PHASE TWO CONSULTATION



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# Updated plans and proposals

January 2024

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This icon means there is a question on this topic in our feedback questionnaire.



## Foreword

Climate change is a challenge we must all play our part in addressing – from the small changes in our everyday lives to the transformational changes we need to make across our whole economy, particularly the way we power our homes, businesses and transport systems.

Over the next decade, we'll need to replace the fossil fuels that once powered our economy with sources of low-carbon electricity.

At EDF Renewables UK we are passionate about creating a net-zero future where clean energy powers our lives. We're already one of the UK and Ireland's leading renewable energy companies, developing, building, operating and maintaining wind, solar and battery storage projects. Together with Luminous Energy, a company with numerous solar farms in development across the UK and abroad, we are delighted to share our updated proposals for Springwell Solar Farm.

With the potential to supply enough clean, secure electricity to power over 180,000 homes each year\*, Springwell Solar Farm would make an important contribution to the UK's future energy network by producing clean, secure energy and helping reach the government's target of 70GW of installed solar capacity by 2035.

At the first stage of consultation (January-March 2023), we asked for your thoughts on our early proposals for Springwell Solar Farm, as well as for your suggestions on how we could enhance the local environment and contribute to community initiatives. The comments we received, along with outputs of early environmental assessments and technical work, have helped shape our plans, and we are now asking for your feedback on our updated proposals.

Community input will continue to play a very important role in helping us refine our proposals before we submit a planning application. I encourage everyone to attend our public events to speak with the team and share their thoughts on our updated proposals.

We look forward to reading your feedback.

#### Matthew Boulton

Director of Solar, Storage and Private Wire EDF Renewables UK

<sup>\*</sup> Based upon the average domestic electricity consumption per home (temperature corrected) per the Energy Consumption in the UK (published September 2021, Table C9 of ECUK: Consumption data tables)

## The consultation



## **Role of consultation**

Springwell Solar Farm – 'Springwell' – is a proposed new solar farm with battery storage in North Kesteven, Lincolnshire. Springwell is backed by Springwell Energyfarm Limited, a joint venture between EDF Renewables UK and Luminous Energy.

Springwell is classed as a Nationally Significant Infrastructure Project (NSIP) because it would have a generating capacity above 50 megawatts (50MW). This means we need to apply for a type of planning consent called a Development Consent Order (DCO) to build and operate it. Consultation is an important part of the DCO process because it enables everyone to comment on the proposals. This stage of consultation is called a 'statutory consultation' because it is being carried out in line with the formal requirements of the Planning Act 2008. We have published a Statement of Community Consultation (SoCC), which sets out how we are carrying out this consultation. The SoCC is available on the Springwell website and the locations listed on page 9 of this booklet.



For more information on the DCO planning process, please visit:

#### infrastructure.planninginspectorate.gov.uk



We are now consulting on our updated proposals and preliminary environmental information for Springwell. Feedback from this consultation will be used to help us further refine our plans before we submit a DCO application to the Planning Inspectorate.



These dates are indicative only and are subject to change.

## **Updates and changes**

We have updated our proposals for Springwell based on the feedback from the first phase of consultation and continued engagement with stakeholders, as well as ongoing technical work and the outputs of our early assessments. We have:



Reduced the area we are proposing to use for solar panels since we shared our early proposals and have worked with near neighbours to develop bespoke offsets to homes and villages closest to the site.



Increased the area proposed for mitigation, ecological enhancement or retained for agricultural use. These areas now make up 58% of the total site.



Developed our ideas for new permissive footpaths, which could provide up to 8.6km of new walking routes. We're seeking feedback on our latest proposed routes as part of this consultation.



Refined the number of locations we are considering for the siting of the battery storage and Springwell substation. The potential areas where these elements could be located has reduced from four to two since our phase one consultation.



Developed our initial ideas for new planting to screen views of our proposals from residential areas, roads and footpaths.



Continued to work with National Grid to understand its preference for the location of the National Grid Substation into which Springwell would connect. This substation will now be developed separately by National Grid and is no longer part of the Springwell proposals.

## About our consultation

This consultation is open for six weeks, from Thursday 11 January to 11:59pm on Thursday 22 February 2024. During this consultation, we are seeking your views on our updated proposals for Springwell Solar Farm, which are summarised in this consultation booklet.

