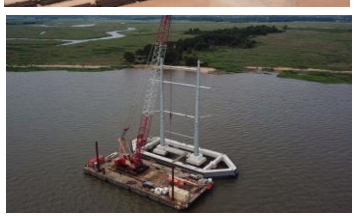
Marji Rosenbluth Philips

PJM MRC Special Session on Black Start Units

February 16, 2021



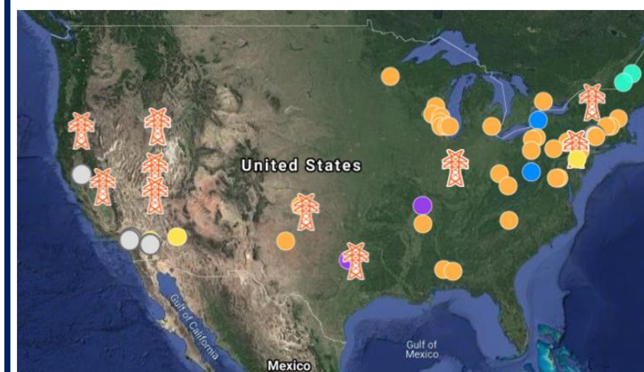




LS Power Group Overview

LS Power is a development, investment and operating company focused on the North American power and energy infrastructure sector

- **Founded in 1990, LS Power has over 250 employees** in NY, NJ, MO, TX and CA, beyond which its projects and businesses have **provided thousands of construction and operations jobs**
- **LS Power has raised over $45 billion to finance and support energy infrastructure investments in the U.S.**
- LS Power actively invests in competitive power markets and
  - **Manages over** 14,000 MW of generation capacity and over 4,000 MW of demand response and energy efficiency, for a total of over **18,000 MW throughout the US**
  - **Makes fuel neutral investments,** including solar, wind, battery energy storage, natural gas, hydro, pumped storage, demand response and energy efficiency
  - **Leaders in distributed energy through EVgo** (the nation's largest fast charging platform for electric vehicles) **and CPower Energy Management** (leading demand-side energy management company that helps commercial, industrial and government organizations save on energy costs, earn revenue through energy curtailment, enhance sustainability efforts, and contribute to a balanced, reliable grid)
  - **Invests over $2 billion in high voltage transmission projects across the U.S. to support renewables and grid reliability**

Innovation and Investment in Energy



Project Portfolio

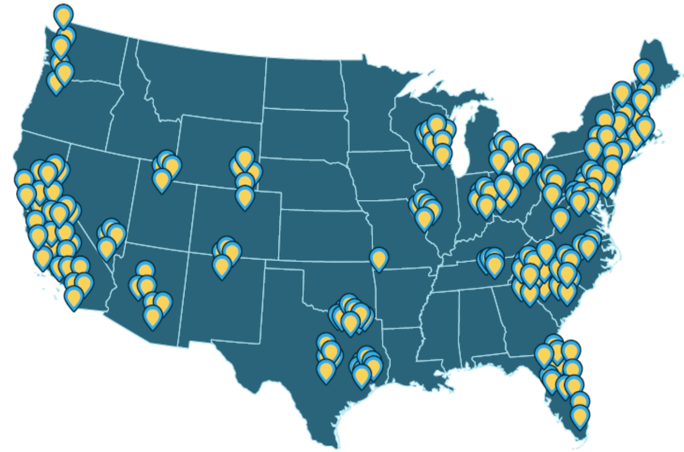
LS Power has extensive development and operating experience across multiple regions, markets and technologies

LS POWER

LS Power Distributed Energy Platforms

National Leaders in Electric Vehicle Charging, Energy Efficiency and Demand Response

- **EVgo is the nation's largest and most reliable public fast charging network for electric vehicles**, powered 100% by renewable energy, with more than 800 fast charging locations in 66 metropolitan markets across 34 states. EVgo owns and operates its network, and serves more than 180,000 retail and fleet Consumers, with plans to more than triple its network over the next five years. We believe that EVgo has the best operating record in the industry – more than 98% uptime – and consistently earns the highest consumer scores on PlugShare for U.S. public charging networks



- **CPower Energy Management is the leading demand-side energy management solutions provider in the U.S.,** that helps over 1,400 commercial, industrial and government organizations across North America save on energy costs, earn revenue through energy curtailment, enhance their sustainability efforts, and support the decarbonization and reliability of the electric grid

LS Power Footprint in PJM

LS Power is the second largest privately held generation company in PJM, with over 11,000 MW of capacity

