Feasibility Assessment and Optimal Dispatch of Transactions in Deregulated Power Markets

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INTRODUCTION

A large number of transactions possible among the power traders in power market due to following reasons:

- Deregulation of the power industry
- Wide deployment of RES units in power system
- Open access transmission networks.

Selection of optimal feasible transactions in the deregulated energy markets is one of the important tasks of the system operators.

TRANSACTIONS

Feasibility of Transactions

All the transactions need to be check their feasibility at the time of scheduling. Only after the feasibility test, the transactions are scheduled for dispatch.

Advantages:

- Energy prices
- Efficiency and economy
- Reliability and security
- Consumers gets choices
- Standards of energy services

Open access transmission network

Deregulation → Competition

CONCLUSION

The proposed hybrid dispatch model has efficiently determined the optimal transactions with minimization of operational cost of the system.

- The proposed model effectively reduces the searching space and difficulty in the process of finding feasible multilateral transactions.
- The proposed market dispatch model efficiently enhances the network capability to dispatch more number of transactions and also it takes care of the security and economic benefits of the competitive power market.

REFERENCES