#### **Our consultation materials**

Along with this booklet, we have published the following materials as part of this consultation:

A consultation questionnaire, which you can use to share your feedback.

A Preliminary Environmental Information Report (PEIR), which summarises the results of our preliminary environmental assessments, across four volumes:

Volume 1: Preliminary Environmental Information Report, including a 'Non-Technical Summary of preliminary assessment of effects' Volume 2: Supporting Figures Volume 3: Supporting Reports Volume 4: Landscape Viewpoints

The PEIR is available to download from our website (www. springwellsolarfarm.co.uk) or to view at our consultation events as well as at Sleaford Library and The Venue (see right for details). You can learn more about our proposals by:



Calling us on **0800 038 3486** 



Emailing info@springwellsolarfarm.co.uk



Writing to the following Freepost (no stamp required) address: Springwell Solar Farm FREEPOST SEC Newgate UK Local



Visiting our project website: **www.springwellsolarfarm.co.uk** where you can view and download all our consultation materials and visit our virtual exhibition.



Coming along to the public exhibitions we are holding (see page 35 for details).



Requesting a printed copy of our consultation booklet and questionnaire (also available, along with the PEIR, on a USB stick), which we will send free of charge to your address. Alternative format materials (e.g. different languages) are also available on request.



Viewing printed copies of the PEIR and SoCC or collecting a copy of our consultation booklet and questionnaire from the following locations (please check opening hours):

**Sleaford Library**, 13-16 Market Place, Sleaford NG34 7SR **The Venue**, Grantham Road, Navenby LN5 0JJ

## Springwell Solar Farm

Feedback from consultation, along with the outputs of our early environmental assessments and ongoing technical work, has been used to refine the proposed layout of Springwell (see illustrative operational plan on page 15). Refining the proposed layout has also helped us develop our approach to building Springwell, including the land and construction traffic routes we would use during the construction period (see pages 24-28 for more information).

### **Environmental considerations**

#### Assessing environmental effects

Understanding how Springwell could affect the environment is an important part of the development process. An Environmental Impact Assessment (EIA) will assess the potential effects, both positive and negative, that Springwell could have on the environment over its lifetime. ?

Early environmental assessments (summarised in the PEIR) have already helped shape our proposals for building and operating Springwell. As the design of Springwell is not yet finalised, we have carried out these assessments based on 'parameters' (see PEIR, Volume 1, Chapter 2: Description of the Proposed Development).

The parameters represent the maximum possible scale of development. This ensures a conservative approach to identifying any potentially significant environmental effects.

Feedback from this consultation, along with ongoing environmental assessments and technical work will help to further refine our proposals. This includes identifying appropriate mitigation measures that could avoid, reduce, mitigate or offset any likely significant negative effects that we have identified in the PEIR. The final results of these assessments will be presented in an Environmental Statement which will accompany our DCO application (for more information see PEIR, Volume 1, Chapter 4: Approach to EIA). A summary of potential effects and preliminary mitigation measures reported in the PEIR is available in Volume 1, Non-technical summary of preliminary assessment of effects.

#### Characteristics of the local area

Understanding the character of the local landscape helps to ensure that we are proposing different elements of Springwell in appropriate places. Our assessments also consider natural and man-made features, such as existing woodlands, hedgerows, watercourses and designated cultural heritage sites. Offsets from these features are proposed to avoid significant effects (for more information see PEIR, Volume 1, Chapters 8: Cultural Heritage, 9: Landscape and Visual and 13: Water).

The type and current use of the land proposed for Springwell is also important. We have tested soil samples from across the site to understand its quality, particularly in relation to agricultural use (see PEIR, Volume 1, Chapter 10: Land, Soils and Groundwater). Just over half of the total site area has been assessed as 'best and most versatile agricultural land'. We are no longer proposing to have solar panels in fields that our assessments have shown are of highest agricultural quality (solely Grades 1 and 2).

#### Local views

Views of Springwell from public and private locations - including nearby homes and villages as well as roads and footpaths - are also an important consideration.

To protect visual amenity, we have looked for opportunities to increase the distance between solar panels and nearby homes and villages. We are also proposing to include breaks between sections of solar panels along roads and footpaths, as well as new planting where appropriate, to further screen views (see Figures 2-8 on pages 15-21 of this booklet).

