Thermal capacity - Green Mountain, LON-1 East

Ref	Emission Source Description	Type	New / existing	Manufacturer	Gen set model	Engine Manufacturer	Engine Model	output rating (kVA)	Output rating (kWe)	Max fuel (l/hr)	Assumed efficiency	Thermal capacity (MWth)	Cumulative thermal capacity
EP1	Build 1 - gen 1	DRUPS	Existing	EuroDiesel	X2200C	MTU	16V4000G23	2300	1,840	461	39%	**4.51**	**4.51**
EP2	Build 1 - gen 2	DRUPS	Existing	EuroDiesel	X2200C	MTU	16V4000G23	2300	1,840	461	39%	**4.51**	**9.03**
EP3	Build 2 - gen 3	Generator	Existing	SDMO	X3300C	MTU	20V4000G63	3025	2,420	627	36%	**6.14**	**15.17**
EP4	Build 2 - gen 4	Generator	Existing	SDMO	X3300C	MTU	20V4000G63	3025	2,420	627	36%	**6.14**	**21.30**
EP5	Build 3 - gen 5	Generator	Existing	Broadcrown	BCMU 3050P-50	MTU	20V4000G63L	3237.5	2,590	671	36%	**6.57**	**27.87**
EP6	Build 3 - gen 6	Generator	Existing	Broadcrown	BCMU 3050P-50	MTU	20V4000G63L	3237.5	2,590	671	36%	**6.57**	**34.44**
EP7	Build 3 - gen 7	Generator	Existing	Broadcrown	BCMU 3050P-50	MTU	20V4000G63L	3237.5	2,590	671	36%	**6.57**	**41.01**
EP8	Build 3 - gen 8	Generator	Existing	Broadcrown	BCMU 3050P-50	MTU	20V4000G63L	3237.5	2,590	671	36%	**6.57**	**47.58**
EP9	Build 3 - gen 9	Generator	Existing	Broadcrown	BCMU 3050P-50	MTU	20V4000G63L	3237.5	2,590	671	36%	**6.57**	**54.15**
EP10	Build 4 - gen 10	Generator	New	Rolls Royce	DS3600	MTU	20V4000G94F	3730	2984	756	39%	**7.40**	**61.55**
EP11	Build 4 - gen 11	Generator	New	Rolls Royce	DS3600	MTU	20V4000G94F	3730	2984	756	39%	**7.40**	**68.96**
EP12	Build 4 - gen 12	Generator	New	Rolls Royce	DS3600	MTU	20V4000G94F	3730	2984	756	39%	**7.40**	**76.36**
EP13	Build 4 - gen 13	Generator	New	Rolls Royce	DS3600	MTU	20V4000G94F	3730	2984	756	39%	**7.40**	**83.76**
EP14	Build 4 - gen 14	Generator	New	Rolls Royce	DS3600	MTU	20V4000G94F	3730	2984	756	39%	**7.40**	**91.16**
EP15	Build 4 - gen 15	Generator	New	Rolls Royce	DS3600	MTU	20V4000G94F	3730	2984	756	39%	**7.40**	**98.56**
EP16	Build 4 - gen 16	Generator	New	Rolls Royce	DS3600	MTU	20V4000G94F	3730	2984	756	39%	**7.40**	**105.97**
EP17	Build 4 - gen 17	Generator	New	Rolls Royce	DS3600	MTU	20V4000G94F	3730	2984	756	39%	**7.40**	**113.37**

Total NET input Thermal capacity (MWth) **113.37**

Thermal capacity calculation completed in line with Environment Agency guidance: *"AMPS Determination of thermal input power of an engine driven generator"* (Equation 4):

Max fuel	756	
MK	625.968	MK = max fuel x0.828
Hu	42.568805192	Hu = calorific value
Pth	7401.863847	Pth = MK x Hu / 3.6
MWth	7.40	