



Press Release

TRES AMIGAS APPOINTS FRANK BARBERA AS DIRECTOR OF RELIABILITY ASSURANCE

Plans for High-Tech National Interconnection Project Developing Rapidly

SANTA FE, N.M. – April 1, 2010 – Tres Amigas, LLC today announced the appointment of Mr. Frank Barbera as the company's Director of Reliability Assurance. Mr. Barbera, 60, is an electric utility industry veteran with over three decades of hands-on management experience in utility regulatory and business strategies, engineering, power resources (generation, transmission, distribution, and bulk power trading), system operations and system planning, and IT systems. As Director of Reliability Assurance, Mr. Barbera's responsibilities will include serving as a liaison with U.S. Interconnections and other constituents, and leading the engineering and operations for the Tres Amigas SuperStation.

Mr. Barbera is well known for his tireless efforts promoting transmission reliability and facilitating access to affordable and reliable energy resources, including most recently renewable energy resources. His work with the Control Area Networking and Discussion Organization (CANDO), the Public Power Initiative of the West (PPIW), the Federal Energy Regulatory Commission, the Western Electric Coordinating Council, the Western Governor's Initiative and the California Independent System Operator have been key to addressing the issue of diminishing transmission capacity in California and the western United States.

According to Phillip G. Harris, the Chief Executive Officer of Tres Amigas, “Mr. Barbera’s engineering expertise and decades of experience will be invaluable as we work through the various steps to bring Tres Amigas to market. As one of our key hires, we wanted to ensure that all design elements were in compliance with each of the region's standards. Frank's leadership and oversight of this function will be focused, and he will be our key contact so that these matters can be timely and appropriately addressed and communicated to all affected parties and agencies.”

At PPIW, Mr. Barbera is credited with leading the effort to create westTTrans.net, a web-based regional transmission marketplace. WestTTrans.net was the first Super OASIS (Open Access Same Time Information System) to serve the Western United States. The website enables transmission customers to acquire transmission capacity at one site from multiple providers. Among Mr. Barbera’s many other accomplishments are major and highly successful Substation Automation projects, Telecommunications fiber and microwave communications projects as well as management of several new Energy Control Center installations. Mr. Barbera has also been a representative on the Geothermal Task Force and the Transmission Task Force of the Western Governors Association’s Clean and Diversified Energy Advisory Committee (CDEAC). Mr. Barbera earned his Bachelor of Science degree in Electrical Engineering (BSEE) at New York University in 1975, and shortly thereafter began his career with Orange and Rockland Utilities in New York.

“I share the goal of all my new associates at Tres Amigas, which is to ensure the most reliable electric service to customers at the lowest cost possible, and we will accomplish that by implementing the path breaking ‘SuperStation’ concept pioneered by the founders of Tres Amigas,” said Mr. Barbera. “As a part of this team, I plan to continue to vigorously promote renewable power, as I have in my past positions, particularly wind resources, geothermal, and photovoltaics which all have great near-term potential to augment our Nation’s existing electricity supplies.” To these ends, Mr. Barbera will be a featured commentator at several upcoming regional meetings in New Mexico and Texas, including the Wind and Transmission

Summit hosted by Class 4 Winds on April 29 in Amarillo, Texas. Mr. Barbera will update participants on key aspects of the planning of the Tres Amigas SuperStation.

About the Tres Amigas, LLC Project

The Tres Amigas SuperStation will be a renewable energy market hub employing Superconductor Electricity Pipelines. The SuperStation will be capable of controlling, transferring and balancing many gigawatts of renewable power between the three main Interconnections in the U.S. (the Eastern Interconnection, the Western Interconnection and the Texas Interconnection also known as the Electric Reliability Council of Texas, or ERCOT). Similar to highway rotaries used for traffic flow control, multiple power transmission lines from each of the Interconnections will feed power into and out of the Tres Amigas SuperStation through multiple AC/DC converters, each connected by DC superconductor cables. Tres Amigas, which will be a balancing authority, will help ensure the efficient and reliable flow of power from multiple renewable generation sources in all three power grids to customers across a wide area of the U.S., Canada and Mexico.

The transmission inter-tie technology to be employed at Tres Amigas is a vast improvement over the technology used at most of the existing AC/DC ties in the United States. In combination with Superconducting Transmission Cables, Tres Amigas will deploy state-of-the-art Voltage Source Converters (VSC) based upon self-commutated, insulated gate bipolar transistors (IGBT). This technology changes the AC wave form into a DC circuit with conventional DC voltage and current characteristics and then, with precise control, back to an AC wave form. Unlike legacy converters, modern VSC converters have a control process that rapidly and accurately defines the direction and magnitude of the AC power at each node within the DC network.

For power transmission, the VSC technology enables the conversion of power from multiple synchronous grids to a common DC network and reversion back to the synchronous

networks while each operates within its own synchronized electrical state and with its own reliability protocols.

The technology to be deployed at Tres Amigas provides critical benefits to the surrounding electrical system. In particular:

- VSC can rapidly control both active and reactive power independently.
- The reactive power will be controlled separately at each synchronous interconnection independent of the voltage levels on the other synchronized systems.
- By using VSC, Tres Amigas will not place restrictions on each AC network's minimum short-circuit capacity.
- The self-commutation feature of VSC technology will permit all three phase voltages to be synthesized.
- Inasmuch as VSC converters themselves have no reactive demand, Tres Amigas will be able to control reactive power in the interconnecting separate AC systems.
- The real-time dynamic support of each AC system will improve stability, transfer capability and most likely reduce losses on each connecting AC system.
- The VSC will provide black start capability to each interconnection separately. Tres Amigas will appear, electrically, as a large generator to each interconnection. The value of this to the long distance AC transmission lines planned for this region is significant because the advanced technology deployed at Tres Amigas has the potential to solve many voltage, reactive support, stability, and dynamic control problems that long distance AC lines connected to large intermittent generation resources create, and is likely to reduce losses on these planned large AC transmission lines as well.

In short, Tres Amigas is advancing a technology solution that will *unite* the Nation's electric grid. Utilizing the latest advances in power grid technology, Tres Amigas plans to provide the *first* common interconnection of America's three power grids to help the country achieve its renewable energy goals and facilitate the smooth, reliable and efficient transfer of green power

from region to region. Additional technical details and project plans are available at www.tresamigasllc.com.

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