

**7000acres Comments on the Response to the Environmental Statement ES  
Addendum 21.1: Human Health and Wellbeing effects**

**West Burton**

**Deadline 5: 11 April 2024**

The author of this document is a health professional who has over thirty years' experience of working in Lincolnshire Health as a General Practitioner and in a leadership position within the local Lincolnshire NHS

7000 acres has concerns with the Applicant's statement that this document is "***suitably comprehensive and a proportionate assessment***" for the following reasons. The way this has been written clearly demonstrates that a person with a health background has not been involved. A desktop review does not take into account local intelligence to advise and provide a balanced view. This needs to be provided by the local stakeholders in health. Elements of this report on important issues are simply stated as "***no significance***" without the knowledge and base to make comments. The author is a Town Planner with no health background (from the LANPRO website and from his involvement in the West Burton session where he participated as an expert). Therefore, we do not recognise the author as an expert.

**These are the issues with this addendum on human health and health and wellbeing:**

- This report does not specifically outline potential health outcomes, something which should be reported. How does solar improve health? What are the positive and negative impacts? In our 7000 acres WR we have outlined potential health outcome risks which have not been adequately addressed. We will comment later on their deductions in this report.
- This addendum does not have a literature review attached. In Chapter 15/21, their references are very scanty on health with papers biased towards the energy sector. We would expect more papers to back up their claims within this addendum.
- We believe that it is important to interpret the data correctly. For this to occur, one needs to interrogate the data and for that reason, the searches on data to inform an opinion has been unsatisfactory. For this to occur, people in the health sector deep dive data to fully understand what it is telling us. Therefore, a desktop review from a distance will not highlight local issues, especially if the local stakeholders have not been involved. This report is low on stakeholder knowledge. Data needs to be thoroughly scrutinised.

- There has been very little critical assessment by the applicant as to their process and evaluation.
- They have not identified the gaps in their methodology and assessments. We would like to know what the unintended consequences will be. These need to be identified
- More importantly, there is no balanced approach to understanding and reporting impacts.
- There is nothing in this report as to how they will identify health inequalities or how they will mitigate against this e.g. the Traveller site at Odder and concerns around flooding which will affect this community with health consequences. In Traveller groups we must recognise literacy and digital exclusion. On average this group have life expectancies 10-15 years shorter than the general population (Quality and Human Rights Commission). For this group, sending them information and letters is not adequate. They need face to face contact. Did IGP engage with them directly? Another important excluded group are carers. Has IGP engaged with the local carer's association?
- It does not feel very democratic. People have rights to participate in major decisions that affect their lives. People need to be informed in a balanced way to do this. Most people in our area are currently unaware of the long-term consequences these schemes will have on them, that is because a balanced view has not been articulated. Merely stating this scheme will generate electricity for x amounts of homes means to local people, my home, free electricity! The reach has not been far enough.
- How will these schemes maximise health and wellbeing benefits. Clearly, this has not been articulated. Over 15 years people will get used to seeing rows and rows of panels in their fields. That does not articulate the health benefit.
- The process has not been participatory due to the right stakeholders being engaged to give the local intelligence and debate their concerns going forward, especially the cumulative impact.
- More qualitative data is required. The only qualitative data supplied was Census data from 2011 (Figure 18.4 Environmental Statement Chapter 18: Socioeconomics, Tourism and Recreation). Ask us how this scheme will make us feel emotionally, physically and mentally so that that there is well-balanced feedback through an independent survey.
- How will the applicant propose to monitor the implementation and identify indicators to measure health and wellbeing e.g noise levels or health management plans which have not been included within this report. They should set parameters to monitor health.
- Governance issues especially around decision making and probity. This should be clearly demonstrated which is not the case. 7000 Acres see all these schemes as one scheme.

The Applicants legal team advised during a West Burton hearing, that guidance on health and wellbeing was constructed from Institute of Environmental Management and Assessment (IEMA) guidelines.

