

EXHIBIT J

EXHIBIT J – SPECIAL FACTORS

As stated in Exhibit J of Exhibit 1 to the Rules of Practice and Procedure Before Power Plant and Transmission Line Siting Committee:

“Describe any special factors not previously covered herein, which Applicant believes to be relevant to an informed decision on its application.”

The following sub-exhibits include information related to special factors Applicants believe relevant to an informed decision on the Application:

Exhibit J-1	Design Philosophy
Exhibit J-2	Public Outreach
Exhibit J-2(a)	Nogales Interconnection Project July 2017 FAQs
Exhibit J-2(b)	Nogales Interconnection Project June 2017 Fact Sheet
Exhibit J-2(c)	Notice Flyer for June 2017 Open House Meetings
Exhibit J-2(d)	Mailing List for Notice of June 2017 Open House Meetings
Exhibit J-2(e)	E-mail List for Notice of June 2017 Open House Meetings
Exhibit J-2(f)	Publication and Affidavits of Publication for Notice of June 2017 Open House Meetings
Exhibit J-2(g)	June 2017 Open House Meetings Newspaper Article
Exhibit J-2(h)	June 2017 Open House Meetings Materials and Posters
Exhibit J-2(i)	June 2017 Open House Meeting Sign-In Sheets and Completed Comment Cards
Exhibit J-2(j)	Nogales Interconnection Project Materials Presented at September 2015 Agency and NGO Meeting
Exhibit J-2(k)	Nogales Interconnection Project February 2015 Pre-NEPA Public Meeting Materials
Exhibit J-3	March 8, 2017 Memorandum of Understanding
Exhibit J-4	2017 System Impact Study

As summarized herein, Applicants have minimized environmental impacts through their shared design philosophy (Exhibit J-1), and engaged in extensive public outreach and consultation including formal and informal efforts to involve federal, state, and local agencies; private and public organizations; tribes; and stakeholders (Exhibits J-2 through J-2(k)).

The CEC Transmission Facilities support the March 8, 2017 Memorandum of Understanding (“MOU”) between the North American Electric Reliability Corporation, the Comisión Reguladora de Energía (“CRE”) and the Centro Nacional de Control de Energía (“CENACE”). That MOU recognizes the established and growing interconnections between the United States and Mexico and roles of each party in support of continued reliability, and establishes a collaborative mechanism for strengthening grid reliability (Exhibit J-3). The System Impact Study illustrates that UNSE system reliability will be increased by the Nogales Interconnection Project, among other potential benefits (Exhibit J-4).

Pursuant to Footnote 1 of Exhibit 1 to the Rules of Practice and Procedure Before Power Plant and Line Siting Committee, Applicants refer the Committee to the following studies for additional analysis of design philosophy for the Nogales Interconnection Project:

- Exhibit B-1(a): PP EA (Section 2.1)
- Exhibit B-1(b): DOE Draft EA (Sections 2.5.1, 4.1.2)

Applicants further refer the Committee to the following studies for additional analysis of public outreach for the Nogales Interconnection Project:

- Exhibit B-1(a): PP EA (Sections 1.3, 6)
- Exhibit B-1(b): DOE Draft EA (Sections 1.4, 1.6)

Exhibit J-1 – Design Philosophy

To minimize land and resource impacts, Applicants selected alternative routes for both the Nogales Interconnection Project and the Nogales Tap to Kantor Upgrade Project by evaluating existing infrastructure and designing corridors with minimal impacts. This approach focused on:

- working within or next to existing corridors to the extent practical;
- working with landowners and stakeholders to avoid or minimize impacts to sensitive areas;
- integrating information from existing federal and state energy and land use planning efforts, such as from the U.S. Forest Service and Arizona Department of Transportation;
- developing responsible routes and route alternatives informed by:
 - public input,
 - industry experience,
 - local utility companies,
 - federal, state, and local agencies; and
- integrating information from the route previously approved by the Arizona Line Siting Committee in 2001 for the Sahuarita-Nogales Transmission Line Project (ACC Docket Number L-00000C-01-0111-00000).

