# Renewable Grid Liaison Group (RGLG)

3<sup>rd</sup> December 2020



#### **RENEWABLE STATUS UPDATE**

RGLG 3<sup>rd</sup> December 2020



#### **Renewable Generation Status – Q3 2020**





#### NI Connected Renewable Generation Technology Mix

#### NI Connected and Committed Renewable Generation Technology Mix

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# Transmission Connection Applications

RGLG 3<sup>rd</sup> December 2020



Generation Applications												
Unit	Connection Level	User's Name	Maximum Export Capacity (MW)									
Curraghmulkin Wind Farm	Transmission	Dooish Wind Farm Ltd	42									
EP Kilroot GT5 and GT6 OCGTs	Transmission	EP Kilroot Limited	405.9									
Aught Wind Farm	Transmission	Aught Wind Farm Limited	37.2									
Pigeon Top Wind Farm	Transmission	Pigeon Top Wind Farm Limited	51.6									
EP Kilroot GT7	Transmission	EP Kilroot Limited	299									
EP Kilroot GT6 OCGT (Increased MEC)	Transmission	EP Kilroot Limited	44.1									
EP Kilroot GT8 OCGT	Transmission	EP Kilroot Limited	299									
EP Kilroot GT9 OCGT	Transmission	EP Kilroot Limited	450									
Belfast Power CCGT	Transmission	EP Kilroot Limited	468									
Storage Applications												
Unit	Connection Level	User's Name	Maximum Export / Import Capacity (MW)									
Drumkee Battery Storage	Transmission	Drumkee Energy Limited	50 / 50									
Mullavilly Battery Storage	Transmission	Mullavilly Energy Limited	50 / 50									
Castlereagh Battery Storage	Transmission	Energia Renewables Company 1 Limited	50 / 50									
Kells Battery Storage	Transmission	Kells BES Ltd	50 / 50									



# **Connections Innovation Working Group**

**RGLG Update – 3<sup>rd</sup> December 2020** 





# NIE Networks Derogation Application to UR

- Risk of NIE Networks being unable to remain compliant with 3 month licence standard
  - Influx of applications (due to change of policy)
  - Speculative applications
- To mitigate against this risk NIE Networks applied to UR for a derogation of this licence standard
  - Limited to distribution connection applications for generators 5MW and above
  - Limited to the interim connections process
  - NIE Networks would confirm anticipated timelines for

     Set is suing offer in the early stages of the process

     Set works

# Managing the Risk

- NIE Networks will utilise the extension process to maintain compliance with licence standard
  - Requires consultation with the person requesting the connection and other affected parties
  - Individual extension applications submitted to UR for approval
- This approach does not eliminate the risk
- Industry co-operation will be needed





## **Distribution Queue Principles**

- Applicants enter the queue based on date & time their application is deemed valid
- NIE Networks licence standards to offer terms within 3 months
- NIE Networks can request an extension of time to offer terms from the Utility Regulator
- Consistent application of the extension process is needed to maintain queue integrity





#### Next Steps & Timelines

- Decision Paper published Q4 2020
- Interim Connection Process go-live Q1 2021
  - NIE Networks documentation updated and approved as necessary
  - Go-live date based on approval of Statement of Connection Charges (comes into force 1 month after UR approval)
- Development of enduring connections process (go-live to align with updated NI Energy Strategy in Q4 2021)







# **RGLG – SSG SCADA UPDATE**

03/12/2020

#### **Generation Decentralisation in Northern Ireland**





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#### **SCADA Overview**



# What is SCADA?

- Remote visibility and 'control' of generators
- <u>Alarms</u> e.g. Circuit Breaker Status
- <u>Measurement</u>s e.g. Voltage
- <u>Control</u> e.g. Reactive Power – Will not affect kWh

### Requirements

- Requirements outlined in Distribution Code Issue 1 (2010)
- This is not a retrospective change!
- Responsibility of Generator to install SCADA hardware required – e.g. RTU
- Further Guidance given in SSG Setting Schedule





#### **SCADA Implementation Process**

- SSGs requiring SCADA will be issued a Notification Letter and Guidance Document on 5<sup>th</sup> December 2020
  - Website is now Live!! → <u>www.nienetworks.co.uk/ssg-scada</u>.
- SSGs acknowledge receipt and appoint a verified SCADA Installer by 31<sup>st</sup> January 2021
- SCADA Hardware installed by SCADA Installer at the generator.
- SCADA System will connect to NIE Networks' Systems SCADA Site Acceptance Test (SAT) will be completed.
- SAT Certificate Issued to generator







#### **Generation Monitoring Program**



- Weekly analysis of all SCADA connected Generators (LSG & SSG).
- Evaluates Active Power, Reactive Power, PF, Voltage against D-Code Limits.
- Variance from limits at NIE Networks discretion.

Small Scale Generation				MEC (kW)			MEC (kVA)				Power Factor			Voltage			Average Output				
Generator	Monitoring	Voltage	Inspection	DI	Issue	MEC (kW)	%Time	kWh	kW Max	MEC	%Time	kVAh	kVA Max	PF Within -0.95	Average	Average	Voltage within -1.06	Voltage	Voltage	kW	kVA
	Period	Control	Required?				below	above		(kVA)	below	above		+0.95 % of time	Leading	Lagging	+1.06 (% of Time)	Average	Max	Average	Average
Α	23/12/2019 -	NO	NO			2800.00	100.00	0.00	2798.89	2950.00	100.00	0.00	2812.29	100.00		1.00	100.00	34070.89	34594.07	2710.36	2721.46
В	23/12/2019 -	NO	NO		Р	2300.00	99.71	17.14	2347.14	2420.00	100.00	0.00	2355.75	100.00		1.00	100.00	33683.66	34101.99	876.79	884.12
С	23/12/2019 -	NO	NO			4999.00	100.00	0.00	1564.23	5250.00	100.00	0.00	1557.21	100.00	-1.00	1.00	100.00	33599.50	33914.70	102.36	167.39
D	23/12/2019 -	NO	NO			1063.00	100.00	0.00	243.45	1118.95	100.00	0.00	246.20	100.00	-0.99		100.00	11245.33	11396.91	151.56	161.43
E	23/12/2019 -	NO	NO	<b>Missing Data</b>		850.00				894.74											
F	23/12/2019 -	YES	NO			850.00	100.00	0.00	312.07	894.74	100.00	0.00	345.25	84.23	-0.93	0.99	100.00	11227.11	11321.60	269.50	277.71
G	23/12/2019 -	NO	YES		PF	225.00	100.00	0.00	193.68	236.84	100.00	0.00	235.62	0.00	-0.61		100.00	398.94	402.12	71.20	112.91
Н	23/12/2019 -	NO	YES		PF	2400.00	100.00	0.00	2090.00	2530.00	100.00	0.00	2134.06	68.35	-0.95	0.96	100.00	11226.48	11274.12	1667.26	1744.28

#### Questions





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