#### Wildlife and climate

Ecology surveys have helped identify the different species, including different types of birds and bats in and around the site. Alongside retaining existing habitats wherever possible, we would manage areas within the site to provide breeding and foraging habitats for different species of birds and to boost biodiversity. Figure 2 on page 15 shows the areas that could be suitable to provide mitigation and enhancement areas for wildlife. We are also considering planting appropriate nut or fruit-bearing species which could also benefit wildlife, along with managing the land between and beneath the solar panels (for more information see PEIR, Volume 1, Chapter 6: Biodiversity).

In addition to providing opportunities to boost biodiversity, Springwell would also contribute to the urgent need for sources of low-carbon electricity to address climate change. We have assessed the potential carbon savings Springwell could make against potential emissions associated with it over its lifetime. Overall, we estimate that Springwell could help to save 11 million tonnes of CO2e (carbon dioxide equivalent) compared to other forms of energy generation, (assessed against operational emissions from a Combined Cycle Gas Turbine). For more information, see PEIR, Volume 1, Chapter 7: Climate.

#### Continuing our assessment work

The PEIR contains the environmental assessment work we have carried out to date. Ongoing assessment work will continue to help us refine our proposals. The surveys page on the Springwell website includes up to date information about what you may see happening on-site.

(www.springwellsolarfarm.co.uk/categorysurveys)

#### What is a 'significant effect'?

When an effect is identified, we need to understand how much of an impact it would have on the surrounding environment. This is done by assessing its 'significance', which looks at both the scale of change caused by an effect and the sensitivity of the thing it would change. The way this is assessed is slightly different for each topic (see PEIR, Volume 1, Chapters 5-14).

## **Springwell Solar Farm**

Feedback from the phase one consultation, ongoing technical work and the outputs of early environmental assessments have helped us to refine the proposed locations for the different parts of Springwell.

This section describes the core elements of our proposals for Springwell (for a detailed description, along with the parameters used to assess their potential environmental effects, see PEIR, Volume 1, Chapter 2: Description of the Proposed Development).

Figure 2 on page 15 shows where different parts of Springwell could be located during operation. To show the proposals in more detail, we have divided the site into three areas - Springwell West, Springwell Central and Springwell East (see pages 16-20). ?

**Solar panels:** we have reduced the size of the area proposed for solar panels compared to our early proposals shown at phase one consultation. In some limited areas, solar panels could be up to 4m high, though most would be 3.5m high at their highest point.

**Battery storage:** we have refined the potential locations of the battery storage to two 'siting zones' (reduced from the four we were considering at phase one consultation). Based on today's technology, we expect the battery storage units to be 3m high and painted grey, dark green or similar. Some associated electrical plant may be up to 6m high.

Collector compounds: to reduce the amount of underground cabling required across the site, we are considering the use of collector compounds, which could be up to 6m high. There would be one satellite compound each in Springwell West, Central and East, with the main collector compound adjacent to the Springwell substation.

**Springwell substation:** this would be located in the northern part of Springwell West, in the siting zone identified in Figure 2. The substation would include a control building with office, welfare and storage facilities. Parts of the substation would be up to 12m high, with the buildings up to 6m.

Areas for mitigation, enhancement or retained for agricultural use: we have increased the areas that could be used for mitigation, ecological enhancement or retained for agricultural use compared to our earlier proposals.

**Permissive footpaths:** to connect up different villages and provide new routes to enjoy, we are proposing to create 8.6km of new permissive footpaths within the Springwell site.

**New planting:** new trees and hedgerows are proposed to help screen Springwell and increase biodiversity across the site. Figure 2 shows our initial ideas, which will continue to be developed in advance of submitting our DCO application.

**Cables:** underground cables would connect parts of Springwell together and transport electricity to and from the National Grid (see page 32 for more information).

**Safety and security:** mesh fencing with wooden posts is proposed for the areas where there would be solar panels. This would be up to 3m high and would include mammal gates to allow very small animals to move between fields. More robust perimeter fencing would be required around the battery storage and Springwell substation for security. There would also be CCTV mounted on wooden poles, with fixed views looking into the Springwell site.



#### Figure 2: Illustrative layout of Springwell Solar Farm

#### KEY



Indicative Site Boundary (preferred Order Limits)



Existing hedgerow / trees



Existing Public Right of Way (retained)



Existing power lines and pylons

Proposed area for mitigation, enhancement and/or retained agricultural land

Proposed screening / planting

Proposed permissive footpath route



......

