Suggestions for ExQ2 (response to Applicant's D2 submission)

The Second Written Questions would be an opportunity for the ExA to seek clarity on some practical and technical conflicts in the BWSF proposal.

Practical matters

The Applicant's recent responses [REP2-027, p52 &c] did not resolve many of the identified real-world shortcomings in the proposal [REP1-156]. These span issues from the inadequate analysis of sheep grazing logistics to the lack of security, maintenance facilities and staff.

Of these, the most pertinent from an environmental perspective is probably the selection of a location for a landfill site (as early as by year 25). The CEO of the Blenheim Estate might welcome the opportunity to volunteer some Palace land for this.

Power rating

Doubt has been expressed elsewhere about the claimed 840 MW power rating [REP1-169]. Indeed, this seems to be based solely on the value specified in BWSF's 2021 grid connection contract. The ExA would probably like to know the solar farm's proposed Installed Capacity and make its own evaluation of the projected output rating.

The Installed Capacity is the number of panels (grey box areas in the masterplan layout [APP-062, REP2-045]) multiplied by the panel rating, 575 W [REP2-027, p54]. The ExA would likely wish the Applicant to first convert the masterplan from its current 'desktop' conceptual solar farm into a real-world solar design:

- 1) Increase the north-south gap between tables to at least 3 or 4 metres, as for other UK solar farms. Tractors and maintenance vehicles have to be able to access these areas.
- 2) Delete the theoretical mini-tables. Prospective table suppliers can advise the minimum real-world table length (8 metres?).
- 3) An HGV (e.g. fire tender, PCS-delivery articulated lorry, livestock transporter) is 2.5 metres wide. It will not be able to negotiate *any* curve on 2.5-metre-wide track, let alone the tight-radius curves shown. 'Swept-path' analysis (as incorrectly claimed [REP2-027, p56]) was used only for the access routes from the highways.
- 4) Adhere to the 7-metre fencing-panel separation specification [APP-043, Table 6.3].
- 5) Leave sections of the construction sites free of solar panels. Bases will be needed when panels are being dismantled to restore the full construction sites (at year 25 and for decommissioning).
- 6) The ExA might insist that each of the three sites includes a maintenance building and associated infrastructure, given that this is intended to be a functional solar farm.

Batteries

Notwithstanding the overwhelming benefit to both constructors and NGET of having batteries embedded in the solar circuitry [REP2-122, p3], the ExA might be persuaded by PVDP's argument that third-part BESS providers will be able to satisfy BWSF's energy storage requirement (estimated at 3.1 GWh [REP2-122, p1]).

If so, the ExA would probably want to have confidence that Power Purchase Agreements (PPAs) will be in place to ensure that BWSF's surplus midday energy will not be discarded. The Applicant has specified two potential BESS providers for this: EDF's 50MW BESS at Cowley substation [APP-043, 6.4.3] and a 250MW connection agreement at Farmoor NGET substation [REP2-027, p39].

EDF's 50MW/55MWh Cowley facility is part of Oxford's £41m multi-agency project for city decarbonisation: Energy Superhub Oxford.¹ As PVDP must be aware, this is a grid-support battery – it is not available for bulk solar energy storage.

It is not clear which 250MW facility the Applicant is referring to. By "Farmoor NGET" PVDP presumably mean the proposed Botley West substation. Grid connection agreements for this potential substation are listed in NESO's Transmission Entry Capacity (TEC) register.²

Botley West substation currently has four TEC entries: BWSF, the Buckland Marsh PV array with BESS, and two BESS projects of unspecified energy capacity. Some scepticism must be exercised when reviewing TEC connections: unscrupulous operators appear to be exploiting the system by bagging gigawatts of grid connection in order to sell them when a genuine developer turns up needing grid capacity (see Appendix).

Botley West substation connections (TEC)		MW	type	date	status	
Botley West Solar Farm	PVDP	840	PV	2026	Scoping	
Buckland Marsh Solar Farm	Arise Renewable Energy UK Ltd	280	PV/BESS	2033	Scoping	
Botley Green Energy Centre Ltd	Ethos Green Energy	800	BESS	2033	Awaiting consent	
West Botley High Impact Green Energy Hub	TELIS ENERGY UK LIMITED	100	BESS	2037	Scoping	

The application for LPA consent that Ethos Green reports as 'awaiting consent' could not be found on the SODC/Vale planning websites.

