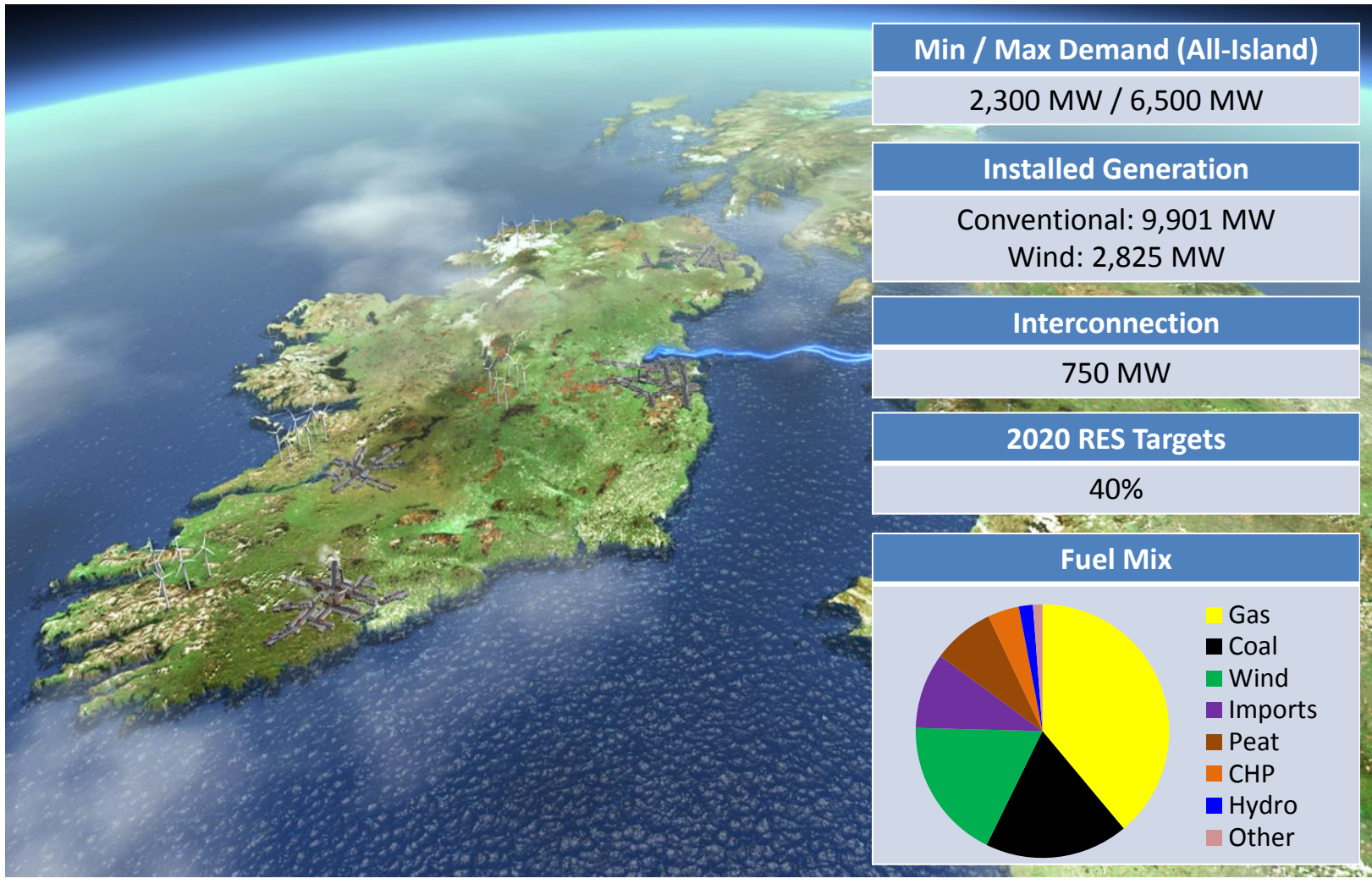




East-West HVDC Interconnector

6 May 2015 – ISGAN Webinar

Séamus Power (EirGrid)



What is the East-West Interconnector?

