

As requested by the Examining Authority, please find below additional information in relation to the comments I made at the Issue Specific Hearing 1 on the agenda item in respect of the Grid Connection.

I attended the consultation for the proposed 400kv High Marnham substation which was held at South Clifton Coronation Hall on 26/04/2024 at 2PM.

On speaking with the representative from National Grid in relation to the proposed One Earth Solar Farm project, at that time they had a split connection between the 275kv and proposed 400kv substation. I asked what the current situation with capacity on the 275kv substation was and what would be the outcome if the 400kv substation did not get approval and where would this leave its prospective customers who have connections assigned on the 400kv system. The answer was that the 275kv system could not accept these customers, but National Grid had an obligation to provide a connection to these customers if the 400kv system fell through. I asked how they planned to accommodate this when the current substation was at capacity but again, I was told they had an obligation to provide a connection. All I took from the consultation was there is an obligation but no way logistically to provide without the 400kv substation. This begs the question why the applicant moved all its allocated grid connection, which was previously split over two separate connections, one part on the 275kv system and one on the 400kv system, to all being on the 400kv system which could be blocked/rejected by Town and Country Planning.

In relation to questions asked by the ExA on the new 400kv network that is planned (via NSIP) to go from the East Coast (Willington) to Chesterfield I feel that the applicant's technical expert was misleading in his response to the ExA on highlighting the importance of the 400kv High Marnham Substation in relation to the 400kv line happening. It does in fact have no impact on the 400kv line which is mainly there to bring power from offshore renewables, If High Marnham does not get permission from T&C planning the 400kV line can still go ahead.

So, What Happens If High Marnham Doesn't Get Built?

1. The Chesterfield–Willington line will still go ahead.
 - It has its own NSIP process, route, and strategic justification.
 - It connects into existing infrastructure at Willington (South Derbyshire) and Chesterfield.
 - It does not depend on High Marnham's approval to proceed or function.
2. However, electricity generation projects like One Earth Solar Farm may be blocked or delayed.
 - If One Earth's grid offer is tied to High Marnham, and that substation doesn't get consented:

- Their grid connection becomes non-viable.
- They would need to reapply for a connection, possibly at Chesterfield or elsewhere.
- This could delay the solar farm significantly or even make it unfeasible.

3. System Impact: Limited.

- The grid is designed with redundancy and routing flexibility, so National Grid would likely reroute flows.
- But planned generation capacity relying on High Marnham would have no access point, which undercuts their projects.

Summary

- Chesterfield–Willington 400 kV line can and will proceed independently.
- High Marnham's cancellation would not impact the rest of the transmission system.
- But it would directly undermine projects (like One Earth Solar Farm) that depend on connecting to it.