

Our ref: NI2702

Elmwood House
74 Boucher Road, Belfast
Co. Antrim BT12 6RZ
T +44 2890 667 914

Date: 10 April 2024

Planning Validation Team
Armagh City, Banbridge and Craigavon Borough Council
Bridgewater House
23a Castlewellan Road
Banbridge
Co. Down
BT32 4AX

VIA E-Mail to Mr Gerard McGee

Dear Sir/Madam,

RE: LA08/2024/0259/F – Proposed Solar Farm Located on Lands South of Magheralin and southeast of Dollingstown

The above referenced planning application (the original submission) was lodged with the Council Planning Department on 01st March 2024.

This correspondence responds directly to a series of clarifications issued by the Council to inform their validation process. For ease of reference clarifications raised by the Council are summarised in *blue italic text* within this correspondence. RPS responses – provided on behalf of the Applicant, RES – are provided immediately thereafter to each clarification raised.

This submission includes the following new and updated drawings for consideration by the Council:

- Figure 4 Revision 8 – Site Layout - replacing previous Figure 4 Revision 7 drawing which formed part of the original submission;
- Figure 8 Revision 3 – Typical temporary construction compound - replacing previous Figure 8 Revision 2 drawing which formed part of the original submission;
- Figure 12 Revision 4 – Substation - replacing previous Figure 12 Revision 2 drawing which formed part of the original submission;
- Figure 17 – Setting Down - New drawing; and
- Figure 18 – Typical Hardstand Section - New Drawing.

Clarification 1: *The Council request FFL's / ground levels for the substation.*

Response: Please refer to enclosed Figure 17 – “Setting Down” – which provides an overview of the proposed layout with existing and proposed levels included for proposed internal access tracks, inverter stations, construction compound and sub-station compound. The detail confirms the sensitive design approach to development as set out within Section 2.3 of the Planning, Design and Access Statement, which inter-alia includes a commitment to minimise cut and fill across the site by working with existing levels. Accordingly changes to levels are minimal.

In addition to Figure 17 referred to:

- Previously submitted Figure 8 has been updated (now Figure 8 Revision 3) to provide a Section through the typical temporary construction compound – ground level construction make-up; and
- A new Figure 18 has been provided demonstrating a typical hardstand section.

Once again, both drawings illustrate the sensitive design approach which minimises the need for cut and fill across the site.

Our ref: NI2469

Clarification 2: *The Council request existing and proposed levels for all hardstanding areas, temporary construction compound and access tracks.*

Response: Please refer to the response to Clarification 1 and the information contained within Figure 17, Figure 8 Revision 3 and Figure 18. Additionally Figure 7 Revision 2 - Tracks - provided as part of the original submission again attests to the sensitive design approach which minimises cut and fill across the site.

Clarification 3: *The Council request that information be provided to confirm how hardstanding areas, tracks and temporary construction compounds are to be finished.*

Response: The following Figures which have been referenced in responses to Clarifications 1 and 2, all contain drawing “keys” confirming the ground level construction make-up and finishes to the respective project components:

- 7 Revision 2 – Typical Access Track Detail;
- 8 Revision 3 – Typical temporary construction compound layout; and
- 18 – Typical hardstand.

All surfaces are to be finished in permeable stone.

Clarification 4: *The Council set out that the stream crossing should not be marked as indicative.*

Response: Please refer to the enclosed updated Site Layout – Figure 4 Revision 8, which removes the term indicative as requested.

Clarification 5: *The Council request full details of all proposed cabling.*

Response: Please refer to Sections 2.2.3 and 2.2.4 of the Planning, Design and Access Statement which formed part of the original submission. This confirms that panel mounted cables run along the back of each solar row, which in turn link to inverter stations placed throughout the site. The inverter stations convert the Direct Current (DC) energy created from the panels into Alternating Current (AC) energy appropriate for feed into the onsite sub-station before transfer onwards to the electricity grid. Updated Site Layout – Figure 4 Revision 8 provides confirmation of likely cable routes from proposed inverter stations to the on-site substation.

As per Section 2.2.7 of the Planning, Design and Access Statement, the Grid Connection route does not form part of this application and will be delivered via a separate consenting process by the statutory undertaken – normally benefitting from Permitted Development rights. At this stage it is likely that the connection point for the project will be the 110kV/33kV Warringstown substation.

Figure 10 which formed part of the original submission provides typical cable trench sections.

