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LS Power

Southwest Intertie Project (SWIP) North

Sandeep Arora

RETI 2.0 – Transmission Technical Input Group

January 22, 2016

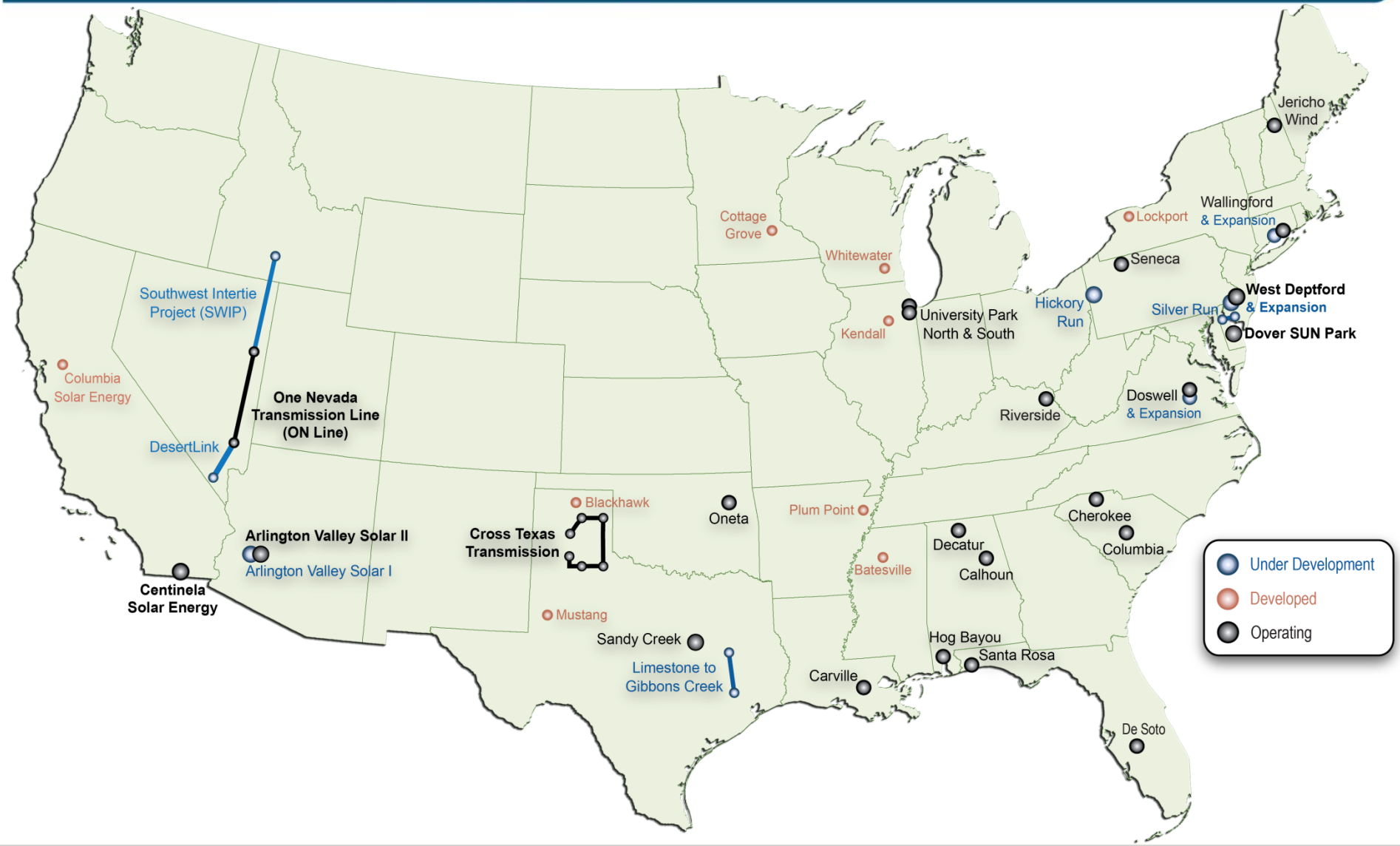
LS Power

- LS Power is a power generation and transmission group

Power Generation	Transmission	Acquisition
▪ Over 32,000 MW of development, construction, or operations experience ▪ Active development of renewable and fossil generation resources	▪ Over 470 miles of 345-500kV development, construction or operations experience ▪ Rate regulated transmission utility in the State of Texas ▪ Active development of high-voltage transmission throughout North America	▪ Over $6 billion in private equity capital dedicated to energy sector ▪ Acquired over 20,000 MW of power generation

