## **CIGRE Study Committee N° C1**

## PROPOSAL FOR CREATION OF A NEW WORKING GROUP \*

## WG C1.15 Name of Convenor: Adele Sleator (Ireland)

**Title of the Group**: Review the drivers for transmission investment decisions and the role of technical planning criteria in transmission investment

**Background:** Traditionally investment in transmission infrastructure development has mainly been driven by planning reliability and security criteria, that set the technical standards to which the network is planned. The network is operated to operational criteria. The planning criteria and operational standards are usually complementary if the network is to be designed to meet desired technical operational standards. With de-regulation, evolution of electricity markets, increase in renewable generation, the drive to combat climate change by mechanisms including energy efficiency initiatives and micro-generation, the decision making environment in transmission development investment is changing. Drivers of and factors influencing transmission investment decisions could include technical criteria, economic criteria, congestion management, facilitating market integration and relieving market constraints, operational criteria, strategic considerations, environmental aspects, societal aspects and risk assessment. The drivers could also include political decision making and urbanisation which lead to undergrounding of existing and new power lines based on aesthetic and health and safety issues. Investments may be made based on short-term concerns and a minimal incremental approach or be made on a long-term more integrated strategic basis. The regulatory environment and ownership of the decision making company may also influence the approach to investment decision making.

The objective of this working group is to review the rationale used for transmission investment decisions, establish the role of technical planning criteria in investment decisions and identify trends in investment drivers.

## **Deliverables:**

- Establish data on recent transmission investment decisions and the regulatory and market environment in which the decisions were made.
- Analyse data and identify the main reasons for investment.
- Establish the role of technical criteria in investment decisions.
- Publish the results in a Technical Brochure with an Executive Summary in Electra

Starts: April 2009

**Final Report:** April 2011

**Comments from Chairmen of SCs concerned:** 

**Approval by Technical Committee Chairman**: Klaus Fröhlich **Date**: 03/06/2009