

LERWICK GREENER GRID PARK

ERECTION OF PROPOSED LERWICK GREENER GRID PARK STANDBY FACILITY BY LOWER BLACKHILL INDUSTRIAL ESTATE, GREMISTA, LERWICK, ZE1 OTW

PRE-APPLICATION CONSULTATION REPORT

February 2023





Prepared By:

Orbit Communications (PR and Public Affairs) Ltd

4 Queen Street Edinburgh EH2 1J2

T +44 (0)0131 603 8996 | E <u>hello@orbit.scot</u> W <u>www.orbit.scot</u> Registered in Scotland No. SC395892

Contents



1.	Introduction	4
2. Background		5
2	2.1 Statkraft UK Ltd	5
2	Planning Application for the Development	5
3.	Consultation & Engagement	6
3	3.1 Overview of Consultation Measures	6
3	3.2 Proposal of Application Notice	7
3	3.3 Pre-Application Public Consultation Measures	7
3	3.4 Publicity and Newsletters	8
3	3.5 Consultation Website and Public Exhibition Web Page	9
3	8.6 Public Exhibition	9
3	3.7 Analysis of Reply Cards	10
4.	Feedback	11
4	I.1 Introduction	11
4	I.2 Qualitative Analysis	11
4	I.3 Response To Feedback	12
4	I.4 Pre-Submission Webinar	13
4	I.5 Conclusions	14
Appendix A - Pre-Application Notice		
Appendix B - Council's Pre-Application Consultation Advice		17
Арр	pendix C - Newspaper Advert	19
Арр	pendix D - Project Website/In-Person Information Slides	21
Арр	pendix E - Virtual Exhibition Website	40
Appendix F - Public Exhibition Images		
Appendix G - Reply Card		
Appendix H - Stakeholder Notification		
Appendix I - Table 1: Consultation Comments and Responses		



1. Introduction

Orbit Communications (PR and Public Affairs) Ltd ('Orbit') has prepared this Pre-Application Consultation ('PAC') Report on behalf of Statkraft UK Ltd ('the Applicant'). The PAC Report accompanies a planning application ("the Application") for a proposed Greener Grid Park ('the Proposed Development') to be located by Lower Blackhill Industrial Estate, Gremista, Lerwick, ZE1 OTW. The Site lies in the administrative area of Shetland Islands Council ('the Council').

The Proposed Development falls within the category of 'Major Development' under the Town and Country Planning (Hierarchy of Development) (Scotland) Regulations 2009 (the hierarchy regulations). Therefore there is a statutory requirement to undertake public consultation and submit a PAC report in accordance with the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013. As the PAN was submitted prior to the regulatory changes which came into effect 1st October 2022 the requirement for consultation in this regard is one public facing exhibition. Taking on board the transitional period at the time of submission, whereby COVID restrictions were removed but some members of the public were still uncomfortable meeting face to face, a combined approach to consultation was undertaken such that a face to face and virtual engagement process was established.

The applicant subsequently undertook additional consultation in the form of an update briefing webinar to let local stakeholders know about changes to the layout. This was undertaken as the applicant felt it was appropriate to update local stakeholders but was not required by the planning department.

This PAC Report outlines that the statutory requirements under the Town and Country Planning (Scotland) Act

1997 (As Amended)⁴ ('the Town and Country Planning Act') have been complied with during the PAC process. The report sets out the background and details of the pre-application consultation process carried out by the Applicant in preparing the planning application. Issues that were raised during the course of the consultation by local stakeholders or residents have been recorded in this report, along with the Applicant's response to how the issues have been considered. Where possible, suggestions made by residents or stakeholders have been incorporated in the amended final plans as the project has progressed.

It is the intention of this report to demonstrate that in respect of the Development, the Applicant has complied

fully with the provisions of Circular 3/2013 Development Management⁵ and the Council's approach to community involvement, to engage the public fully with the proposals prior to submitting a planning application.

3 Scottish Government (2020) Scottish Government Guidance: Covid 19 Emergency and Pre-Application Consultation and Requirements for a Public Event [online] Available at: <u>https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2020/04/coronavirus-covid-19-</u> planning-guidance-on-pre-application-consultations-for-pu\blic-events/documents/covid-19-emergency-and-pre-application_ consultation-and-requirements-for-a-public-event/covid-19-emergency-and-pre-application-consultation-and-requirements-fora-public-event/govscot%3Adocument/Planning%2ECOVID%2B19%2Bemergency%2Bmeasures%2BPreapplication%2Bconsultation%2Bcuidance%2B%2B-%2Bfinal%2Bversion%2Bfor%2Bpublication.pdf (Accessed 08/09/2020)

4 Scottish Government (1997) The Town and Country Planning (Scotland) Act [Online] Available at: <u>https://www.legislation.gov.uk/ukpga/1997/8/contents</u> (Accessed 24/09/2020)

5 Scottish Government (2013) Planning Circular 3/2013: Development Management Procedures [Online] Available at: https://www.gov.scot/publications/planning-series-circular-3-2013-development-management-procedures/ (Accessed 24/09/2020)

¹ Scottish Government (2008) The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008 [Online] Available at: https://www.legislation.gov.uk/ssi/2008/432/contents/made (Accessed 24/09/2020)

² Scottish Government (2009) The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009 [Online] Available at https://www.legislation.gov.uk/sdsi/2009/9780111001714/contents (Accessed 24/09/2020)



2. Background

2.1 Statkraft UK Ltd

The Applicant is fully committed to early stage public engagement, and believes it is important to give local people an opportunity to view the proposals and discuss the Development with members of the project team. A programme of consultation which is set out in Section 3 of this Report was undertaken prior to the submission of the Application.

We are pleased to have established a fund of £20,000 per year for the benefit of local communities near each of our Greener Grid Parks, to be set up during the construction phase.

2.2 Planning Application for the Development

The Planning Application for the Development is supported by this PAC Report as well as a suite of documents that includes:

- Cover Letter
- Completed Application Form
- Planning Statement
- Design and Access Statement
- Noise Impact Assessment
- Outline Construction Environmental Management Plan (CEMP)
- Supporting Environmental Information Report (SEIR)
- Construction Traffic Management Plan (CTMP)
- Outline Battery Safety Management Plan (OBSMP) to be submitted shortly (as noted in the cover letter)
- Planning Drawings
- Perspective 3D Views
- 3D Model and Viewpoints

These documents demonstrate how any potential environmental effects of the Development, including cumulative effects, have been considered and, where possible, mitigated through the design process.

The Application has been subject to an Environmental Impact Assessment (EIA) Screening Request that was submitted to the Council in October 2022 (ref: 2022/270/SCR). The Council concluded that the Development did not require an EIA in November 2022.



3. Consultation & Engagement

3.1 Overview of Consultation Measures

The Scottish Government's Planning Advice Note (PAN) 3/2010, Community Engagement, which provides guidelines for PAC, has been used as a framework for the engagement activity for this Proposed Development. The guidelines have provided a useful framework to help plan, monitor and evaluate community engagement in relation to this development.

