Associated Transmission Reinforcements (ATRs)

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Contents

- Overview of ATR Projects
- Project types
 - ATRs from 2012-16
 - ATRs from 2017-20
- Summary



Transmission Programme



New Build

400/220/110kV New circuits New Stations

Uprates

440/220/110kV

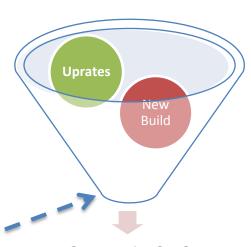
Circuit Uprates /
Station Upgrades
Busbar Uprates

Refurbs

400/220/110kV

Line Refurbs
Line Resagging
Stations Refurbs
Protection Upgrades

subset



Gate 1, 2, 3 ATR Output

Transmission Programme to 2020







Overview of ATR Projects



Projects Phases

Concept Planning Construction

Programme Certainty Increases



Overview of ATR Projects



Projects Types

New Lines

New Stations

Uprates

Programme Certainty Increases



Gate 3 ATR Project Types



Gate 3 ATRs can be broadly divided into 2 categories

1. 2012 – 2016 ATRs

- Line Uprates
- Station Busbar Uprates
- New Build Station Projects



2. 2017 – 2020 ATRs

- Large scale linear projects
- Indicative timelines based on standard assumptions





2012-16 ATRs



1. Current Status

- 2. Project completion and experience
- 3. Approach taken to determine ATR dates
- 4. Risks



Current Status



Under the 2010 FAQ Analysis the majority of projects were conceptual

ATR Status from 2012 ITC Analysis

| Total | Capital Approval | Project Agreement | Completed |
|-------|---------------------|----------------------|-----------|
| 34 | 27 | 11 | 5 |

All ATRs are on the EirGrid/ESB Networks works programme







ATR Types



| Total | New Line | New Cable | | Line Uprate | Busbar Uprate |
|-------|-------------|--------------|---|----------------|------------------|
| 34 | 2 | 1 | 4 | 19 | 8 |

- 27 uprates (line/busbar)
- New lines completed in 2012
- New stations have planning permission and construction has commenced in 2 of 4.
- Outage requirements included in programme
- Land Access
 - minimal land access requirements







Track Record 2010-12



2010 215km Line Uprates

2 Station Busbar Uprates

Planning Permissions Achieved

2011 300km Line Uprates

7 Station Busbar Uprates

Planning Permissions Achieved

2012 215km Line Uprates

6 Station Busbar Uprates

Planning Permissions Achieved







Risks & Mitigations



1. Volume of projects

2. Outage Risk

Mitigation

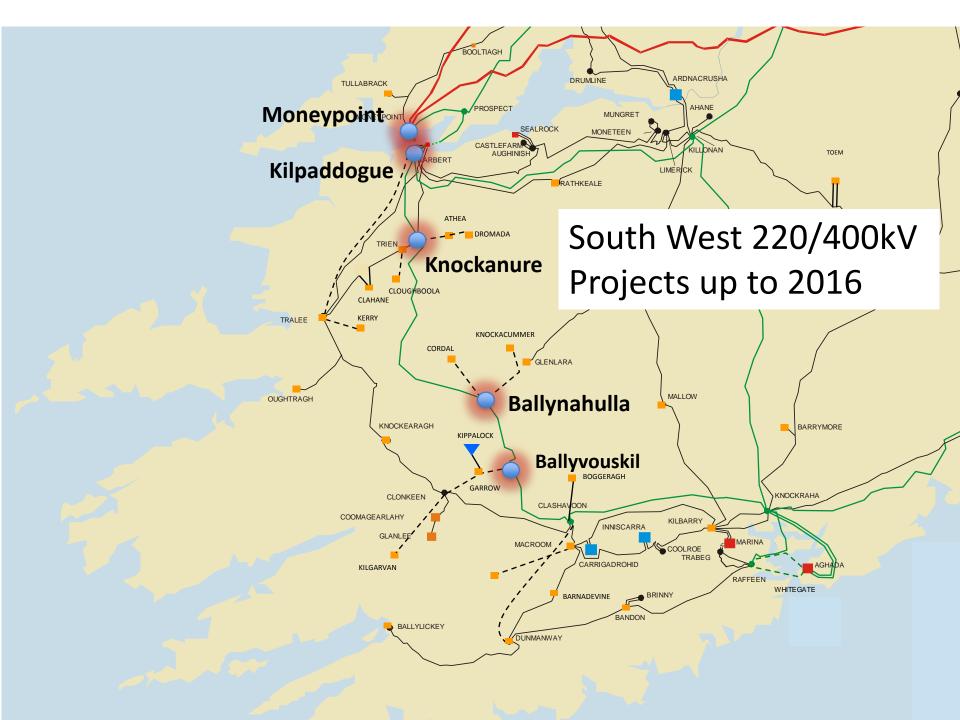
- Programme designed to allow degree of project rescheduling without impacting FAQ
- Efficient work sequencing to maximise system access
- Detailed resource planning including close cooperation with ESB Networks
- Prioritisation of projects which provide most access