Proposed internal track route



Proposed solar panels and inverter transformer stations



Proposed area for Springwell substation, main collector compound and solar panels. Preferred location for battery storage.



Proposed area for solar panels and potential area for battery storage.



We are proposing to use around half of Springwell West for solar panels. The battery storage, Springwell substation and main collector compound are also proposed in this area. Some parts of Springwell West would be used for underground cabling to connect the different areas of Springwell together and into the National Grid (see Figure 3 for our proposed cable route corridor). The areas above the cabling and other parts of Springwell West would be managed for mitigation, ecological enhancements or retained for agricultural use.

The landscape around Springwell West is mostly flat and open. To preserve this character, minimal planting is proposed except where existing hedgerows can be reinforced or to screen views of the proposed battery storage and Springwell substation (see Figure 3).

While we have identified some potentially significant effects on a small number of homes, particularly in relation to noise, further work to avoid, reduce, or mitigate these effects is ongoing. This includes looking at the size and distribution of the battery storage and solar panels, the exact location of the battery storage within the siting zone, and potential mitigation measures such as acoustic fencing (for further information see PEIR, Volume 1, Chapters 9: Landscape and Visual and 10: Noise and Vibration).

This illustrative layout shows potential ways to break up sections of solar panels along the A15. To protect the amenity of nearby homes, we are no longer proposing to have solar panels in the areas closest to these properties. Figure 3 shows some early ideas for potential planting, including to the north of Heath Road and along the Public Right of Way to Bloxholm Wood to screen views towards the B1191 junction. Feedback from this consultation, along with our ongoing assessments will help us to refine our approach to mitigation in this area, where potentially significant visual effects have been identified

(see PEIR, Volume 1, Chapters 9: Landscape and Visual and 14: Glint and Glare).

To connect New England Lane to Brauncewell, a new permissive footpath is proposed along the western edge of Springwell West, as well as a new footpath across the A15 to connect this and the wider network to Bloxholm Wood. Opportunities to improve parking facilities at Bloxholm Wood are also being considered as part of our proposals.





Figure 5: Illustrative layout of Springwell Central

We are proposing to use around a third of Springwell Central for solar panels. There would also be some areas used for supporting infrastructure as well as cabling to connect different parts of the site together. The remainder of Springwell Central would be used for mitigation, ecological enhancements or retained for agricultural use.

We are proposing fewer solar panels in this part of Springwell Central compared to our early proposals. In response to feedback and the outputs of our early assessments, we are proposing to set solar panels back from individual properties, RAF Digby, Ashby de la Launde and along Heath Road.

While some potentially significant visual effects remain in this area, we are working on mitigation measures to avoid, reduce, mitigate or offset these effects. Figure 5 shows the locations of some early ideas for potential planting, including how existing hedgerows could be extended and where new planting could be appropriate. For further information, please see PEIR, Volume 1, Chapters 9: Landscape and Visual and 14: Glint and Glare.

We are also proposing a new permissive footpath on land between RAF Digby and Scopwick, which includes a loop connecting to the existing footpath to create a circular walking route. This route has been developed in response to feedback on our early proposals which included requests for links between different villages. ?



#### Figure 6: Indicative visualisation of Springwell along part of Heath Road



? Figure 7: Illustrative layout of Springwell East

We are proposing to locate solar panels in Springwell East, along with supporting infrastructure and cabling to connect different parts of the site together. In some areas along the railway line and to the northern part of Springwell East, solar panels could be up to 4m in height due to increased flood risk in this area (see PEIR, Volume 2 Figure 2.4).

The landscape in Springwell East is enclosed, with an extensive network of existing trees and hedgerows providing screening of Springwell from Blankney, Scopwick and Kirkby Green. To further screen views of solar panels in Springwell East, we are proposing to reinforce these existing hedgerows and introduce new planting.

Consideration of the footpath network between Blankney and Scopwick has been an important part of our approach. We are now proposing fewer solar panels, including areas with no panels along existing footpaths to break up views (for example, between the B1188 and Spires and Steeples Trail), compared with our earlier proposals. New planting along these routes is proposed to further screen proposed solar panels.

In response to feedback and environmental assessments, we are proposing to set solar panels back from nearby homes. To avoid the Lancaster plane crash memorial, we are no longer proposing solar panels in the field where it is located.