Reference 2.12: Flooding, Ground contamination, Noise and Vibration, Glint and Glare, Air Quality, Socio-economics and Recreation, Waste and EMF are all by products of the scheme which affect health. Most fall under the heading of health protection. However, when looking at health within populations, one needs to look beyond these headings to really understand how schemes like these can affect the people who live and work within the affected areas concerned. Therefore, understanding Population Health Management is important, as this will help to identify and reduce health inequalities by defining the wider determinants of health, health behaviours and lifestyles, places and communities in which we live and an understanding of integrated health and care system (Health and Social Care Act 2022). It is for this reason that 7000 acres is requesting a full Health Impact Assessment with the right stakeholders who hold the local data intelligence and that a balanced opinion can be obtained to guide the examiners who ultimately advise the Secretary of State. The cumulative effect of all these schemes is massive. In this report there is very little on both physical and social health and given that this area has a large elderly population, this has implications in the context of a rural area. 7000 acres have presented this within their WR. Using GP QOF data highlights disease profiles such as Respiratory, Heart, Mental Health, Neurological and Musculoskeletal disorders and Cancer, of which we have patients with all and some with multiple conditions living within our communities. 7000 acres has highlighted issues within the Equality Impact statement around those vulnerable and protected characteristics. We have also pointed out the Core20Plus5 work within the NHS which looks at health inequalities which could be impacted by this scheme. We have also pointed out that this scheme and others may potentially fragment communities and social networks due to the impact of this and other schemes affecting economic and environmental living conditions with indirect effect on health and health outcomes. There needs to be a clear understanding of how communities directly live off the land. How does one mitigate against outward migration of young people, which leaves potential gaps in social care? In 2.2.3 by not providing a distinct assessment of human health and wellbeing, how can one adequately set out a summary of health and wellbeing impacts?

2.2.5 This was a desktop health assessment, which does not, in our view, address the local issues. The author clearly has a limited understanding of health issues and this why certain significant areas of health were missed in the original DCO. Areas such as mental health,

constitutional lifestyle factors, understanding rural health issues, and the fabric of our society such as social networks and how they will be affected and how deprived areas will benefit socioeconomically other than to state jobs and training potential will be on offer. This needs a deeper understanding from the examiners as we are not sure the applicant has an understanding of the issues in deprived areas and perhaps paying lip service.

2.2.6 How does the author, a Town Planner, mitigate against health issues? 7000 acres requests a wider health professional opinion through a proper health Impact Assessment to mitigate the impact of this and the other schemes. We also request a session on health. We welcome the Public Health report on solar farms and their impact in Lincolnshire.

3.1.1. Our environment is recreational. This is a rural area so how does one mitigate against this when solar panel heights are 4.5 metres high (5 metres to the highest point on the panel), creating a claustrophobic effect for those living close to them.

3.3 Please refer to 7000 acres WR on Noise. In particular, we have questioned the methodology and given that much of this is subjective, urban testing applied to rural settings fails because of this. Operational noise will only become apparent when the scheme is up and running and this in itself is a worry as we know that these schemes emit significant noise.

Table 3.6 7000 acres requests a Health Impact Assessment. We note the authors reference to this. We believe all the schemes should be seen as one. The size and scale of these schemes in our area has a cumulative effect to warrant one single Health Impact Assessment which we believe the examiners of all the schemes will require when presenting their findings to the Secretary of State. (see 4.3.18)

3.3.14 (including 3.3.15) There is little substance around these statements to make comments on significant effect. We suggested data needs to be interrogated and perhaps a deeper dive to challenge. Health is not only about desirability of public rights of way and recreational routes.

3.4.7 In combination effects **“The only effects relating to human health and wellbeing are in-combination transport and access effects resulting from the carrying out of multiple Works packages of the Scheme. These in-combination effects impact upon the wellbeing of non-vehicular road users and public right of way users”**. Implying “angry” residents as a health issue demonstrates arrogance and a total lack of

understanding around human health. Green spaces are important to the rural population, so destroying this has a negative impact, especially on mental health.

