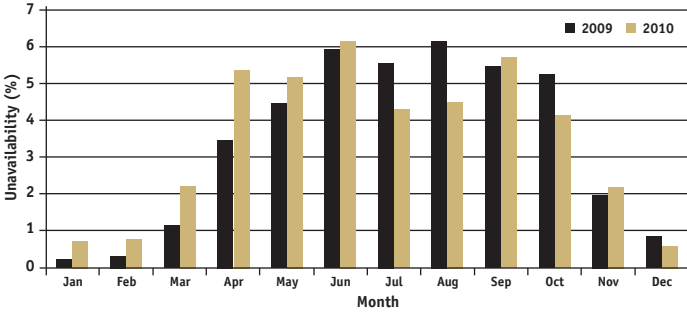


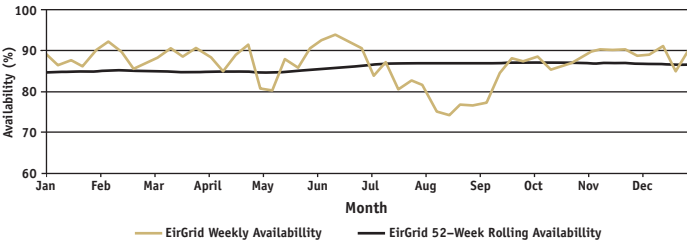
EirGrid Transmission System Availability

Monthly variation of System Non-Availability

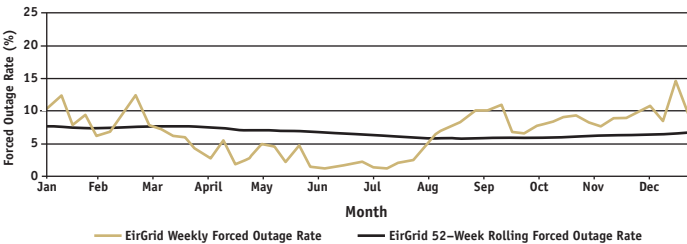


EirGrid Generation System Availability⁵

52-Week Rolling & Weekly System Availability 2010



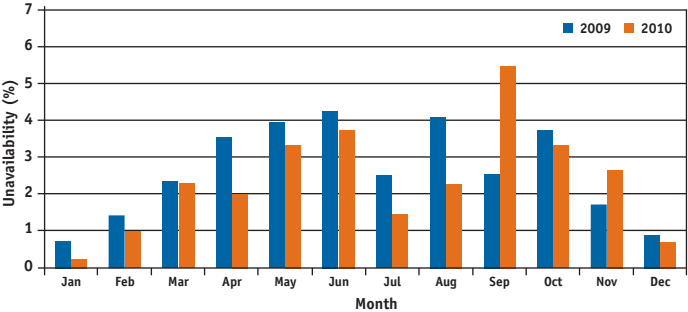
52-Week Rolling & Weekly Forced Outage Rate 2010