Clarification 6: *In the case of the temporary construction compounds, should these not be bespoke for each compound? Please provide existing and proposed levels, elevations of buildings, their FFL and boundary treatments.*

Response: Regarding the above clarifications:

- The proposed construction compounds will be the same in each area. In accordance with the assessment approach, the design detail for the construction compounds is provided on a robust and “worst-case” scenario basis. Upon appointment of a contractor at post planning stage, it may be that a compound of this scale is not required. It is proposed that this is an accepted approach at planning stage and if further details are required it is not unusual that these are requested as part of a pre-commencement condition requiring that a final Construction Environmental Management Plan (CEMP) be submitted for approval by the planning authority;
- Existing and proposed levels are provided on the enclosed Figure 17 “Setting Down”;
- Figure 8 Revision 3 provides a section of the ground level construction make-up of the temporary compounds and confirms that levels will not change. The drawing also includes elevations and dimensions for all temporary site containers and facilities;
- Boundary fencing will be typical temporary wire mesh fencing – similar to Plate 1 below.



Plate 1: Typical Wire Mesh Fencing

Clarification 7: *In the case of the Inverter layouts, please provide existing and proposed levels, elevations of buildings, their FFL and boundary treatments.*

Response: Regarding the above clarifications:

- Existing and proposed levels are provided on the enclosed Figure 17 “Setting Down”;
- Figure 18 has been provided demonstrating a typical hardstand section. This reinforces the sensitive design approach which minimises the need for cut and fill across the site.
- Please refer to Figure 11 contained within the original submission documents which provides details of the inverter stations including any proposed boundary treatment. A description of the inverters is included within Section 2.2.6 of the Planning, Design and Access Statement and should be read alongside Figure 11. This confirms there are 2 options for inverters. Option 1 is where inverter units and the associated transformer is placed in the open air. In this instance the transformer is surrounded by an enclosure fence as shown on Figure 11. The second options involves housing the inverter and transformer within an inverter container unit.

An image of a typical enclosed inverter station is shown at Plate 2 below.



Plate 2: Typical Inverter Station

Clarification 8: *In the case of the substation compound, please provide full elevations of all structures and buildings, floor plans, levels and details of surface finishes.*

Response: Please refer to:

- Figure 12 Revision 4 – enclosed – which updates Figure 12 Revision 2 which was included as part of the original submission. This Figure contains appropriate elevations and floor plans of all proposed structures. Elevations have also been appropriately labelled for ease of reference against the floor-plans;
- Figure 12 Revision 4 also confirms details of the proposed surface finishes and has been updated to include a further typical hardstand section. This reinforces the sensitive design approach which minimises the need for cut and fill across the site;

Our ref: NI2469

Please be advised that with the exception of the NIE control building and the substation control building, the remaining structures shown on the substation layout are electricity plant and are not accessible. The control buildings are also occupied by plant and monitoring equipment the exact design of which is not finalised. It is respectfully proposed that the floor-plans shown are appropriate.

Clarification 9: *Solar Panels are marked as indicative which is inappropriate. Elevations have not been provided for panels marked as “indicative solar PV to be raised” on the site layout – Figure 4.*

Solar panels are mounted on frame tables which are pushed or screwed into the ground. There is no cut and fill to facilitate this process and the panels are “set” to follow topographical changes and deviations in the landscape. To allow for continuity along the rows of panels as they follow the landscape undulations this means there can be minor deviations in the solar panel heights which is facilitated by either raising or lowering the height of the frames on which they are placed. Regardless of this however, maximum panel heights will not exceed 3.5m at any time. The front, bottom edge of panels will be typically 0.7m above existing ground level and within a range of 500mm to 1.2m depending on local topography. Please refer to Section 2.2.1 of the Planning, Design and Access Statement which confirms this standard design approach.

Where panels are marked on the layout as “*indicative solar PV to be raised*” this refers to the front bottom edge of panels – and not the rear which will remain within the 3.5m design envelope. In these areas the front edge of panels will be set at 1.2m as opposed to the minimum clearance of 500mm. The key contained within Figure 4 Revision 8 is updated to clarify this. Figure 5 – Typical PV Module and Rack Detail – contained within the original submission remains an appropriate drawing.

I hope and trust the above information appropriately clarifies those matters raised and referred to. Please do not hesitate to contact me regarding any further matters.

Yours sincerely,
for RPS Ireland Limited



Paul McKernan

Technical Director

paul.mckernan@rpsgroup.com

+44 (0) 7713310582

CC – Rachel Buchanan – Senior Project Manager - RES