Because of that design philosophy, approximately 80%¹ of the Nogales Interconnection Project preferred route and 100% of the Nogales Tap to Kantor Upgrade preferred route parallel existing linear features.

¹ This estimate includes public roads and other paralleling opportunities such as the Nogales Wash and dirt roads. If the Nogales Wash or dirt roads were excluded, 22% of the Nogales Interconnection Project Preferred Route parallels an existing transportation or utility corridor.

Exhibit J-2 – Public Outreach

I. SUMMARY

Applicants are committed to effective public engagement through direct outreach, as well as federal, state, and local processes, to communicate information regarding the CEC Transmission Facilities. This exhibit introduces and explains the public outreach materials produced by Applicants and included as Exhibits J-2(a) through J-2(k).

A. Online Public Outreach

Information about the Nogales Interconnection Project is available at www.huntpower.com/nogalesdctie.aspx, while information about the Nogales Tap to Kantor Upgrade Project is available at <https://www.uesaz.com/nogales-tap-to-kantor-upgrade/>. These websites have been and will continue to be updated regularly with information on how the public can become involved as both projects progress through the permitting process. See Exhibits J-2(a) and J-2(b) for examples of FAQs and a fact sheet posted to the Nogales Interconnection website in July 2017.

B. June 2017 Open House Meetings

Applicants hosted open house meetings in June 2017 to share information and solicit input about the Nogales Interconnection Project and the Nogales Tap to Kantor Upgrade Project. Notice of these meetings was provided to the public and other interested parties, via U.S. Mail, email, and newspaper postings. A public notice flyer was mailed to 2,053 residences and businesses within one-half mile of the projects. Of these 2,053 mailings, 205 flyers were returned as undeliverable. The public notice flyer and the names of residents and businesses included on the notice mailing list are provided in Exhibits J-2(c) and J-2(d). The flyer was also emailed to additional interested parties. A list of individuals noticed via email is provided in Exhibit J-2(e). In addition, public notices were published in the Sahuarita Sun on June 14, 2017, the Nogales International on June 16, 2017, and the Green Valley News on June 18, 2017. A copy of the publication and affidavits of publication for these publications are provided in Exhibit J-2(f). These meetings were further publicized in a June 20, 2017 Nogales International newspaper article, provided in Exhibit J-2(g).

The meetings were held on Wednesday, June 21, 2017, from 5-8 p.m. at the Sahuarita High School Auditorium in Sahuarita and on Thursday, June 22, 2017, from 5-8 p.m. at the Holiday Inn Express in Nogales. Materials provided at and posters displayed at these meetings are included in Exhibit J-2(h). Applicants solicited comments and input before, during, and after the June 2017 open house meetings.

Prior to the meetings, an interested landowner contacted Applicants to request a map showing alternative routes in relation to his property, which Applicants provided.

Copies of meeting sign in sheets and comment cards are located in Exhibit J-2(i). At the Sahuarita open house, five individuals signed in as attendees, three of whom submitted comment cards. Two landowners with property adjacent to Facilities indicated their strong support for Applicants' Nogales Tap to Kantor Upgrade Project preferred route, citing improved views, more effective land-use, and increased safety. One landowner requested that Applicants contact her regarding pole placement based on her concern of potential adverse changes to her view. At the Nogales open house, eight individuals signed in as attendees, one of whom submitted a comment card. This landowner expressed support for the CEC Transmission Facilities in general, citing the benefit of redundancy to the existing 138-kV line serving Nogales. The landowner also indicated that Applicants' Nogales Interconnection Project preferred route would be the most desirable, followed by Alternative Routes 2 and 4, and stated that Alternative 1 would be the least desirable routing option.

Following the meetings, Applicants received comments from two landowners. One landowner inquired whether Applicants would construct Nogales Tap to Kantor Upgrade near her house; when informed that both poles and wire would be replaced near her property either in an existing alignment or 30 feet to the west of the existing alignment, the landowner indicated that she was fine with these options and offered Applicants access to the right-of-way through her property. A second landowner inquired whether Applicants would be adding a second line or replacing existing poles and wires; when informed that the poles and wires would be replaced and the old poles would be removed, the landowner indicated that he was fine with this plan.

