		Not quantified at this point
Net benefits from avoided CI/CML costs plus deferment saving	**£2,467,480**	