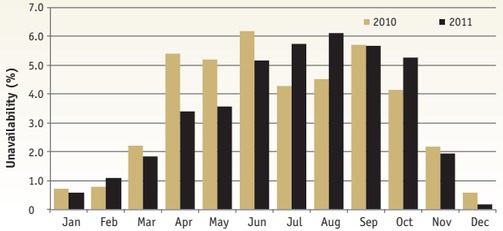
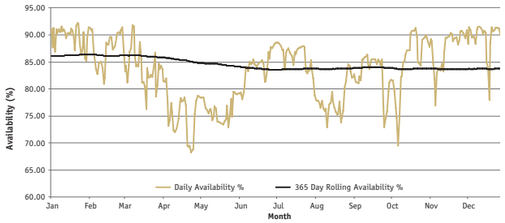
EirGrid Transmission System Availability

Monthly variation of System Unavailability

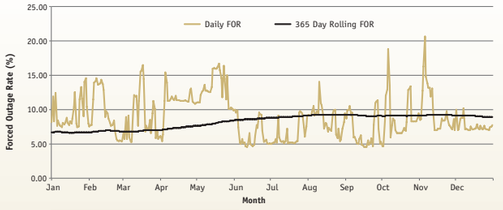


EirGrid Generation System Availability[6]

EirGrid Daily Forced Outage Rate



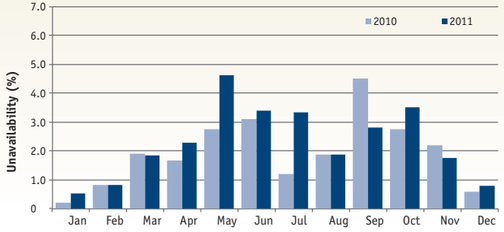
EirGrid 365 Day Rolling Forced Outage Rate



6 Dispatchable Plant only

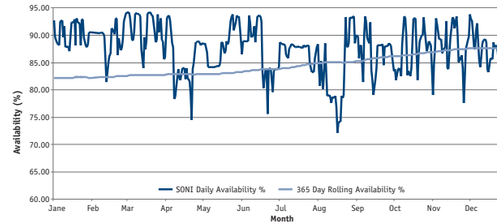
SONI Transmission System Availability

Monthly variation of System Unavailability

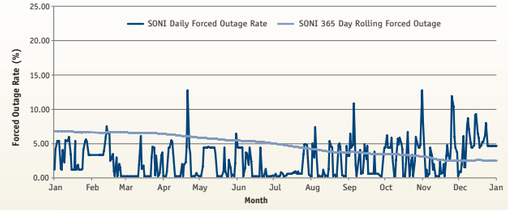


SONI Generation System Availability[7]

SONI Daily Forced Outage Rate



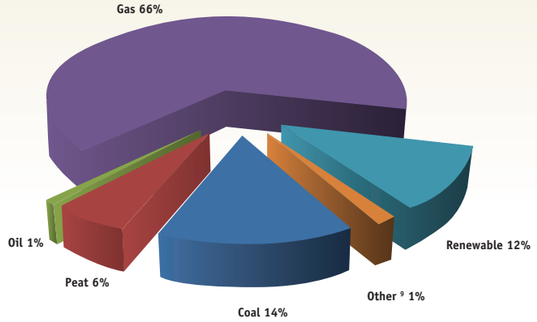
SONI 365 Day Rolling Forced Outage Rate



7 Dispatchable Plant only

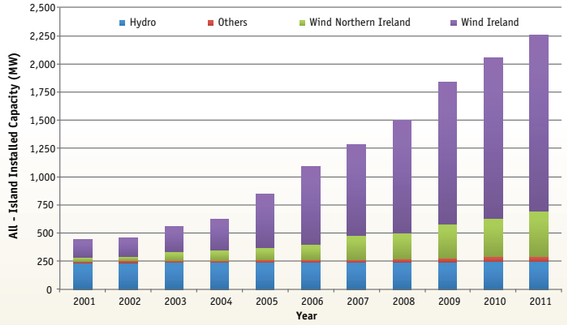
Electricity Consumption and Renewable Capacity[8]