Functional Expertise			
Project Development	Transmission	Licensing & Environmental	Project Finance & Execution
Regulatory, Legal & Compliance	Power Marketing & Energy Management	Engineering & Construction	Operations Management

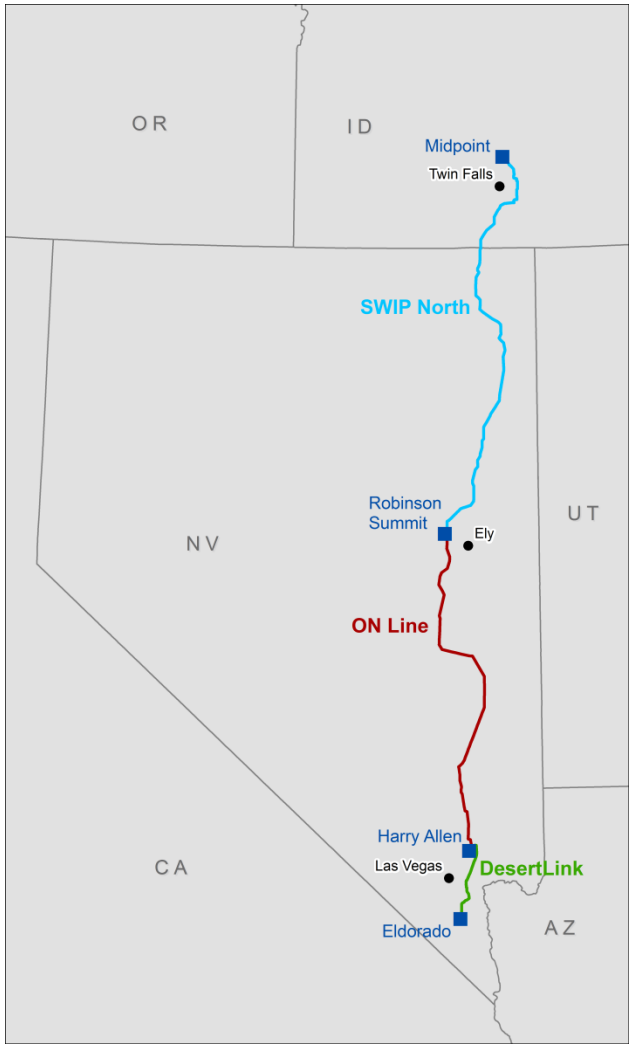
Project Portfolio



Development Philosophy

- Meet the needs of our customers
  - Safe, reliable and competitive energy
  - Renewable and fossil power generation
  - Transmission infrastructure
- Safe and protective of the environment
  - Modern designs with advanced technologies
  - Tailor projects sensitive to the locality and region
- Work with communities
  - Projects that fit with community plans and goals
  - Encourage using local subcontractors and hiring local workers

Southwest Intertie Project



- Midpoint to Robinson Summit 500 kV line (SWIP North)
  - ~284 miles
  - NEPA complete
  - BLM issued Notice to Proceed
  - 24 months Construction
  - Target In-service 2020
- Robinson Summit to Harry Allen 500 kV line (ON Line)
  - ~231 miles
  - Currently In service
  - Transmission Use and Capacity Exchange Agreement with NV Energy
- Harry Allen to Eldorado 500 kV line (DesertLink line for CAISO)
  - In service by 2020

