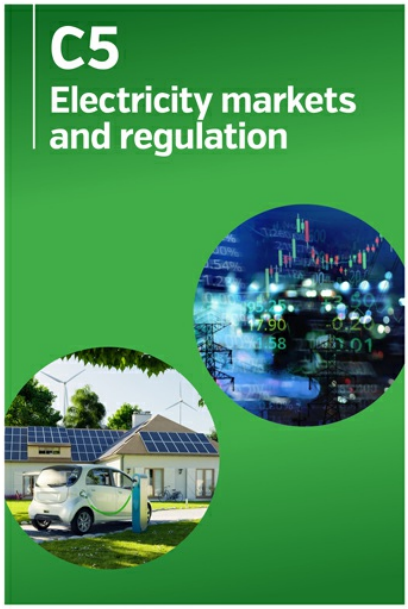
C5 - Electricity markets and regulation



Mission

Study Committee C5 bridges the gap between engineering, economics and regulation. It analyses the impacts of different approaches to markets, regulation and differing market structures (Institutions, participants and stakeholders) on the planning, operation and regulation of electric power systems. Examining the role of competition and regulation in the electricity industry is important for the orderly transition of the power system as well as improvements to its end-to-end efficiency.

Current activities of the Study Committee

Changes in regulatory roles and jurisdictional regulation related to the interaction between the transmission system and the distribution system.

The role of markets and regulation regarding:

- the integration and coordination of distributed energy resources and new technologies;
- wholesale market price formation, including emissions pricing and the impact of non-wholesale market participants;
- sector integration between gas (including renewable gases) and electricity;
- validation of low emission technologies;
- The impact of emerging technologies on market (and system) operations;
- Market clearing procedures, techniques and principles used to take advantage of the flexibility of aggregating large numbers of end-users;
- Potential Market rule changes to address changes in traditional ancillary service products to cater for the changes in the supply and demand for electricity;
- Generation and demand flexibility to manage intermittent supply;
- incentivising system strength and inertia in energy systems.

Working groups
View a list of CIGRE's current working groups including for C5 here.

Publications

View all publications for Study Committee C5 on eCIGRE

Main areas of attention?

Market structures and products such as physical and financial markets and the interaction between them, contracts, internationally integrated markets. Emerging technologies, including renewable gases, and sector coupling.

Techniques and tools to support market actors such as demand and price forecasting profit estimation, financial risk management etc.

Regulation and legislation such as regulation objectives, extension and limits, price regulation of transmission, and ancillary services, transmission/distribution coordination and interactions, international harmonization, environmental and regulatory objectives etc.

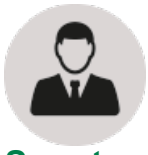
Evolution of markets and regulation from wholesale transmission focus to include retail distribution. The increasing interaction between regulation and markets throughout the electric power system value chain and the ability of markets and regulation to cater to rapid evolutions in dynamic / variable generation, demand and storage technologies and behaviours.

Coordination of regulation, funding and trading arrangements for new assets and technologies expansion in new market structures, including the trend of decentralization of operations with distributed applications; the remaining assets coexisting with the retirement of other in utilities; the consideration of legacy trading arrangements in the new market arena.

Key contacts



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