The Interconnector Forum
12 September 2002

The Moyle Interconnector

Alan Rainey
Moyle Interconnector plc
The Moyle Interconnector

- Belfast
- Ayr
- Stranraer
- Ayrshire
- Co. Antrim
- Larne
- Belfast
- Portmuck
- Portmuck South
- Currarie Port
- Ballycronan More Converter Station
- Coylton Substation
- Auchencrosh Converter Station
- Undersea Cable (B)
- Underground Cable Route
- Overhead Line (A)

(A) 500MW Single Circuit
(B) 2 x 250MW Dual Monopole
Ballycronan More Converter Station
Direct-light-triggered Thyristor Valve
Cable Ship Skagerrak
Coylton - Auchencrosh 275kV Line
The Moyle Interconnector
Ownership and Contracts - 1

- Re-financing proposal to reduce cost to customers
  - Ofreg consultation paper 10 September 2002
  - 100% debt finance

- Ownership
  - asset owner is Moyle Interconnector plc (Moyle)
  - Viridian Group PLC subsidiary at present
  - proposal to move to not-for-profit Customer Trust
Moyle Interconnector
Ownership and Contracts - 2

- **Moyle revenue**
  - charges to Capacity Acquirers following capacity auctions
  - TUoS contribution

- **Changes to Moyle Interconnector Capacity Agreements**
  - present contracts with NIE, proposed to be directly with Moyle
  - need for Capacity Acquirers to have credit rating or provide credit support (LoC, bank guarantee)
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Design Performance

<table>
<thead>
<tr>
<th></th>
<th>Forced Energy Unavailability (%)</th>
<th>Scheduled Energy Unavailability (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Converter Stations</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Cables</td>
<td>0.6</td>
<td>0</td>
</tr>
<tr>
<td>Overhead Lines</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Overall</td>
<td>1.4</td>
<td>1.0</td>
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</tbody>
</table>
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Performance during Trial Commercial Operation

- **1 January – 9 April 2002**
  - defect clearance, teething problems
  - 2 month available capacity reduction to 250 MW
  - 73% availability based on 500 MW capacity (84% on contracted capacity)

- **Converter station noise**
  - attenuation measures installed requiring pole outages

- **Converter station fault**
  - design defect rectified during planned outages for noise attenuation measures

- **Scottish 275 kV line forced outage during January storm**
  - defects rectified during planned outages

- **Minor control and protection defects**
  - short duration unavailability, now rectified
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Performance during Full Commercial Operation

- 10 April 2002 to date
  - 2 day planned outage during July holiday period
  - no other incidents
  - 98.7% availability to date based on 500 MW capacity (99.2% on contracted capacity)
  - possible minor outage in September
  - 400 MW capacity with design availability expected for winter period
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Planned Maintenance

- Provisional outage plan 2003/04
  - 1 pole (250 MW) outage 09-13 June 2003
  - 1 pole (250 MW) outage 30 June – 4 July 2003

- Overhead Line outages under discussion with ScottishPower
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