



THE NATIONAL
RESEARCH INSTITUTE
PAPUA NEW GUINEA

PNG NRI Council Chairman's Seminar Series

Energy: *"Update on reform to deliver least cost and reliable electricity"*



Regulatory Reform in the Electricity Sector



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FOREST RESEARCH INSTITUTE (FRI) CONFERENCE HALL
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INDEPENDENT CONSUMER AND COMPETITION COMMISSION

"Our Competition Watch Dog, Shaping our Market Economy and Protecting our Consumers"



Presentation Outline



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- Objectives of the Regulator**
- Rationale for regulatory reform**
- Recent reforms**
- Power system models**
- Regulatory reform considerations**



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Objectives of the Regulator



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Existing Objectives

Design and Manage Electricity Tariffs

Maintain System Reliability, Meet Demand Growth, and Expand Electricity Access

Ensure Financial Health of PNG Power

Facilitate Private Investment

Protect the Interests of the Consumers (users)

Support Technical Safety and Reliability of Power System

Enhance Energy Security and Manage Risk

Emerging Objectives

Reduce Health and Environmental Impacts of Power System Operation

Meet Rapidly Growing Demand While Minimizing Environmental Impacts and Risk

Support Procurement of Renewable Energy

Facilitate Private Investment

Integrate Renewable and Distributed Generation Resources to the Grid

Incentivize Energy Efficiency, Demand Side Management, and Smart Grid Technologies

Facilitate Consumer Participation in Power Markets

Enhance Cyber security and Protect Privacy

Manage Increased Interactions with Other Sectors



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Rationale for regulatory reform



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❑ Consumers perspective on the energy sector:

- ✓ unaffordable;
- ✓ unreliable; and
- ✓ inaccessible.

❑ Regulatory reform offers significant potential benefits in terms of:

- ✓ improved efficiency in the production of electricity and allocation of resources across the economy;
- ✓ lower electricity prices for consumers;
- ✓ improved risk allocation; and
- ✓ stimulus to economic growth and competitiveness.

❑ Reasons for reform:

- ✓ Lower energy prices;
- ✓ Lack of competition;
- ✓ Poor market performance;
- ✓ Fiscal pressures;
- ✓ Security of supply;
- ✓ Technological developments;
- ✓ Evidence of successful reforms in other sectors and economies.



INDEPENDENT STATE OF PAPUA NEW GUINEA

**ELECTRICITY INDUSTRY
POLICY**



Independent Consumer and Competition Commission

THIRD PARTY ACCESS CODE

GRID CODE



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- Introduction of private ownership, particularly in generation, through entry of Independent Power Producers (IPPs)

THIRD PARTY ACCESS CODE

Third-Party Access Code (TPA Code) – refers to the policy, rules and regulations and commercial arrangements promulgated by the Regulator for the Third Party connection and use of the Transmission Network.