PAN Standard 3/2010	Activity undertaken
1 Involvement: Identify and involve the people and organisations who have an interest in the focus of the engagement	 The host community council as well as local politicians for the Proposed Development were identified and contacted with information about the Proposed Development; An offer was made to Community Councils to host virtual meetings, special meetings on the Proposed Development and/or a private viewing of the public exhibition prior to opening to the wider public. A dedicated website with contact details was established in August 2022; Online Exhibition held 22 – 29 September 2022; Physical Exhibition held 22 September 2022; Invites to the physical and virtual exhibition with basic project information and feedback forms were sent to over 500 residents and businesses within the surrounding area
2 Support: Identify and overcome any barriers to involvement	 Able to communicate with the Proposed Development team via the project website, email, letter, telephone, or in person; Accessible Online Exhibitions and Physical Public Exhibitions in accessible location delivered in line with Covid-19 advice; The exhibition was advertised in the The Shetland Times and on the online version of The Shetland News on W/C 19th September 2022 and adverts provided to Community Councils, Councillors and other key stakeholders to post online; Invitations were sent to over 500 households and businesses within approximately 4 miles of the Proposed Development, during both exhibition periods. The invitations included information on the forthcoming consultation and how to get involved, details on the Proposed Development and a freepost feedback reply card.
3 Planning: Gather evidence of need and resources to agree purpose, scope and actions	• The commitment to undertaking meaningful consultation with the local community was set out during the Pre Application Notice. This included considering access to technology and accessibility of the venue.
4 Methods: Agree and use methods of engagement that are fit for purpose	 Information presented on the Proposed Development website, accessible to interested parties; Commitment to meaningful engagement outlined in Scoping Report, issued to Community Councils; Two Online Exhibitions, providing residents and interested groups an opportunity to meet and interact with the Proposed Development team, allowing discussion and feedback; Following Community Council feedback and Covid-19 restrictions easing, two physical exhibitions were held in the local area during the second exhibition period (September/October 2021); Online Chat sessions were held during both exhibition periods.
5 Working Together: Agree and use clear procedures that enable participants to work together effectively and efficiently	 PAC process enabled the Applicant to listen and take on board comments from interested parties and use responses to influence design; Encouraged use of virtual meetings, feedback forms and contact details provided at public exhibitions to receive input; Project contact information provided on all public documentation, including a dedicated website;

Statkraft UK Ltd



	 Held physical exhibitions for the second period of exhibitions.
6 Sharing Information: Ensure necessary information is communicated between the participants	 Interaction at Online and Physical Exhibition and follow up with any questions and provided further information; Exhibition Brochure made available online; Follow up with queries after public exhibition Provide additional webinar briefing and visuals to show updated design to local stakeholders Updated website with additional visuals Provide Consultation update on submission of planning application
7 Working with Others: Work effectively with others with an interest - Interaction and comment from residents and Community Councils - followed up recommendations	
8 Improvement: Develop the skills, knowledge and confidence of the participants	 Experienced team - Project Manager and EIA team members attended the public consultation events to provide information requested by visitors to the exhibitions; Provided visitors at the exhibitions the opportunity to view a representation of the Proposed Development from different local locations. During the physical exhibition visitors had the opportunity to view a representation of the Proposed Development from their property. The Project Manager offered to present the project to the Community Council meeting.
9 Feedback: Feedback results to the wider community and agencies affected	 A summary of exhibitions provided to stakeholders such as community councils and local politicians via email update; Update one page document on FAQ's from the public consultation period included with submission notification letter; Dialogue with individuals with specific queries, posed before or during the consultation process, with responses to queries followed up;
10 Monitoring and Evaluation: Monitor and evaluate whether engagement achieves its purpose and meets the national standards for community engagement	 Followed best practice as set out in PAC Report

3.2 Proposal of Application Notice

A Proposal of Application Notice (PAN) was submitted to the Council on 29th August 2022 (Planning Reference: 2022/224/PAN) and accepted on 9th September.

The PAN was in accordance with the provisions set out in Section 35b of the Planning Act.

A PAN period of at least 12 weeks must elapse between giving the notice and submitting a planning application. On that basis, a planning application could not be made until November 2022 at the earliest subject to compliance with PAC procedures, as laid out in the aforementioned legislation.

3.3 Pre-Application Public Consultation Measures

The Covid-19 consultation guidance has now lapsed but as the PAN was submitted whilst this guidance was still in place, discussions were held between the Applicant and the Council to agree upon the form that consultation measures would take. It was decided that an in-person event would go ahead, supported by a project website and separate public exhibition web page which provided the same information as the in-person event.

The measures proposed by the Applicant and agreed upon by the Council were as follows:

• A dedicated project website, to be live and available to the public for a minimum of 4 weeks prior to the application, containing the following agreed upon features:

Statkraft UK Ltd



- o Brochure with project details and information about the Applicant
- Project documents section- including technical drawings.
- Frequently Asked Questions section
- Surveys/polls and a question/comment feature.
- Subscription function for updates.
- Function to request a call back.
- o An exhibition page which would be live from 22nd 29th of September.
- An advert published in a locally circulated newspaper.
- A letter distribution to local properties, within an agreed upon catchment area, informing them of the PAN.
- An in-person event with a provision of non-electronic methods to ask questions and provide comment, including via a freephone number and freepost address.
- The in-person event would take place at Islesburgh Community Centre, Isleburgh Complex, King Harald Street, Lerwick, Shetland, ZE1 0EQ on the 22nd September 2022 from 12 noon to 7.30pm.

3.4 Publicity and Newsletters

All relevant bodies were notified via the PAN and were advised that a follow up letter would be sent to confirm the details of the consultation. As required by Regulation 7 of the Development Management Procedure Regulations, a formal letter was sent via email to the representatives and community councils. An invitation was also issued on 6th September 2022 informing stakeholders of the details of the event:

- Lerwick Community Council
- Cllr Arwed Wenger Lerwick North & Bressay (Ward 5) Independent
- Cllr Gary Robinson Lerwick North & Bressay (Ward 5) Independent
- Cllr Stephen Leask Lerwick North & Bressay (Ward 5) Independent
- Cllr Cecil Smith Lerwick South (Ward 6) Independent
- Cllr Dennis Leask Lerwick South (Ward 6) Independent
- Cllr John Fraser Lerwick South (Ward 6) Independent
- Cllr Neil Pearson Lerwick South (Ward 6) Independent
- Cllr Duncan Anderson North Isles (Ward 1) Independent
- Cllr Robert Thomson North Isles (Ward 1) Independent
- Cllr Ryan Thomson North Isles (Ward 1) Independent
- Cllr Catherine Hughson Shetland Central (Ward 4) Independent
- Cllr Davie Sandison Shetland Central (Ward 4) Independent
- Cllr Ian Scott Shetland Central (Ward 4) Independent
- Cllr Moraig Lyall Shetland Central (Ward 4) Independent
- Cllr Andrea Manson Shetland North (Ward 2) Independent
- Cllr Emma Macdonald Shetland North (Ward 2) Independent
- Cllr Tom Morton Shetland North (Ward 2) Scottish Labour
- Cllr Alex Armitage Shetland South (Ward 7) Scottish Green Party
- Cllr Allison Duncan Shetland South (Ward 7) Independent
- Cllr Bryan Peterson Shetland South (Ward 7) Independent
- Cllr Robbie McGregor Shetland South (Ward 7) Scottish National Party
- Cllr Liz Peterson Shetland West (Ward 3) Independent

