### Operating UK wide

# Power Stations - gas and hydro Distribution Networks Onshore windfarms Subsea -- Interconnector Offshore windfarms Whitelee **East Anglia ONE**

## Making clean energy work for you

# - Onshore - delivering low carbon energy

Whitelee - UK's largest onshore windfarm

- 215 turbines, enough green energy to power almost 300,000 homes
- Our 4 star Visitor Centre has welcomed over 500,000 people and is playing a big part in the community

East Anglia ONE

homes every year

planned for 2020

This £2.5bn project will utilise

**102**, Siemens **7MW** turbines powering more than **500,000** 

 Onshore construction commenced Spring 2017, with full operation

The target to deliver more than

**50%** of UK content across the

life of the project has been achieved

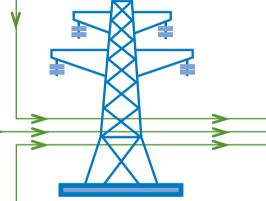
#### Our 2,000MW target

- **38** operational windfarms by the end of 2017
- 2016/17 £655m investment programme -8 windfarms, 221 turbines, 474MW

#### Wikinger

- €1.4bn to construct this 70 turbine 350MW project in the Baltic Sea
- Under construction, this offshore windfarm will be operational by the end of 2017
- This project will create benefits across the entire supply chain and support hundreds of long-term highly skilled jobs

# Industry changing infrastructure projects



- Innovate in the transportation of power with first of a kind smart grid technology and the introduction of a **Distribution System Operator** model
- Reducing networks costs on consumer bills through innovation – by 8% in Central and Southern Scotland and by 12% in Manweb
- Most ambitious upgrades to the electricity network for more than half a century
- Now in 5th year of £2.6bn RIIO TI Transmission investment (2013-2021)
- Now in 3rd year of £4.4bn RIIO EDI Distribution investment (2015-2023)
- Delivering excellence in customer service and industry leading reconnection times during severe weather incidents

#### Delivering the largest bi-directional subsea interconnector in the world - operational 2017







The WesternLink HVDC project, one of engineering's greatest challenges, is about to become reality as the longest subsea direct current cable in the world has reached land. This £1.3bn project will secure electricity for the whole of the UK, allowing electricity to flow north and south, taking low carbon energy to where it is needed.

- £1.3bn investment, part of RIIO T1
- More than **380km** of subsea interconnector cables
- Operating at 600kV, providing an additional 2,200MW of capacity
- Capable of transferring power in either direction
- · Employing 450 employees and contractors
- Operational: towards the end of 2017

#### ┌ Pump Storage - Cruachan

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Offshore-growth

projects

A cleaner way to meet peak demand

 Develop large scale electricity storage - so that UK plc can use our natural resources more efficiently

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- Pump Storage hydro is a major asset for electricity generation worldwide
- As simple as turning on a tap, Cruachan can currently generate 440MW in 30 seconds
- We believe we could develop between 400 - 600MW of additional capacity with an investment of between £300 - £400m