Total line uprates and refurbishments from 2012 to 2020



Confidence based on:



- 1. Work on all ATRs is underway
- 2. Experience to date
- 3. Outages
- 4. Multi-year planning approach



Gate 3 ATR Project Types



Gate 3 ATRs can be broadly divided into 2 categories

1. 2012 – 2016 ATRs

- Line Uprates
- Station Busbar Uprates
- New Build Station Projects
- Completion dates based on EirGrid/ESB works programme

2. 2017 – 2020 ATRs

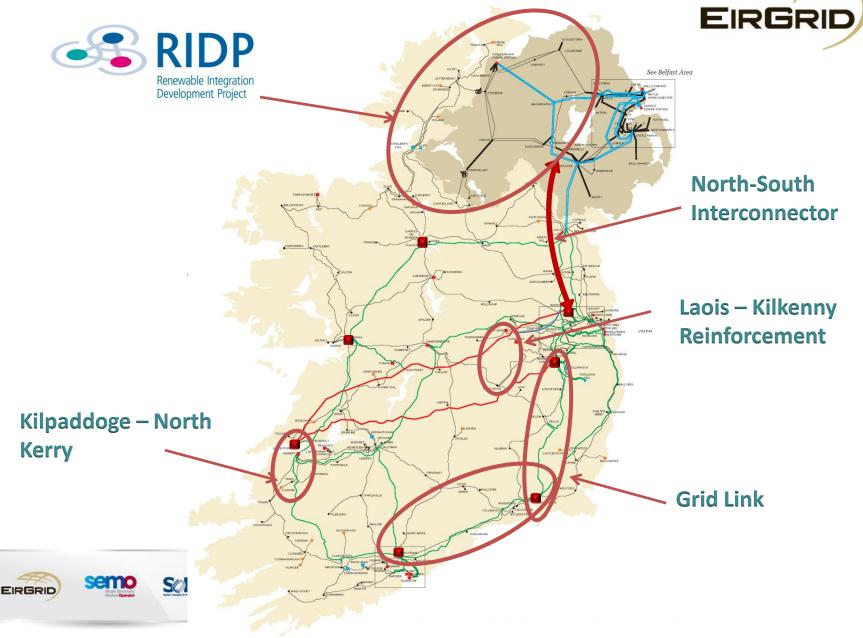
- Large scale linear projects
- Indicative timelines based on standard assumptions







2017-20 ATRs



Overview of ATRs



- Large scale linear infrastructure projects
 - Contentious public planning process
 - Landowner access (survey and construction)
 - Public acceptability
- Projects at the early stages of lifecycle

High risk projects with challenging completion dates



Risks & Mitigations



- Public Acceptability
 - Methodologies and processes
 - Consultative approach
 - Community gain

Public Planning

- Expertise
- Robust applications

Landowner access

- Early engagement
- Consultation
- Discussion with farming bodies

Resource

- Widen supply base.
- Identify pinch points in the programme.