Provisional All Island Electricity Consumption by Generation Source



Total All Island Electricity Consumption 2011 = 35.14 TWh

Installed Renewable Capacity



8 Note that this is a provisional mix calculated by EirGrid & SONI and may not correspond to the mix due to be published towards the end of 2011 on the All Island Project website (www.allislandproject.org)

9 Others includes Landfill Gas, Biomass and Combined Heat and Power (CHP)

EIRGRID

SONI
System Operator for Northern Ireland

TRANSMISSION SYSTEM INFORMATION BOOKLET **2011**

www.eirgrid.com

Overview of EirGrid plc

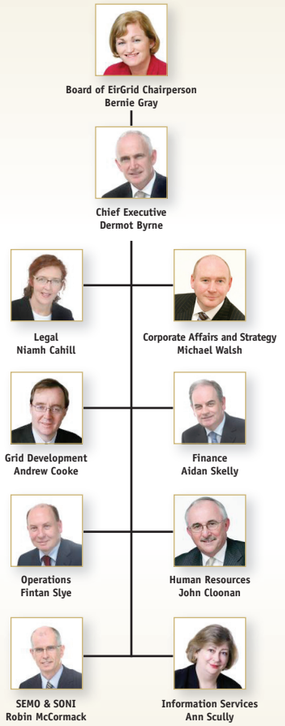
EirGrid plc is a leading Irish energy business, dedicated to the provision of transmission and market services for the benefit of electricity consumers. It is a state-owned commercial company.

EirGrid holds licences as independent electricity Transmission System Operator (TSO) and Market Operator (MO) of the wholesale trading system in Ireland. System Operator Northern Ireland (SONI Ltd), which is part of the EirGrid Group is the licensed TSO and MO in Northern Ireland. The Single Electricity Market Operator (SEMO) is a joint venture between EirGrid and SONI, and operates the Single Electricity Market on the island of Ireland.

In its role of TSO in Ireland, EirGrid operates and maintains a safe, secure, reliable, economical and efficient transmission system, as well as developing key infrastructural projects which are vital for the socio-economic development of the State. Current projects include the East West Interconnector, a new 500 Megawatt (MW) High Voltage Direct Current (HVDC) connection that will link Ireland to the Great Britain electricity grid. As TSO, EirGrid is regulated by the Commission for Energy Regulation (CER).

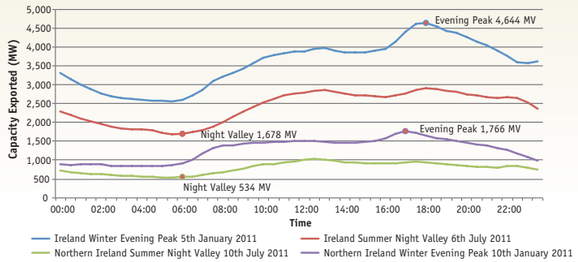
SONI Ltd has the responsibility of ensuring the safe, secure and economic operation of the high voltage electricity system in Northern Ireland. It is regulated by the Northern Ireland Authority for Utility Regulation (NIAUR).

This booklet provides recent information on the Transmission System's in both jurisdictions.



System Demand and Growth[1]

2011 Summer and Winter Record Load Curves



Total Operational Generation Capacity

		EirGrid	SONI	Total
	Dispatchable	Capacity (MW)	Capacity (MW)	Capacity (MW)
Transmission System	Fully	6,744	2,736	9,480
	Non/Partially	762	28	790
Distribution System	Fully	104	40	144
	Non/Partially	1,050	387	1,437
Total Operational Capacity (MW)		8,660 MW	3,191 MW[2]	11,851 MW

