

Botley West Solar Farm

Consolidation of Issues Raised in PINS Response to Scoping Request

INTRODUCTION

Appendix 2 of the PINS response to the developer contained submissions from consultees who replied within the statutory deadline. Inevitably many issues featured both in the main report written by PINS and the consultee's submissions but consultees also made comments that did not feature in the PINS document.

This document lists all of the issues raised in no order of priority and refers the reader to the appropriate section for further details using the following code:

P Planning Inspectorate
BPC Begbroke Parish Council
BlaPC Bladon Parish Council
Ch Cherwell District Council
CPC Cassington Parish Council
CuPC Cumnor Parish Council
EA Environmental Agency
EPC Eynsham Parish Council
FPC Freeland Parish Council
HE Historic England
HPC Hanborough Parish Council
KPC Kidlington Parish Council
NGC National Grid Company
NE Natural England
OCC Oxfordshire County Council
TPC Tackley Parish Council
TW Thames Water
UKHSA UK Health and Security Agency
VWHDC Vale of White Horse District Council
Wo West Oxfordshire District Council
WTC Woodstock Town Council
WoPC Wootton Parish Council
YPC Yarnton Parish Council

LOCATION

- Inaccurate Maps (P), (BlaPC), (WTC) (WoPC) etc
 - Inconsistencies and an additional area added East of Woodstock post preliminary consultation (WTC) (BlaPC)

- Uncertainties in provision and location of major infrastructure such a cable route, battery storage, sub-station, watercourse crossing of cable (P)
- Location Choice(P)
 - Botley West will impact over 30000 homes in multiple communities in addition to the World Heritage Site of Blenheim Palace (WTC)
 - Botley West Solar Farm will be the biggest ever built on farmland (KPC)
 - Reasonable alternatives need to be considered, not just Botley West or “do nothing” (OCC) (VWHDC) (WODC) (WTC)
 - Applicant state that 22000 households will be consulted but for a solar farm of this size the number of consultees will be far lower as they are constructed in remote areas with little visual impact (HPC)
 - National policy is to develop on previously used land, such as Didcot Power station, Greenham Common Air Base not valuable agricultural land (FPC)
 - National Grid enables solar farms to be built in remote areas or in smaller sizes (FPC)
 - There needs to be a national assessment of the most appropriate sites, not just piecemeal development by large landowners(CPC)
 - Total site 1400 ha (BlaPC)
 - All parish councils concerned about sheer size of this site on agricultural land
 - 53% of Bladon Parish will be solar farm (BlaPC)
 - 30% of Hanborough Parish will become a solar farm
 - Northern Site within 50m of green belt (BlaPC)
 - Woodstock with many listed buildings not mentioned as close to Northern Site (BlaPC) (WTC)
- Green belt site(P)
 - All respondents concerned about use of green belt land and its justification
 - 76% of solar farm is in green belt and the remainder close to the Green belt (CPC) (WTC)
 - Entire village and surrounds of Cassington are in the green belt (CPC)
 - Greenbelt land between Yarnton and Long Hanborough will be almost totally filled in (YPC)
- Wider historic landscape and listed buildings(P)
 - Compromises three landscapes of international significance, dreaming spires of Oxford, estate farmlands around Blenheim and the approach to the Cotswold AONB (FPC)
 - Conservation areas of Rousham, Shipton-on -Cherwell and Hampton Gay excluded from assessment (Ch)
 - Conservation areas in Hanborough and Bladon are within the red line but have been excluded from the assessment, applicant is wrong to state that no conservation areas are within the projects area (WODC)