5.1.4 **“the only significant adverse effect to human health and wellbeing, which is short term and temporary moderate adverse effect to physical and mental health wellbeing is due to potential repeated closures of the Trent Valley Way and National Byways for cable laying and drilling works.”** They then say **“the human health and impact does not outweigh the benefits the scheme is able to provide at a local and national level”**. If this is the only significant adverse effect on human health, then we think that a Health Impact Assessment is definitely required given the complexity required beyond the authors view to assess the impact of this scheme and others will have on our area. Besides, this is a biased view by an author who has no real depth and understanding of health issues other than those required around construction and decommissioning. Glint and Glare and EMF have been covered separately by 7000 acres.

3.5.13 7000 acres challenges the benefits of this scheme and others as potential enablers of health and wellbeing in relation to reducing deprivation, especially in Gainsborough by increasing access to employment and education. There is no detailed plan of how they intend to do this and we feel they do not understand the context of what this means considering they did not recognise initially the issues within Gainsborough town (see 7000 acres WR). We feel they are paying lip service to this and the applicant needs to be challenged by the examiners on how they intend to uplift this community. Their intention needs to be interrogated. There is a link between employment, education and health. However, we feel these schemes offer very little benefit as the intent is to bring in outside trained workers to build the schemes. That is why they have looked at the FTE GPs in the area. More data is required around this. They point out the loss of agricultural workers, however there is a supply chain to this that is local and regional which needs to be considered, so the knock-on effect is much greater. This may have a detrimental effect to those remaining farmers who themselves are vulnerable (protected characteristics).

4.2 BESS fires would only be a significant health risk if the battery units caught fire. More of a health protection risk with possible contamination of the soil and water courses. EMF is covered by a separate author.

4.2.4-8 West Lindsey District Council Green Strategy October 2012 report stated, **“that in 15 year’s time, West Lindsey will be a place where there is a better-quality environment to make people healthier. It recognised that we are an important agricultural area that**

**feeds the nation, and that the landscape, the built-up areas and the historic environment retains its unique character, and needs to be protected and enhanced to the benefit of all that being visitors, business and residence. It stated that we the people need to become greener in the way we live our lives! “**

Older people move to rural areas to have good health in their later years, also to be financially secure, have good social connections and feel that their lives are meaningful and purposeful. Age is regarded as one of the protected characteristics. Green spaces are good for wellbeing. There are concerns these schemes will increase loneliness and isolation, and at worse fragment social networks as highlighted in our WR. The examiners are quite right to raise the issue around the change in landscape having a detrimental impact on the desirability of the locality to live well (given the local NHS ambition: Start well, Live well and Age well and soon to be published NHS Joint Plan 2023 -2028). This will have a negative impact on residential amenity and enjoyment where people live, which then has an effect on physical health and mental wellbeing. The argument that this will improve for subsequent generations does not hold. In 15 years, older people will not want to come to live here as there will be no benefits to rural living, especially to gain health. The positive impact of green space improving mental health is the key.

The Examiner is right to challenge the methodology. We have covered these points earlier. Rural issues are very different to urban and this differentiation in the DCO and this addendum clearly demonstrates the deficiency in knowledge. There is a real risk that over the 60-year period this area could become a wasteland, especially if new technologies in renewables become a reality. Imagine what this will present to health if this occurs. At best this could be a future major “health inequality”!

4.3.1 **“The Applicant is confident that physical health impacts from the Scheme have been suitably assessed through the individual ES topics described previously in this document”**. 7000 acres cannot agree with this statement as no Health Impact Assessment has been carried out as described earlier taking local issues into consideration using in depth local intelligence

4.3.6 The worst-case scenario approximately 17 FTE agricultural jobs will be lost. What will be the total loss for all the schemes and the knock-on effect for the suppliers and the agricultural sector as a whole when 13,000 acres in this area is lost to solar development. This has implications for health and wellbeing when you look at the cumulative effect,

especially on the families affected. So, we question the authors statement that the likely impact will be low. "Employment" is a wider health determinant and this needs further evaluation.

