# Request for FERC Technical Conference on Carbon – May 2020





# LS Power Summary

- **LS Power has invested over $40 Billion to finance and support energy infrastructure investments in the United States**
- **LS Power actively invests in competitive power markets and**
  - Manages over 15,000 MW of generation capacity and over 4,000 MW of demand response and energy efficiency for a total of over 19,000 MW throughout the United States
  - Makes fuel neutral investments, including solar, wind, battery energy storage, natural gas, hydro, pumped storage, demand response and energy efficiency
  - Recently acquired EVgo, an electric vehicle fast charging business
  - Investing over $2 Billion in high voltage transmission projects to facilitate renewable energy and enhance grid reliability

# LS Power Overview

## Power generation and transmission company formed in 1990

***42,000+ MW***

Power generation development, construction or operations experience

***$40+ billion***

Capital raised to finance and support investments in energy


***$1+ billion***

High voltage transmission placed into operations since 2013

***$1+ billion***

High voltage transmission in permitting or construction

***CAISO, ERCOT, MISO, NYISO, PJM***

Transmission competitively awarded to LS Power



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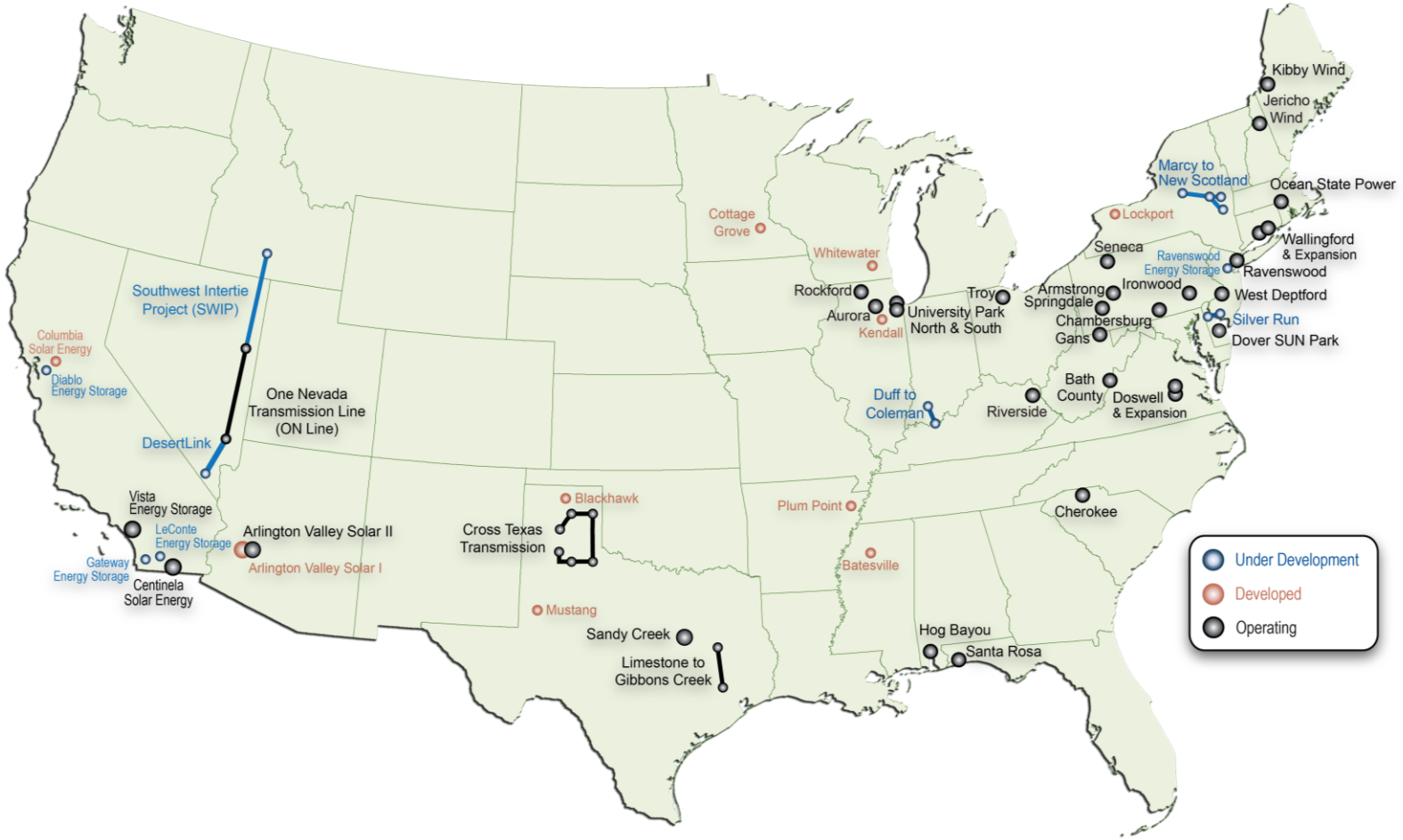
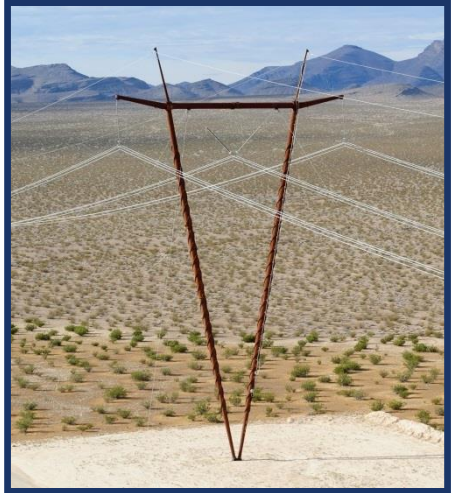
# LS Power Project Portfolio