Statkraft UK Ltd



- Alistair Carmichael MP MP for Orkney & Shetland Liberal Democrat
- Beatrice Wishart MSP Constituency MSP for Shetland Liberal Democrat
- Donald Cameron MSP- Regional Highlands & Islands-Scottish Conservative & Unionist
- Douglas Ross MSP Regional Highlands & Islands– Scottish Conservative & Unionist
- Rhoda Grant MSP Regional Highlands & Islands Scottish Labour
- Jamie Halcro Johnston MSP Regional Highlands & Islands Scottish Conservative & Unionist
- Edward Mountain MSP Regional Highlands & Islands Scottish Conservative & Unionist
- Emma Roddick MSP Regional Highlands & Islands Scottish National Party
- Ariane Burgess MSP Regional Highlands & Islands Scottish Green Party

Letters with key information about the development were also sent to over 500 neighbouring residents and 19 businesses in the local area. The letters included reply cards and freepost envelopes as well as details on how members of the public could give their feedback via the website.

Furthermore, the intention for submitting a planning application for the Development was initially publicised in The Shetland Times and on the online version of The Shetland News on W/C 19th September 2022. An extract of the public notice is provided in Appendix C.

3.5 Consultation Website and Public Exhibition Web Page

In line with the approved consultation measures, outlined in Section 3.3 of this PAC Report, the Applicant has established a project website for the presentation of information and as a mechanism to ensure that interested parties are kept up to date with developments. As discussed with the Council, the contents of the website suitably satisfy the requirements of the pre-application process, in tandem with an in-person public consultation event. All information and interactive features that would also be achievable through a consultation event were also provided via the dedicated project website and virtual exhibition web page.

The website is available at the following address:

https://www.statkraft.co.uk/projects/Lerwick/

The website project information slides are provided in Appendix D.

The website also provides contact details for the project team, should members of the public wish to raise any questions or comments. This included an online question section, FAQs with answers and a dedicated project telephone number.

The website was launched on 22nd August 2022, and in the 4-week period following this the website was visited 129 times and had 705 page views. Visitors to the website were encouraged to ask questions, provide feedback through a reply card, and complete a questionnaire.

The project website will remain available throughout the planning process to keep local residents and representatives updated on project developments.

3.6 Public Exhibition

• A public consultation event took place on the 22nd September 2022 from 12 noon to 7.30pm at Islesburgh Community Centre (Appendix F) where the local community were able to find out more about the proposals from the project team. This event provided details on the site, introduced the Applicant and provided members of the team a chance to meet the public and gather feedback on the proposals. A total of 63 people attended the Public Exhibition.

Statkraft UK Ltd



• Following the Public Exhibition on 22nd September 2022, the website featured a virtual consultation page (<u>https://www.statkraft.co.uk/projects/Lerwick/virtual-exhibition-Lerwick-Greener-Grid-Park/</u>) (Appendix E), The virtual consultation page included all of the written information provided at the in person Public Exhibition on 22nd September 2022, including a copy of the exhibition brochure (Appendix D) and visualisations of the site (Appendix E).

3.7 Analysis of Reply Cards

An online and in-person reply card provided the opportunity for visitors to make their views known. 18 reply cards were completed and returned to the Applicant. This section sets out the questions raised to the Applicant and the responses and comments received.

Whilst only 19 questionnaires were completed, as acknowledged, the website was visited 129 times and there were and had 705 page views during the 4 week consultation period. This traffic cannot be considered as support for the Development but can be acknowledged as engagement with the proposals.

4. Feedback



4.1 Introduction

Local residents were given the opportunity to submit feedback either by filling out a survey on the dedicated project website and Public Exhibition page, completing a reply card either at the exhibition or having received it in the post and returning it by freepost, or by getting in touch through email.

The website survey consisted of three multiple choice questions which were related to clarity of the proposals, feelings about increased renewable energy generation in the UK and feelings about the proposed development. Below this was space for written feedback and further comments. Two digital responses to the survey were received throughout the consultation period. Both agreed that the website was helpful to understand the proposal. One person supported the proposal and one did not. Only one of the respondents to the website survey left comments which have been detailed in consultation comments (Appendix I). The survey is available to view in Appendix J.

The Public Exhibition survey gave attendees space to provide written feedback. A total of 19 surveys were received during the Public Consultation. Five of these included only the respondents' personal details so that they could be kept informed about the plans.

4.2 Qualitative Analysis

At the Public Exhibition and on the website survey, consultees were asked to submit written feedback. As well as this, residents emailed their comments and questions.

Fourteen consultees submitted written feedback through the survey at the Public Exhibition and mail out respondents (Appendix I). Further to this one email was received which also included questions around the type of battery being used and feedback on the plans. This question is included in Appendix I.

A number of residents left comments that were supportive of the proposals, such as:

• "Very informative and useful discussion I look forward to being kept up to date with the progress of this

project (maybe even have the opportunity to see the installation when it is complete).

- Great concept, look forward to seeing this project moving forward. Keep in touch.
- Thank you very much for letting me know about this development. I am sure it will be fine and I have no questions.

The analysis has identified some additional themes. The topics that were cited most often are outlined below.

Community impact

- Noise impact
- Community Benefit Fund spending

Safety

- Safety of alkali metal in batteries
- Types of batteries used
- Cooling of batteries
- Fire safety measures

Other

- Work with local community and schools
- Light pollution
- Maintenance of equipment in Shetland specific environment

Statkraft UK Ltd



4.3 Responses to Feedback

The feedback in Appendix I shows that residents are interested in impacts on local residents, types of battery used and noise.

The Applicant has provided a response to issues raised through feedback in the points below.

ISSUE	RESPONSE
	Lithium Batteries are the most likely solution to be used at Lerwick Greener Grid Park. Statkraft are most likely to select this solution for a number of reasons listed below:
attery Specification	1.We are able to procure Lithium batteries which do meet the necessary technical standards and use materials sourced from other countries such as Chile and Australia. We also expect to see more manufacturing of Lithium batteries in Europe in the near future.
	2. Lerwick Greener Grid Park requires extremely fast reaction/response times and relatively short power duration. Lithium batteries can deliver these types of response times.
	During construction, we will work to keep noise levels from the site to a minimum. We will follow all conditions imposed on construction activities if our application is successful. The noise levels will stay below the level which is set out by the council in the planning permission.
Noise	The equipment once installed and operational will be clad in noise insulating materials together with the installation of appropriate noise attenuating fencing to the eastern and southern boundary of the site. The specific equipment to be used will be selected once the planning application has been granted. The development will not exceed noise limits set by the Council to prevent negative impacts on residential properties in the surrounding area.
	Some examples of safety measures that Statkraft undertake on their Greener Grid Park Projects include:
Safety	1. To separate transformers from adjacent structures and from each other.
arety	2. Spatial separation between the transformer and the battery units.
	3. Automatic fire, gas and smoke detection.
Statkraft UK Ltd	4. Automatic fire suppression (e.g. water and/or Orbit Communications Ltd