No reference to the TELIS proposal could be found on the internet.

¹ The URL for this innovative decarbonising project was earlier redacted. Readers interested in this technology should put "Energy Superhub Oxford" into a search engine, then press "Download Report" to obtain the 2023 publication as a pdf file. The description of the Cowley hybrid battery starts on page 94.

² National Energy System Operator (NESO). Put "NESO TEC Register" into a search engine to find the web page, then click on "Download (CSV)" to get the up-to-date TEC spreadsheet.

Appendix – the TEC register

The ESO division of National Grid plc (NESO's predecessor) was generous in handing out connection agreements with little oversight as to whether the applicants were viable energy businesses with genuine projects or just market speculators. Fortunately, NESO has recently started its Reforms Process (approved April 2025) to eliminate speculative TEC entries that do not meet its 'readiness criteria' (Gate 2 to Whole Queue process).

The TEC register spreadsheet should be a much quicker download by the end of the year.

The West Botley High Impact Green Energy Hub is one of 18 TEC projects registered by Telis Energy UK Ltd. Ownership can be traced back to a Luxembourg-registered company, CRSEF II GLOW S.A.R.L. It looks like a typo may have been responsible for the uniquely low connection capacity for their Botley West project. The accounts at Companies House are now several months overdue.

Project	Substation	MW	date	status	
Biggleswade High Impact Green Energy Hub	Biggleswade	1000	2034	Scoping	
Brodsworth High Impact Green Energy Hub	Brodsworth	1000	2035	Scoping	
Daventry High Impact Green Energy Hub 1	New Patford Bridge	1000	2033	Scoping	
Didcot High Impact Green Energy Hub 1	Didcot	1000	2037	Scoping	
East Claydon High Impact Green Energy Hub 1	East Claydon	1000	2034	Scoping	
Grendon High Impact Green Energy Hub 1	Grendon	1000	2033	Scoping	
Huntingdon High Impact Energy Hub 1	West Anglia Node H	1000	2034	Awaiting consent	
Huntingdon High Impact Energy Hub 2	Huntingdon 2	1000	2037	Scoping	
Leadenham High Impact Green Energy Hub	Trent Valley South A	1000	2034	Scoping	
Market Harborough Green Energy Hub	Market Harborough	1000	2034	Scoping	
Melton Mowbray High Impact Energy Hub 1	West Melton	1000	2034	Scoping	
Melton Mowbray High Impact Energy Hub 2	West Anglia Node I	1000	2034	Scoping	
Necton High Impact Energy Hub	Necton	1000	2034	Scoping	
Newchurch High Impact Energy Hub	Newchurch	1000	2037	Scoping	
Rugby High Impact Green Energy Hub 1	Enderby	1000	2034	Scoping	
Spalding High Impact Green Energy Hub	West Anglia Node G	1000	2034	Scoping	
West Botley High Impact Green Energy Hub	Botley West	100	2037	Scoping	
Wymondley High Impact Green Energy Hub 1	Wymondley	1000	2033	Scoping	

Simon Wragg (Ethos Green Energy Ltd) is a more prolific TEC contributor, with numerous companies registered for the purpose – some directly owned by Mr Wragg and others via holding companies. Curiously, many are listed as being at the 'awaiting consent' stage, although superficial attempts to find corresponding LPA applications were not successful.