**4.3.7 "the Applicant is confident that the significance of assessed effects for operational effects has been sufficiently considered and that the long-term mental health and wellbeing effects from the Scheme are not significant".**

**"The magnitude of the assessed long-term mental health and wellbeing impacts takes account of the potential for these to be permanent amongst some members of the population, whilst there is potential for this to reduce over time as peoples' perceptions of the Scheme change of its lifetime". "The assessment of mental health and wellbeing throughout the operational lifetime of the Scheme has had regard to the length of time over which the effects will occur"**. On what basis is this statement made, ONS data 2011? No qualitative survey has been carried out and nor has there been an attempt by the applicant to understand the mental health issues in this area e.g. the number of patients with depression or long-term mental health conditions. We raised concerns that depression rates are rising in the over 65's. Perhaps our local mental health trust as part of a Health Impact Assessment could contribute. We know that mental health in rural communities is a problem in Lincolnshire and that this is a concern.

**4.3.9 "an effect on personal perception of the landscape and its mental health and wellbeing value is dependent on subjective interpretation of the landscape as a whole and of individual views by an individual and collective set of receptors. Residual visual effects at the 15-year assessment point [REP2-052] are location specific and based on viewpoint"**. Has this been assessed by a recent independent qualitative survey? This statement is speculative and not evidence based through data collection. In 15 years' time, this area might be wasteland where no one wants to live because rural life is not appealing. If this statement was true, why do urban people like to get out into the rural areas? Green space helps to rejuvenate the soul, improving people's mental health. Ask the tourists who regularly use the Airbnb's in our area.

4.3.10 Landscape and the environment are wider deterrents of health, and this is important to a way of life in rural areas. Take this away, over time as stated previously, this creates "grief and loss", which then turns into depression and anxiety with resultant long term mental health problems (long term mental health is a protective characteristic).



4.3.11 ***“it was concluded that no express assessment of the mental health and wellbeing impacts would be required, as the likely effects would not be significant. Hence, the assessment of impacts upon individual and community amenity or sense of place was not included at Section 21.5 of C6.2.21 ES Chapter 21 Other Environmental Matters [APP-056]”***. In population health, it is a known fact that there is importance of “place” and that communities in which we live shape our health. This needs to be recognised, and in the case of rural settings, people choose to live there for the benefits the environment offers to their health and wellbeing. It is all about neighbourhoods and the social networks and connections on which rural people thrive. It’s a way of life. Destroy this, and health will be affected (see 7000 acres WR report). Our biggest asset is the wide-open spaces (countryside), and that should be respected. The role of communities in supporting good mental health is critical. Removing this way of life creates high level psychosocial stressors, which affect both physical and mental health, as well as the social fabric of our society. It might not be evident to all at the moment, however over time this has the potential to escalate. Therefore, we need a full Health Impact Assessment to be carried out particularly to look at the health outcomes over time.

4.3.12 ***“Assessment of the impacts of the consultation and examination process have not been undertaken as it was not considered that these would have significant impacts on mental health and wellbeing”***. The applicant has admitted that the impacts have not been undertaken when it comes to mental health. ***“The Applicant considers that the level of consultation provided, including targeted consultation for residents most likely to be affected by visual changes to their setting, and the level of information produced about the Scheme, the DCO process, and how members of the public can engage, demonstrates that there has been a forthcoming in its approach to informing members of the public”***. 7000 acres believes the targeted area was not large enough to inform people of the consequences of this and other schemes. They should have gone well beyond those who are close to the schemes because as previously stated, “place” is important to our health. Just because you live in Gainsborough or Saxilby, does not mean that you will not be affected. People drive through the countryside, gain inspiration which helps their mental health. Villages and towns are inextricably linked to rural areas that surround them. ***“the Applicant considered that the responses issued to comments made by written and oral representations during the examination process have been accurate and informative to ensure that Interested Parties have enough information to make an informed judgement of the Scheme. the Applicant is confident that appropriate measures were made to ensure hard-to-reach groups”***. We disagree with

this. 7000 acres has over 1000 members. Not all have participated in the process. Given this and all the schemes it is impossible to keep up with all the information to make an informed judgement, whether pro or against solar. That is why we have asked for qualitative surveys (independent of IGP/LANPRO) to understand how this and the other schemes will make us feel emotionally, physically and mentally. Regarding the hard to reach, we feel this has not been adequate (see above comments on this and the 7000 acres WR on the Equality Impact Assessment)