⁵ Dispatchable Plant Only

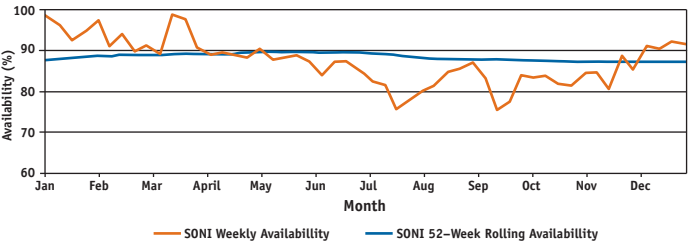
SONI Transmission System Availability

Monthly variation of System Non-Availability

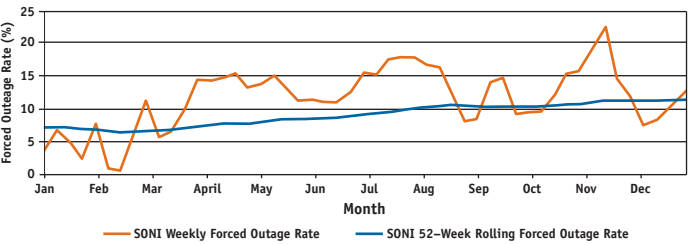


SONI Generation System Availability⁶

52-Week Rolling & Weekly System Availability 2010



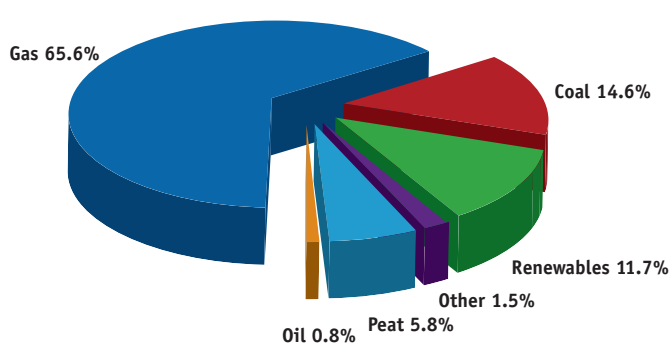
52-Week Rolling & Weekly Forced Outage Rate 2010



⁶ Dispatchable Plant Only

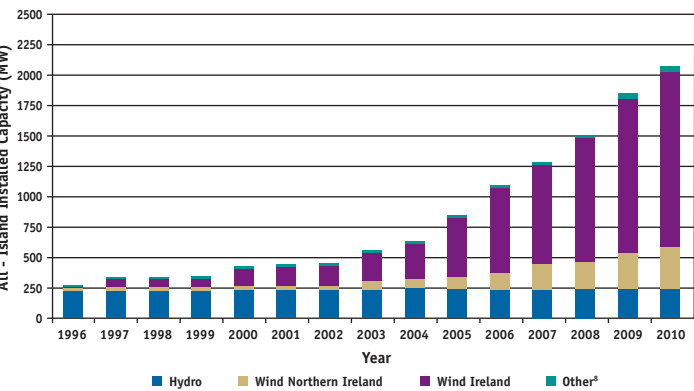
Electricity Consumption and Renewable Capacity

Provisional All-Island Electricity Consumption by Generation Source⁷



Total All-Island Electricity Consumption 2010: 36.4 TWh

Installed Renewable Capacity



⁷ 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)

⁸ Others include Landfill Gas, Biomass and Combined Heat and Power [CHP]



TRANSMISSION SYSTEM
INFORMATION BOOKLET
2011



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) in the wholesale trading system in the Republic of Ireland. System Operator Northern Ireland (SONI Ltd), which is part of the EirGrid Group is the licensed TSO and market operator 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 MegaWatts (MW) High Voltage Direct Current (HVDC) connection that will link Ireland to the UK 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 transmission 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 in Ireland and Northern Ireland.




Board of EirGrid Chairperson
Bernie Gray




Chief Executive
Dermot Byrne




Group Legal
Niamh Cahill




Grid Development
Andrew Cooke




Operations
Fintan Slye




SEMO & SONI
Robin McCormick




Strategic Planning &
Corporate Affairs (TBC)



Finance
Aidan Skelly



Human Resources
John Cloonan



Information Services
Ann Scully

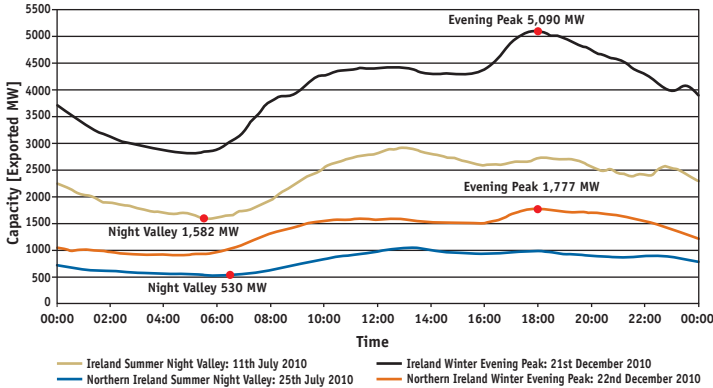
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(1) All data presented as at 31st December 2010 unless specifically stated otherwise.
(2) While every effort has been made in the compilation of this booklet to ensure that the information contained herein is correct EirGrid plc cannot accept any responsibility or liability whatsoever for any damage however caused by reliance on the information presented here.