- Woodstock is within 2Km of the study area and has a large number of listed buildings (WTC)
- Considering two points for high voltage power cables to cross the Thames – both close to Swinford Toll Bridge and this factor needs explicit assessment (CuPC)
- Land included in the buffer zone and security fencing needs to be included in geophysical assessment (CuPC)
- Quality and grade of agricultural land(P)
 - There needs to be an independent assessment of land quality. It is not “low grade.” This assessment should not only be based on soil samples but production records (CPC) (HPC) (WODC) (YPC) etc
 - Grade 3a and 3b around Begbroke (BPC)
 - Land around Bladon is classed as 3b or better (BlaPC)
 - Loss of valuable agricultural land and food security issues. Impact of off-shoring food, increased transportation etc. needs to be off-set against any environmental benefits of Botley west in an environmental cost benefit analysis (TPC)
 - Several tenant farmers have already vacated land so any recent production data might be abnormally low, land converted to pasture and potential changes to ecology (WTC)
- Study area(P)
 - 20m buffer zone to existing properties inadequate (WoPC)

TECHNOLOGY AND ENGINEERING ASPECTS

- Choice of large solar power plant when other options are available (P) et.al.
 - Wind
 - Tidal power
 - Solar on roofs, brownfield sites
- Applicant quotes carbon intensity figures for current types of power generation that include fuel production costs but their figures for solar power are not on the same basis as manufacturing and raw material costs are ignored (HPC)
- Solar panel raw materials and production processes are major sources of pollution (HPC)
- Cranfield University figures imply carbon debt of PV panels will not be repaid for at least 26 years of power generation and might never be repaid as panel life is typically 25 years and proposed lifetime of facility is 42 years (HPC)
- What is the net carbon benefit of Botley West based on a comprehensive study including raw materials, manufacture, transport, construction, operations and maintenance and decommissioning also including off-setting the equivalent area of agricultural land overseas for food production (TPC)
- Size of Power Plant(P)

- 250MW is quoted as being financially viable so why 850MW. ES should consider reducing size (BlaPC) (WoPC)
- ES needs to justify why smaller solar plants distributed around the country and on roofs etc is not a viable option (BlaPC)
- ES needs to discuss other options than the two outlined – Botley West or do nothing (BlaPC) (Ch) (WTC)
- ES needs to justify assertion that Govt net zero target will not be met without Botley West (BlaPC) (CPC)
- No data is provided on NGC's need for such a large power plant in this area or that a grid connection will be supplied (HPC)
- Does NGC need the grid or vice-versa? (HPC)
- NGC submission specifies restrictions on site layout but does not discuss or give an opinion on the need for a solar plant of this size in this location (NGC)
- Construction Timescale(P)
 - Construction could be phased and if operational period begins on completion areas first completed will be decommissioned after operating for a period in excess of the planned 42 years (WTC)
- Operational Phase
 - Solar panels typically have a life of 25 years and with a 42 year planned operational period, a major maintenance programme will be required mid -life (HPC)
- Decommissioning(P)
 - 42 year operational period c.f. solar panel life of around 30 years (HPC)
 - 2.5m piles unlikely to be removed (BPC) (YPC)
 - Decommissioning costs can be twice as large as construction costs (KPC)
 - Central Site within 200m of Blenheim Wall and 600m from Woodstock which will be encircled (BlaPC) (WTC)
 - Northern and central sites border many hamlets, villages and at least one major settlement (BlaPC)

LAND AND LANDSCAPE

- Visual Impact on Landscape(P)
 - Commitment to no permanent security lighting has to be confirmed in writing (Ch)
 - PIR and movement induced lighting could be triggered by animals etc (HPC)
 - Cherwell landscape officer disagrees with statement that there will be no visual impact and residents will also think otherwise (Ch) (WODC)
 - With a 15m high substation sited on 3.5ha of land there is no justification for statement that residential visual impact need not be assessed on southern site (CuPC) (VWHDC)