- 500 MW HVDC-VSC Interconnector linking Ireland & Northern Ireland system to Great Britain system
- €570m investment
- 264 km of DC cable
- Commenced: 2007
- Completed: 2012
- Contracts to commercial operation in 45 months



Security of Supply

- Provide additional capacity
- Reduce dependence on imported fuels

Promote Competition

- Exert downward pressure on price
- Direct access to GB market

Accommodate RES

- Reduce RES curtailment
- Assist meeting RES targets

- Choice of technology key - HVDC VSC
 - Represents the optimum whole-life techno-economic solution
 - Well-suited to the technical characteristics of island systems
- Environmentally friendly XLPE cable utilised
- Performance during transient events



Frequency Response

- Very fast active power response for high and low frequency events

Black Start

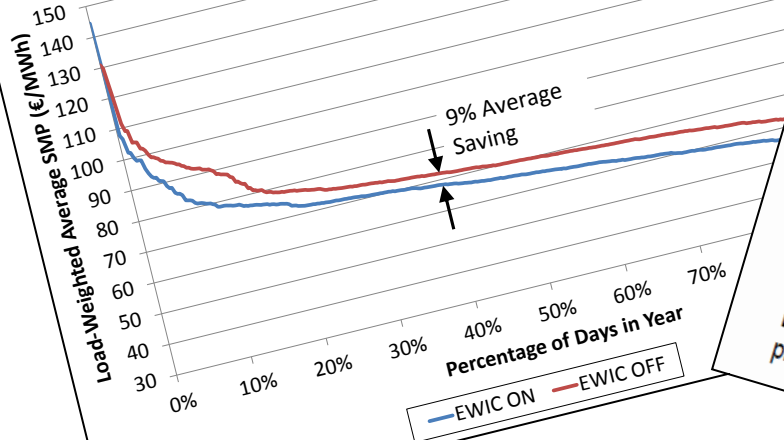
- Speed up restoration of grid in event of major blackout

Voltage Control

- Steady-state reactive power
- Voltage support during faults



Load-Weighted Average SMP per Trading Day with EWIC ON vs EWIC OFF
01/05/2013 - 30/04/2014

