

# **East West Interconnector Project**

**Crowne Plaza**

**3<sup>rd</sup> October 2007**



# Background

- Interconnection with Britain studied and discussed for 30 years
- Initiatives earlier in this decade that considered merchant interconnection did not deliver interconnection
- EU favours a single market - moving to regional energy markets is a first step that will deliver:
  - Enhance Security of Supply
  - Increase Competition
  - Facilitate development of renewable sector

# Introduction

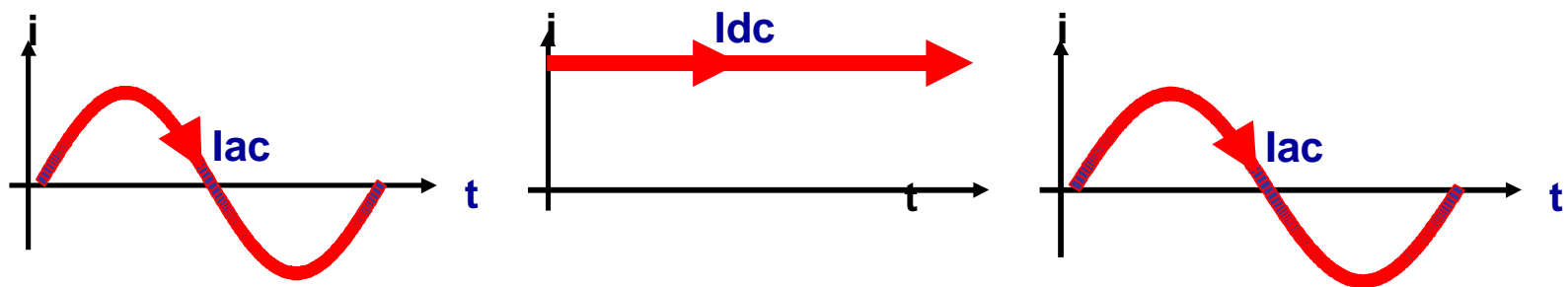
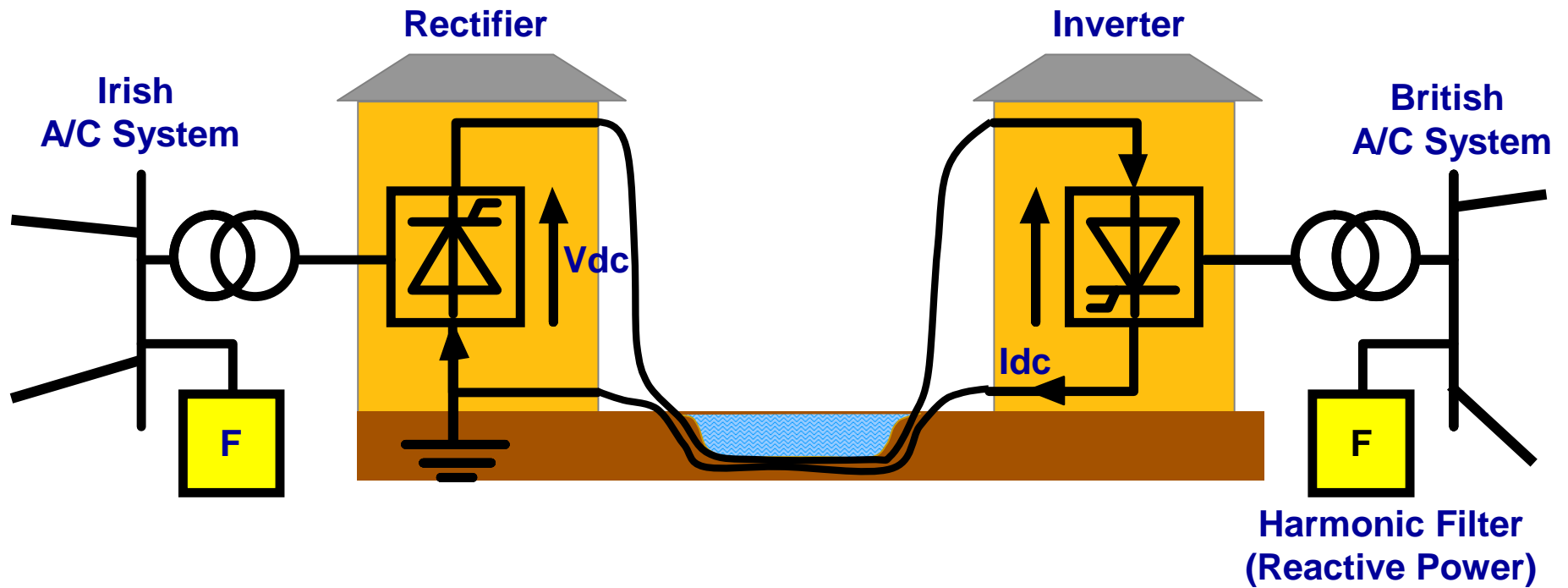
## Government Decision – July 2006