**Extensive development and operating experience across multiple regions, markets and technologies**



# LS Power Transmission Projects

## One Nevada Transmission



Partnership with NV Energy

231 miles 500 kV transmission
8 miles 345kV transmission
EHV substation

$500+ million construction cost

First connection between northern and southern Nevada

## Cross Texas Transmission

Selected by PUCT

298 miles 345 kV transmission
4 EHV substations

$500 million rate base

Public Utility in Texas

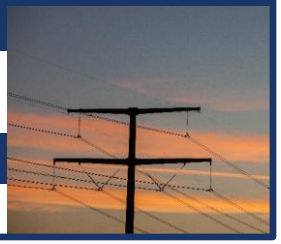
## LS Power Grid New York

Selected by NYISO

100 miles 345 kV transmission
2 EHV substations

$750 million estimated cost

Partnership with NYPA



## Silver Run Electric

Selected by PJM

3 mile 230 kV Delaware River crossing, EHV substation

$146 million construction cost cap


## DesertLink

Selected by CAISO

60 miles 500 kV transmission

$145.5 million construction cost cap

## Republic Transmission

Selected by MISO

31 miles 345kV transmission

$58 million cost cap

Public Utility in Indiana



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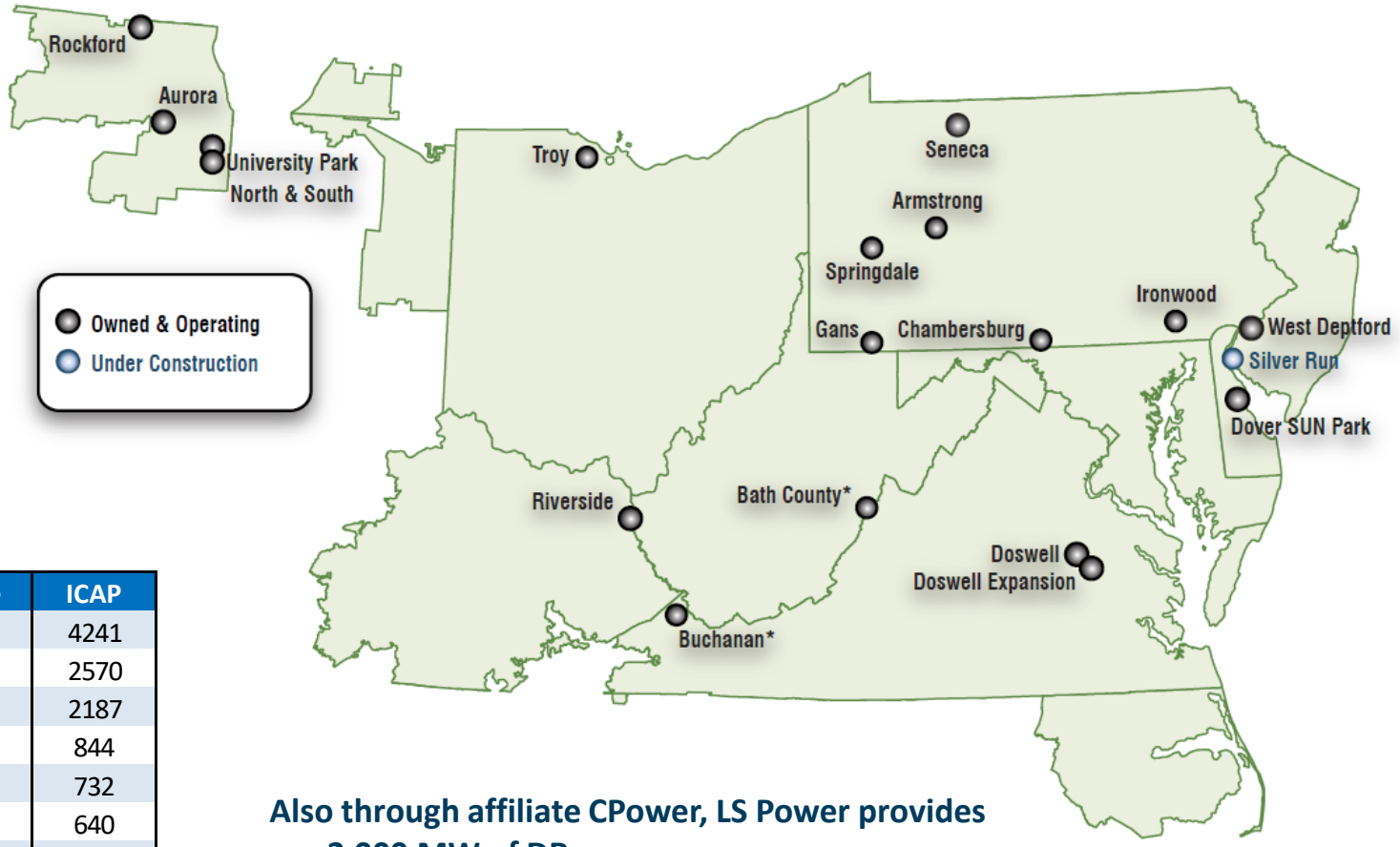
# LS Power Footprint in PJM

