

## A Study on The Planning of Power Wheeling

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### I. Research Background and Objectives.

To comply with the Electricity Act and renewable energy-related policies (including the increasing green electricity demand from energy-consuming industries, from national renewable energy installation target, and from companies that make promises on the RE100 goal) and to respond to the massive request for the power wheeling services in the future, we must find a way to simplify the application process and improve the settlement method of the power wheeling.

However, the existing operating regulations, contracts, application procedures, power wheeling metering methods, and human-machine interfaces of operation management information system (MIS) may not be able to satisfy stakeholders. Therefore, stakeholder meetings must be convened to conduct studies on simplification of the application process for power wheeling services and power wheeling metering methods.

The main objective of this study is to assist Taipower in designing power wheeling operation regulations and application processes that meet the stakeholders' needs and to provide consulting services for preliminary planning regarding the installation of MIS software and hardware. By doing so, this study achieves the goals of application process improvement and process digitization. The main achievements of this study are summarized as follows:

### II. Research Content

1. Proposals for power wheeling operation regulations, contract and application processes, and application process digitization have been completed. These include dividing the structure into three levels: regulations, contracts, and appendices. In addition, through digitization of the future information system, diversion mechanisms and review procedures

for rapid clearance have been designed for new cases, contract changes, and the conversion process between power wheeling and wholesale purchase contracts. Fig. 1 shows the new application processes of power wheeling.

2. Content for fifteen power wheeling operation management system modules has been formulated. The requirement specifications, bidding specifications, and development plan for the Power Wheeling Operation MIS were submitted by the end of July 2022. Fig. 2 shows the management information system of power wheeling.
3. The analysis based on a section-level plan and a power wheeling/ direct supply service subsection [MO1] has been proposed. First, establish a "power wheeling section" in the Department of System Planning as a transitional plan for reference. Afterward, it was negotiated and finalized by the Department of System Planning [MO2] in the business meeting. Suggestions for the rolling review and revision of the operating regulations and operating procedures of power wheeling have been proposed and submitted to Taipower for review.

### III. Conclusion

This study offered legal consulting on changes to operation regulations for power wheeling, signing of wheeling contracts, security deposit waivers, operation regulations for power wheeling, planning of relevant contracts and supplementary contracts, etc.

