

# WIND ENERGY TECHNICAL REFERENCE GROUP (WETRG) - TERMS OF REFERENCE

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## Version Control

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## Executive Summary

To provide an industry reference point to assist AEMO with the review of specific issues related to the implementation of the Australian Wind Energy Forecasting System (AWEFS) initiative.

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## 1. Background

The Wind Energy Forecasting Capability (WEFC) was announced in June 2004 in the Australian Government's Energy White Paper as one of a package of measures designed to address impediments to the uptake of renewable energy. WEFC provides support for the development and installation of software and systems to allow effective prediction of wind energy generation on Australian electricity networks.

Experience in leading international wind markets indicates that a centralised system has the potential to provide an optimal and cost-effective solution. Under the WEFC initiative, a centralised Australian Wind Energy Forecasting System (AWEFS) is to be established.

This facility will produce forecasts of wind farm generation that can be used by wind farms as well as AEMO's various forecasting and other operational processes.

Forecasts of wind generation over the range of forecast timeframes will also be used by NEM market participants and possibly others to better understand the balance between supply and demand, thereby facilitating NEM market transparency and encouraging the efficiency of dispatch and pricing market outcomes.

The purpose of the AWEFS project is to:

1. deliver a tool for centrally forecasting wind generation
2. provide those forecasts of wind generation to AEMO and wind farms for use in the AEMO systems that produce or rely on market forecast data, including demand forecasting processes and the central dispatch engine.
3. provide facilities / data to support the progressive improvement of forecast accuracy by providing data to public researchers

Following an international ROI process, the ANEMOS partners based in Europe were selected to deliver the system and their base solution was implemented in September 2008. Following the implementation of the base solution, in May 2009, the NEMMCO Board approved the enhancement work commencing with a variation to the Phase A contract, with the knowledge that a new contract for the remaining enhancements i.e. Phase B, was being developed. A number of enhancements have now been identified and are planned for implementation by November 2010. The accuracy of forecasts will also be progressively tuned at 6 monthly intervals by ANEMOS consortium till September 2010 as agreed in the Phase A Contract.

## 2. Role of the wind industry reference group

The role of the WETRG to provide advice to the AWEFS project on the:

- Functionality of the interfaces with the base system and data requirements to minimise the system risk.

- To assist with the identification of additional functionality(s) during the Enhancement stage.
- Governance arrangements for interacting with public researchers.
- Ongoing support and operational arrangements.
- Arrangements for improving data quality (in particular SCADA data).
- Requirements for interactions with other systems (both market and wind farm systems).

### **3. Timetable**

It is anticipated that:

- the WETRG will meet approximately monthly, or as required;
- Meetings will be available via teleconferencing, although members of the group are encouraged to meet face to face on a number occasions through the year.

Members of this reference group are encouraged to liaise with the industry sector that they represent, and to bring the view or range of views from their sector to the group.

The AWEFS project delivered the base system in September 2008, at which point the enhancements to the system were identified and progressively implemented through 2009-2010. The WETRG is expected to be active through this process.

### **4. Membership**

Representative from each of the following industry sectors will be sought for membership of the WETRG:

- Wind generation developers and operators (ideally all, if not at least three from existing wind farms);
- Generators (prefer one);
- Retailers (prefer one);
- Network Service Providers (prefer at least one TNSP, one DNSP);
- Clean Energy Council

### **5. Convener**

The review group will be chaired by AEMO.