

	Cost	Notes
Base Cost for Speed of Uptake, based on 10% of overloaded networks		
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 (50%)	1372	Detailed analytics has produced a figure of 2744 feeders requiring attention, assume 50% require reinforcement
Total cost of reinforcing feeders	£8,232,000	
LV Substation Reinforcement		
Cost of reinforcing lv substation	£60,000	10% of projected number of networks overloaded in SSEN areas only (from 2023 when SEC Mod may be
Total number of substations	460	implemented, to 2028)
Total cost of reinforcing	£27,582,000	Assume 10% affected by faster than expected uptake
Total Reinforcement		
Total cost of reinforcing feeders and substations	£35,814,000	
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	1372	
Percentage of feeders affected	100%	Already a 50% factored in Row 8
Number of feeders prone to fuse ruptures	1372	Accuracy dependent on above assumptions
Number of customers affected by fuse ruptures	32013	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	256107	Taking average of 2 months to reinforce a network, 4 outages per month
Total CI cost	£2,981,082	
Total CML cost	£7,256,356	
Total CI CML cost	£10,237,437	
Future Labour Costs		
Number of anticipated faults	10976	
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	£2,881,200	
Total Base Costs		
Total Reinforcement, IIS & Labour costs	£48,932,637	
Method Cost		
Last Resort Capability		
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	£965,370	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	460	
Installation costs of connecting LCT to HCALC (£100/property)	£1,608,950	Estimate 50% would already be connected
Total Last Resort Costs	£2,646,670	
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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 (3.76% discount rate)	£1,039,482	Deferment NPV
Deferment, IIS & Labour Savings		
Deferment saving plus avoided CI/CML & labour costs	£14,158,119	Accuracy dependent on above assumptions
Non Quantifiable Benefits		
Reputational benefit - broader measures		Not quantified at this point
Net benefits from avoided CI/CML costs plus deferment saving		
Net benefits from avoided CI/CML costs plus deferment saving	£11,511,449	