



**SC C5 Electricity Markets and Regulation**  
**CE C5 Marchés de l'Electricité et Régulation**

**Working Group C5-02**

**Market Design – Structure and Development of Electricity Markets**

<b>WG No :</b> C5 -2	<b>Name of Convener :</b> Dr Charlie MACAULAY, Australia
<b>TITLE of the Group :</b>	<b>Market Design – Structure and Development of Electricity Markets</b>
<b>Scope</b> Risk management for market participants; Congestion Revenue Rights; Market solutions (Contracts for differences, long-term bilaterals); Methods and tools (Unit commitment and settlement process); Interaction between gas and electricity markets; Demand-side response programs (including market impacts of green power)	
<b>Deliverables</b> Two (2) reports (one on each of the following subjects) 1. <u>Classification of Electricity Markets Worldwide</u> : a high-level paper on Market classification • See Appendix 1 for examples of possible classification criteria 2. <u>Risk Management for Market Participants</u> : a detailed exploration of Risk Management methods  Each report will have ⇒ Clear definition and scope ⇒ Definition of criteria to evaluate policy/practices around the world ⇒ Current policies, practices and outcomes around the world  Report 1 is intended to be a high level generalist paper, whereas report 2 is intended to explore the subject in depth.	
<b>Timetable</b>	
Phase 1	Create two (2) task-forces, recruit leaders with responsibility to develop reports <b>(March 2003)</b>
Phase 2	Recruit members to task-forces, determine detailed scope and develop questionnaires for information gathering <b>(August 2003)</b>
Phase 3	Collect and compile information <b>(April 2004)</b>
Phase 4	Prepare final reports <b>(August 2004)</b>
<b>Target Groups</b> Participants in developed, emerging and future markets	

<b>Papers issued :</b>	<b>N/A</b>
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<b>Approval by TC Chairman :</b>	<b>Date :</b>
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Appendix 1

**Classification of Electricity Markets used worldwide (for example).**

- ⇒ Regional Markets – overarching market encompassing individual / state / national Markets
- ⇒ Gross or net pool, bilateral contracts
- ⇒ Formats of offers and bids (e.g. per generating unit, number of blocks per generating unit, per company, per portfolio etc)
- ⇒ Time schedules for offer / bid submission and market clearing, day ahead to real-time
- ⇒ Algorithms for price clearing (e.g. marginal price or pay as bid)
- ⇒ Ex post or ex ante pricing
- ⇒ Cost based or bid based pools
- ⇒ Energy payments only or capacity payments plus energy payments
- ⇒ Capacity obligations
- ⇒ Day ahead or Futures markets
- ⇒ Investment mechanisms (Regulated or Market driven for generation)
- ⇒ Prudential arrangements and credit rating issues for Market Participants etc
- ⇒ Treatment of Transmission Access, Planning and Investment (Regulated or Market driven investment?)
- ⇒ Requirements for Risk management e.g. Hedging instruments (including congestion management)
- ⇒ Incorporation of demand side?
- ⇒ Market monitoring processes and responsibilities
- ⇒ Rationale for decision on specific arrangements (for example)
  - Introduction of competition
  - Maintain supply reliability
  - Desire to privatize etc.