

# Connections – Large Scale Renewable Generation

RP5 Stakeholder Event  
NIRIG  
Rory Mullan  
23<sup>rd</sup> May 2011



# What is NIRIG?

- Northern Ireland Renewables Industry Group
- not a separate organisation!
- joint collaboration between IWEA and RenewableUK
- voice of both organisations in Northern Ireland
- members are full members of either IWEA or RenewableUK, often both

# NIRIG Grid Group

- Collaborative approach to interacting with grid stakeholders
  - NIE
  - SONI
  - Utility Regulator
  - DETI

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**All-island Issues**

Grid Delivery

Facilitation of Renewables

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**NI Issues**

Connection policy development

Resources

Connection costs and timelines

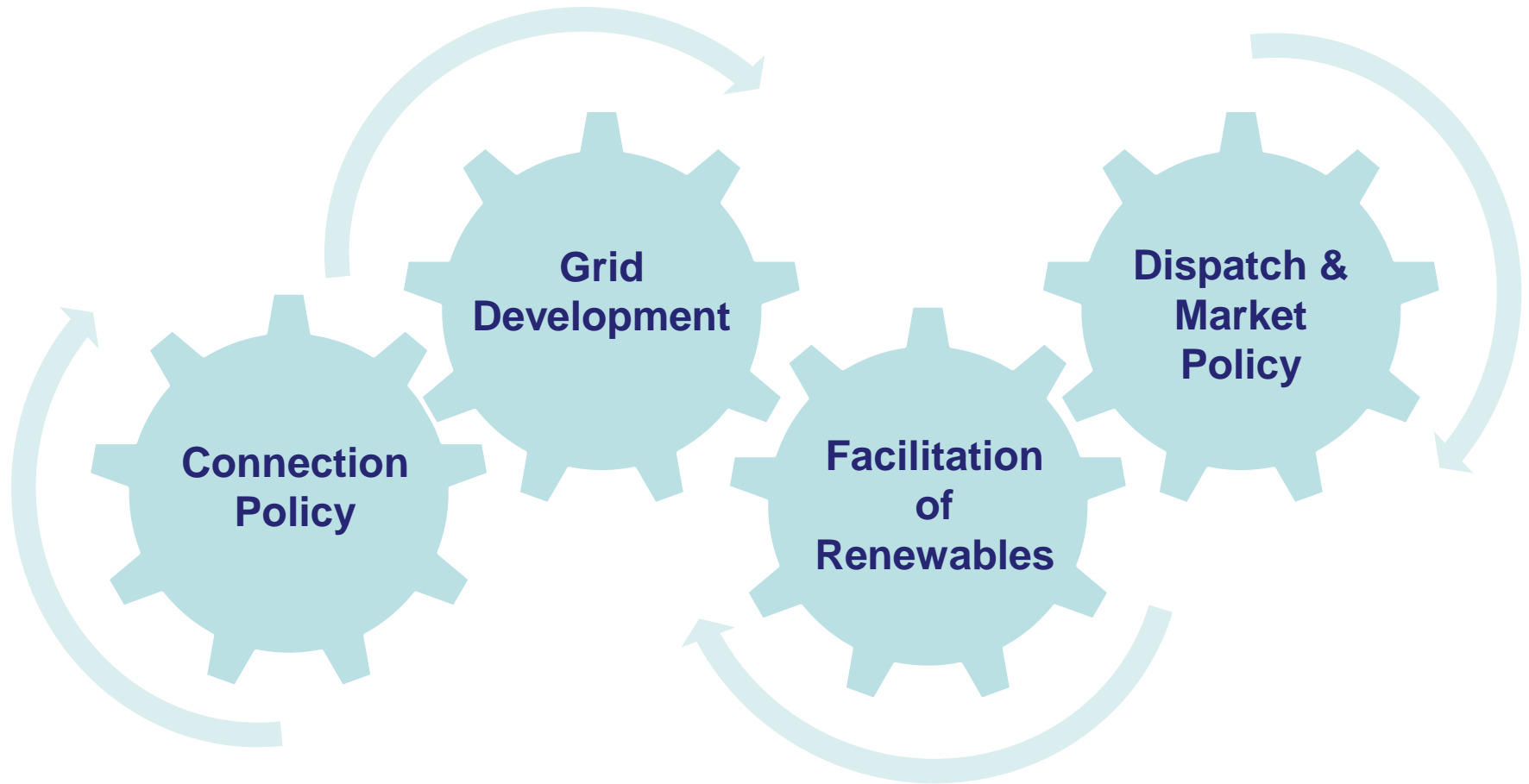
Connection offer process

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# Emerging Grid Challenges

- Shallow Connections
  - Complexity of Cluster connections
  - Addressing increasing costs and timelines
- Deep Reinforcements
  - Planning process
  - Community and landowner issues
  - Increasing constraints
- System Issues
  - Facilitation of Renewable studies – inertia, voltage stability etc...
  - Increasing Curtailment