	DESDONG
ISSUE	RESPONSE
	gas-based sprinklers) within the buildings.
	5. Use of fire-resistant non-combustible
	materials/enclosures around the components.
	6. 24/7 remote control of the temperature of the
	components.
	Fire safety measures will be detailed within the
	soon to be submitted Outline Battery Safety Management Plan currently being prepared by
	DNV.
	Statkraft will implement procedures and plans for
	emergency situations and will run regular
	emergency preparedness exercises in order to
	ensure that all personnel in the organisation,
	including third parties, are aware of how to act
	and react if any unplanned situations should occur. Agreements will be made, and cooperation
	established with local emergency services for
	training and exercises in order to secure their
	own personnel, third parties, environment and
	properties.
	What makes this fund particularly special is that it
	will provide a regular stream of funding dedicated
	to projects that help accelerate the just transition
	to a low carbon society.
	This could include initiatives such as:
	Training and education of local residents
	about renewable energy and reducing
	carbon emissions
	Addressing fuel poverty through
	education on low-carbon living
Community Donofit Fund Sponding	
Community Benefit Fund Spending	Practical support for energy efficiency
	initiatives, from draught excluders to
	heat pumps and more
	Increasing access to electric vehicle
	charging points and promoting
	electrification of transport
	• Supporting communities to develop their
	own renewable energy projects
	Promoting active travel methods,
	including e-bikes



ISSUE	RESPONSE
	• Supporting residents with information on how to pursue careers or retrain to join the net zero workforce
	We have appointed Grant Scape to set up and administer funds from our Greener Grid Parks. They are a highly respected charity and experts in community fund management with over 20 years' experience and one of the UK's major grant-makers having distributed nearly £90 million to local communities.
Light pollution	Any lights will be installed with motion sensors and will not be in constant illumination to prevent light pollution. Once operational, the site is expected to be attended by a service technician only for essential maintenance.

4.4 Pre-Submission Webinar

On 24 January 2023, the Applicant organised a digital roundtable webinar to provide an update on changes to the proposal since the public exhibitions in September 2022.

Invitees to this were:

- Constituency MSP
- Constituency MP
- Regional MSPs
- All Shetland Islands Council Elected Members
- Lerwick Community Council

At the event, there was a short presentation reiterating the purpose and effect of the proposal, the plans as proposed in September and the final plans about to be submitted. Digital animation fly-throughs were also displayed. These fly throughs are available to view on the website along with updated visual representations of the adjusted layout.

Following the presentation, 7 questions were put to the members of the Applicant team on the call. These were chosen as key issues raised during the public consultation and put to the panel to provide information of any impact of the change in design on these topics. The questions covered: purpose of solution; technology choice and selection; safety; and sustainability.

One person attended the event and 5 invitees requested the slides from the presentation which were sent along with a link to a video of key viewpoints of the new layout. This webinar was undertaken by the Applicant as an additional piece of engagement which was not requested by the planning officer but was felt appropriate given the updated layout.

4.5 Conclusions

The Applicant has carried out a pre-application consultation with the local community in a proportionate manner to the scale of Development. The design evolution process has considered the comments made during the consultation process in finalising the Development design and layout.

Consultation with the Council and the public has influenced the design and appearance of development contained as part of the Application.

Statkraft UK Ltd



In terms of engagement with the public exhibition, project website, and the virtual exhibition it is considered that the information reached a good number of people and the comments received were engaging and have been considered and addressed within this PAC Report.

The Applicant is committed to continuous liaison with the local community and key stakeholders throughout the life of the project as demonstrated by the webinar to ensure that local views continue to be taken account of, and the construction is carried out in as appropriate a way as possible.

The consultation and engagement that the Applicant has carried out with the local community and consultees is considered to accord with the relevant statutory requirements and those of the Council. The Applicant will continue to operate in a spirit of collaboration throughout the planning process and keep public communication channels open and assist the Council in the determination of this Application.



Appendix A - Pre-Application Notice

Dear John,

Land at Lower Blackhill Industrial Estate, Gremista, Lerwick, ZE1 0TW

Gremista Greener Grid Park Stabilisation Facility – Proposal of Application Notice The Town and Country Planning (Scotland) Act 1997 (as amended)

Statkraft UK LTD is pleased to submit a Proposal of Application Notice (PAN) and associated site location plan relating to the proposed Greener Grid Park – which will deliver a grid stabilisation facility to support the new Shetland Grid Supply Point (GSP) substation, which was granted planning permission on 15 April 2022 (Ref. 2021/353/PPF).

The development would comprise of a number of Battery Energy Storage System (BESS) modules (with a generating capacity of up to 50 mega-watt [MW]) and synchronous compensators housed in an Energy Management Building that are linked to the GSP and located across a split site to the north and south of the consented GSP.

The proposed development has been subject to pre-application discussions and is classified as Major development by virtue of being in excess of 2 hectares and that the generating capacity of the BESS at greater than 20MW.

The 'red line' PAN site boundary (at 7.9 hectares) as shown in the submitted Site Location Plan seeks to include land required to construct the standby and connections to the approved GSP, and related infrastructure such that the works to facilitate the development at the site can be constructed. As discussed during the pre-application call, the development is required to provide a solution to ensure security of supply to Shetland in the event of planned or unplanned outage at the GSP.

The location is within the Local Development Plan land allocation known as 'LK006' located within the Lerwick Harbour Authority land to the west of the existing Black Hill Industrial Estate just off Gremista Road, north of Lerwick.

The attached PAN form is fairly limited in terms of space for description and therefore a more detailed description of the proposed development is as follows:

"Proposal for Greener Grid Park (GGP) Grid Stabilisation Facility to include synchronous condensers housed in Energy Management Buildings; battery energy storage modules with supporting inverters and aux distribution panels; 33kV switchgear building; control room building; perimeter fencing; gates; access and road and associated landscaping and ancillary works".

Further details on the proposed development will be provided to interested parties at a public consultation event to be held on <u>22 September 2022 at Islesburgh Community Centre, Isleburgh Complex, King Harald Street, Lerwick, Shetland, ZE1 0EQ (12noon to 7.30pm)</u>.

A virtual event running on the project website for a period of 2 weeks (from 22-29 September 2022), will supplement this in-person event to accommodate those parties unable to attend in person, or for whom COVID 19 remains a risk.

The Community Council and other parties receiving the PAN will be informed in advance of any changes to the arrangements.

Both events will be advertised at least 7 days prior to the dates in the relevant newspaper, which is the Shetland Times.

Statkraft UK Ltd



Comments on the events will be accepted for four weeks after the events. Furthermore, the ability to engage with the project by way of the project website will be open throughout the whole 12-week pre- application period before the submission of the planning application.

The Project Website is: www.statkraft.co.uk/lerwick

We trust that the attached information and the above description is sufficient for the purposes of completing the PAN process and I look forward to your confirmation thereof. Should you require any further information please do not hesitate to contact me directly.

