LS Power

Power generation and transmission company formed in 1990

- **40,000+ MW**
  - Power generation development, construction or operations experience

- **$45+ 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
Renewables, Battery Storage and Transmission Solutions

LS Power is a U.S. development, investment and operating company focused on power generation, electric transmission and energy infrastructure.

- 42,000 MW of power generation development, construction and operations experience throughout the U.S.
- $45 billion capital raised to finance and support investments in energy
- Currently building and operating over 600MW of battery storage in California
- 660 miles of competitively awarded transmission by CAISO, ERCOT, MISO, NYISO and PJM
- 800 EVgo fast charging locations in 66 markets across 34 states
- 1,400 commercial and industrial customers at nearly 9,000 sites in the U.S. served by CPower’s demand-side energy management expertise
- Offices in CA, MO, NJ and NY, 200+ employees, formed in 1990
- Committed to low-cost, clean energy solutions
Project Portfolio

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

Smaller generators (< 40 MW) not labeled
LS Power Grid

**One Nevada Transmission**
- Partnership with NV Energy
- 239 miles 500/345 kV EHV substation
- $500+ million investment
- First connection between northern and southern Nevada

**Republic Transmission**
- Selected by MISO
- 31 miles 345 kV
- $58 million investment
- Public Utility in Indiana

**LS Power Grid New York**
- Selected by NYISO
- 125 miles 345 kV
- 2 EHV substations
- $750 million investment
- Partnership with NYP A

**LS Power Grid California**
- Selected by CAISO
- 500 kV transmission
- 2 EHV substations
- $144 million investment

**Silver Run Electric**
- Selected by PJM
- 6 miles 230 kV EHV substation
- $150+ million investment

**Cross Texas Transmission**
- Selected by PUCT
- 298 miles 345 kV
- 4 EHV substations
- $600+ million investment
- Public Utility in Texas

**DesertLink**
- Selected by CAISO
- 60 miles 500 kV EHV substation
- $200+ million investment
Southwest Intertie Project (SWIP) Overview

Phase I - ON Line (Robinson to Harry Allen) – Operating
- 231-mile 500 kV t-line from Ely to Las Vegas (plus 8 miles of 345 kV)
- Placed into service in January 2014
- ~2300 MW transfer capacity (~1200 MW reserved by NVE)
- Built as joint development project by LS Power and NVE
- First connection between Nevada Power Company and Sierra Pacific Power Company

Phase II - DesertLink (Harry Allen to Eldorado) – Operating
- 60-mile 500 kV t-line in Clark County
- Placed into service in August 2020
- ~3500 MW transfer capability controlled by CAISO
- LS Power selected by CAISO via competitive solicitation pursuant to FERC Order 1000
- Robust cost containment package including caps on construction costs, capital structure and ROE
- Extended the CAISO boundary from Eldorado to Harry Allen
- Increased capacity on NVE’s Centennial Path

Phase III - SWIP North (Midpoint to Robinson) – Permitted
- 285-mile 500 kV t-line from Ely to Twin Falls under development
- ~2100 MW transfer capacity (~1000 MW reserved by NVE)
- When completed, LS Power entitled to ~1100 MW from Midpoint to Harry Allen
- Links NVE and CAISO to PacifiCorp and Idaho Power
- Nearly construction ready and planned to be online by the end of 2025
- Being considered for approval and cost recovery by CAISO in extended 2021-22 TPP
One Nevada Transmission Line (ON Line)

**ON Line is the first connection between Nevada Power and Sierra Pacific Power**

- Joint Development Effort between LS Power and NV Energy
- Transmission Use and Capacity Exchange Agreement (TUA) executed in 2010, approved by FERC and PUCN
- Creative and unique arrangement between incumbent utility and independent developer...provided short term and long term economic benefits to ratepayers with additional upside opportunities
- Millions of dollars in benefits to NVE ratepayers since 2014 due to seasonal energy exchanges, joint dispatch, etc.
- Joint Ownership: NVE 25%, LSP 75%
- NVE responsible for asset management and O&M
- TUA capacity lease arrangement is LSP’s cost recovery mechanism
- Upon completion of SWIP-North, full ~2300 MW of transfer capacity will be available, and triggers capacity swap such that NVE gets ~1200 MW from Midpoint to Harry Allen, and LSP gets ~1100 MW from Midpoint to Harry Allen
DesertLink (Harry Allen to Eldorado)

*DesertLink is a CAISO-controlled asset that provides free reliability and capacity benefits for Nevada*

- LS Power development effort with significant partnership support from NV Energy established under the TUA and subsequent agreements. NVE roles include:
  - Interconnection provider at Harry Allen
  - O&M provider including coordination with CAISO, NERC compliance,
  - Secondary communications provider
  - Co-located series capacitor at Crystal Substation
  - Co-located wires on 18 miles of NVE owned double circuit towers through sensitive corridor
- Upon completion in 2020, NVE exercised its right to purchase 20% of the project
- Joint Ownership: NVE 20%, LSP 80%
- CAISO Transmission Access Charge is cost recovery mechanism
- Increased capacity on NVE’s Centennial Path
SWIP North (Midpoint to Robinson Summit)

SWIP North is the final link of the 576-mile SWIP buildout that will provide 2,300 MW of new firm transmission rights between Idaho, Nevada and California

- 100% LS Power ownership
- Late stage development, planned construction start in 2023
- No additional cost to NVE or Nevada ratepayers
- Upon completion in 2025, triggers the capacity swap under the TUA providing free additional capacity to NVE on ON Line plus free additional 285 miles of path from Robinson Summit to Midpoint
- Cost recovery mechanism to be determined
- Currently being evaluated as an economic and policy project in CAISO’s 2021-22 Transmission Planning Process which has been extended to specifically further consider SWIP North
  - If selected by CAISO, cost recovery would come from CAISO Transmission Access Charge similar to DesertLink
  - If not selected by CAISO, other alternatives to secure cost recovery will be considered
SWIP North - Benefits for Nevada

- 300+ construction jobs for two years
- Direct & indirect construction expenditures
- Sales/Use taxes during construction (tens of millions)
- Overall economic impact (hundreds of millions)
- Annual property taxes (millions)
- At least 1,100 MW of free capacity rights to benefit Nevada consumers
- Increased electrical import capacity in Northern Nevada
- Access to new diverse renewable resources for import into Nevada including wind and pumped storage
- New export opportunities for new Nevada renewable energy resources
- Increased benefits to Nevada from Western Energy Imbalance Market (EIM)
- Bi-directional wholesale transmission revenues to offset customer transmission charges
- Enhanced grid reliability
SWIP-North Would Enable Multi-Market Access to Diverse New Non-Solar Renewables (8,842 MW)

Source: Data taken from LGIR queues of CAISO, Idaho Power, PacifiCorp and NV Energy as of 2/13/22. Data shown is for active non-solar renewable requests including wind, geothermal, pumped storage and battery storage.
SWIP North – Development Status

Key Milestones Achieved:

- Environmental Impact Statement and BLM Record of Decision
- BLM Right-of-Way Grant
- Congressionally directed realignments for sage grouse and Minidoka NHS
- Approved Construction, Operation, and Maintenance Plan including key compliance requirements (site specific surveys, mitigation measures, best management practices)
- Conditional Notice-to-Proceed

Remaining Key Activities to be completed in 2022:

- Completion of cultural resource reports
- Minor realty actions
- PUCN UEPA Permit
- Final design/bid packages

Contractor Selection and Construction Start in 2023

Planned Commercial Operation 2025
Questions?

Mark D. Milburn
Senior Vice President
LS Power
636-532-2200
mmilburn@lspower.com