

Title: Transmission Planning in CAISO

EPES Seminar 8/31/2010

Abstract: The speaker will share her experience of an 8-week internship in CAISO. A description of CAISO will be presented at first, including some basic information such as its organization, its responsibilities, and its geographical coverage. The market structures are introduced in terms of its day-ahead market, real time market and ancillary markets. A description of job responsibilities will be provided, including an overview of the transmission planning methodology and an introduction of California state-wide transmission plan being studied to meet the state's 33% renewable portfolio standard (RPS) goal by 2020. Details of production cost simulation through GridView and power flow analysis through PSLF will be introduced, which evaluate a new transmission plan from economic and reliability aspects. The study result and its influence to current network update will be discussed. Some comments on the benefits of the intern experience will be offered, with a discussion on how it affects her research activities at ISU as well as her long-term goals.

Brief biography: Mei Li, currently a PhD student in Iowa State University, has just experienced an internship in CAISO from June to August 2010. She acquired her bachelor's degree from Tsinghua University in 2005 and master's degree from Chinese Academy of Sciences in 2008. Her research area is on the MW-Hz Issues with High Wind Penetration.