- ZTV needs to be reconsidered with respect to Cumnor Neighbourhood Plan, siting of substation, inverters, cable route etc (OCC) (VWHDC)
- Residential Visual Amenity has been scoped out but in addition to solar panels there will be inverters, sub-stations, security fencing, pylons, cameras etc making the site highly visible (WoPC) (YTC)
- Visual impact from points such as South Parks Oxford should feature in ZTV analysis so study area should be wider than proposed (VWHDC)
- Range of viewpoints is limited and needs revision, especially in light of other proposed solar farms in the vicinity of Cumnor, Bladon, Church Hanborough, Cassington and Woodstock(VWHDC) (WODC)
- Spring Hill near Yarnton offers views of the North Wessex Downs, Blenheim Park and the Costwolds AONB which will be compromised by the industrialised landscape of the solar farm (YPC)
- Glint and glare(P)
 - RAF Brize Norton could be affected (CuPC) (OCC)
- Ambient EMF (UKHSA)
 - EMF fields need to be considered as cable route likely to run close to residential and childcare facilities (CuPC)
 - London Oxford Airport concerned about EMF fields and high intensity radio interference (Ch)
- Archaeology(P)
 - Decommissioning will require large vehicles to access site and could affect underlying archaeology and must be considered in addition to effect in construction phase (HPC) (HE) (OCC)
 - Geophysical investigations cannot be relied upon and field work needs to be undertaken prior to construction (OCC)
 - Investigations should cover the whole area (WoPC)

ENVIRONMENTAL

- Ecology and nature conservation(P)
 - The statement that *'no habitat loss would occur within any of the identified designated sites, at European, national or local level'* is questionable (CuPC)
 - Ambient EMF can affect the behaviour of several species and the solar farm will create its own microclimate (BlaPC) (WTC)
 - Farmoor Reservoir has an international status for migratory birds and the impact of the project needs to be considered (CuPC)
 - The Longmead Wildlife Site is crossed if the westerly cable route across the Thames is considered (CuPC)
 - Cable route needs to reassessed as it is close to Long Mead and Swinford Farm Meadow Local Wildlife sites, historic water meadows (OCC)
 - Long Mead poses a flood risk (VWHDC)

- Will remove animal corridors and reduce areas wild life use to forage, graze and feed, deer, rabbits, hares, muntjac and smaller species (FPC) (HPC) (WTC) (WoPC)
 - The existence of deer, hares etc has not featured in the scoping request and there is an area around Yarnton that is a priority area for the brown hairstreak butterfly whilst great crested newts inhabit Begbroke Wood (YPC)
 - British wild bee, thought extinct has recently been discovered in the area (FPC)
 - Potential impact on Oxford Meadows SAC (includes Cassington Meadows SSSI) and hydrological and air pollution impacts need to be assessed (NE) (WODC)
 - SSSI impacts could be Blenheim Park SSSI, Rushy Meadows SSSI, Wytham Ditches and Flushes SSSI, Wytham Woods SSSI (NE)
 - Natural England identify 12 areas of ancient woodland that could be affected (NE)
 - Biodiversity net gain should be in excess of 10% (NE)
 - A full site arboricultural survey is necessary (OCC)
- Hydrology and flood risk(P)
 - Cassington, Worton, Jericho Farm and Yarnton have a history of flooding and there needs to be an impact assessment of the effects of this solar farm on the increased risk of flooding (CPC)
 - Thames Valley Flood Scheme has potential to “overlap” with project and needs to be considered (EA)
 - Application sites encompass Flood Zones 1,2 and 3
 - Detailed flood modelling is required and methodology needs to be signed off by the Environmental Agency (EA)
 - Site design should ensure that infrastructure is safe and operational in the event of flooding (EA)
 - All development should be at least 8m back from major rivers and ordinary watercourses(EA)
 - Information is required on design of river crossing to assess impact on flood risk elsewhere (EA)
 - Impact of project on aquifers needs to be assessed together with possible groundwater contamination during construction and operational phases. Use of private boreholes has to be included (EA)
 - Horizontal directional drilling during construction may pose a risk to groundwater (EA)
 - One of the cable routes being considered passes through the Long Mead Wildlife Area which poses a flood risk and needs assessing (VWHDC)
 - There is a history of flash flooding in the Yarnton area (YPC)
- Ground conditions(P)
 - Ground and groundwater contamination due to the use of panel cleaning products etc over the course of the 42 year operational period must be considered (CuPC)
 - Toxic chemicals can slowly leak from solar panels contaminating land (KPC)
 - The cable route crosses one historic landfill site that contains asbestos and other controlled materials. Methane has been detected coming from this site (EA)