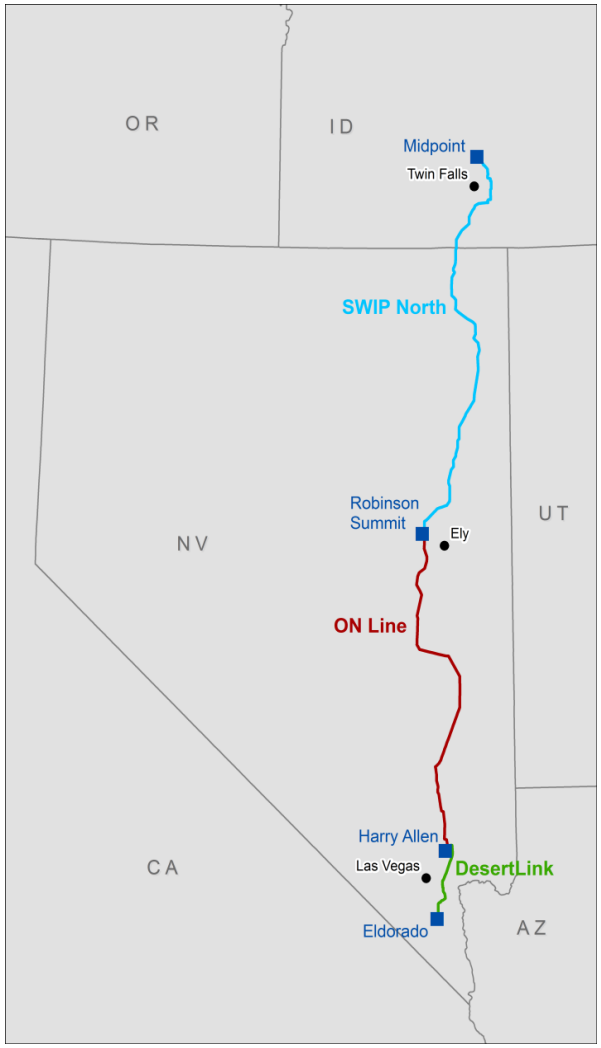
SWIP North Development Status

- Federal Approvals
  - Federal NEPA process complete
    - Project analyzed in a multi-agency Environmental Impact Statement
  - BLM Rights-of-Way secured
    - Right-of-way recognized as anchor to major land use planning corridor (West Wide Energy – EPAct 2005 Section 368 Corridor)
  - Post NEPA resource surveys performed for sensitive biological species and cultural resources
  - Unprecedented coordination with federal and state agencies for avoidance of impacts to important sage grouse habitat
    - Included Congressionally directed Right-of-Way realignment and funding of USGS led sage grouse research efforts.
  - Construction, Operation and Maintenance Plan Approved
  - Notice to Proceed with Construction Issued

SWIP North Development Status (cont.)

- State and Local Approvals
  - White Pine County Special Use Permit and Development Agreement Approved
  - Key permits to be obtained
    - Elko County Special Use Permit
    - Public Utilities Commission of Nevada UEPA Permit
- Real Estate Rights
  - Federal right-of-way grant issued
  - Private land rights substantially secured
- Preliminary Engineering Complete
- Transmission Interconnection Requests Filed
  - Midpoint Substation – Idaho Power
  - Robinson Substation – NV Energy

SWIP Capacity and Cost Allocation



Phase 1 - ON Line (231 miles Robinson to Harry Allen)

- Co-ownership NVE and LS Power subsidiary
- 100% of cost related to ON Line borne by NVE
- 100% capacity to NVE, under NVE OATT

Phase 2 – SWIP North (284 miles, Midpoint to Robinson)