Yours sincerely

han

David C Bell BSc (Hons) DipUD MCIHT MRTPI Director

Enc.



Appendix B - Council's Pre-Application Consultation Advice

Executive Manager: Iain S McDiarmid Director: Neil Grant

Pippa Gardner David Bell Planning Ltd 26 Alva Street Edinburgh EH2 4PY Planning Development Services 8 North Ness Business Park Lerwick ZE1 0LZ

Telephone: 01595 744293 Email: development.management@she tland.gov.uk www.shetland.gov.uk

If calling, please ask for: Brett Taylor Planning Officer Brett.Taylor@shetland.gov.uk Direct Dial: 01595 743963

Our Ref: 2022/224/PAN

Date: 9 September 2022

Dear Sir/Madam

Town and Country Planning (Scotland) Act 1997 (as amended)

Development	Gremista Greener Grid Park Stabilisation Facility including synchronous condensers, battery energy storage and associated infrastructure and ancillary works.
Location	Lower Blackhill Industrial Estate, Gremista, Lerwick , ZE1 0TW
Applicant Name	Pippa Gardner

I refer to the above Proposal of Application Notice (PAN) for the above-proposed development submitted to the Planning Authority on 29 August 2022.

I note that you propose to consult the Lerwick Community Council and also propose to hold a Public Consultation Event at the Islesburgh Community Centre on the 22 September 2022 and an online event on the 22 -29 September 2022.

Notice of the public meeting must be published at least 7 days in advance in a newspaper circulating in the locality of the proposed development (The Shetland Times), and you must notify the Planning service of the date of this advertisement. You may also wish to consider other means of advertising the public event such as local radio stations or social media to ensure that it attracts as wide a public audience as possible.

The notice for the public event must include:

- A detailed description of the development and its location;
- Details as to where further information may be obtained concerning the proposed development;
- The date and place of the public event;
- A statement explaining how, and by when, persons wishing to make comments to the prospective applicant relating to the proposal may do so; and
- A statement that comments made to the prospective applicant are not representations to the Planning Authority and that there will be an opportunity to make representations on any resultant application to the Planning Authority.

Statkraft UK Ltd



As well as the Community Council I would advise you that the Planning Service considers that you should also consult the following stakeholders:

- Shetland Islands Council Roads Service
- Shetland Islands Council Planning Engineer
- Shetland Islands Council Environmental Health Service
- Scottish Water
- Scottish Environmental Protection Agency
- Shetland Regional Archaeologist
- NatureScot

Guidance on the Pre-Application Consultation (PAC) states that there is a need to emphasise to the community that the plans presented to them may alter in some way before the final proposal is submitted as a planning application. Ideally, those consulted or who expressed views could be given a chance to comment on any significant changes to proposals being considered as a result of PAC, before the application is finalised.

The submission of the proposal of application notice starts the PAC processing

clock. The 'proposal of application notice' must be submitted at least 12 weeks prior to the submission of an application for planning permission. In this case, the starting date for the minimum 12 week period is 29 August 2022.

Yours faithfully

Brett Taylor Planning Officer



Appendix C - Newspaper Advert

Date: 09/09/2022 Publication: The Shetland Times Circulation: 9605 Pages: Page 32



Date: 16/09/2022 Publication: Shetland Times Circulation: 9,605 Pages: advert

PUBLIC NOTICES





Public Exhibition Invitation

We invite you to attend our public exhibition for the Lerwick Greener Grid Park proposal, located next to the new Gremista Substation.

These plans, if approved, would be a key component of Shetland's future electrical grid infrastructure, supporting the new Shetland Grid Supply Point (GSP) substation, which will see Shetland's local electricity network connected to the British electricity grid for the first time.

We are committed to listening to communities as we seek to shape our development. PHYSICAL EXHIBITION Islesburgh Community Centre (Room 9) Thursday 22 September, 12.30pm- 7.30pm

Thursday 22 September, 12.30pm- 7.30p

Statkraft will also run a virtual event on the project website (www.statkraft.co.uk/lerwick) from 22-29 September with the same information and opportunity to ask questions.

Comments should be made to Statkraft UK and do not constitute a formal representation

An opportunity to make a formal representation will exist when a subsequent planning application is made.

Thank you and we hope you can take part in the consultation events.

Statkraft UK Ltd



Date: 19/09/2022 Website: Shetland News Monthly Readership: 17,272 UVPM (est.) Coverage Views: N/A. Article Link: Advert (no link available)



Public Exhibition for Greener Grid Park by Lower Blackhill Industrial Estate

Islesburgh Community Centre 12:30-19:30 Thursday 22 Sept

CLICK FOR MORE INFORMATION

PDF is linked to advert as shown on Shetland News

Date: 19/09/2022 Website: Shetland News Monthly Readership: 17,272 UVPM Coverage Views: N.A. Article Link: Advert (link unavailable)



Statkraft plans for a Greener Grid Park on land by Lower Blackhill Industrial Estate.

A public exhibition will take place at Islesburgh Community Centre (Room 9) from 12:30pm to 7:30pm on Thursday 22nd September.

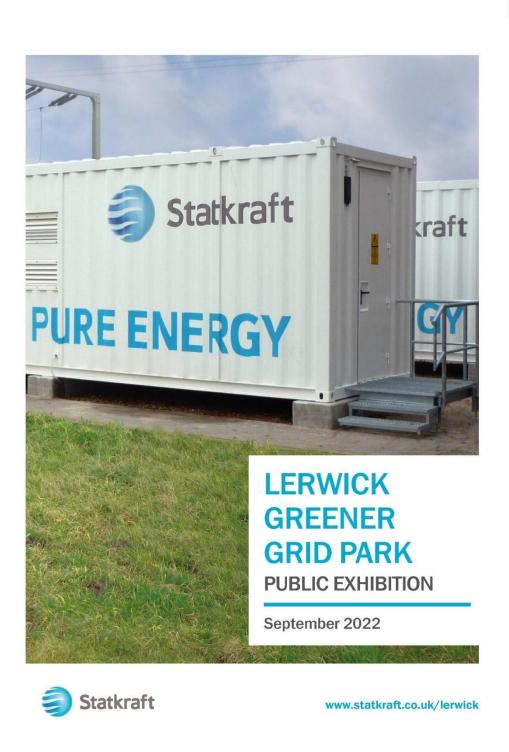
Statkraft will also run a virtual event on the project website <u>https://www.statkraft.co.uk/lerwick/</u> from 22-29 September with the same information and opportunity to ask questions.

Statkraft UK Ltd



Appendix D - Project Website/In-Person Information Slides

Exhibition Brochure



Statkraft UK Ltd





Contents

Statkraft





2



Welcome

Our team are here to discuss our plans, listen to your views and outline the next steps of the Proposed Development.

About Statkraft

- → The largest generator of renewable energy in Europe
- \rightarrow Operating in the UK since 2006
- \rightarrow Offices across the UK
- → Development pipeline includes wind, solar and grid stability services
- → Distributed over £2 million to communities near operating renewables projects
- → A state owned utility with origins in Norwegian hydropower over 125 years ago







5

Statkraft UK Ltd



Welcome

Statkraft in the UK

.....

