Abstract

The increasing demand of load without considerable increase in transmission resources has posed numerous constraints and challenges in the power system monitoring and performance. The issues of deregulation trend in the industry and the requirement of better network monitoring, leads to the development of the solutions for wide area monitoring (WAM), protection and control, than the currently used methods which are mostly good for local area monitoring, protection and control. The purpose is to increase the overall system efficiency and reliability for all power stages via significant dependence on WAM as distributed intelligence agents with improved monitoring, protection, and control capabilities of power networks. The necessity for WAM has gained worldwide acceptance, and a number of WAM systems have been established, or initialized, in different power utilities throughout the world. This paper
addresses some issues and defines a strategy towards the coordination of local and wide-area controls and protections to ensure power system grid security. The strategy relies on the integration of the latest PMU technology and data processing to deploy different types of control actions and special protection schemes.

References

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Wide Area Monitoring, Control and Protection of Power System


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