

## Thermal capacity schedule - Colt Hayes

Ref	Emission Source Description	Gen Set Supplier	Genset Manufacturer	Genset model	Engine model	max fuel (litre/hr)	Output rating (kVA)	Output rating (kWe)	Thermal Capacity (MW)
S1	Building 1 - Gen 1	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S2	Building 1 - Gen 2	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S3	Building 1 - Gen 3	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S4	Building 1 - Gen 4	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S5	Building 1 - Gen 5	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S6	Building 1 - Gen 6	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S7	Building 1 - Gen 7	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S8	Building 1 - Gen 8	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S9	Building 1 - Gen 9	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S10	Building 1 - Gen 10	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S11	Building 1 - Gen 11	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S12	Building 1 - Gen 12	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S13	Building 1 - Gen 13	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S14	Building 1 - Gen 14	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S15	Building 1 - Gen 15	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S16	Building 1 - Gen 16	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S17	Building 1 - Gen 17	AVK	MTU	MTU 20V4000 DS3100	20V4000G74F	656	2670	2,400	6.42
S18	Building 1 - Gen 18	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S19	Building 1 - Gen 19	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S20	Building 1 - Gen 20	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S21	Building 1 - Gen 21	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S22	Building 1 - Gen 22	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S23	Building 2 - Gen 1	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S24	Building 2 - Gen 2	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S25	Building 2 - Gen 3	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S26	Building 2 - Gen 4	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S27	Building 2 - Gen 5	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S28	Building 2 - Gen 6	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S29	Building 2 - Gen 7	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S30	Building 2 - Gen 8	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S31	Building 2 - Gen 9	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S32	Building 2 - Gen 10	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S33	Building 2 - Gen 11	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S34	Building 2 - Gen 12	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S35	Building 2 - Gen 13	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S36	Building 2 - Gen 14	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S37	Building 2 - Gen 15	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S38	Building 2 - Gen 16	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S39	Building 2 - Gen 17	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S40	Building 2 - Gen 18	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S41	Building 2 - Gen 19	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S42	Building 2 - Gen 20	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S43	Building 2 - Gen 21	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43
S44	Building 2 - Gen 22	AVK	MTU	MTU 20V4000 DS3600	20V4000G94F	657	3088	2,600	6.43

**Aggregated net thermal input capacity (MW) 282.87**

Thermal capacity calculation completed in line with Environment Agency guidance:

\*AMPS Determination of thermal input power of an engine driven generator" (Equation 4):

	2.4MW	2.6MW
Max fuel consumption (litre/hr)	656	657
MK = max fuel x 0.828 (fuel density)	543.17	544.00
Hu = calorific value	42.5688	42.5688
Pth = MK x Hu / 3.6	6,422.78	6,432.57
MWth	6.42	6.43