.....

- → Offices in Glasgow, London and Cardiff
- → Developing Energy Isles Wind Farm in the north of Yell
- → Operational portfolio in the UK includes one Greener Grid Park, five wind farms and one hydro plant
- → Delivering grid stability services for National Grid in Moray and Liverpool with upcoming projects in South West Scotland
- → Recent expansion into solar development and electric vehicle charging points
- → Over 1GW of wind and solar projects in development
- → 10 Greener Grid Parks in development



Statkraft UK Ltd

6





Statkraft UK Ltd



Introducing Lerwick Greener Grid Park

The energy supply on Shetland will see a major change in the near future. Currently, Shetland's electricity is supplied from the Gremista diesel power station, Sullom Voe gas turbines and renewable sources.

Statkraft are proposing a Greener Grid Park to provide an important service across the Shetland Isles, to ensure a continuous electricity supply. This is an innovative new way to provide grid stability which significantly reduces the need for diesel generators and protects the Shetland Isles power supply.



8





SHET (SSE Transmission) are improving Shetland's grid with a new, cleaner, lower cost energy supply enabled via a long subsea cable (HVDC link) which will run from the UK to Shetland.

When this cable is in maintenance or if it trips, the diesel generator will be on standby to provide backup generation to Shetland. The diesel generator will take some time to start up, so to ensure there is continuity of supply, Shetland needs a fast acting and clean solution to keep the lights on.

SHEPD (SSE Distribution who are responsible for the supply in Shetland) are introducing the 'Shetland Standby' service which will bridge the gap between a fault on the HVDC link and the diesel station getting online. Statkraft are bidding into SHEPD's competitive tender to deliver this service.

.....

9



About Greener Grid Parks

.....

Greener Grid Parks are facilities including buildings, compounds and containers, housing zero carbon technology which stabilise the grid, allowing more renewable energy to be transmitted through the network. They are not a wind farm or solar farm, but may import, store, and export electricity.

.....



Synchronous Compensator

Large machines with builtin flywheels provide grid stability without emitting any carbon dioxide – decarbonising the grid and saving consumers money.

10

Statkraft UK Ltd





Find out more at: www.statkraft.co.uk/grid-services The Lerwick Greener Grid Park is expected to use synchronous compensators and a battery energy storage system (BESS) to deliver this grid stability service instantaneously and for a duration long enough to get the necessary diesel generators online.

Greener Grid Parks are pioneering projects which help achieve zero carbon emissions.

.....



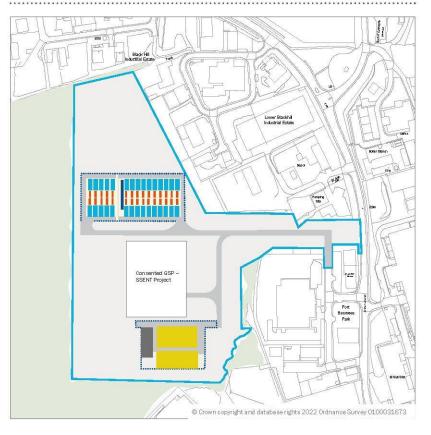
Battery Energy Storage System (BESS)

Batteries capture energy and store it for use later. Grid-forming converters combined with batteries always stay in 'grid-forming' mode which means they inherently resist changes in voltage and frequency on the electricity grid. This is another innovative way we can provide stability to the grid.



Where Will Lerwick Greener Grid Park Be Located?

Located next to the proposed Gremista Substation in Lerwick. SHEPD's ongoing requirements have informed our proposal.



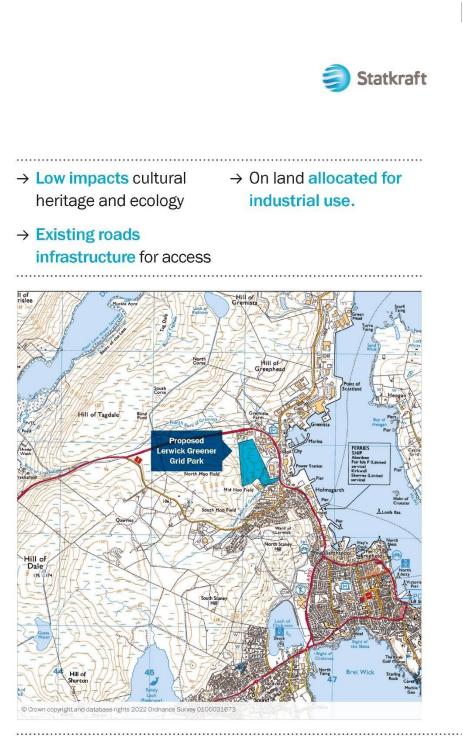
LEGEND



12

Statkraft UK Ltd





For more information and to provide your comments please go to our website: www.statkraft.co.uk/lerwick

Statkraft UK Ltd

Orbit Communications Ltd

13



Enabling a Cleaner, Lower Cost Energy Supply

If Lerwick was granted planning permission, we estimate the project will be operational in 2025

We are often asked by residents near our projects what benefits they can bring. We are the first to offer community benefit funds for grid stability projects.



.....

- "We are extremely grateful to Statkraft for the ongoing sponsorship of our Winter Trail Series which is an important part of our calendar.
- "The sponsorship helps us promote running as a healthy and sociable pastime for a wide range of ages and levels across Caithness and Sutherland."
- Donna Stewart, Vice-chair of North Highland Harriers



Windy Rig Wind Farm is another valuable contract for GTR. We are just one of several local businesses who are directly benefiting from the many wind farm developments within this area. This can only be a good thing for both local businesses and the local economy especially during the current pandemic."

Tanya Russell, Director, GTR Contracts Ltd

14

Statkraft UK Ltd





"I very much welcome the benefits that the project will bring to the local community, and I also welcome the community benefit initiative that you have mentioned. This project and the significant investment in the local economy will bring benefits for local supply chains while also helping put the region at the forefront of our continuing journey to put renewable energy at the centre of our journey to net zero."

Michael Matheson, Cabinet Secretary for Net Zero, Energy & Transport at launch of Keith Greener Grid Park, March 2022.





Community Benefits

We look forward to engaging with the communities to find out different ways we can bring positive benefits to the local area.

.....



Investment from wind farm projects are helping young entrepreneurs achieve their business goals. Northcoast Watersports were granted £5,000 from Caithness Business Fund (Baillie Wind Farm) that enabled them to buy essential equipment to help get their, now very popular, business started.

16





Community Benefit Fund

We are committed to setting up a Community Benefit Fund of £20,000 per annum. Our community benefit is the first of its kind for grid projects.

Biodiversity Enhancements

Statkraft looks to actively improve the environment around our projects and will consult to find enhancements suited to the Shetland climate to improve habitat and biodiversity.

OUR COMMITMENT

Leave the environment in a better state than it was before we arrived

Local Supply Chain

We work with local business groups to increase awareness of opportunities to get involved in the construction and operation of our projects. **Over £1.6million was invested in the local supply chain at our Keith Greener Grid Park in Moray.** Visit our website to find out how to register interest.



