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PUC PROJECT NO. 54999

**TEXAS ENERGY
FUND**

**§ PUBLIC UTILITY COMMISSION
§ OF TEXAS**

**COMMENTS OF WÄRTSILÄ NORTH AMERICA, INC. REGARDING THE TEXAS
ENERGY FUND**

COMES NOW Wärtsilä North America, Inc. (“Wärtsilä”) and files these comments as a response to the Public Utility Commission of Texas (“Commission”) to highlight and discuss proposals on prioritization of the Texas Energy Fund.

I. INTRODUCTION

Wärtsilä is a global energy and marine technology company based in Helsinki Finland, with its North American headquarters in Houston, Texas. Wärtsilä’s mission is to provide power generation technology solutions that enable a healthy, reliable, affordable, and resilient power system. Wärtsilä’s offerings include grid-scale reciprocating internal combustion engine power plants (RICE), hybrid solar power plants, and battery energy storage systems (BESS). Wärtsilä has 76 GW of installed power plant capacity in 177 countries around the world, and over 1 GW in Texas, including 850 MW of engine power plants and 200 MW of battery energy storage systems. Wärtsilä’s technology solutions provide grid operators with cost-effective, reliable, and precise tools to support modern renewable heavy power systems.

OVERVIEW

The ERCOT power system is being stressed by increasing load growth, a rapid deployment of variable renewable energy resources (VREs), and extreme weather events such as prolonged heat waves. At the same time, ERCOT lacks sufficient modern flexibly dispatchable generation to balance and backstop growing system variability and uncertainty. Wärtsilä is supportive of market reforms and policy interventions that promote resource adequacy, operational reliability,

flexibility, and affordability through investment in new generation equipment, improvements to existing equipment, and orderly retirement of aging uneconomic and inflexible generators.

Not all megawatts (MWs) of capacity are created equal. Much of Texas's generation fleet have aged beyond their useful life but are unable to retire due to system reliability needs. Around 24,000 MW¹ the of 62,000 MW (39%) of installed Coal, Combined Cycle, Gas Turbines, and Gas Steam Turbines are older than 40 years in age. Furthermore, these resources were built to serve a very different power system than today's ERCOT grid, let alone what is needed to maintain reliability and minimize costs for customers in the future.

There is a clear need for not only new dispatchable capacity, but in particular *flexible* dispatchable resources as shown by ERCOT's increased procurement of Residual Unit Commitment (RUC) and Non-Spin reserve service to ensure system stability. Texas is home to one of the nation's largest and fastest growing renewable fleets, with 37,700 MW of wind and 17,000 MW of solar capacity today.² The volatility of renewable generation output creates a need for resources that can rapidly respond with changes in output in real-time. Modern resources for efficient renewable integration exhibit five elements of flexible dispatchability, which include minimizing start-up time, minimum run time, minimum down time, and minimum operating level while maximizing ramp speed and operating duration.

LOANS FOR FACILITIES INSIDE AND OUTSIDE THE ERCOT POWER REGION

1) Prioritization of Funds for Grid Scale Generators

Wärtsilä, urges the commission to implement a prioritization system of Texas Energy Funds for appropriate projects and generation resources on the bulk electric system. Our proposal is for projects to be prioritized in a "Texas Two Step" manner assessing project readiness and resource attributes defined by the matrix in Exhibit 1. The first step would be project orientation and progress. If the potential project has completed more hurdles than others by having a position in

¹ SARA Summer 2022 report

² ERCOT Fact Sheet September 2023

the ERCOT Generator Interconnection Queue, Permits filed, etc. then the assessed project should receive a higher prioritization for funding than an early-stage project.

The second step is ranking projects by physical resource performance criteria. These performance characteristics, including flexibility, efficiency, and resiliency, are important attributes for renewable integration and power system reliability during extreme weather events. These physical characteristics would need to be collected at the time of application and assessed against other projects.

Wärtsilä believes prioritizing loan funding with the Texas Two Step method will alleviate legislative concerns regarding funding generation projects that are insufficient to meet ERCOT's operational needs.

II. FUNDED PROJECTS

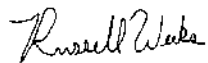
2) Interconnection for Texas Energy Fund Financed Projects

Wärtsilä supports the allocation of low-interest loan financing and completion bonus grants to upgrade or construct necessary dispatchable generation capacity. The availability of additional funding will attract new generation projects that will add additional pressure to the already overloaded interconnection queue. Wärtsilä encourages the Commission to ensure that projects that would add additional dispatchable generation receive expedited interconnection approval from ERCOT and transmission service providers. Without interconnection review priority, many eligible projects may not meet the completion bonus timelines, thereby jeopardizing the project economics.

Wärtsilä appreciates the Commissions leadership in the implementation of the Texas Energy Fund appreciates the opportunity to submit these comments ahead of the Energy Fund Workshop.

Date September 15th, 2023

Respectfully submitted,



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Exhibit 1

Project Readiness	True/False
Control of Site? (Land lease or Deed)	
SPV is in place? (Special Purpose Vehicle)	
Generator Interconnection Study Started? (ERCOT Report)	
Generator Interconnection Agreement Signed? (ERCOT Report)	
Fuel Supply Contract Signed?	
Assigned Engineering Procurement Contractor? (EPC)	
Engineered Equipment Contract Signed? (EEQ) – If Separate from EPC.	
Asset Management Agreement Signed? (AMA)	
Proof of Funds / Terms Sheet?	
Engineering Work has advanced?	
Air Permit Started (TCEQ)?	
Air Permit Completed (TCEQ)?	
Highway Use Agreement signed?	
FAA -Form 7460-1 Filed?	
FAA -Form 7460-1 Completed?	
Registration as a Power Generation Company?	

Resource Attribute Assessment	Weight	Comments
Flexibility	50%	Resources that maximize (e.g., Ramp Speed) and Minimize (e.g., Startup Time, Min Run Time, Min Down Time, and Min Operating level)
Fuel Efficiency	20%	The lower the heat rate on an applying technology will yield a higher score in this category
Thermal Derate	15%	Resources that minimize reduction of available capacity due to ambient conditions will yield a higher score in this category
Historical Availability	10%	Resources that have a high historical availability
Water Consumption	5%	Resources that minimize consumption of water for power generation and cooling