- There is a public sewer on one of the sites and piles must not be driven within 15m of that sewer (TW)
- Site Waste
 - Solar panels, inverters etc will need to be replaced during the operational period but no commitment is made with respect to waste disposal (CuPC) (OCC) (TPC)
 - Waste management plans during all project phases need to be produced (EA) (TPC)
- Permitting
 - Site will need a number of consents and permits (EA)

IMPACT ON COMMUNITY

- Traffic and transport (all project phases) (P)
 - The A4095 and Lower Road are not listed (WTC) etc
 - The B4017 is the main access route to the southern site and the impact of this development during all project phases cannot be discounted from the traffic assessment (CuPC)
 - Traffic will be disrupted on all roads that are in regular use, such as the A40, A4095, A44, Lower Road and Pigeon House Lane (FPC)
 - Traffic issues consequent on decommissioning have been scoped out from the study (WTC) (HPC) (BlaPC) etc
- Noise and vibration (all project phases) (P)
 - 69dB predicted – loud (BPC)
 - Noise will be considerable during construction and operation and a full assessment should be made including the development of an acoustic map (WoPC)
 - Not all villages and towns likely to be affected have been included, missing is Bladon, Church Hanborough, Cassington, Begbroke, Wootton (BlaPC) (WTC)
 - Note that Bladon is bordered by the Northern and Central Sites (WTC)
- Socio-economic issues(P)
 - Workforce(P)
 - Public rights of way(P) (OCC)
 - The recreational amenity of Shakespeares Way long distance footpath (the part through Yarnton is known as Frogwelldown Lane), an ancient drovers route , will be severely affected (YPC)
 - Access to Dornford Lane (TPC)
 - Housing and land values(P)
 - House price depreciation must be a consideration with a planned 42 year operational phase (BlaPC)
 - Argument to scope out housing issues on basis of 42 year operational period being temporary is questionable (WTC) Etc

- Crime, safety and security(P)
- Theft of cabling, solar panels etc from site is a real possibility so intrusive high security fencing will be required (HPC)
- Tourism has been scoped out but is a major source of income both for Blenheim and the surrounding area, much of which will be covered by a solar farm making the destination less attractive (WTC)

CUMULATIVE EFFECTS

- Cumulative effects and inter-relationships(P)
 - Site needs to be considered in relation to other approved or proposed developments in the areas such as Salt Cross (2500 homes), Yarnton (4000 homes) and others in Long Hanborough, Eynsham, Woodstock and surrounding villages. Thus areas identified as countryside might not exist which together with Botley West would enclose many settlements such as Woodstock, Bladon and the open countryside along Lower road linking Hanborough and Bladon with Eynsham and the A40. It will not necessarily be located in open countryside (BlaPC) (EPC) (HPC) (WTC) (YPC)
 - Oxford Airport could be affected (BlaPC)
 - There is a proposed park and ride close to the Bladon roundabout (BlaPC) (WTC)
 - Another solar project is being proposed adjacent to southern section – Red House Farm (CuPC) (OCC)
 - There are active discharge consents for a number of entities (eg Thames Water, Blenheim Business Park etc) and the impact of the project on these has to be discussed (EA)

MAJOR ACCIDENTS ETC.

- Major accidents, disasters and emergency plans(P) (UKHSA)
 - London Oxford Airport concerned about access to site in event of plane crash etc (Ch)
 - Solar panels, inverters, transformers and switchgear can catch fire. The Southern section is close to Oxford, Farmoor Reservoir and on the flightpath to Brize Norton and as such emergency plans must be reviewed (CuPC) (OCC)