Project Development & Consultation Road Map





Consultation Process

Staged Approach

Published Process

Recognition of Public Participation

'Hold Points'

Stage Reports

Government Policy Statement - Key Points



Mandated to deliver the State's network investment programmes in the most cost efficient and timely way possible.

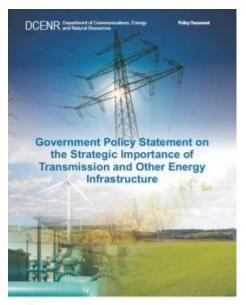
The Government affirms that EirGrid [...] are obligated to adhere to all relevant guidelines and standards and they act in the national interest.

The Government underlines the imperative for the State Companies.....of early, transparent engagement and consultation with local communities and stakeholders....

The Government underlines the imperative [for] the appropriateness of building community gain consideration into project planning and budgeting

It is essential that Grid25 [...]is taken forward on the basis of the best available knowledge and informed engagement on the impacts and costs of different engineering solutions.

State Companies are required to address and mitigate, as necessary, human environmental and landscape impact in delivering the best possible engineering solutions.







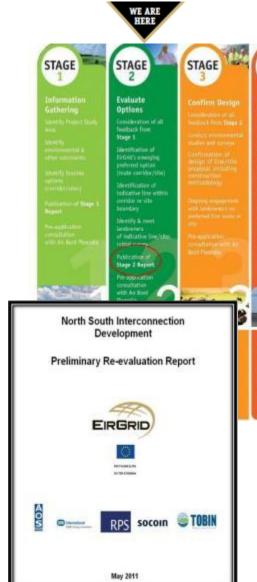


North South Project Update



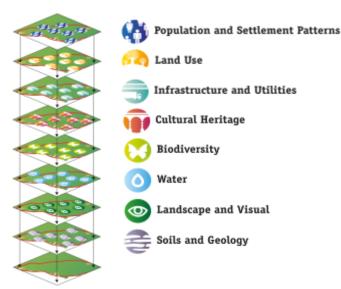
Stage 2 of 5 Stage Roadmap

- Indicative route issued
- Project re-evaluation nearing completion
- Will have close regard for;
 - Recently published **Government Policy Statement**
 - International Expert **Commission report**
 - JOC interactions
 - Stakeholder including landowner inputs in 2 past years
- Project moving to stage 3 of the Roadmap in early 2013 onto next phase of consultation
- Planning lodgement later in 2013





Grid Link Project Update



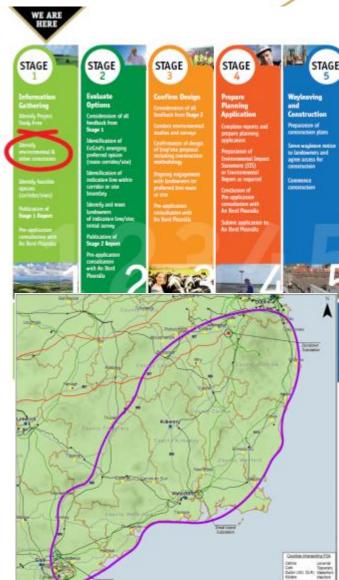




Stage 1 of 5 Stage Roadmap

- 21 opens days in 17 locations – SO FAR....
- Constraints report recently published
- Next Key Milestone is publication of Corridors in early 2013
- Planning Lodgement 2015





Summary



- A lot of work done on ATRs since the original analysis
- Large degree of confidence regarding the 2012-16 ATR dates
- 2017-20 ATRs are complex and have challenging completion dates
- EirGrid is fully committed and focused on achieving these dates







