

**FINAL REPORT
OF THE
PUBLIC SERVICE COMMISSION OF MARYLAND
TO THE
MARYLAND GENERAL ASSEMBLY**

OPTIONS FOR RE-REGULATION AND NEW GENERATION

DECEMBER 10, 2008

Pursuant to §2(b)(2), Chapter 549, Acts 2007.

F. The Commission's Consultants' Analyses Demonstrate That New Generation Will Benefit Maryland Ratepayers.

As discussed in more detail in the Kaye Scholer report, restructuring has failed to stimulate construction of new power plants in Maryland: only 700 MW of new capacity has been added since 2000. Maryland has approved construction of more than 3,000 MW of new generation, but less than 200 MW of that is expected to be in-service by year-end 2009. At the same time, Maryland's generation fleet is aging: 67 percent of the State's total generating capacity over 31 years old, and another 11 percent over 21 years old. Under deregulation, merchant generators were expected to respond to market signals regarding needed generation, but despite high LMPs and capacity payments, Maryland's generation needs are not being met. Indeed, one merchant generator testified before the PSC that no matter how high RPM payments were, it could not finance a new generation project in Maryland without a PPA for at least ten years.⁶¹ Complicating the situation is the fact that merchant generators and companies owning generation share a vested interest in maintaining high LMPs and capacity payments.

The PSC's consultants explored multiple options for obtaining additional generation in Maryland, and specifically whether each of these options would yield economic benefits for ratepayers when measured against Levitan's baseline Reference Case. Levitan modeled two options for 1,080 MW of combined-cycle gas generation: long-term PPAs with merchant generators and IOU-owned and -operated new construction under traditional cost-of-service regulation. Both Levitan and Kaye Scholer also explored various options for a state power authority, including the construction of new generation. Levitan also modeled solar and wind options.

Stated generally, our consultants' analysis reveals that Maryland ratepayers would benefit from 1,080 MW of additional generation, above and beyond basic reliability needs, and

that the economic benefits are roughly equal regardless of ownership and cost-recovery structure. The benefits from further generation, the “overhang” case, are less clear, and the purely economic benefits from renewables even less so:

1. Long-term PPAs.⁶² Long-term PPAs have the potential to solve some of the market deficiencies that have led to a deficit of new generation in Maryland and other constrained states. They can provide a guaranteed stream of income to the generation owner, which in turn enables project financing and reduces the cost of investment risk built into energy costs. They can allow Maryland to control the timing, location, type and environmental impact of new generation, and to diversify its options as a hedge against market risk. They can encourage new entrants to the Maryland energy market, thereby enhancing competition. Finally, strategic placement of new generation under a long-term PPA could lower LMPs and capacity costs, thus lowering wholesale prices. PJM has provided guidance on preferred sites that provide more reliability “bang for the buck.”

Levitan modeled a 20-year PPA between an IOU and a merchant generator, which would entitle the IOU to the market value of 1,080 MW of new capacity (including energy, capacity and ancillary services sales in PJM markets) in exchange for fixed and variable payments to the merchant generator. Fixed payments would include recovery of capital costs, adjusted for the value of the site from years 21 to 30, as well as return on equity. Variable payments would include fuel and non-fuel operating costs. Levitan projected annual savings of roughly \$300 to nearly \$800 million compared to the “business as usual” reference case. Although there was a small but insignificant increased benefit of IOU-built new generation, after factoring in the risk of cost overruns the long-term PPA may edge out the IOU build. However, long-term PPAs require a great many decisions, including how best to structure the procurement process to stimulate competition, how to ensure lowest price and best terms, whether to contract for capacity and/or energy, how to index the fuel price to allow the developer reasonable flexibility without exposing ratepayers to excessive volatility, how best to encourage the

developer to maintain availability and efficiency, whether to take actual delivery of the capacity/energy from the facility versus “financial” delivery (in which the buyer gets payments equal to the market values of the capacity and/or energy), what performance guarantees should be built in, and the ideal length of the contract, among others. The risks from long-term PPAs include technological obsolescence, fuel costs (although some of this risk is normally allocated through indexing), stranded costs, and discouraging retail suppliers from entering the market.

⁶¹ Transcript of October 3, 2008 hearing, Case No. 9149, at 209 (testimony of D. Egan).

⁶² See Levitan report at 110-12, Kaye Scholer report at 79-86.

