

MEMORANDUM

To: Sandie Haverlah - Consumer Fund of Texas From: Joshua Rhodes, PhD - IdeaSmiths LLC

Date: October 30, 2023

Re: Preliminary analysis of the impact Texas Senate Bill 2627

IdeaSmiths LLC has been retained by Consumer Fund of Texas to provide an analysis of the overall cost and market implications of Texas Senate Bill 2627¹ (SB2627). IdeaSmiths has partnered with Astrapé Consulting for modeling support and is actively working to complete that analysis.

This memo serves to provide a preliminary look at the implications of SB2627, in particular how the lower cost of capital from the loan program would impact the market equilibrium. While more effort is needed to fully finish that analysis, our initial results indicate that the loan program laid out in SB2627 is not needed to reach the desired level of reliability, particularly in light of the market changes that will result from HB1500.

At its core, the bulk of SB2627 would provide completion bonuses and low cost loans for a portion² of either new power plants or the expansion of existing power plants that add a total of at least 100 MWs of new generation capacity not already under consideration. The general idea is that lower cost capital would spur the development of more dispatchable generation capacity than would otherwise be developed, thus increasing system reliability.

Without SB2627, the modeling indicates that about 14GW of net thermal power plants would be expected to retire in the near term, resulting in an unacceptable 2.46 LOLE. With SB2627, the modeling indicates about 13 GW of net thermal retirements and a LOLE of about 1.77, which is an improvement, but still much higher than the historic industry standard of 0.1 LOLE (and not accounting for the risk spectrum for magnitude or duration of loss of load events at a given LOLE frequency).

The modeling indicates that SB2627 can reduce market costs, but only if more generation capacity is built than retires. While the modeling indicates that this outcome is a possibility, the market impact on older plants will determine whether or not that is the case.

¹ https://capitol.texas.gov/BillLookup/Text.aspx?LegSess=88R&Bill=SB2627

 $^{^{\}rm 2}$ Either up to 60% or 25% depending on the number of loan applications in-hand at any time.