



# GTMax: A Model Used Worldwide to Analyze Deregulated Power Market Issues

**Past**

**Natural Monopoly**

Vertically Integrated

**Present**

→

**Transition Phase**

**Future**

**Open Market**

Unbundled

- Many countries are restructuring and deregulating their power markets, fundamentally changing the way electricity markets function.
- Different market agents use GTMax to analyze today's strategic market issues.
- GTMax users include generation companies, power merchants, transmission companies, government and regulatory bodies, and research institutions.

- GTMax's extremely versatile interface makes building networks of regional, national, or multi-national scope as easy as drag and drop.
- GTMax power system networks consist of nodes and links:
  - Nodes represent different supply and demand options.
  - Links represent hydro cascades, heat pipelines, and electric transmission lines.
- Drop-down menus allow access to a variety of overlays, such as the results for hourly energy flows from generators and IPP firm contract purchases to load centers and spot market delivery points.

## Generation and Transmission Maximization (GTMax)

The Western Area Power Administration, Bureau of Reclamation, Department of the Interior, and Forest and Wildlife Service use GTMax to analyze the economics of hydropower systems in the Western U.S.

Poland's Energy Market Agency uses GTMax to evaluate gas-fired cogeneration, pumped-storage hydro, and power transfers from Russia to Germany.

USAID and Montgomery Watson Harza use GTMax to simulate an East European integrated market with up to 13 countries.

The University of Illinois, Chicago, uses GTMax to analyze deregulated market issues in the Midwestern U.S.

The International Atomic Energy Agency (IAEA) uses GTMax to help member countries analyze how nuclear power plants can compete in deregulated electricity markets.

The Ministry of National Infrastructures in Israel and the National Electric Power Company of Jordan use GTMax to analyze power systems.

Argentina's Nuclear Research Institute uses GTMax to simulate the national power market, assess competitiveness of nuclear power, and evaluate price volatility issues.

A large international power merchant uses GTMax to evaluate the financial viability of two transmission lines in the Balkans.

