INTERNATIONAL POWER GRID CONSIDERATION OF RULE-MAKING

Marubeni Corporation
Power Projects & Plant Group

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CONSIDERATION FOR INTERNATIONAL POWER GRID

Public Interest
National Policy
Social Responsibility

System Stability
Power Supply Stability
Energy Security

Rule Making
Investment Recovery
Operation and Penalty
Reverse Transmission
Condemnation Process

Economics
Price

Congestion Point
Congestion cost & area

National Security
Fuel diversification

Environment,
Aesthetics and
Ecosystem effect
Permission etc

Power Supply
Reliability
Power flow

Source: 丸紅チーム分析: Marubeni Team Analysis
TRANSMISSION CONGESTION / INTERCONNECTION LINE

CONGESTED AREA 1
“FC”
Interconnection Line between Tokyo and Chubu with frequency converter substation

CONGESTED AREA 2
“KANMON”
Interconnection Line between Chugoku and Kyushu across the Kanmon Straits

CONGESTED AREA 3
“KITA-Hon”
Interconnection Line between Hokkaido (Kita) and Honshu (Hon)

Source: 資源エネルギー庁: Agency for Natural Resources and Energy, 丸紅チーム分析: Marubeni Team Analysis

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TRANSMISSION INCENTIVES

Revenue Model + Incentives

Regulated Model (Cost of service)

- Incentives ROE (ROE Adder)
- Use of hypothetical capital structures
- Accumulated deferred income taxes for transcos

Non-Regulated Model

- Long-Term Bilateral Contract
- Open Season (Auction)

- Full recovery of prudently incurred construction work in progress
- Full recovery of prudently incurred pre-operations cost
- Accelerated depreciation
- Use of hypothetical capital structures
- Accumulated deferred income taxes for transcos

Additional Return

Risk Mitigation

Source: (米)連邦エネルギー規制委員会 (Federal Energy Regulatory Commission)、丸紅チーム分析 (Marubeni Team Analysis)