- CER to arrange for the design of a competition for Construction of a 500MW interconnector at earliest possible date before 2012
- On completion, Interconnector to be owned by EirGrid
- Assume no exchequer funding, NDP funding possible
- Work on selection of sub sea route and sites and associated grid reinforcement to proceed in parallel with the selection of developer process
- Minister will revert to Government for final decision on foot of competition result
- Project Governance arrangements agreed in January 2007

# Project Overview

- Key Strategic Project
  - Priority Interconnector Project - DG TREN January 2007
  - ‘..Critical National Strategic Importance..’ – NDP 2007-2013
- Project Parameters
  - HVDC
  - 500MW with potential expandability
  - 150-200km Subsea, up to 70km Land Routing + 2 Converter stations
- HVDC Technology
  - Well established method for high capacity electricity transmission between power systems
  - Two types: Voltage sourced conversion and Line current conversion

# HVDC Transmission Point to Point with Submarine Cable



# HVDC Converter Station (outside)



HVDC  
Converter  
Station  
(Inside)



# Project Scoping

- Detailed Project Plan developed
- Route selection prioritised
- Paralleled with competition design
- Project team recruitment and procurement of specialist advisors
- Preliminary meetings with Vendors and Developers
- Contacts/meetings with GB bodies initiated

# Project Timetable

Project Phase	Timeframe
Procurement and Route Selection	2007-2008
Building Consents, Authorisations and Permits	2007-2009
Construction	2009-2011
Commissioning	2012

# Project Overview



# Route Selection

- Southern crossing of Irish Sea not favoured
  - National Grid estimated 2016 for firm access to Grid in South Wales
  - Significant reinforcement required for southern connection points on Irish system
- Connection applications for Deeside and Pentir submitted to National Grid UK
- Woodland most favoured connection point on Rol side
  - Strong point on 400kV to support interconnection with minimum amount of deep reinforcements
  - Other points closer to the coast required greater reinforcement
  - Woodland direction issued by CER on August 9<sup>th</sup> 2007
- Woodland route feasibility study carried out by ESBI
- Welsh route feasibility studies being carried out by PB Power
- Cable Cost is proportionate to length and cost of land varies with land use and location