17



Thank you

Your views are important to us

There will be an opportunity to formally comment on the application when a proposal is submitted. All of the information will be available to view on the consenting authority's and our project website at the time of submission.

We are committed to engaging with the local community and would like to keep you informed. Contact us with your questions, comments or to subscribe for project updates.



18

Statkraft UK Ltd



3	Statkraft
-	and and and

We would like to keep you updated as our plans progress:

.....



Please return the freepost reply card provided.



UKProjects@statkraft.com



www.statkraft.co.uk/lerwick



Phone the project hotline: 0800 772 0668

19





www.statkraft.co.uk/lerwick

Phone: 0800 772 0668

Orbit Communications Ltd

Appendix E - Virtual Exhibition Website



Virtual Exhibition Page



Statkraft UK Ltd



Visuals (New Layout) East



North



South





Old layout East



South



North





Appendix F - Public Exhibition Images



PAC Report Greener Grid Parks





Statkraft UK Ltd

Appendix G - Reply Card



Statkraft	Please tell us what you think – complete and return in the envelope provided Your questions and comments:
PUBLIC EXHIBITION SEPTEMBER 2022	
LERWICK	
GREENER	
GRID PARK	
You can use this form to let us know your views or ask any questions. We will respond to all queries as quickly as possible.	continue overl
PRIVACY STATEMENT Respect for privacy and personal data protection	Yes please, I would like to receive project updates (mainly by email) Yes, please respond to my comment a advise when the project is submitted
is part of Statkraft's corporate culture. This enables us to maintain an environment where our customers, vendors and other stakeholders can trust Statkraft to process their personal data.	No thank you, I do not want project updates
Our online privacy statement explains how, why and for how long Statkraft processes your personal data. Go to http://bit.ly/SKUKp2	Title: Mr / Mrs / Miss / Ms
Comments made to Statkraft are not representations to the consenting authority. An application is expected to be submitted in 2022, there will be an opportunity	Name: Address:
to make representations on that planning application to Shetland Islands Council Planning Department.	Postcode: Tel:
Please note all comments should be received by Statkraft no later than 11 October 2022.	Email:



Appendix H - Stakeholder Notification

Dear XXX,

Invitation: Lerwick Greener Grid Exhibition 12.30pm – 7.30pm, Thursday 22 September Islesburgh Community Centre (Room 9)

I am writing to invite you to the public exhibition event for Statkraft's plans for a Greener Grid Park on land by Lower Blackhill Industrial Estate in Lerwick.

These plans, if approved, would be a key component of Shetland's future electrical grid infrastructure, supporting the new Shetland Grid Supply Point (GSP) substation, which will see Shetland's local electricity network connected to the British electricity grid network for the first time.

The exhibition will take place at Islesburgh Community Centre (Room 9) from 12.30pm to 7.30pm on Thursday 22 September.

The development would comprise of battery modules with a capacity of up to 50MW and two synchronous compensators. The Greener Grid Park is planned to be split and located north and south of the GSP and connected into the consented substation development. The size of the proposed development means the planning decision will be taken by Shetland Islands Council.

To ensure more people can see what is being proposed, Statkraft will also run a **virtual event on the project website** (<u>www.statkraft.co.uk/lerwick</u>) from 22-29 September with the same information and opportunity to ask questions.

Statkraft is committed to using local skills and suppliers where possible, particularly given the engineering expertise and knowledge that exists in Shetland. Additionally, a community benefit fund will be available from the start of construction, throughout the project's lifetime to support local projects.

I hope you will be able to attend the event but we would be happy to arrange a separate meeting or online discussion with you at a more convenient time if that would be of any assistance at all.

I look forward to speaking with you about this exciting project for Shetland.

Sincerely,

Lucy Kent Senior Project Manager

Email: <u>lucy.kent@statkraft.com</u> Mobile: +44 (0)7503 627102 Direct: 0207 448 8238

Statkraft UK LTD 22 Bishopsgate, London EC2N 4BQ

www.statkraft.com

Near neighbour

Name Address



POSTAL ADDRESS: Statkraft UK Ltd 22 Bishopsgate London EC2N 4BQ

--HONE: +44 (0)207 448 8238

www.statkraft.co.uk

YOUR REF./DATE: OUR REF.:

PLACE/DATE:

6 September 2022

E-MAIL: lucy.kent@statkraft.c ____

Dear XXX,

As a resident living close to the site of our proposed Greener Grid Park on land by Lower Blackhill Industrial Estate in Lerwick, I wanted to invite you to attend a public exhibition so you can learn more about the plans and ask any questions you might have.

These plans would be a key part of Shetland's future electrical grid, supporting the new Shetland Grid Supply Point (GSP) substation, which will see Shetland's electricity network connected to the British electricity grid network for the first time.

The exhibition will take place at Islesburgh Community Centre (Room 9) from 12.30pm to 7.30pm on Thursday 22 September.

The development would comprise of battery modules with a capacity of up to 50MW and two synchronous compensators. The Greener Grid Park is planned to be split and located north and south of the GSP and connected into the consented substation development. The size of the proposed development means the planning decision will be taken by Shetland Islands Council.

To ensure more people can see what is being proposed, Statkraft will also run a **virtual event on the project website** (www.statkraft.co.uk/lerwick) from 22-29 September with the same information and opportunity to ask questions.

Statkraft is committed to using local skills and suppliers where possible, particularly given the engineering expertise and knowledge that exists in Shetland. Additionally, a community benefit fund will be available from the start of construction, throughout the project's lifetime to support local projects.

I hope you will be able to attend the event but we would be happy to arrange a separate discussion at a more convenient time if that would be of any assistance at all.

I look forward to speaking with you about this project and make sure concerns of local residents are taken in to account.

Lucy Kent Senior Project Manager

Statkraft UK Ltd



Community Council

Dear Sharon

Invitation: Lerwick Greener Grid Exhibition 12.30pm – 7.30pm, Thursday 22 September Islesburgh Community Centre (Room 9)

I am writing to invite you to the public exhibition event for Statkraft's plans for a Greener Grid Park on land by Lower Blackhill Industrial Estate in Lerwick.

These plans, if approved, would be a key component of Shetland's future electrical grid infrastructure, supporting the new Shetland Grid Supply Point (GSP) substation, which will see Shetland's local electricity network connected to the British electricity grid network for the first time.

The exhibition will take place at Islesburgh Community Centre (Room 9) and **we would like to offer the Community Council the chance to visit at 11.30am on 22 September**, before it opens to the public at 12.30pm. This would allow us to specifically brief you on our plans and answer any questions you might have.

The development would comprise of battery modules with a capacity of up to 50MW and two synchronous compensators. The Greener Grid Park is planned to be split and located north and south of the GSP and connected into the consented substation development. The size of the proposed development means the planning decision will be taken by Shetland Islands Council.

To ensure more people can see what is being proposed, Statkraft will also run a **virtual event on the project website** (<u>www.statkraft.co.uk/lerwick</u>) from 22-29 September with the same information and opportunity to ask questions.

