

## 4.7 Cooling system

4.7.1 The comments raised in respect of the cooling system during Phase One Consultation are summarised in Table 4.7, together with the Applicant's response.

Table 4.7: Comments on the cooling system received at Phase One Consultation

Ref	Comment	SC	LA	LI	No. CC	CC IDs	Applicant's response	Change
<b>Cooling system</b>								
<b>Cooling system options</b>								
4.7.2	Agree with NLWA's assessment of the cooling system options.	-	WCC	-	5	26, 27, 33, 40, 48	Noted.	-
4.7.3	Support air cooled condenser because wastes less water and does not have a plume.	-	-	-	4	22, 24, 27, 50	Noted.	-
4.7.4	Further information requested on noise pollution of air cooled condenser and energy required to run it.	-	-	-	1	6	The operation of air cooled condensers does produce some noise from the operation of fans but they are not loud and are not expected to be audible by those living or working near the site. The operation of the air cooled condensers does not consume a large amount of energy.	N
4.7.5	Support water cooling system because it is more energy efficient and preferred by residents.	-	-	-	18	5, 16, 18, 19, 26, 33, 36, 38, 39, 40, 42, 46, 47, 10006, 10008, 10009, 10019, 10020	Noted.	-
4.7.6	Support water cooling system with caveat that there has not been sufficient information.	-	-	-	2	27, 31	Noted.	-
4.7.7	No preference between two options.	-	-	-	1	25	Noted.	-

Ref	Comment	SC	LA	LI	No. CC	CC IDs	Applicant's response	Change
<b>Cooling system</b>								
Plume								
4.7.8	Concern with a plume from the cooling system including that it is unsightly, harmful to birds, contains pollutants and would travel over resident's house.	-	-	-	3	24, 27, 45	Noted. The plume is water vapour which does not contain pollutants. The plume is not harmful to birds.	N
4.7.9	No concern. Comments included that it is acceptable/unimportant, residents are used to it and no concern as long as it is not harmful.	-	-	-	10	9, 16, 19, 21, 25, 40, 46, 10006, 10018, 10019	Noted.	-
4.7.10	Other comments including the need for more publicity about the plume, query about plume composition and query about the water scrubbing system.	-	-	-	5	9, 37, 39, 45, 1006	The plume from a water cooled system is water vapour only and contains no combustion exhaust gases. NLWA understand that in the absence of regular communications, the composition of the plume will not be understood by those who see it or who live and work nearby and is likely to be mistaken for smoke.	N
<b>Criteria and concerns</b>								
4.7.11	Choose most energy-efficient system.	-	WCC	-	17	9, 16, 18, 19, 21, 26, 33, 36, 37, 38, 39, 40, 42, 47, 54, 10008, 10018	Noted.	-
4.7.12	Choose most cost-efficient system.	-	-	-	3	16, 21, 23	Noted.	-
4.7.13	Choose system with no odour.	-	-	-	2	16, 23	Noted.	-

Ref	Comment	SC	LA	LI	No. CC	CC IDs	Applicant's response	Change
<b>Cooling system</b>								
4.7.14	Choose system with least impact on residents.	-	-	-	1	5	Noted.	-
4.7.15	Release only clean, toxin-free vapour.	-	-	-	2	16, 22	With both air and water cooling only toxin-free vapour would be released.	N
4.7.16	Concern regarding legionella and how it will be prevented.	-	-	-	1	6	Noted.	-
4.7.17	No concerns.	-	-	-	1	48	Noted.	-
<b>Other comments/questions on cooling system</b>								
4.7.18	Other questions including: a) if cooling system impacts on heat output to local network;	-	LBE	-	1	33	The cooling system will not impact on the level of heat which is anticipated to be required from the LVHN heat network being promoted by LB Enfield. If other district heating schemes come forward in the future, will be capable of supplying these schemes with additional heat.	N
	b) if an energy-consuming cooling agent is required;						No energy-consuming agents are required for the cooling system which relies on condensation of water.	N
	c) if steam tubes could be diverted through the earth for cooling instead.						It is not possible to divert steam through the earth in part because of cost and long term effectiveness of the localised ground to absorb heat.	N

### Account taken of Phase One cooling system comments

- 4.7.19 The comments received in respect of the proposed cooling system have indicated that some respondents have a preference for air cooling whilst other have a preference for water cooling however there is no clear preference overall.
- 4.7.20 It is considered that further views should be sought in order to inform the decision on which type of cooling process should be progressed. Therefore as part of Phase Two Consultation further views were sought on this topic.