- Our PJM generation assets include clean supply resources: **hydro pumped storage, solar, and natural gas fired peaking and combined cycle facilities**
- **Affiliate CPower is the largest supplier of demand response and energy efficiency in PJM**
- **LS Power is a leading developer of transmission assets in PJM, for which its solutions were deemed lower cost and environmentally superior** to other options proposed; LS Power established a first-of-its-kind project cost cap to protect electricity consumers from paying for cost overruns – a new, consumer-focused approach
- **LS Power is technology neutral…** including hydro pumped storage, solar, and natural gas fired peaking and combined cycle facilities
- **We will invest where price signals are efficient and transparent to provide an opportunity (but not a guarantee) of a return on its investment**
  - With two-thirds of LS Power's generation portfolio in PJM**, PJM has provided such investment opportunities over its history that have provided significant consumer benefits**

LS Power Advocacy Principles

- Markets must be:
  - Non-discriminatory
  - Transparent
  - Fair

- Consumers benefit the most from competitively driven procurements
  - This is true for both generation and transmission reliability procurements

Black Start in PJM

- There is no requirement that generators provide black start
- Schedule 6 of the PJM OATT contains general provisions for acquisition of black start
- The OATT recognizes that there are additional costs to providing black start service
- Provides explicit methodology for the basis of cost recovery for black start investment, as well as obligations and termination rules

PJM Competitively Contracts for Black Start

- PJM solicited offers to provide black start
- Competitive process
- Bidders were told that their revenue requirements would need to be consistent with, among other things, the CFR *in the table in the tariff*
- PJM sent letters to winning bidders confirming their payment and obligations
- PJM is hereby providing notification that X Company proposal for $x has been accepted… The proposed Project Costs to convert the units to Black Start Service have been reviewed and the purpose of this correspondence is to memorialize the terms associated with providing Company X the opportunity to recover new or additional Black Start Capital Costs as set forth in paragraph 6 of Schedule 6A of the Tariff…PJM has determined that the appropriate CRF and recovery period will be five (5) years, and that the applicable CRF for the purposes of the Project will be 0.363.

Contracts 101

- Need offer
  - Competitive supplier provided bid offer to invest, develop and maintain black start pursuant to PJM Tariff rules
- Need acceptance
  - PJM accepted the offer in its letter
- Need “consideration:
  - The competitive supplier agreed to provide the services in return for PJM’s agreement to compensation pursuant to the winning bid offer

Reliance

- The Black start supplier relied on methodology specified in the tariff; the table for the CFR contained explicit numbers
  - The relevant provisions do not contain a Mobile-Sierra clause (see subsequent slides) or reference to an index but rather a table with specific information
- As part of structuring its bid, the supplier used that table specifically to develop its offer
- Suppliers would have made different offers if they knew they were going to have to manage around a variable cost
  - In other words, the rate was a "black box" rate, and one consideration was the CFR
  - if the supplier knew that rate could be variable, it would have likely added a risk premium
- Upon receipt of the PJM letter, the supplier relied on the contractual relationship established and went ahead and made the necessary investment to meet its obligations

Mobile-Sierra and FERC on Contracts

- Very high burden to modify contracts
  - Must meet "Public Interest" standard, which is much higher than "just and reasonable" standard
  - In fact, seminal case, Sierra, was about a utility trying to retroactively raise rates under one contract so that the contract would be consistent with subsequent contracts
  - Standard
- Contract does not have to be FERC Filed
- "Agreements made pursuant to tariffs and market based rates are treated as contracts the distinctions between market-based and cost-based rate contracts are largely distinctions without a difference in terms of whether and how one applies the *Mobile-Sierra* doctrine." ***See PacifiCorp,*** 99 F.E.R.C. 7 61,381 (2002)
- Competitive power markets simply cannot attract the capital needed to build adequate generating infrastructure without regulatory certainty, including certainty that the Commission will not modify market-based contracts unless there are extraordinary circumstance." ***See PacifiCorp***

Mobile Sierra cont'd

- The *Mobile-Sierra* "public interest" presumption applies to an agreement only if the agreement has certain characteristics that justify the presumption. In ruling on whether the characteristics necessary to justify a *Mobile-Sierra* presumption are present, the Commission must determine whether the agreement at issue embodies either: (1) **individualized rates, terms, or conditions that apply only to sophisticated parties who negotiated them freely at arm's length**; or (2) rates, terms, or conditions that are generally applicable or that arose in circumstances that do not provide the assurance of justness and reasonableness associated with arm's-length negotiations. Unlike the latter, the former constitute contract rates, terms, or conditions that necessarily qualify for a *Mobile-Sierra* presumption. In *New England Power Generators Association v. FERC*, [707 F.3d 364 (D.C. Cir. 2013),] *Alabama Power Co.*, 174 FERC P 61018 at P 28 (2021).

And the Point is…

- Black start contracts are exactly that. Contracts
- Law is clear that there must be a public interest in modifying a contract; a desire to change a rate(up or down) does not meet the standard (may be exception if it puts entity into bankruptcy)
- Existing providers of black start relied on their contract to make their investments
- Any change to amend a table that was specifically included in the tariff (and not even referenced as a floating rate) must be prospective

- THANK YOU