To support the ambition of the Scopwick Neighbourhood Plan to improve connections to Metheringham, we are considering opportunities for upgrading the cycleway and footpath along the existing public right of way between Scopwick and Blankney. ? Where we have identified potentially significant visual effects on some properties, roads and footpaths in this area, further work to avoid, reduce, mitigate or offset these effects is ongoing.

This includes identifying appropriate locations to plant new trees and hedgerows, as well as opportunities to reinforce existing vegetation (for further information see PEIR, Volume 1, Chapter 9: Landscape and Visual).



Figure 8: Indicative visualisation of Springwell along a public footpath

## **Battery storage**

As more of our electricity is generated by renewable sources, battery storage will play an important role in balancing the National Grid – storing electricity and releasing it when it is most needed. Locating battery storage within Springwell allows us to make the maximum possible contribution to the electricity network allowed by our grid connection.

Battery storage makes use of tried and tested technology, much of which we use in our day-to-day lives, including in electric cars.

While battery storage at Springwell would be larger in scale, we would build safety measures into our battery design including for example, self-contained units for each battery. This is something we already do at the battery storage sites we manage around the country. Engagement with local councils and the Lincolnshire Fire and Rescue Service to date has fed into our updated proposals, and we will continue to liaise with them as our plans evolve.

As part of our DCO application, we will submit a Battery Safety Commitments document, setting out how battery storage at Springwell will be designed, maintained and managed in line with regulatory guidance to reduce fire risk as far as practicable.





We recognise that the construction and operation of solar farms can affect the communities around them. As long-term investors in our projects and the communities where we operate, EDF Renewables UK is committed to extending the benefits of Springwell to the local community. All our onshore wind and solar sites in the UK have a dedicated community fund to spend on improvements in the local area. A Springwell community fund would be put in place at the start of operation and last throughout the lifetime of the project. It would be managed by an independent third party with the total amount of funding based on the final installed capacity of Springwell. We are proposing to provide £400 per megawatt per year of operation. More detail about our community fund will be available closer to the time of operation, should Springwell receive consent.

## Construction

## **Building Springwell**

Should Springwell be granted consent, construction on our main site is planned to start in 2026, with electricity expected to be exported to the National Grid from 2028. Some parts of the Springwell site would support its construction (see PEIR, Volume 1, Chapter 2: Description of the Proposed Development for more information).

The measures we will take to limit the potential effects of construction will be included in an Outline Construction Environmental Management Plan (oCEMP) which will be submitted as part of our DCO application. The oCEMP will set out mitigation measures, controls and monitoring to reduce environmental effects during construction such as dust, noise and disturbance (see PEIR, Volume 1, Chapters 5-14 which detail the potential effects of construction).

Construction would require temporary works including:

**Temporary access tracks:** would be established to link access points to the construction compounds and for travel within the site.

**Construction compounds:** would include areas for unloading materials and staff parking, storage areas, welfare facilities and offices. Entrances to compounds would be located within fields and managed by staff controlling deliveries to reduce traffic backing up onto roads.

Materials and people would arrive at main construction compounds, which would be up to 250m x 100m. We expect to have two compounds located within Springwell West and one in Springwell East. Satellite construction compounds would be smaller in size (50m x 25m). There could be up to six satellite compounds located around the proposed site. We are also proposing some permanent road improvements to ensure safe access into the site. Early assessments have shown that improvements to the Gorse Hill Lane/A15 junction would be required for safe access to and from the Springwell substation. Further work will identify other areas requiring highway improvements and will be detailed within our DCO application.

Working hours would likely be between 7am to 7pm Monday to Friday and typically 7am to 12 noon on Saturday. No working would take place on Sundays or bank holidays.

The construction programme will be informed by the design of Springwell, which will be informed by feedback from this consultation, alongside further environmental assessments and on-going technical work. More information about the likely phasing, activity and timings for this period will be set out in our DCO application.

## Moving construction workers

Construction is likely to take place over approximately 48 months, though the level of activity on site would vary throughout this period. At the very peak of construction, we would expect up to 600 staff on site each day. Parking facilities would be located in the main construction compounds, with staff arriving and leaving from these and moving between different areas of the site using internal routes (for more information, see Figure 9 on page 28 of this booklet and PEIR, Volume 1, Chapter 12: Traffic and Transport).

