
Overview of the Southline Transmission Project

SWAT Oversight Committee

November 3, 2009

**Western Renewable Transmission Development
(WRTD)**

Black Forest Partners, LP

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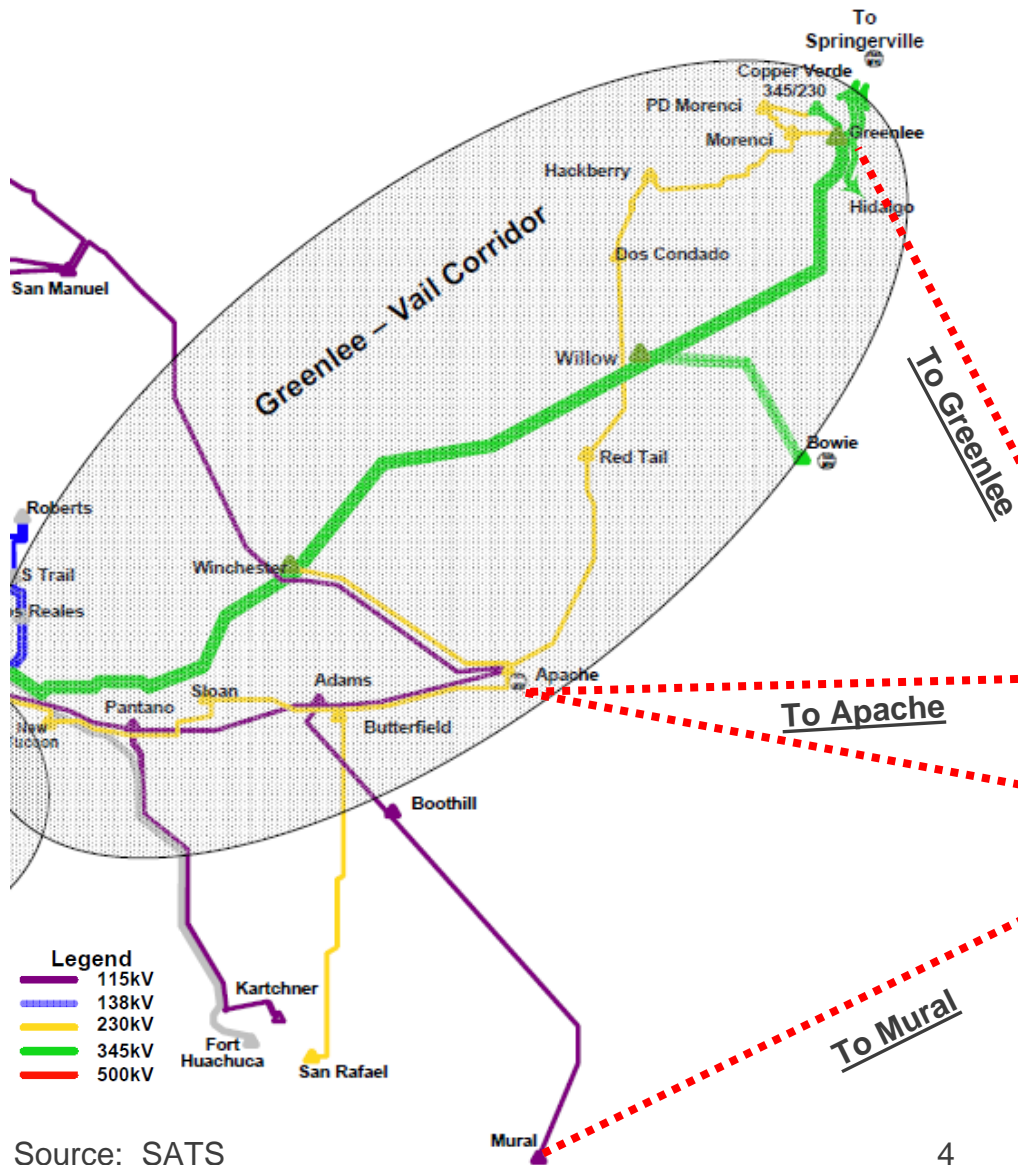
Goal: accelerate the use of renewable energy through opportunities in electricity transmission, energy storage, and efficiency

- Principals are experienced investors, entrepreneurs and operators (Google and Goldman alums) from the Southwest
- Firm has access to institutional investors, renewable developers, technology providers, and major private regional landowners
- Advisors have deep sector knowledge, regulatory expertise and extensive development experience (USE, Stoel Rives, Fontana Energy, and others)
- Formed Western Renewable Transmission Development Company (WRTD) to access renewable resources in the Desert Southwest
- The Southline Transmission Project will enable development of solar energy in a **faster, cheaper, greener** way than alternatives