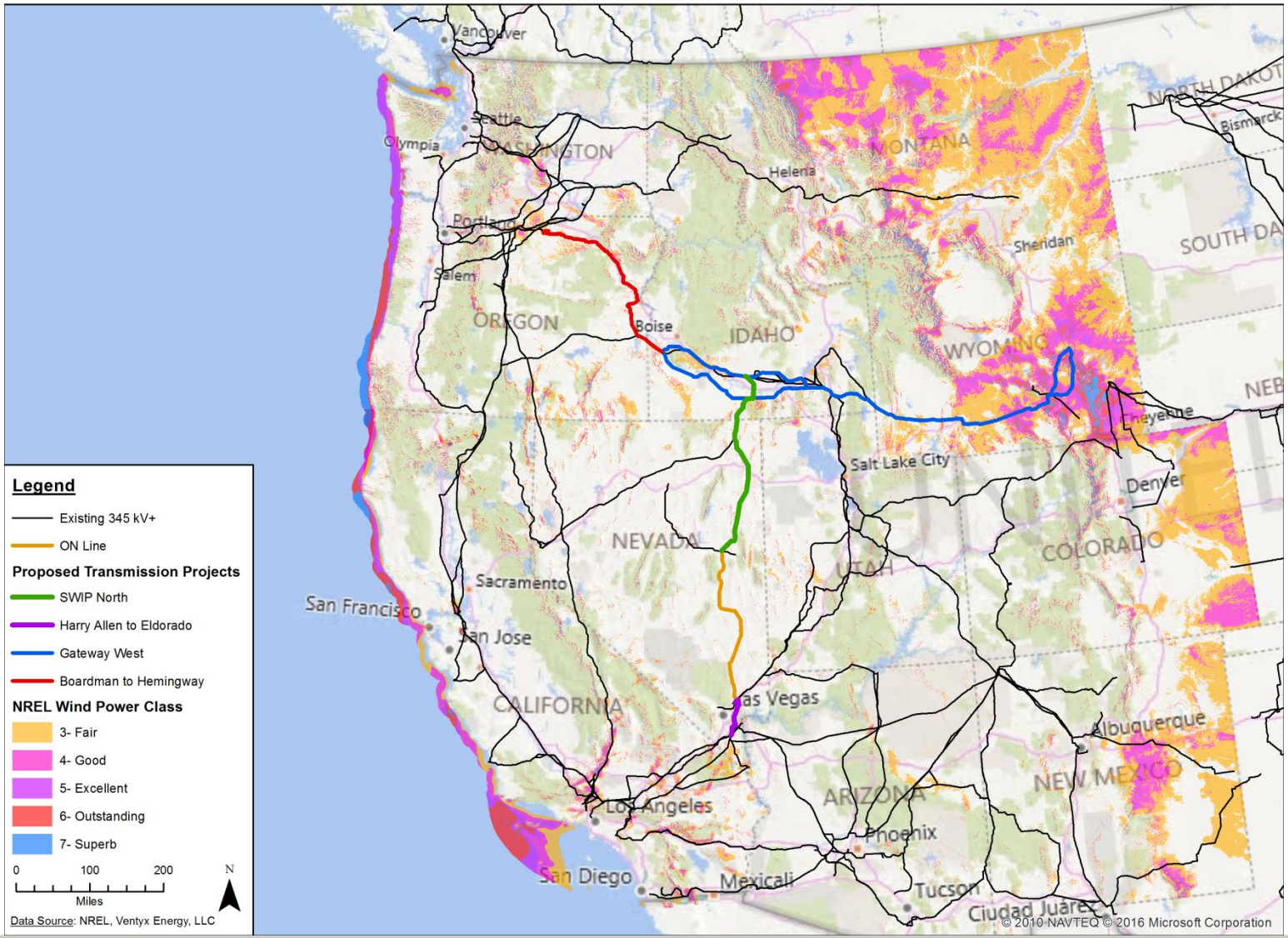
- New path from Midpoint to Robinson Summit
- Uprate of ON Line path
- 100% of cost related to SWIP North borne by LS Power
- Capacity exchange on both segments, estimated to be

	NVE Capacity (MW)	LSP Capacity (MW)
SWIP-N (Midpoint-Robinson)	700	1,000
ON Line (Robinson-Harry Allen)	1,000	1,000