**4.3.13” In considering the mental health and wellbeing impacts of the pre-application and examination process, the level of significance of changes to different sections of the affected communities will vary to a large degree. The level of awareness and involvement in the examination process may impact upon participants’ mental health and wellbeing adversely through stress and focus on the most negative aspects of the Scheme, particularly for participants of multiple DCO examinations. Conversely, these participants may also be most informed of the process and thus less likely to suffer mental health and wellbeing impacts as a result”.** 7000acres finds this statement to be discriminatory and we would like this withdrawn with an apology. To state that those who participated through multiple DCO examinations focused on the negative aspect of the scheme, implying that these participants mental health and wellbeing were affected through stress from participating is quite ludicrous. It takes courage to get up and speak at open sessions. 7000 acres has over 1000 members, many have not been able to participate for various reasons, so a statement like this is quite insulting. This shows a lack of respect for the participants. For many people, due to commitments and daily life, they are not able to participate. It does not mean they do not share the same anxiety as the participants. That is why we have called for a Health Impact Assessment and qualitative independent surveys to refute this notion. We call on the examiners to challenge this.

**4.3.14 “The effects to health and wellbeing on existing residents who have pre-existing health conditions and therefore are more sensitive to changes to healthcare access are also not significant”.** An influx of say 2000 workers into this area for all the schemes is equivalent to one FTE General Practitioner. It does not take into account the extra staff required to service that practitioner. This needs discussion with the local NHS (Lincolnshire Integrated Care Board) who is responsible for General Practice provision. Access is particularly challenging at the moment, so any increase to GP lists is important to understand especially in the context of temporary resident patients. Also, to single out high users (pre-existing health conditions) is unfair as the NHS belongs to all. Other high use

services are the Urgent Treatment Care facilities at both Gainsborough and Lincoln who really need to understand the impact of this influx. These facilities are run by the Community Trust. This is why one needs a Health Impact Assessment to understand how local services work. Potentially, this could impact on our already busy Acute service (United Lincolnshire Hospital Trust). Therefore, we disagree with the statement “that is not significant”.

4.3.15 **“Where comments have been raised specifically regarding groups with known health or deprivation inequalities in the communities affected by the Scheme, the Applicant is confident that these inequalities have been sufficiently accounted for in the assessment of health and wellbeing impacts”**. We disagree. No conversation has been had with the local Integrated Care System where there are experts on health inequalities. This is a very highly specialised area. A HEAT (Health Equity Assessment Tool) has not been carried out. This would be a requirement of a Health Impact Assessment. This tool identifies health inequalities for any project. Furthermore, the author was unaware of the NHS commitment to the Core20Plus5. This could be impacted by this and the other schemes with regards to health inequalities. A desktop review has not highlighted any of this so that the author cannot be confident that inequalities have been sufficiently accounted for. An example was referenced in the WR noise 7000 acres submission around partially sited people and exposure to solar scheme noise as they have heightened hearing (senses). See 7000 acres WR submission for other examples. They even state **“that any vulnerable groups within the community are likely to be disproportionately impacted by the Scheme with regard to socio-economic impacts, direct physical health impacts, nor at a greater risk of social isolation as a result of the Scheme”**. 7000 acres believe there is a real risk that vulnerable people will be impacted by the scheme. Our WR has given examples (Traveller Community, Military Veterans, Single parents, Learning disabled, the elderly, those with long term mental health problems, and of course farmers in the community because of the high suicidal risk in this group). A full Health Impact Assessment would identify if this was the case. NHS local data is essential **“there are anticipated to be no significant effects to the health and wellbeing of vulnerable or isolated groups”**. This is an assumption which needs to be backed with hard evidence with deep dive data and local intelligence. There is a huge data source available for reference that can be used by people outside the NHS e.g PHE fingertips.