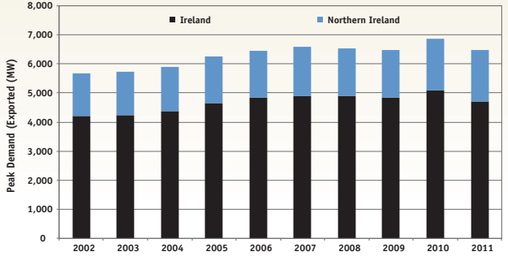
2011 System Records

	EirGrid		SONI	
Record	Date	Exported (MW)	Date	Exported (MW)
Winter Night Valley	26th Dec 2011	1,874	26th Dec 2011	608
Summer Night Valley	6th Jun 2011	1,678	10th July 2011	534
Mid-Day Peak	20th Jan 2011	3,998	21st Jan 2011	1,570
Evening Peak	5th Jan 2011	4,644	10th Jan 2011	1,766
Maximum Wind	30th Nov 2011	1,463	17th Nov 2011	378
Total Exported Energy	2011	26,126 GWh	2011	9,017 GWh

1 Net/Exported basis
2 Includes Moyle interconnector import capacity (450 MW Winter/410 MW Summer)

Transmission System Information[3]

Historical Peaks[3]



Transmission System Infrastructure

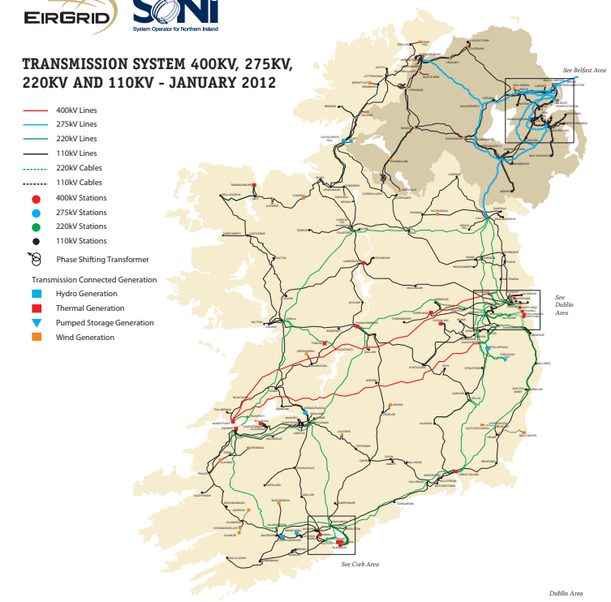
	EirGrid		SONI	
Plant Type	No. of Items	Circuit Length [km]	No. of Items	Circuit Length [km]
110 kV Circuits	188	4,035	82	1,534
220 kV Circuits	56	1,862	n/a	
275 kV Circuits	n/a		15	753
275 kV Tie-Lines	2	97[4]	2	97
400 kV Circuits	3	439	n/a	
Circuit Total	**249**	**6,433**	**99**	**2,384**
Plant Type	**No. of Items**	**Transformer Capacity [MVA]**	**No. of Items**	**Transformer Capacity [MVA]**
110/33 kV Transformers	n/a		72	4920
220/110 kV Transformers	44	8,239	n/a	
275/220 kV Transformers	3	1,200	3	1,200[5]
275/110 kV Transformers	n/a		16	3,840
400/220 kV Transformers	5	2,500	n/a	
Transformer Total	**52**	**11,939**	**91**	**9,960**
Total No. of sub-stations	**156**		**40**	

3 Graph represents All Island Peak Demand and illustrates the contribution of both jurisdictional systems to it. Please note that the individual jurisdictional Peak Demand may occur at a different date and time to the All Island Peak
4 The portion of the 275 kV tie-line which is situated in the Republic of Ireland is 19.4 km
5 Transformers are a shared asset but are physically located in Ireland

(1) All data presented as 31st December 2011 unless specifically stated otherwise.
(2) While every effort has been made in the compilation of this booklet to ensure that the information contained herein is correct EirGrid plc cannot accept any responsibility or liability whatsoever for any damage however caused by reliance on the information presented here.

EIRGRID SONI System Operator for Northern Ireland

TRANSMISSION SYSTEM 400KV, 275KV, 220KV AND 110KV - JANUARY 2012



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