Statkraft is committed to using local skills and suppliers where possible, particularly given the engineering expertise and knowledge that exists in Shetland. Additionally, a community benefit fund will be available from the start of construction, throughout the project's lifetime to support local projects.

I hope you will be able to attend the event but we would be happy to arrange a separate meeting or online discussion with you at a more convenient time if that would be of any assistance at all.

I look forward to speaking with you about this exciting project for Shetland.

Sincerely,

Lucy Kent Senior Project Manager

Email: <u>lucy.kent@statkraft.com</u> Mobile: +44 (0)7503 627102 Direct: 0207 448 8238

Statkraft UK LTD 22 Bishopsgate, London EC2N 4BQ

www.statkraft.com



Appendix I - Table 1: Consultation Comments and Responses

Comments

1. Great plans with local benefits

2. Just a quick comment on the image - the 'pure energy' text looks similar to Pure Energy Centre that is a company in Shetland

ISO shipping containers have a short life in Shetland's salty climate. Possible high maintenance. Best of luck with your project

Would like to thank Kate for her time- very informative.

Wish you all the best with the project and hope it is a success.

1. Following the initial construction, how many long term levels of employment of local applicants do you expect?

2. What terms do you expect to apply for the use of your local development fund?

3. As the grid will consist of very large capacity batteries and the associated turbines, what if any disturbance will this cause nearby residents

Thank you very much for letting me know about this development. I am sure it will be fine and I have no questions.

Great concept, look forward to see this project moving forward. Keep in touch. Civil engineer.

My only concern is light pollution. Good exhibition. Plenty of information

Very informative and useful discussion. I look forward to being kept up to date with the progress of this project (maybe even have the opportunity to see the installation when it is complete).

Community Benefit funds could be used to tackle high fuel poverty levels in Shetland. Ness engineering are a good local company for installing temporary site buildings- cabins, generators, waste disposal etc

Would like to thank Kate for her time. Hope the project is a success

Interested in the heat cooled useful for district heating

Staney Hill Hall, Concern Lithium Ion batteries

As you proceed arrange a meeting with the community

Very informative. Thanks for the opportunity to discuss first hand.

Thank you for the opportunity to hear of your proposal for grid stabilisation in Shetland at your exhibition on Thursday evening.

Here are my observations:

1. Most people will not understand what grid stability means. You need to explain what benefit is provided to the grid by having a large rotating , high inertia, machine in the system. I think this should be explained separately from the battery backup system. Then three scenarios should be described for the overall system (a) interconnector cable outage with plenty of wind power for Shetland's needs, (b) interconnector cable outage with insufficient wind power for Shetland's needs and (c) normal operational stability support.

2. One of the obvious things from the information shared at the consultation evening in Lerwick was the amount of cooling units attached to both the battery and synchronous compensator buildings. The proposed installation is across the road from the Shetland Heat Energy and Power (SHEAP) heat exchanger which powers the Lerwick District Heating Scheme. It, therefore, seems an obvious step to put your excess heat to good use by supplying it to SHEAP and helping heat Lerwick's homes, business and public buildings including the hospital, care homes and schools.

3. Publicity in conjunction with the Viking Wind Farm construction companies will be essential and you



should be aware that you may be caught in the crossfire between Viking and Sustainable Shetland who object to the windfarm and all its associated works. This is because of the constant drip, drip of another project, and another project that seems to be a constant theme of this development.

Regards,

Dear Sir,

I visited Statkraft's "Lerwick Greener Grid Park" exhibition at Islesburgh Community Centre on 22nd September and spoke with your two representatives there. I understand that there is still some work to be done on the plans for this project and that the detailed configuration of the battery farm has not been finalised yet. I was surprised, indeed disappointed to learn that vanadium batteries were not being considered even as part of a hybrid configuration, and therefore it seems that the farm will consist entirely of lithium batteries.

My main concern about lithium battery farms is the risk of fire and resulting toxic fumes from the fire. Of course I understand that such fires are rare, but there has been enough large-scale instances in various parts of the world to cause concern. The proposed park in Lerwick is amongst residential and industrial buildings, and a fire producing toxic fumes in that location would be hugely dangerous.

I was told that the risk of fire in this project would be mitigated and significantly reduced because there will be a sensor in each cell to raise an alarm if any danger of fire arises. This is, of course, some comfort, but by acknowledging the need for such sensors this indicates that your project team are aware that there is an inherent risk of fire within lithium batteries.

With vanadium batteries, on the other hand, there is no fire risk because the energy is stored in tanks containing liquid, not in cells.

Apart from the fire risk, you are no doubt aware that vanadium batteries have a number of other advantages over lithium, i.e:

• Lithium batteries decay and lose capacity over time, while vanadium batteries discharge at 100% throughout their entire lifetime.

• Lithium has high disposal costs, but the vanadium electrolyte in vanadium batteries can be reused, so it retains its end-of-life value.

• Vanadium flow batteries offer the highest level of safety compared to any other battery technology on the market today.

• Vanadium flow batteries operate at a wider range of temperatures than lithium.

• Vanadium batteries have an average lifespan of 25 years or longer, with low annual maintenance.

As a result of these characteristics, although vanadium batteries may have a higher up-front capital cost, they will work out less expensive over the life of the projects.

I would be very interested to know if you will be giving any consideration to utilising vanadium batteries for the Lerwick Greener Grid Park, either in its entirety or partially in a hybrid configuration.

Yours sincerely,

Sidney Tulloch

Appendix J Website Survey



	Get in touch
(On this page you can provide your feedback on the project and request (
	cell back from our development team in the forms below. Thank you for enceoing!
	Give your feedback
	Helic, thank you for your intervent in the project. We hope you will have your say and complete mar survey. This will estable us to gather community views which can shape
	Gur plans.
	Was this website useful to understand the proposal?
	O Yan.
	No Uncare
	Do you support increased reneesable energy generation in the UK?
	O No.
	O Unure
	Do you support this Greener Grid Park proposal?
	O Yes
	O No
	Do you have constraints or feedback on the project?
	1
	Do you have any questions on the project? We will respond to any questions.
	but this won't add you to our mailing list.
	ind pase parities have
	10
	We sould like to keep you updated with news on this project. You can expect to receive about 2 or 3 emails per year. "
	Ves. add my email to the mailing lar, By autorities the fairs. I consent to the
	processing of my e-mail access by StatisticA.S. for the purpose of sending me information on the project in question.
	No. 1 acuit nor like to receive project updates.
	875 N MMCI
	 Wy submitting this form, I agree to the processing of my personal data by
	Statikraft, in accordance with and so described in the privacy policy (see link above).
	Privacy palicy of Statium
	I have read and understood the Privacy Policy by Statistan AS (link above)
	 International constraints and an anomalia
	SLEWIT
	Request a call back
	Request a call back from nor development lears. You will be contacted as soon as openible. If you prefer to call comesoe, phone as on 0.00 773 0.008.
	- the second sec
	Type your phone number here *
	Privacy policy of Stationit
	By submitting this form. I consert to the processing of my phone rulester by
	Station AS to receive a call back phone regarding the Station for project I am Implemented in