# DS3 - Commissioning and Testing Review

Errol Close – Customer Relations 23<sup>rd</sup> January 2013



### **Agenda**



- Transmission Connected wind farms in ROI
- Outage information to be provided to customers
- Process For Calculating Windfarm Availability During Outages
- Requirements from customers
  - Agreed availability methodology for outages
  - DOF/Authorised Operators/24 hour contacts
  - Wind Farm outage information for forecasting accuracy



### **2013 Outage Information**



- Transmission Capital Works Outages 2013
  - To be supplied to customers by 25<sup>th</sup> January

- Transmission Maintenance Outages 2013
  - To be supplied in February
  - Will include notification of eligibility for availability payments for capital works outages



# Calculating Windfarm Availability During Outages



- Pre-conditions must be met for a windfarm to be eligible for a constraint payment during the outage
  - Registered in SEM as a Variable Price Taking Generator
  - Non-zero Firm Access Quantity
  - Taken off the system by the TSO under a TSO dispatch instruction
  - Transmission outage must be for a reason other than maintenance of connection assets, testing of the windfarm, completion of connection works for the windfarm or works being undertaken by the Windfarm Operator.
- Policy published on the EirGrid Website
  - http://www.eirgrid.com/media/Proposal%20for%20calculating%20Availability %20Signals%20during%20outages%20V1.0.pdf





### Requirements from customers



## Methodology for calculating availability



- Two methodologies for calculating availability
  - Met Mast or Anemometer is installed on site
  - Met Mast or Anemometer is not installed on site or is unavoidably unavailable (Historical Data required)
- Wind Farm operator must agree methodology with EirGrid in advance of outage
- Methodology submissions
  - Transmission psop@eirgrid.com
  - Distribution directly to SDCC/NDCC



### **DOF, Authorised Operators**



Declaration of DoF Providers, Authorised Switchers & 24 Hour Contacts

Company Name: [insert Company name here] Facility Name: [insert Facility name here]

Transmission Plant Operators (In all cases below more rows can be added for additional contacts as required)

(a) Declaration of Fitness Provider List

Name	Title	Qualifications	Training Completed	Landline	Mobile	Email	Plant and Equipment Covered (e.g. "ALL" or "T101")*

<sup>\*</sup>Where a person is authorised to provide a DOF for specific plant/equipment only, the relevant plant/equipment has been listed under the column titled "Plant and Equipment Covered".

(b) Authorised Switchers

Name		Company (if different to customers)		
	Land Line	Mobile	Email	customers)

#### I, [name], of [company name] can confirm that:

- The above persons listed under section (a) have the authority to provide a Declaration of Fitness (DOF) for this facility and are qualified to do so. I acknowledge
  that EirGrid are not responsible for verifying the competence of these individuals.
- The above persons listed under section (b) are competent to carry out HV switching at the customer side of the EirGrid/[Company Name] electrical interface at [Company Name], [Facility site], [Facility Address]. All switching at the interface will be carried out in accordance with ESB Safety rules.

Signature:	
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Position:

Date:

#### **24 Hour Contacts**



(c) Declaration of 24 Hour Contact details (Regardless of time of day NCC will begin at #1 and only on no response move to #2, #3, etc.)

Call Priority Order	Name	Title	Landline	Mobile	Email
1	Control Room/Mr X				
2					
3					
4				_	

Please return completed form to info@eirgrid.com. Please note that updates can only be made during office hours.





# Daniel Joyce Power System Operational Planning



# Wind Farm Forecasting and Data Accuracy



#### Standing Data Used for Wind Forecasting

- Wind Farm Size (MW)
- Wind Farm Location (Latitude and Longitude)
- Wind Farm Topography
- Turbine
  - Make
  - Model
  - Size
  - Number of turbines
  - Hub Height



# Wind Farm Forecasting and Data Accuracy



Live Data used for Persistence Forecasting Error Correction

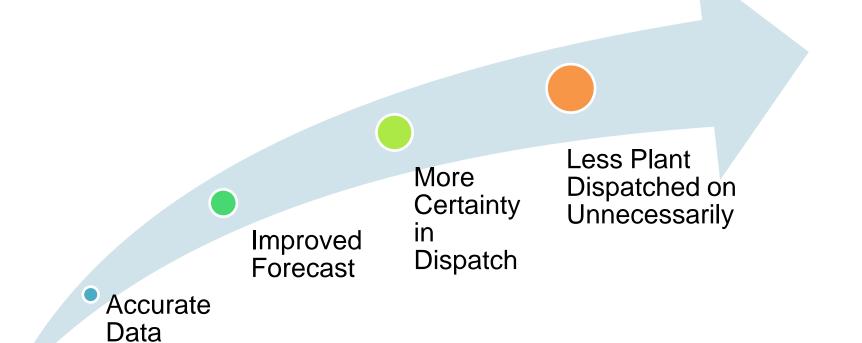
- SCADA MW
- Outage Information
- Meter Data
- Active Power Availability
- Met Mast Data
  - Pressure
  - Temperature
  - WindSpeed
  - Direction
- %Availability
  - Mechanical
  - Due to high speed shutdown
  - Due to low wind
- Dispatch Instructions

Used to Train the Forecast Model



# Wind Farm Forecasting and Data Accuracy









#### Wind Farm Outage Form



### Summary



Outage information will be communicated to Tx
 Connected Wind farms

 Requirement on wind farms to provide and maintain the information held on record for their sites







