Mexico is in the midst of radical changes in the electricity sector, speaker Jeffrey Pavlovic of the Mexican Ministry of Energy explained in Monday’s energy policy seminar, as the country moves from a vertically-integrated electricity system in which almost all generation has been owned by the government to what is intended to be an open, competitive electricity market.

Pavlovic, who has been part of the effort to design the new market, observed that a key motivator is high Mexican electric rates—on average, when the reform effort began, Mexican rates were 25% higher than U.S. rates, and would have been 73% higher without generous government subsidies. In addition, it is hoped that a competitive electricity market will help Mexico reach its renewable generation goals—Mexico aims for 35% clean energy by 2050 (as of 2013, only 17-20% of generation was from non-polluting sources).

The transition to a competitive electricity market is complex, involving breaking up the state-owned Mexican utility into multiple generation companies and separating retail sales from generation, as well as establishing an independent system operator which will operate a spot market for energy as well as energy auctions.

Many elements of the new Mexican market are similar to US markets—including nodal prices and financial transmission rights; however, Pavlovic noted some interesting differences in implementation details. For example, capacity markets, rather than paying for capacity ahead of time, will pay for capacity after it is provided, rewarding generators who were available during the 100 most critical hours over the course of a year. Clean Energy Certificates (CECs) will be used to support the competitiveness of clean generation. Options for storage of Clean Energy Certificates and deferral of CEC obligations will, it is hoped, add additional flexibility to this market, making it more price-responsive.

Long-term contracts for generation will be awarded through auctions which evaluate bids based on quantities of energy, capacity, and clean energy certificates offered. The auctions will be structured so that all technologies will compete with each other, and will award higher prices to generators that produce during valuable hours and/or are located in less well-supplied areas.

The new market’s official start date was January 25, 2016. Participation in the first auction for long-term power contracts was robust, with offers exceeding the target purchase amount more than tenfold. The market is being implemented in phases, with full implementation, including the Clean Energy Certificate Market, expected by 2018. It is hoped that new generators will join the market once it has a chance to prove itself.

Pavlovic spoke as part of the Kennedy School’s Energy Policy Seminar Series, which is jointly sponsored by the Energy Technology Innovation Policy research group of the Belfer Center and by the Consortium for Energy Policy Research of the Mossavar-Rahmani Center on Business and Government.