The use of sustainable transport, such as car sharing, would be encouraged to reduce the number of vehicles travelling to site each day. An outline Travel Plan, which will include details of initiatives to increase car sharing and explore other measures such as providing shuttles to and from construction compounds, will be submitted as part of our DCO application.

Preliminary environmental assessments have indicated there could be temporary significant visual effects during the construction period. Appropriate mitigation measures will be explored where practicable as our plans for construction are refined (see PEIR, Volume 1, Chapter 9: Landscape and Visual for more information).



## **Moving materials**

Building Springwell would require the safe, efficient transport of materials to the site.

We are proposing that construction vehicles would primarily travel to the site via the A15, utilising the B1191 to access Springwell Central and Springwell East. This route would avoid the use of local roads when moving the larger materials required for the Springwell substation and battery storage, allowing them to be transported directly to Springwell West.

We are proposing a secondary route for when the B1191 is unavailable (e.g. due to road works) or to avoid disrupting farm vehicles during harvest periods. To access the site, vehicles would use a one-way system via the A15, onto the B1202 and then south along the B1188. Outbound traffic would travel via Bloxholm Lane, to the B1202 and back to the A15.

All vehicles would enter the site using access points established before the start of construction. Areas where potential access points into Springwell West, Central and East could be located are shown in Figure 9 on page 28. Further environmental assessments and technical work will help us identify our preferred access points, making use of existing field openings and tracks where practicable. Once unloaded, materials would be transported within the site utilising existing agricultural tracks or temporary tracks to keep off the road network. Routes to the site and access points will be shown in an Outline Construction Traffic Management Plan (oCTMP) that would be submitted as part of our DCO application. The oCTMP would also control hours of delivery and include provisions for repairing any damage to roads and verges identified by condition surveys that would be undertaken before construction begins. Further measures would include wheel washing facilities to prevent mud being tracked onto roads, and turning points within construction compounds for larger vehicles.

At this stage, our assessments show that the hedgerow removal required to create certain access points could have a negative effect on bats during construction. Further work is required to understand the amount of hedgerow removal that could be needed. We will seek to limit the amount of hedgerow removal, where practicable, to avoid, reduce, mitigate or offset any potentially significant effects (see PEIR, Volume 1, Chapter 6: Biodiversity for more information).





At the end of Springwell's operational lifetime, all above ground elements of the solar farm would be dismantled, with materials recycled where practicable. Below ground, (up to a depth of 1m) we will remove all concrete, hardstanding area and foundations for the infrastructure. Temporary tracks would also be removed. It is assumed that below ground cables will be left in situ. Like any electrical waste, solar panels need to be disposed of responsibly and safely. Solar panels are up to 99% recyclable, and the major panel components including the glass, aluminium and copper can all be recovered. It is expected that decommissioning would take approximately 24 months, with activities mirroring those during the construction period. An outline decommissioning plan will form part of our DCO application, although details would be finalised closer to the time of decommissioning to reflect best practices.

## Education, skills and supply chain

Along with jobs created during the construction phase of Springwell, we estimate that there could be approximately 24 permanent jobs during its operation.

As part of our DCO application, we will identify how Springwell can contribute to local and regional jobs, community projects and the local economy over its lifetime.

We will also look for opportunities to source materials from the UK and encourage the use of domestic suppliers wherever practicable, recognising that much of the manufacturing process for different components of solar farms is currently located abroad.



# Additional information

## **Connecting to the grid**

Large amounts of electricity are transported around the country every day by a transmission network called the National Grid. The electricity you use in your homes is supplied from your local network which takes electricity from the National Grid and feeds it through to homes and businesses.

Springwell has a grid connection agreement with National Grid that allow us to export up to 800MW of electricity to this network, through a new substation that would be developed, owned and operated by National Grid. There would also be capacity to import power from the network.

At the previous stage of consultation, we showed this substation within the Springwell site. Since then, we have continued to work with National Grid to understand its preference for the location of this new substation (into which Springwell would connect). This substation will now be developed separately by National Grid and is no longer part of the Springwell proposals.

We would connect into National Grid's new substation via an underground cable from the Springwell substation and have identified a corridor in the north of Springwell West where this cable route could be located (see Figure 3 on page 16). Once the cable is laid, the land where the cable would be buried will be returned to agricultural use (for results of our early environmental assessments of the cable corridor, see PEIR, Volume 3, Appendix 6.3).