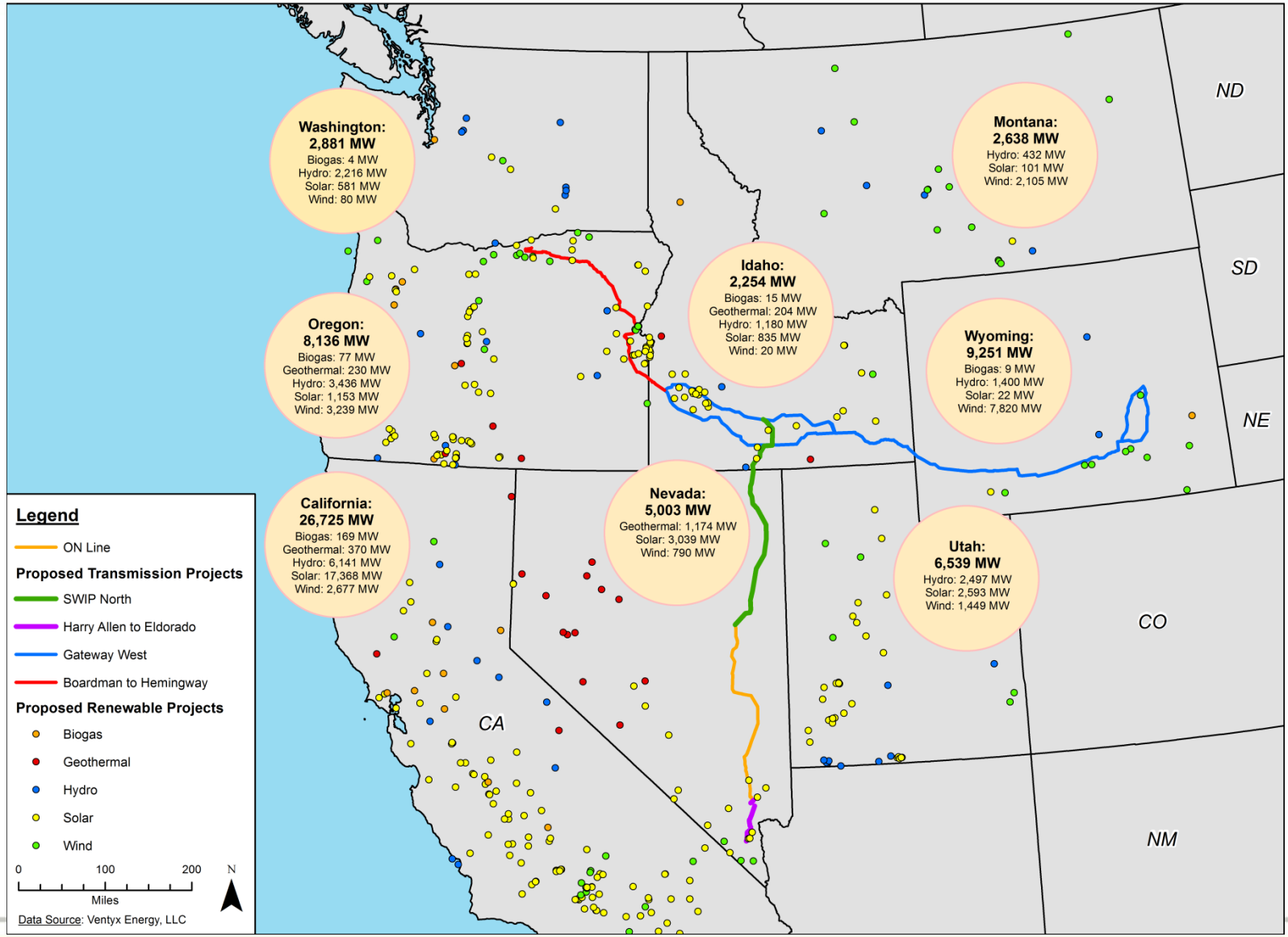
Interregional Capacity and Cost Allocation in Place

- NVE pays the cost of ON Line and receives share of capacity across both segments
- LS Power pays cost of SWIP North and receives share of capacity across both segments
- Cost/capacity sharing already in place results in much lower cost per MW for available capacity compared to alternative that does not utilize rights to ON Line