4.3.16 **“The Applicant confirms no additional consultation was undertaken as it was considered that the comments received were sufficient to be able to undertake the human health assessment in accordance with the Scoping Opinion. No request for a**

***Health Impact Assessment was made prior to the application of this DCO, nor has the scope and methodology of the human health assessment thereafter been called into question by a local authority or statutory body for health***". 7000 acres have always advocated that the applicant should have produced a Health Impact Assessment. The applicant has stated that no Health Impact Assessment was made prior to the application for this DCO, nor was the scope and methodology of the human health assessment thereafter been called into question by the local authority and statutory body for health. How can anyone doing a desktop review understand the local issues without gathering local intelligence data from the local sources. Specialists in the field of population health management, those with expertise on health outcomes and health inequalities are best placed to provide opinions. The cumulative impact is our primary concern. The Local Authority is now grappling with many applications in our area and maybe this changes things for them.

***"The Applicant is confident that the scope and methodology of the human health and wellbeing assessment undertaken has sufficiently addressed concerns raised during the pre-application process, and that any comments raised during the examination process have been adequately responded to"***. 7000 acres has always disagreed with the methodology as this has been weak. Much of the methodology has been written referenced more towards an urban slant than rural. They have not used well recognised approaches such as the WHIASU framework nor the well-recognised Public Health England document **"Health Impact Assessment in spatial planning: A guide for local authority public health and planning teams"**, **October 2020**. The document still has a slant towards a more urban environment. This document does give a flow chart and advice on whether or not a Health Impact Assessment should be carried out. The IEMA Guidance was referenced and we have provided a separate document Additional Comment. Given the scale of all the schemes, and the fact that there are huge gaps within this assessment, framing what is required of an applicant around health issues is significant. This requires critical analysis of the data through a deep dive, using the local statutory bodies such as Public Health Lincolnshire, the local NHS and other local organisations such as MIND, Age UK and the Institute of Rural Health which is based at the Lincolnshire University. This could have provided in depth data to form an opinion beyond the desktop review done by LANPRO, especially local issues. The LANPRO literature research was poor, with only three references to census data and one to the Health and Social Care Act 2012. They also referenced the Corringham Neighbourhood Plan which in no way sets out the health issues for this area. 7000 acres is requesting a specific hearing on health as well as a Health Impact Assessment be completed across all of the schemes so as to minimise negative and

maximise the positive health impacts so as to reduce health inequalities which should become evident as these schemes materialise. The local Joint Strategic Needs Assessment and the local plans of both the Trent and IMP Primary Care Networks are critical to health moving forward in this area.

4.3.17 Please note the Additional Comments document where 7000 Acres has appraised the Guidance documents against the assessments made within the following documents:

**Human Health and Wellbeing Environmental Statement Chapter 18: Socio-Economics and Tourism and Recreation EN010132/ APP/WB6.2.18** and the **Environmental Statement Chapter 21: Other Environmental Matters EN010132 APP/WB6.2.21** as well as the document: **Response to the Environmental Statement ES Addendum 21.1: Human Health and Wellbeing effects.**

4.3.18 The cumulative effect warrants a full Health Impact Assessment.

#### **References:**

- **A vision for population health Towards a healthier future The Kings Fund 11/2018**
- **Health Impact Assessment in spatial planning: A guide for local authority public health and planning teams October 2020**
- **Health and wellbeing in rural areas Local Government Association PHE Case Studies**
- **Improving access to greenspace A new review for 2020 PHE 3/2020**
- **Green Strategy WLDC 10/2012**
- **Ageing in a rural place: A commentary on the challenges and opportunities for people ageing in rural and coastal places Centre for Ageing Better 4/21**
- **Health Impact Assessment of Government Policy:A guide to carrying out a Health Impact Assessment of new policy as part of the Impact Assessment process Dept of Health 7/2010**
- **WHIASU Quality Assurance Review Framework for HIA – Criteria Matrix WHIASI/Public Health Wales Green L et al 2017**