GRID CODE

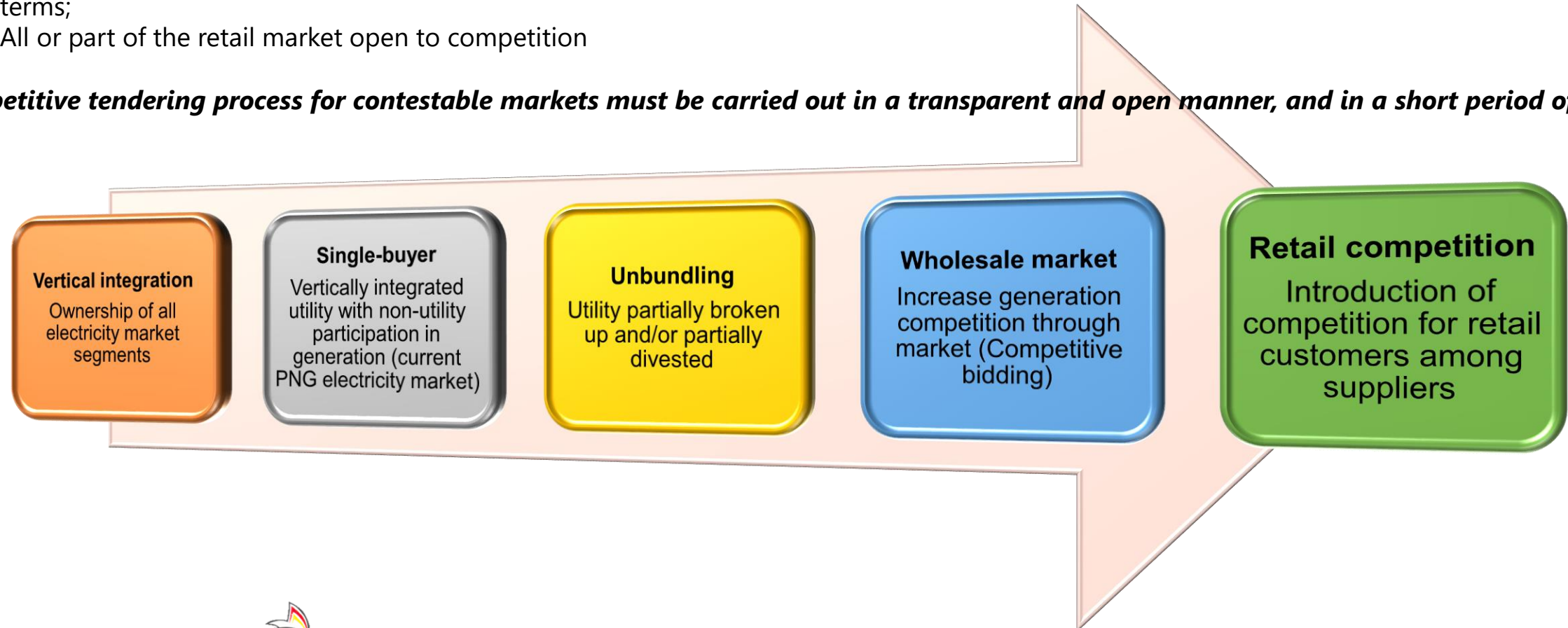
Grid Code – codes and requirements promulgated by the Technical Regulator that governs technical aspects relating to connections to and the operation and use of the transmission system.

Independent
Consumer and
Competition
Commission Act
2002

❑ **Basic model for electricity reform:**

- ✓ Competing generating companies (privately owned or corporatized) bidding into a power pool.;
- ✓ Separation of generation from transmission and distribution;
- ✓ Transmission and distribution companies (privately owned and corporatized) providing access to all network users on non-discriminatory terms;
- ✓ All or part of the retail market open to competition

❑ ***Competitive tendering process for contestable markets must be carried out in a transparent and open manner, and in a short period of time.***





Regulatory reform considerations



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❑ Proposed reforms to achieve market efficiency

- ✓ Amendment of Electricity Industry Act
- ✓ Introduction of private ownership, particularly in generation, through privatisation of state owned assets;
- ✓ Separation of network functions of electricity supply industry (transmission and distribution) from potentially competitive functions (generation and retail supply) has been widely adopted and proposed;
- ✓ Introduction of Independent System Operators (ISO);
- ✓ Competition in wholesale and retail supply markets, particularly for large industrial consumers;
- ✓ The approaches vary from full ownership separation to weaker forms requiring PNG Power to keep separate accounts for each function.
- ✓ Introduction of full retail competition is considered the final stage of a phased program of reform.

❑ Future challenges for the regulatory reform process in PNG

- ❖ Uncertainty about the political commitment and the future development of the privatisation program;
- ❖ New leaderships that challenge the regulatory reform proposals;
- ❖ Need for greater transparency and the development of effective public consultation mechanisms regarding tariff decisions and new regulations;
- ❖ Political interference in the regulatory process;
- ❖ A competitive approach to regulatory reform in the electricity sector.



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**End of Presentation,
thank you!**



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