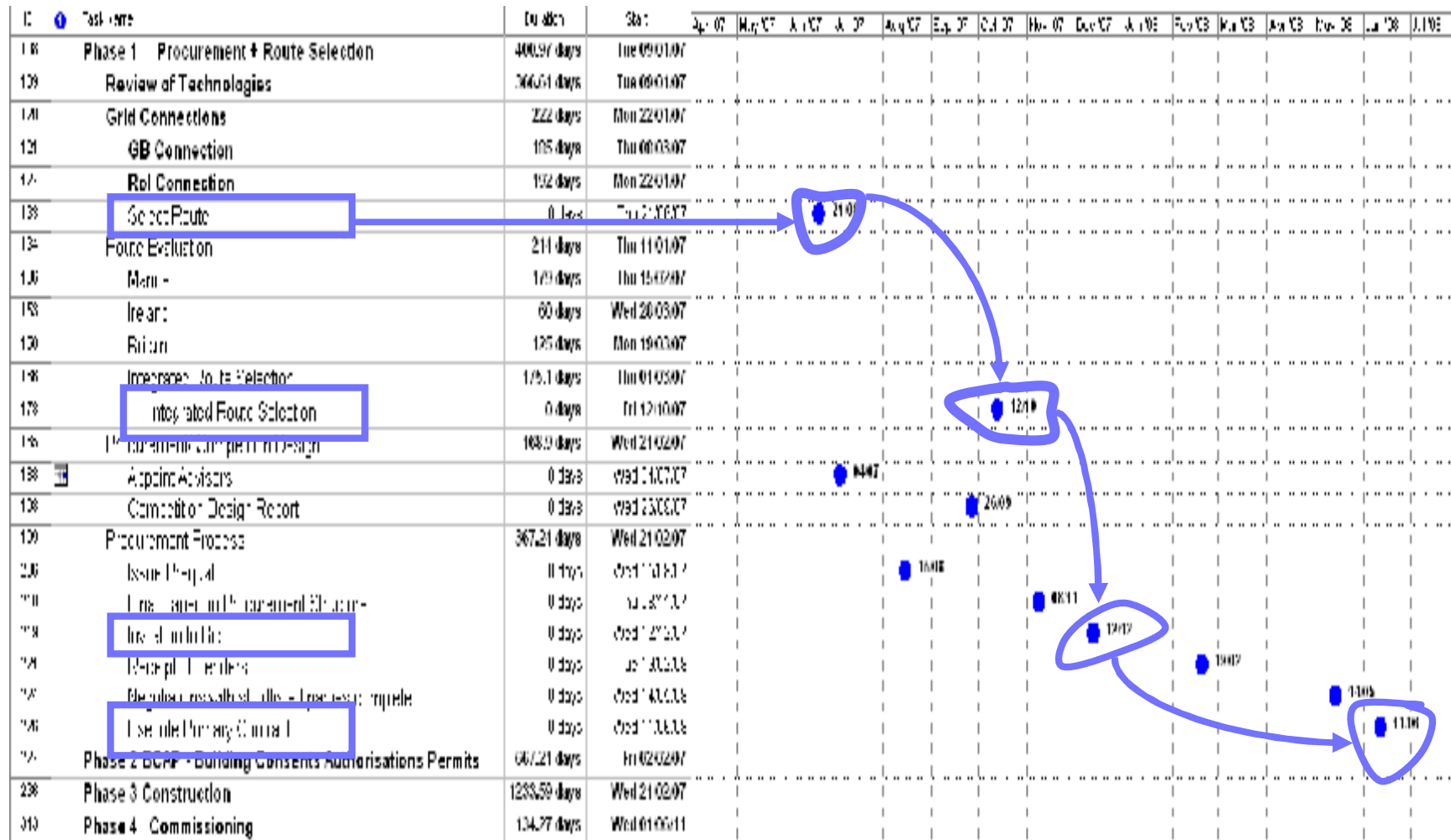
# Project - Work Streams

- **Competition Design and Execution**
  - To achieve value for money, procurement compliance and financing
  - PWC/Philip Lee/Cameron McKenna
- **Grid Access and Technology**
  - HVDC expertise to assist in selecting technology type and with functional specification in tender documents
    - PB Power
  - Access and Integration
- **Marine**
  - JP Kenny appointed as Civil Marine Consultant to specify Marine Survey Tender requirements and to supervise survey, achieve consents etc.
  - Anticipate carrying out a Marine Survey later this year
  - Stakeholder consultation is key
- **Route Feasibility and Planning in Ireland**
  - ESBI are our engineering consultants
  - Meetings with statutory bodies underway
- **Route Feasibility and Planning in Britain**
  - PB Power are our engineering consultants
  - Meetings with statutory bodies underway

## Project - Work Streams (cont'd)

- Finance
- Environmental
- Safety
- Stakeholder management

# Route Selection and Procurement Phase Milestones



# Project Finance and Risks

- Project cost will be determined by competitive tender process
- Finance pre and post construction to be addressed
  - No difficulties anticipated in getting finance for such a Project
  - Corporate structures to be addressed
  - Future operating models to be developed
- The top three Project Risks currently are:
  1. Project not receiving necessary planning and consents
  2. Increased demand for cables coupled with existing supply limitations
  3. Project not obtaining grid capacity at feasible points on both sides

# Summary

- High profile, complex project with aggressive timelines
- Transformational project for EirGrid
- Project team in place
- Project is advancing well
- Competition design and execution will be intensive
- Relationships with statutory and non-statutory bodies being proactively managed