Company	Project	Substation	MW	date	status
Bexley Green Energy Centre Ltd	Bexley GEC - HG Park 2	Hurst	228	2037	Scoping
Botley Green Energy Centre Ltd	Botley GEC Botley West		800	2023	Awaiting consent
Bramford 2 Green Energy Centre Ltd	Bramford 2 GEC	ramford 2 GEC Bramford 57 2032		Awaiting consent	
Bramford Green Energy Centre Ltd	Bramford GEC	Bramford	650	2033	Awaiting consent
Buntington Green Energy Centre Ltd	Buntington GEC	Cottered	850	2032	Awaiting consent
Burwell Green Energy Centre Ltd	Burwell GEC	Burwell	480	2032	Scoping
Cilfynydd Green Energy Centre Ltd	Cilfynydd GEC	Cilfynydd	400	2028	Awaiting consent
Cilfynydd Green Energy Centre Ltd	Cilfynydd GEC	Cilfynydd	625	2033	Awaiting consent
Drakelow Green Energy Centre Ltd	Drakelow GEC	Drakelow	400	2028	Awaiting consent
Drakelow Green Energy Centre Ltd	Drakelow GEC	Drakelow	625	2029	Awaiting consent
Hams Hall Green Energy Ltd	Hams Hall GEC	Hams Hall	400	2028	Scoping
Hams Hall Green Energy Ltd	Hams Hall GEC	Hams Hall	625	2032	Scoping
Hockliffe Green Energy Centre Ltd	Hockliffe GEC	Dunstable	850	2032	Scoping
Legacy Green Energy Ltd	Legacy GEC	Legacy	400	2027	Awaiting consent
Legacy Green Energy Ltd	Legacy GEC	Legacy	800	2037	Awaiting consent
Littlebrook Green Energy Centre Ltd	Littlebrook GEC	Rowdown	400	2031	Awaiting consent
Mablethorpe Green Energy Centre Ltd	Mablethorpe GEC	Mablethorpe	1025	2033	Awaiting consent
M Harborough Green Energy Centre Ltd	Market Harborough GEC	M Harborough	560	2032	Awaiting consent
Navenby Green Energy Centre Ltd	Navenby GEC	Navenby	580	2033	Awaiting consent
Necton Green Energy Centre Ltd	Bradenham-Thetford GEC	Necton	850	2033	Scoping
New Marton Green Energy Centre Ltd	New Marton GEC	New Marton	550	2037	Scoping
Ninfield Green Energy Centre Ltd	Ninfield GEC	Ninfield	600	3031	Awaiting consent
Norwich Green Energy Ltd	Norwich GEC	Norwich Main	400	3031	Awaiting consent
Pelham Green Energy Centre Ltd	Pelham GEC	Pelham	480	2035	Awaiting consent
Penwortham Green Energy Centre Ltd	Penwortham GEC	Penwortham	400	2026	Awaiting consent
Penwortham Green Energy Centre Ltd	Penwortham GEC	Penwortham	200	2031	Awaiting consent
Willington Green Energy Centre Ltd	Willington GEC	Willington	400	2028	Scoping
Willington Green Energy Centre Ltd	Willington GEC	Willington	625	2031	Awaiting consent
Wymondley Green Energy Centre Ltd	Wymondley GEC	Wymondley	700	2032	Awaiting consent
Yaxley Green Energy Centre Ltd	Yaxley GEC	Yaxley	450	2031	Awaiting consent

(These projects have "Green Energy Centre" in the name. Mr Wragg may have additional TEC entries under other names.)

PVDP also has multiple entries in the TEC register. An interesting observation is that the later PV solar projects always include a BESS.

	Company	Substation	Project Name	MW	type	connect
2020	Solarone Ltd					
2020	Solarthree Ltd	Dunstable	Woburn Solar Farm	840	PV	2031
2020	Solarfour Ltd	Staffordshire Node A	Bradford Solar Farm	960	PV	2033
		Chiltern Node C	Ludgershall-Bicester Solar Farm	500	PV/BESS	2038
		Cheshire Node A	New Marton Solar Farm	780	PV/BESS	2037
		North Anglia Node C	Scarning	650	PV/BESS	2034
2020	Solarfive Ltd	Botley West	Cote Solar Power Station	840	PV	2026
2023	Solarsix Ltd					
2020	Solarseven Ltd	North Anglia Node E	Woodbridge	610	PV/BESS	2034
2023	Solareight Ltd					
2023	Solarnine Ltd	West Anglia Node D	Cottered	520	PV/BESS	2034
2023	Solarten Ltd	High Marnham	Wellbeck-Newark Solar Farm	710	PV/BESS	2034
2024	Solareleven Ltd					
2024	Solartwelve Ltd					