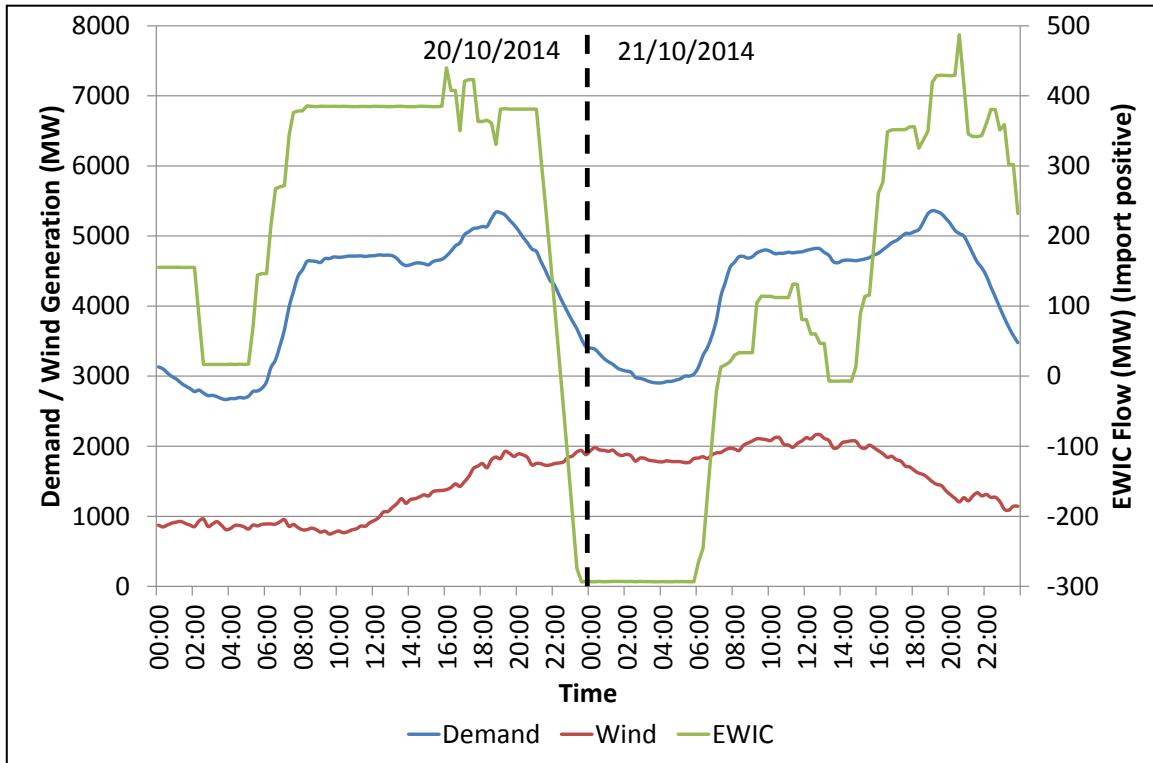


WHOLESALE ELECTRICITY PRICES LOWER BY 9% DUE TO EIRGRID INTERCONNECTOR

- East West Interconnector exerts significant downward pressure on wholesale electricity prices

Wednesday, 30 April, 2014: EirGrid has announced, at the launch of its 2013 Annual Results, that wholesale electricity prices in the Single Electricity Market on the island of Ireland are lower by 9 per cent since the EirGrid East West Interconnector (EWIC) commenced full commercial operations.

EWIC links power markets in Ireland and Great Britain. It has contributed to downward pressure on wholesale electricity prices.



- Countertrading reducing RES curtailment
- 300 GWh between July and December 2013

- Choice of technology key
- Developing and maintaining good stakeholder relationships
- Separate project managers for Ireland, Great Britain and marine works

Ireland-France Interconnector being considered

June 03, 2013 - The two national Transmission System Operators, EirGrid in Ireland and its French counterpart, RTE (Réseau de transport d'électricité), have just signed a Memorandum of Understanding to commission further preliminary studies on the feasibility of building a submarine electricity interconnector between Ireland and France.

An Ireland-France interconnector would, if developed, run between the south coast of Ireland and the north west coast of France, and would comprise a cable length of approximately 600 kilometres. Over recent months, EirGrid and RTE have conducted studies which indicated that an interconnector between the two countries could be beneficial for electricity customers in Ireland and France.

By this agreement, the two Transmission System Operators will continue and deepen their cooperation, and conduct further detailed feasibility studies. These studies will focus in 2013 on desktop analysis of the seabed to identify potential route corridors.

The capacity of the Ireland-France interconnector could be approximately 700 megawatts (MW), or the equivalent of the power demand of about 450,000 households. Last year EirGrid completed construction on the 500MW submarine East West Interconnector between Ireland and Wales.

EirGrid Chief Executive Fintan Slye commented: "The project, if it proceeds, would be expected to be in place by 2025. The benefits of the Ireland-France interconnector could include increased security of supply, downward price pressure on electricity prices through competition, and the potential to export renewable energy".

Pierre Bomard, Senior Executive Vice-President, RTE also welcomed the collaboration agreement. Mr Bomard said: "The construction of the interconnector would facilitate the integration of renewable energy in the European electricity system, and would benefit from the varying wind resources of Ireland and the Continent. It would also improve the quality of electricity supply in the north west part of France".

Ends

Celtic Interconnector

High Voltage Direct Current (HVDC) interconnector between Ireland and France

EirGrid, as the state-owned electricity transmission system operator, and the French transmission system operator, Réseau de transport d'électricité (RTE), are currently undertaking a joint feasibility study to investigate the development of a High Voltage Direct Current (HVDC) interconnector between south Ireland and north-west France, called the "Celtic Interconnector".



We have conducted initial joint studies which indicated that an interconnector between the two countries could be beneficial for electricity customers in Ireland, France and the EU.

Following positive results a feasibility study of the project is being carried out. A decision has yet been made on whether or not to proceed with the project. This decision will not be made until 2016 at the earliest and will be made with our partners on this proposal, the French transmission system operator RTE.