We are continuing to work with National Grid as its plans for the development of this substation progress.

It's helpful to think of our electricity system like our road network. The National Grid is the high-speed route (the motorway) which transfers electricity over a large area while the local networks connect into it to distribute electricity to local areas, acting like 'B roads'.

The existing pylons that you can see running parallel to and crossing the A15 in this area are part of the National Grid.

## How does a solar farm work?

Solar farms use **energy from the sun** (1) to generate electricity, supported by battery storage and a substation to feed the electricity into the National Grid. Solar farms are protected by **fencing (2)** to keep the site secure.

The solar panels (3) are set up in rows (known as 'strings'), connected to each other by cables to transfer the electricity generated by the panels to inverters.

**Inverters (4)** are needed to convert the direct current (DC) electricity generated by the solar panels into alternating current (AC) electricity, which is suitable for use in homes and businesses.

Inverters can be located underneath the solar panels or in areas sometimes referred to as the 'Balance of Solar System'. The 'Balance of Solar System' also includes switchgears (which control the electrical equipment), and transformers (which 'step up' the voltage to the required level for sending to the solar farm substation). **Collector compounds (6)** can be used to reduce the amount of underground cabling needed by collecting electricity from a number of inverters.

A project substation (7) receives all of the electricity, steps up the voltage and sends it to the **National Grid substation (9)** to enter the electricity network.

**Battery storage (8)** stores electricity at times when demand is lower and releases it to the National Grid when it is most needed.

**Cables (10)** connect all the different parts of a solar farm together.



Figure 10: The main elements of a solar farm

- 1. Solar energy
- 2. Fencing
- 3. Solar panels
- 4. Inverters
- 5. Landscape and biodiversity areas
- 6. Collector compounds
- 7. Solar farm substation
- 8. Battery storage
- 9. National Grid substation
- 10. Cables

#### Not to scale and for indicative purposes only.

### Responding to our consultation

Feedback from this stage of consultation will be used to refine our proposals before an application is submitted to the Planning Inspectorate.

This consultation is open between Thursday 11 January and 11.59pm on Thursday 22 February 2024.

#### **Finding out more**

You can find out more about our proposals for Springwell Solar Farm by:

- Coming along to the public exhibitions we are holding
- Visiting **springwellsolarfarm.co.uk**, where you can visit our virtual exhibition
- Contacting us on 0800 038 3486 or info@springwellsolarfarm.co.uk

#### Public exhibitions

Wednesday 24 January (4pm – 8pm)

Scopwick Village Hall, Brookside, Scopwick, LN4 3PA

#### Thursday 25 January (3pm – 7pm)

Ashby de la Launde Village Hall, Church Avenue, Ashby de la Launde, LN4 3JQ

Friday 26 January (Midday – 4pm)

The Venue, Grantham Road, Navenby, LN5 0JJ

#### Saturday 27 January (11am – 3pm)

Metheringham Village Hall, Fen Road, Metheringham, LN4 3AA

#### Tuesday 20 February (3pm – 7pm)

Blankney Old School, Drury St, Blankney, LN4 3AZ

## Sharing your views

You can share your views on our proposals for Springwell Solar Farm by:

- Completing a consultation questionnaire online at: <u>springwellsolarfarm.co.uk/questionnaire</u>
- Emailing a questionnaire to info@springwellsolarfarm.co.uk
- Posting a questionnaire (no stamp required) to: Springwell Solar Farm FREEPOST SEC Newgate UK LOCAL
- Submitting your comments by email to: <u>info@springwellsolarfarm.co.uk</u> or by writing to the above Freepost address

## Next steps

All responses must be received by the consultation deadline of **11:59pm on Thursday 22 February 2024.** 

We will consider all the feedback that we receive which, along with our ongoing assessments, will help us to refine our design ahead of submitting our DCO application. We anticipate this happening in autumn 2024. You can get in touch with us at any time throughout this process using the contact details on this page.

Our DCO application will include a Consultation Report setting out how we have had regard to the responses received during all stages of consultation.

0800 038 3486
Springwell Solar Farm, FREEPOST SEC Newgate UK Local
info@springwellsolarfarm.co.uk



springwellsolarfarm.co.uk