Wyoming Wind Resources



Proposed Renewables & Transmission



SWIP North Benefits

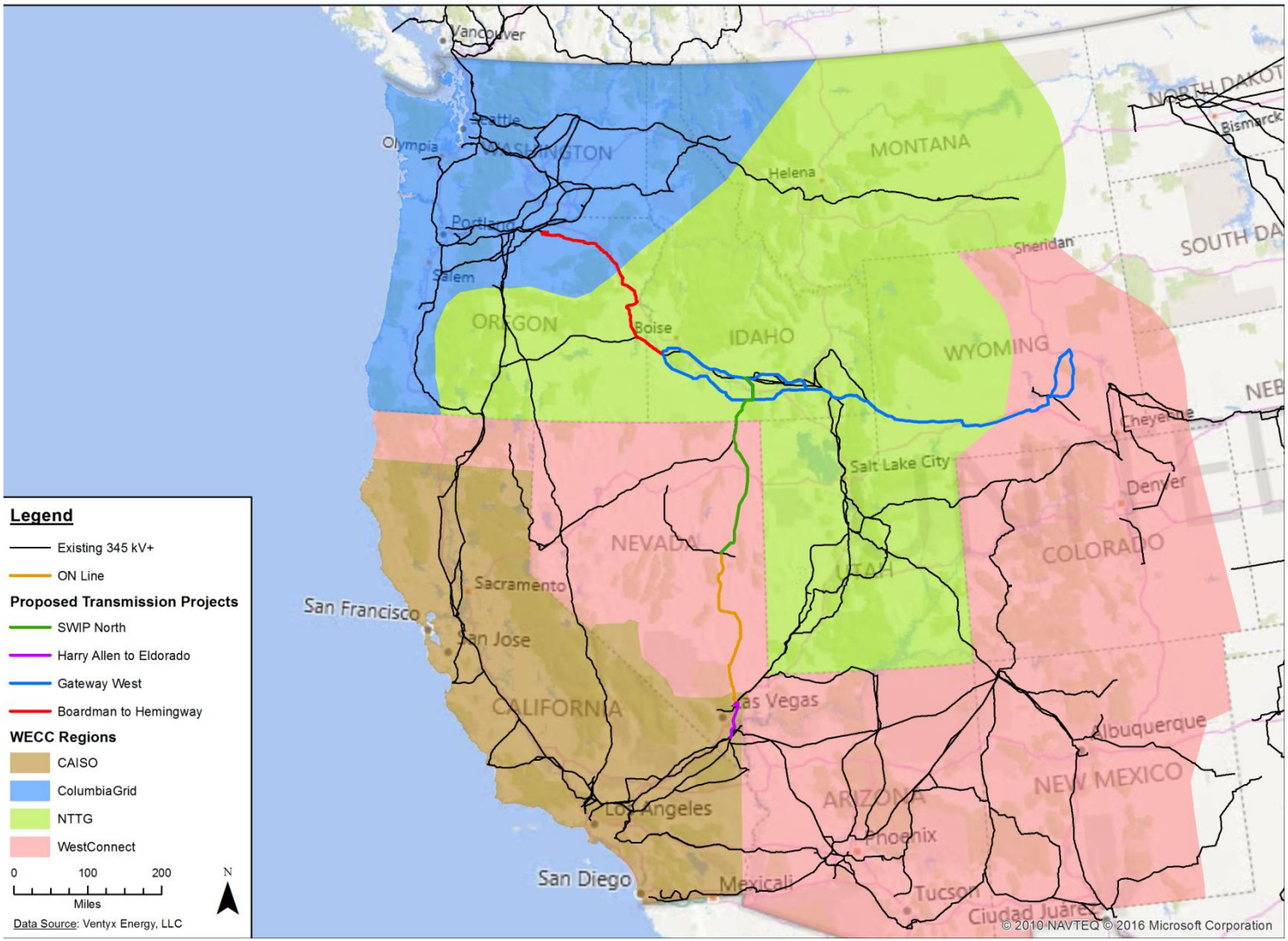
- Improves transfer capability between CAISO & other BAAs: PacifiCorp, NV Energy, Idaho Power, BPA
  - SWIP North provides up to 2100 MW of transfer capability from Midpoint (Idaho Power/PacifiCorp) to Robinson Summit (NV Energy) to Harry Allen (NV Energy/CAISO) to Eldorado (NV Energy/CAISO)
    - LS Power's share of capacity on this path is free of hurdle rate
  - SWIP North unlocks current transmission constraints in WECC and provides access to cost competitive renewables from WY, ID, OR, NV, and UT to access California markets
    - CPUC RPS Calculator v6.1 selects 4000 MW+ of WY/NM wind resources

- Economic benefits
  - Energy Savings (hourly dispatch) + Congestion reduction + Producer Benefits
  - Capacity benefits of new transmission
    - Reduced flexible capacity requirements
    - Load/resource diversity
  - Increased EIM benefits due to increased transfer capability between CAISO, PAC, NVE & APS
  - Geographical Diversity benefits - Wyoming Wind Integration Study shows diversity benefits of delivering WY wind to California load are estimated at $2.3-$9.5 billion

SWIP North Benefits (cont.)

- Policy Benefits
  - Allows more cost effective options to meet CA 50% RPS and GHG goals
  - Aids in over-generation management and reduces renewable curtailment
  - NREL's Low Carbon Grid Study (Phase II) sees SWIP N as a key transmission path that helps economically meet California's 2030 GHG goals
- Reliability Benefits
  - Creates a major WECC path paralleling the California Oregon Intertie (COI) path & Path 26
  - Addresses Northern CA bulk transmission overloads identified by CAISO during 2014/15 TPP
  - Helps prevent WECC NE/SE separation in the event of loss of COI lines
  - Provides significant incremental transfer capability between CAISO and neighboring BAAs even without PAC integration
- Enhanced Benefits for CAISO/PacifiCorp integration
  - Overcomes 776 MW transfer limit identified in E3 integration study
  - Resource procurement savings
  - Over-generation management
  - Lower peak capacity needs
  - More efficient unit commitment and dispatch

WECC Planning Regions



Region boundaries are approximate for illustrative purposes only

WECC Balancing Authorities