System Demand and Growth¹

Summer and Winter Record Load Curves



Total Operational Generation Capacity

		EirGrid		SONI	
		Capacity [MW]	% of Total Capacity	Capacity [MW]	% of Total Capacity
Transmission System	Dispatchable				
	Fully	6,744	79.30%	2,736	86.31%
	Non/Partially	742	8.73%	0	0.0%
Distribution System	Fully	104	1.22%	31	0.98%
	Non/Partially	914	10.75%	403	12.71%
Total Operational Capacity [MW]		8,504		3,170 ²	

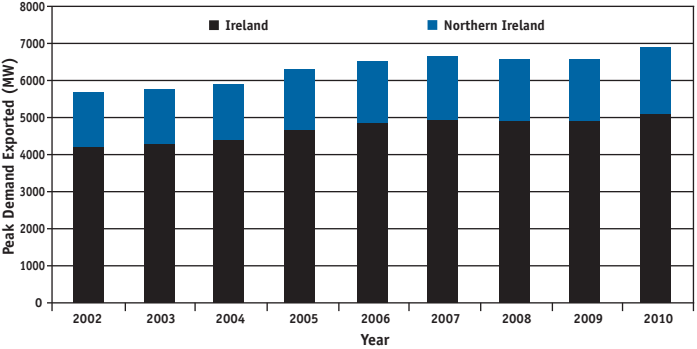
System Records

Record	EirGrid		SONI	
	Date	Exported [MW]	Date	Exported [MW]
Winter Night Valley	22 nd Dec 2010	2,754	1 st Nov 2009	605
Summer Night Valley	11 th July 2010	1,582	12 th July 2009	496
Mid - Day Peak	21 st Dec 2010	4,410	21 st Dec 2010	1,602
Evening Peak	21 st Dec 2010	5,090	22 nd Dec 2010	1,777
Maximum Wind	26 th Dec 2010	1,228	7 th Nov 2010	313
Total Exported Energy	2008 ³	28,341 GWh	2008 ³	9,257 GWh

¹ Net/Exported basis
² Includes Moyle Interconnector import capacity (450 MW Winter / 410 MW Summer)
³ Note that 2008 was a leap year

Transmission System Information

Historical Peaks⁴



Transmission System Infrastructure

Plant Type	EirGrid		SONI	
	No. of Items	Circuit Length [km]	No. of Items	Circuit Length [km]
110 kV Circuits	187	4,115	79	1490
220 kV Circuits	55	1,850	n/a	
275 kV Circuits		n/a	15	753
275 kV Tie-lines	2	97	2	75
400 kV Circuits	3	439		n/a
Circuit Total	247	6,501	96	2,318
Plant Type	No. of Items	Transformer Capacity [MVA]	No. of Items	Transformer Capacity [MVA]
110/33 kV Transformers		n/a	72	4,710
220/110 kV Transformers	39	7,064		n/a
275/220 kV Transformers	3	1,200	15	3,600
400/220 kV Transformers	5	2,500		n/a
Transformer Total	47	10,764	87	8,310
Station Total	156		40	

⁴ This graph represents the All-Island Peak Demand and illustrates the contribution of both the NI and ROI systems to it. Please note that the individual NI Peak Demand and ROI Peak Demand may occur at a different date and time to the All-Island Peak.



TRANSMISSION SYSTEM 400KV, 275KV, 220KV AND 110KV - JANUARY 2011