# Strategic Approach to Grid Challenges

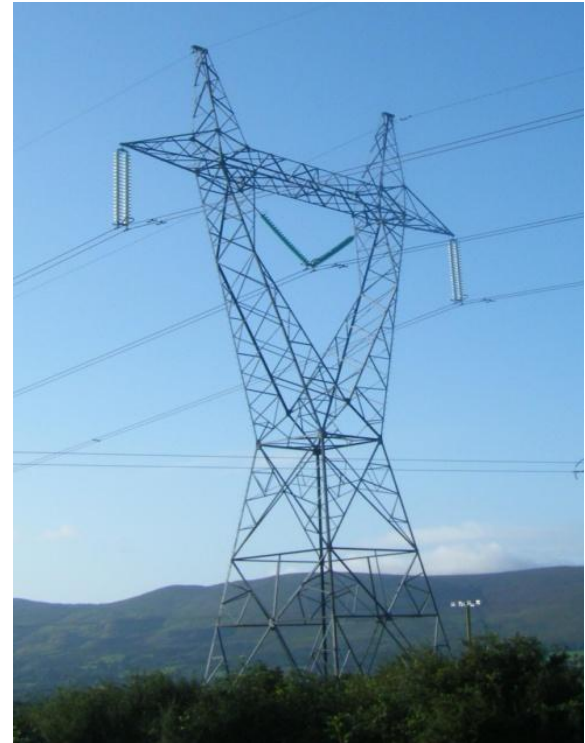


# New Legislative Requirements

- **Government Targets - 40% in 2020**
- **2009 Renewable Energy Directive (EC/2009/28)**
  - Mandates
    - Development of transmission infrastructure to accommodate renewable energy
    - Priority Dispatch for Renewables
    - Mitigation measures are taken to minimise curtailment
    - Transparency on connection costs and timelines
    - Developers have the option to contest connection works

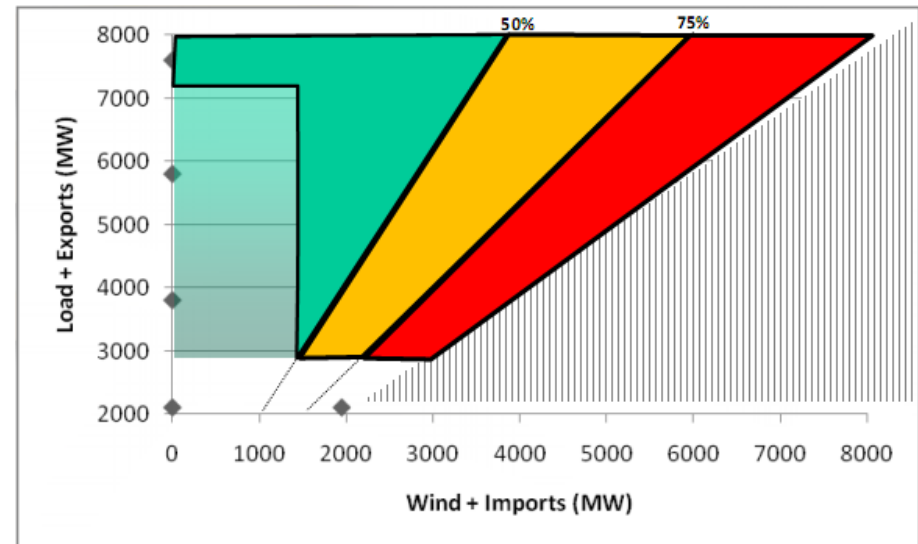
# Grid Delivery

- need for full commitment to costs of developing transmission grid - interim and long term strategies
- grid strategy needs to be published by NIE in 2011
- need for greater transparency and involvement of industry in monitoring progress of Grid Development



# Facilitation of Renewables

- results of studies reflect the challenge of high penetration levels of renewables
- need for TSOs to develop next steps
- need for industry liaison group to monitor delivery of FoR
- need for resources to delivery next steps





# Connection Policy Development

- Welcomed consultation from NIAUR on connection policy
- Continued structured approach needed to grid policy development
- Need for clear policies on connection method, charging and rebating
- Need for continued interaction between NIE, regulator and industry on policy development

## Connection Offer Process

- Integration of NIE and SONI connection offers
- need to review standard format of offer letters and connection agreements

# Connection Costs & Timelines

- need for greater transparency on connection costs
- need to review connection costs and extend list of standard costs
- review O&M costs
- payment schedule
- introduction of contestable options for shallow assets.

## Resources

- appropriate resources in NIE needed to deliver connections in areas of
  - policy development
  - processing offers
  - delivery of shallow and deep reinforcements

# Summary

- New legislative requirements for accommodating renewables needs to be considered in preparation of RP5
- Need for full commitment to costs of developing transmission grid to accommodate renewables
- Need for development of policy framework for connections
- Appropriate level of resources needed in NIE for delivery of connection offers and connection assets