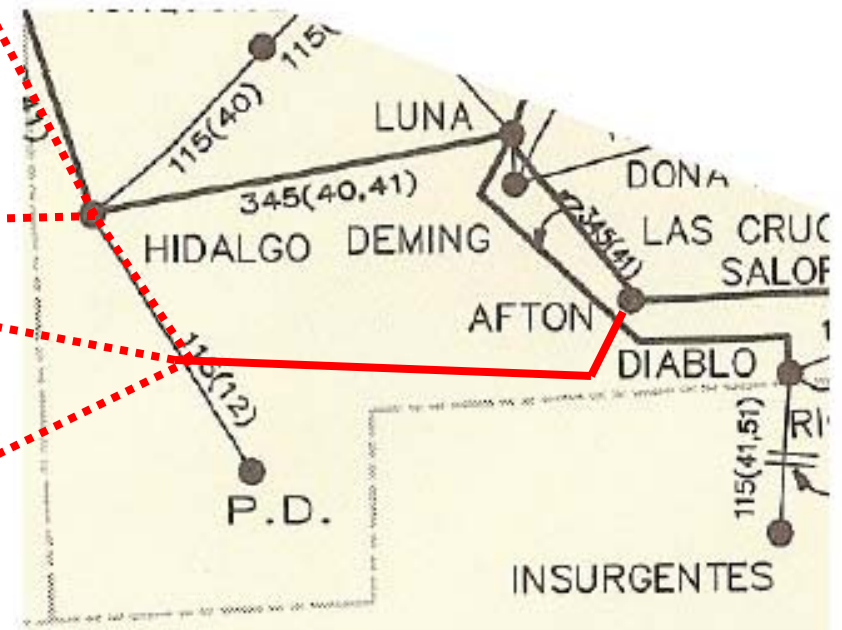
The Southline Transmission Project

Conceptual Plan:

- 250-mile 345/500 kV line connecting El Paso to Southeast Arizona
- Collect solar in New Mexico and SE Arizona
- Connect with Vail/Greenlee corridor to upgrade & counterflow along existing paths to PV area



Source: SATS



Source: WECC

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Benefits

Electrical

- Improves reliability, eases congestion, and enhances security
- Connects major load bases with a bi-directional renewables backbone

Economic

- Cost-efficient way of stimulating renewable generation in the most suitable areas
- Reduces development timelines to meet RPS goals
- Upgrade & counterflow portion decreases new build requirements

Environmental

- Recycles ROW corridors for new build
- Major visual corridors spared
- Transmission and generation construction avoids population centers

Next Steps

Technical Studies (led by USE)

- Analyze line originating Afton, terminating in Vail-Greenlee corridor
- Seek input from WestConnect and regional committees on most beneficial line for all stakeholders
- To obtain full benefit, we desire input on further west EHV possibilities ideally to PV area

Siting

- Finalize BLM ROW application & begin permitting work
- Continue coordination with state and private landowners
- Combine Generation and Transmission siting analysis

Team--Principals

Douglas S. Patterson, CFA

Doug is the founder of Black Forest Partners, a private investment firm dedicated to finding clean energy solutions in the transmission, storage and efficiency sectors. Black Forest is sponsoring WRTD which is developing and investing in renewable energy infrastructure projects.

Prior to Black Forest, Doug spent eleven years at Goldman Sachs, where he most recently was a Managing Director in the Equities Division. Doug founded the Equity Investments business, a principal investing group that managed \$2 billion in assets.

Doug is also an adviser to The Rock Creek Group, an alternative investment firm in Washington, DC founded by a team from the World Bank.

Doug has developed deep relationships with many institutional investors including some of the largest hedge funds, private equity, venture capital and pension plans.

Doug grew up in Colorado and graduated from Dartmouth College in 1992 *cum laude*.

Team--Principals

William M. Kipp

Bill worked with Google from 2003 to 2009 and joined Black Forest Partners in May to develop WRTD and its renewable energy projects.

At Google, Bill was most recently a Vertical Head where he was responsible for approximately \$500 million in annual revenue. Bill has close ties to the Google alumnus network and Google's DotOrg initiatives dealing with affordable renewable energy.

Previously, Bill founded and served as Head of Consumer Products Operations for Europe, the Middle East and Africa (EMEA), where he helped launch twenty-five Google products (including Earth, Maps, Transit, Gmail and Apps) into more than a dozen markets in less than two years.

Prior to Google, Bill was on the founding team of a San Francisco-based technology and healthcare investment bank, Seven Hills Partners, where he handled the firm's initial transactions and helped manage investments in Seven Hills' in-house venture portfolio.

Bill was raised near Lordsburg, New Mexico. He was graduated from Dartmouth College *cum laude* with certification in Environmental Studies in 1992. He received his MBA from the Stanford Graduate School of Business in 1999.

Team--Advisors

Scott Gardner

Scott is a Managing Director at US Renewables Group in Los Angeles and a member of WRTD's advisory board. He has 15 years of business development, project development and investing experience in the energy sector. Over his career, Scott has worked on renewable energy projects in biomass, solar thermal, wind, geothermal, municipal solid waste to energy, landfill gas and hydroelectric.

Prior to USRG, Scott was a Vice President with TRC Companies, Inc., advising major energy companies on new business opportunities. Prior to TRC, he served as Vice President of Business Development for AES Corporation's (NYSE: AES) North America West group. In his 12-year career with AES, Scott held roles in business development, project development, and business restructuring. At AES, Scott served on the Chairman's restructuring task force in 2003, led the company's acquisition of Thermo Ecotek Corporation in 2001, and from 1998 - 2002, served as Project Director of natural gas combined cycle developments in South San Francisco, Denver, and Calgary, Alberta.

Scott is active in the management of Niagara Generation, LLC and serves on the boards of Novo Development Company, LLC and General Compression, Inc. Scott holds an MBA in Finance from the Kellogg School of Management at Northwestern University and an AB with honors in Engineering and Environmental Studies from Dartmouth College.

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