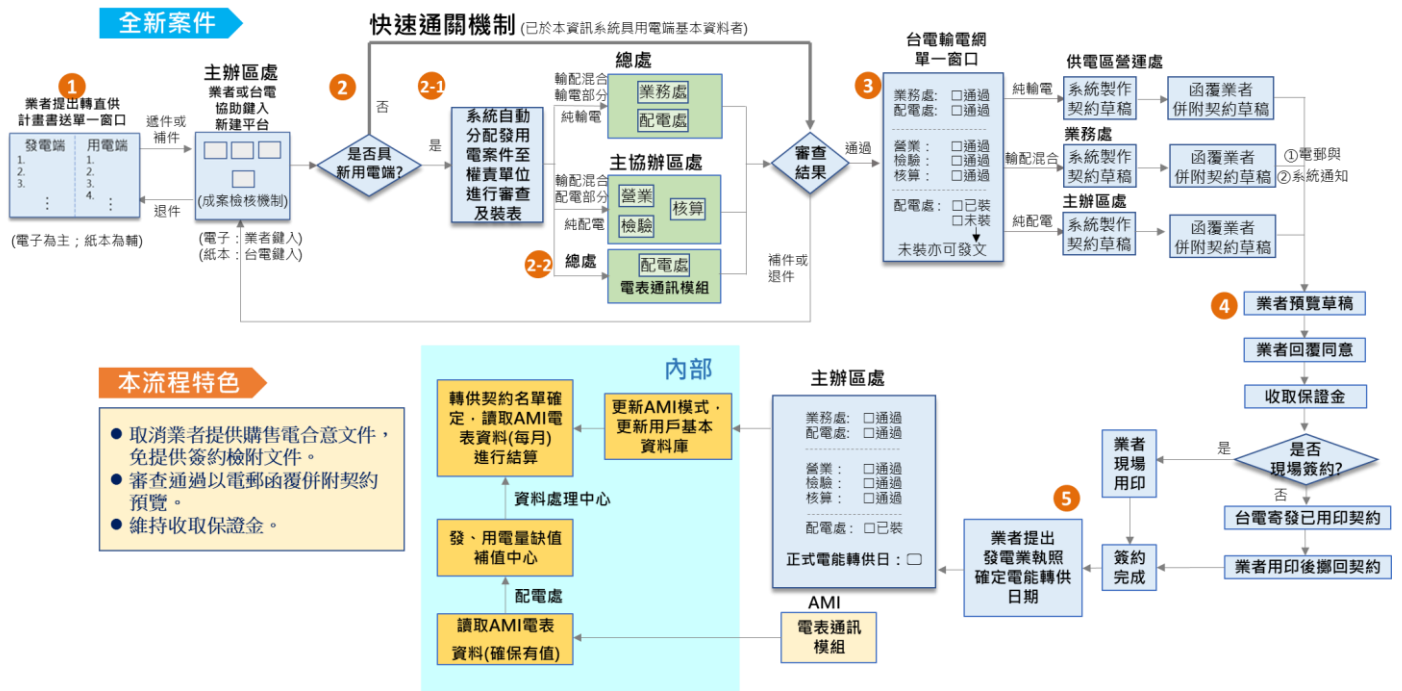


Fig.1 The New Application Processes of Power Wheeling

(Source: drawing by author)

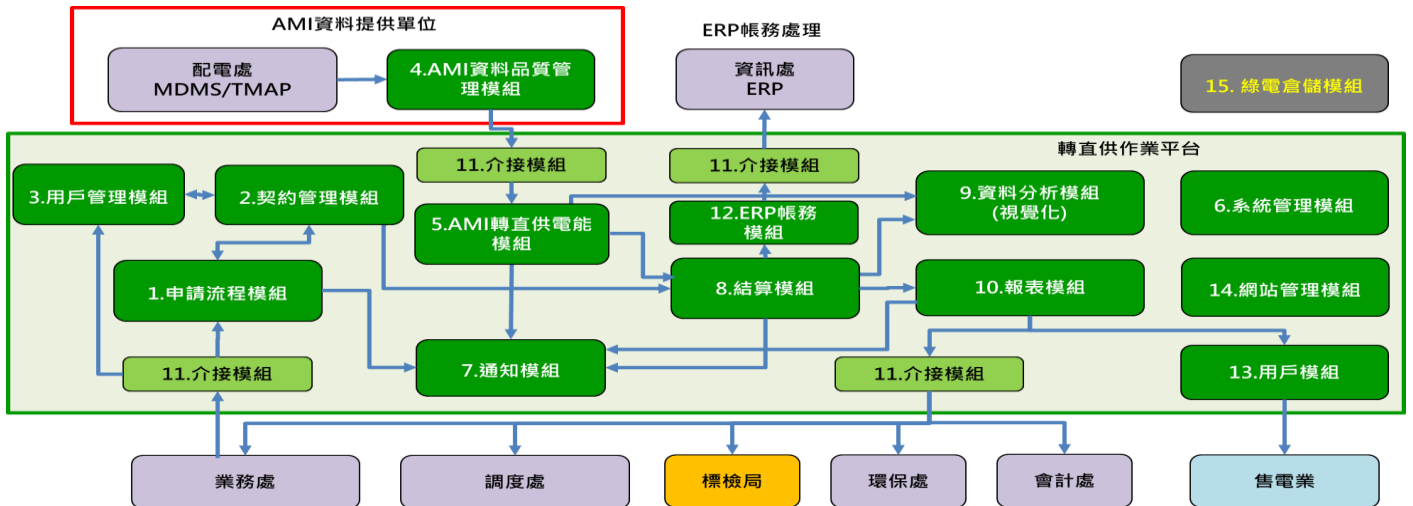


Fig. 2 The Management Information System of Power Wheeling

(Source: drawing by author)