

**APPROACH FOR COORDINATED GENERATION AND  
TRANSMISSION PLANNING**



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Penolong Naib Canselor (Penyelidikan)  
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Ybhg. Prof.,

**LAPORAN AKHIR PENYELIDIKAN “APPROACH FOR COORDINATED  
GENERATION AND TRANSMISSION PLANNING”**

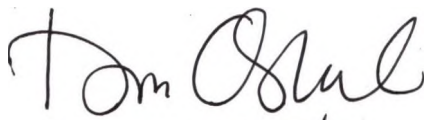
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1. Empat (4) naskah Laporan Akhir Penyelidikan, dan
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Yang bertajuk “Approach for Coordinated Generation and Transmission Planning” untuk makluman pihak tuan..

Sekian, terima kasih.

Yang benar,



**NUR ASHIDA BINTI SALIM**

Ketua

Projek Penyelidikan

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**NUR ASHIDA BINTI SALIM**

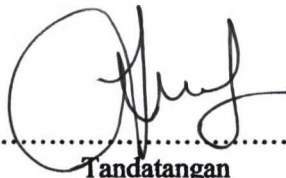
**Project Leader**



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Tandatangan

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Tandatangan

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**Project Member**



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Tandatangan

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## **ABSTRACT**

A technique of implementing the optimal coordinated generation and transmission planning is presented in this report. The coordinated technique is applied to find the optimal solution for the planning of the power systems. This technique involves continuous process of the generation and transmission expansion planning to come out with the solution that not only minimized costs but also transmission losses and avoidance of system constraints. In implementing the proposed method, two different software tools are used which are the WASP and PSS/E.

Two sets of data obtained from the utility in order to proceed with this study. They're the historical load data that is used to perform the load forecasting and also the power flow raw data used to perform the transmission planning. The coordinated planning process proposed in this report is an improvement to the existing system applied in the utility where this process is a continuous process.

The proposed method is represented step by step until the final result is obtained. Although this is a continuous process, the results are explained in sequence so that the reader will understand how the process flow is. They are represented in the form of tables, graphs and also figures.