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**A Model for the Flow of Information between TSOs and DSO Control Centers for
the Future System**

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As the electricity system has been evolving, the resource mix has changed from large centralized generation sources on the transmission system to smaller distributed generation sources on the distribution system. The integration of renewable Distributed Energy Resources (DER) on power systems has changed the way systems are planned and operated. This involves changes to study methods, practices, models and data requirements. In addition, the system operation roles and responsibilities traditionally clearly demarcated between ISOs, TSOs and distribution utilities are also now being reviewed with a view to discharging the responsibilities in a different manner, as a result of bulk DER integration.

The ultimate aim is to get timely, relevant, informative insights to decision makers and to enable decisions to take effect through effective communications. To achieve this, EPRI have developed an approach to modelling the information, functions and responsibilities between transmission and distribution operations departments and control centers. The model is applicable for systems in Europe and North America but can also be extended to be suitable for any particular system interaction.

The information model acts to clarify, for system operators and planners, what data is exchanged, when it is exchanged and the function mapping between the control centers particularly associated with control of DER on the electricity system. This can be utilized by control center designers when it comes to designing displays and tools to enhance situational awareness in real time operations.

Please send the Abstract to dsobajic@gridengineering.com by April 12