- **With over 11,000 MW of capacity in PJM, LS Power is the second largest privately held generation company in the market**
  - Our PJM generation assets include **clean supply resources such as 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 developing Transmission assets in PJM
- **LS Power is technology neutral… supporting grid reliability across pumped storage hydro, solar, and natural gas fired peaking and combined cycle facilities**
- **LS Power will invest where price signals are efficient and transparent to provide an opportunity (but not a guarantee) of a return on investment**
  - Encompassing two-thirds of LS Power's generation portfolio**, PJM competitive market structures have allowed for ongoing investment opportunities that have provided significant consumer benefits**

# LS Power PJM Project Portfolio

## LS Power supports PJM with over 11,000 MW of Generation Capacity




| State | ICAP |
|---|---|
| VA | 4241 |
| PA | 2570 |
| IL | 2187 |
| KY | 844 |
| NJ | 732 |
| OH | 640 |
| DE | 10 |
| Total | 11224 |

**Also through affiliate CPower, LS Power provides**

- **2,000 MW of DR**
- **400 MW of EE**



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# Why Carbon Pricing?

- **"Carbon pricing" is a market-based strategy for lowering global warming emissions**
- The aim is to put a price on carbon emissions—an actual monetary value—**so that the costs of climate impacts and the opportunities for low-carbon energy options are better reflected in our production and consumption choices** --*Carbon Pricing 101/Union of Concerned Scientists*
- States are concerned that the PJM market does not recognize externalities such as emissions, for which carbon pricing can be utilized as an explicit mechanism to do so that can be incorporated into the PJM market
- Discussion is distinct from MOPR issues

# Carbon Pricing in PJM

- **LS Power recognizes that PJM staff and stakeholders have devoted a significant amount of time discussing carbon pricing**
- **LS Power recognizes jurisdictional challenges in having a carbon price in PJM that is not supported by all the states**
- **LS Power believes that a uniform approach to carbon pricing is the most effective way to drive to carbon emissions reduction**
  - Carbon pricing will drive the most efficient technology on the system
  - Carbon pricing will achieve carbon reductions in the most cost effective manner

# Request for Technical Conference or Workshop at FERC: AD20-14

- **LS Power and other stakeholders filed a request at FERC for a technical conference or workshop**
  - **Purpose is to address integration of carbon pricing in wholesale electric markets**
  - Focus is not on jurisdiction but practical implementation challenges
  - **Technical Conference preferred over workshop because it is superior in terms of creating a record**

- **The petition contemplates participation by all industry stakeholders, providing for education and debate among** groups including:
  - Stakeholders with RGGI experience
  - RTOs
  - Supply side stakeholders
  - State participation

# PJM Should Support a Technical Conference

- **PJM does not have to take "sides" in whether to support carbon pricing**
  - PJM is in a good position to identify the "pros" of a uniform approach
  - PJM is in a good position to identify how it can help states achieve their goals without a uniform carbon price
- **PJM has insight to share based on its stakeholder proceedings**
- **PJM can have meaningful interactive dialogue with FERC staff and stakeholders on what works and does not work**
- **<u>Consistent with PJM mission to advocate for markets that drive reliability, innovation and cost efficiency</u>**
  - Carbon pricing is a well documented means to achieve reduction in carbon emissions using a market mechanism
  - **Potential tool to help states achieve their environmental policy goals, for which funds can be utilized for respective state's priorities** (e.g. one state may prioritize funds to support Energy Efficiency, while another may prioritize Jobs Creation or Direct Bill Support, etc.)