

6.11 Cooling technology

6.11.1 The comments raised in respect of the cooling technology issues during Phase Two Consultation are summarised in Table 6.10, together with the Applicant's response.

Table 6.10: Comments on the cooling technology received in Phase Two Consultation

Ref	Comment	SC	LA	LI	No. CC	CC IDs	Applicant's response	Change
Cooling system								
Views on air cooled system								
6.11.2	Support without giving a specific reason	-	-	-	14	10113; 10108; 10110; 10111; 10095; 10098; 10106; 10092; 10093; 10094; 10083; 10085; 10091; 70	The Applicant has considered the comments raised during consultation and with the benefit of professional advice, has taken account of all the relevant factors and has determined that the cooling technology would be air cooled condensers.	C
6.11.3	Support because it is more cost efficient as it requires less maintenance	-	-	-	2	10047; 95		C
6.11.4	Support because it is better for the environment; water cooled system would impact on Lee Valley river's ecosystem by releasing warmer water into the river	-	-	-	2	75; 95		C
6.11.5	Support because it does not create plume	-	LBE	-	20	10120; 10105; 10112; 10119; 10090; 10096; 10101; 10086; 10087; 10088; 10079; 10080; 10046; 5; 62; 63; 64; 65; 74; 98		C

Ref	Comment	SC	LA	LI	No. CC	CC IDs	Applicant's response	Change
Cooling system								
6.11.6	Support because it uses less water	-	-	-	1	74		C
6.11.7	Support because it would cause less corrosion than water cooled system	-	LBE	-	0	10071		C
Views on Water cooled system								
6.11.8	Support without giving a specific reason	CRT	-	-	13	66; 10114; 10115; 10118; 10100; 10102; 10109; 80; 10084; 10089; 10045; 10056; 92	The Applicant has considered the comments raised during consultation and with the benefit of professional advice, has taken account of all the relevant factors and has determined that the cooling technology would be air cooled condensers.	N
6.11.9	Support because it has higher energy output	-	-	-	10	10116; 10117; 10103; 10104; 10107; 10082; 10097; 10099; 87; 79		N
6.11.10	Support because it is environmentally friendly as it reduces air heating	-	-	-	1	83		N
6.11.11	Support because it would create more jobs for local people due to increased maintenance requirements	-	-	-	1	10081		N
6.11.12	Support if water is cleaner	-	-	-	1	79		N
6.11.13	If water is abstracted from the Lee Navigation, a license from CRT would be required	CRT			0		Water is not proposed to be extracted from the River Lee Navigation for either type of cooling technology.	N

Ref	Comment	SC	LA	LI	No. CC	CC IDs	Applicant's response	Change
Cooling system								
6.11.14	Oppose because it increases the rate of corrosion of buildings	-	LBE	-	0	-	The Applicant has considered the comments raised during consultation and with the benefit of professional advice, has taken account of all the relevant factors and has determined that the cooling technology would be air cooled condensers.	N
Alternative								
6.11.15	Suggested alternatives include: a) use Combined Cooling, Heating and Power systems similar to those in Barcelona, Monaco, Baltimore;	-	WCC	-	1	89	Cooling is a necessary part of the ERF operation. This is separate to any cooling which could be provided as part a district heating network. It is possible for the heat from the ERF to be used for cooling rather than heating and this would be determined by any future heat network operator.	N
	b) technology in 2040 should be advanced enough not to require the use of a cooling system						The proposed ERF uses today's best available technology. The Applicant is seeking sufficient flexibility within the DCO Application to be able to assess the detailed solution before procurement allowing potential upgrading at this point, however it is considered unlikely that technology would have advanced to such a position whereby cooling was not required.	N
Criteria								
6.11.16	Views on cost: a) cost should not be the main factor; b) go for the cheaper option	-	-	-	2	79; 10042	The Applicant considered a number of factors in reaching its decision to use air cooling technology, these included comments raised during consultation, visual impact, maintenance, efficiency and cost.	N
	6.11.17							Choose the most energy efficient option

Ref	Comment	SC	LA	LI	No. CC	CC IDs	Applicant's response	Change
Cooling system								
6.11.18	Choose the most environmentally friendly option	-	HBC	-	4	10075; 10077; 88; 85	Neither cooling technology would create significant environmental effects. The comments made will be taken into account by the Applicant in reaching its decision on the cooling system.	N
No comment/opinion/preference								
6.11.19	No views	-	-	-	5	10077; 94; 86; 78; 68	Noted.	N
Water vapour								
6.11.20	Concerning because: a) can be a distraction to drivers; b) exacerbates negative perceptions on the current site	-	LBE	-	1	82	The Applicant has considered the comments raised during consultation and with the benefit of professional advice, has taken account of all the relevant factors and has determined that the cooling technology would be air cooled condensers which would not create plume.	C
Requests for more information								
6.11.21	More detail on: a) use of water for cooling of plant i.e. where would this come from, where would it be disposed of, how would it be cleaned; b) whether there are any additional benefits, e.g. cooling the surrounding area/keeping dust down on roads during summer days	CRT	-	-	2	82; 77	The Applicant has considered the comments raised during consultation and with the benefit of professional advice, has taken account of all the relevant factors and has determined that the cooling technology would be air cooled condensers as such water for cooling is not necessary. Cooling is a necessary part of the ERF process. The cooling process would not have any wider effects such as cooling the surrounding area or keeping dust down on roads during summer days.	N

Account taken of Phase Two cooling technology comments

- 6.11.22 Comments raised during Phase Two Consultation were, on balance, in favour of avoiding the plume because of its visual impact and the potential for considering it to be smoke. In response the Applicant is proposing air cooled condensers which would not generate a plume.