C. 2015 Public Outreach

As described in Exhibit B-1, past public outreach for the Nogales Interconnection Project also included a February 2015 open house meeting in Nogales, a February 2015 meeting with government agencies and non-governmental organizations ("NGO"), and

a September 2015 agency and NGO meeting and site visit. Materials related to these meetings are included as Exhibits J-2(j) and J-2(k).

Exhibit J-2(a) – Nogales Interconnection Project July 2017 FAQs

ABOUT THE PROJECT

What is the Nogales Interconnection Project?

The Nogales Interconnection Project (Project) is a proposed 300 megawatt (MW) direct current (DC) interconnection (commonly known as a DC Tie) and associated electric facilities, which will allow for an asynchronous interconnection between the electric grid in southern Arizona and the electric grid in the northwest region of Mexico.

The Project will be constructed in two phases. The first phase of the Project will include the components listed below and a converter capacity of 150 MW with a planned in-service date of mid-2019. The second phase, to be constructed at a time that has not yet been determined, will expand the DC Tie capacity to 300 MW.

The Project will consist of the following components:

1. A new, approximately 11-acre Gateway Substation where the DC Tie and other substation facilities will be located.
2. A new, approximately 3-mile, 138-kilovolt (kV) alternating current (AC) transmission line between the existing UNS Electric, Inc. (UNSE) Valencia Substation and the new Gateway Substation.
3. A new, approximately 2-mile, 230-kV AC transmission line extending south from the new Gateway Substation to the proposed international border crossing.

What purpose does the Nogales Interconnection Project serve?

The purpose of the Project is to provide an asynchronous interconnection in the vicinity of Nogales, Arizona, that will enable bi-directional electricity transfer capability between the Western Electricity Coordinating Council (WECC) and Mexico in order to facilitate cross-border commercial electricity transactions and to enhance transmission grid reliability.

What are the Project benefits?

The Project will provide several important benefits:

- Enabling cost savings through firm and non-firm energy transactions and diversity of peak demand patterns on both sides of the border.
- Supporting reliability by providing bi-directional power flow and voltage support to each side of the border.
- Creating emergency assistance options for the electrical systems of both the U.S. and Mexico.
- Supporting economic growth by improving the electric grid and region's ability to meet future electric capacity requirements.

Why does the Project include a DC Tie?

The Arizonan and Sonoran grids cannot be connected directly through a synchronous connection because their frequencies are not in phase.

With a DC Tie, AC current from one grid would be converted into DC current, then converted back to AC with characteristics to match the recipient grid. This process is bi-directional, meaning it allows power to flow in either direction, but it does so in a way that keeps the two grids completely separate, effectively acting as a "firewall."

What is the capacity of the Nogales Interconnection Project?

As proposed, the Nogales Interconnection Project will be designed for a maximum power transfer capability of 300 MW. The capacity of the Project is determined by the size of the DC converter unit. The existing Gateway site is over 30 acres and is large enough to support the addition of a second 150 MW DC Tie without increasing the existing Gateway site footprint. Any subsequent expansion would occur only if circumstances warrant after obtaining the appropriate regulatory approvals.

Can the Project be used to import and export power from and to Mexico?

Yes, the Project will allow for both the import of power from Mexico and the export of power to Mexico. Any exports to Mexico will not occur under circumstances that would adversely affect the reliability of the U.S. electric system.

ABOUT THE PROJECT PARTICIPANTS

Who is developing the Nogales Interconnection Project?

The Nogales Interconnection Project is being jointly developed by Nogales Transmission L.L.C. and MEH Equities Management Company (MEH).

Nogales Transmission L.L.C is an indirect subsidiary of Hunt Power, L.P., which is an indirect subsidiary of Hunt Consolidated, Inc. Hunt Power develops and acquires electric transmission and distribution assets—both unregulated and regulated—either through acquisition of existing assets or through new incremental construction projects. Hunt Consolidated is a large, privately-owned group of companies, based in Dallas, Texas, and managed by the Ray L. Hunt family, that engages in oil and gas exploration, refining, power, real estate, ranching, and private equity investments.

MEH is an investment holding company and a subsidiary of Arizona-based UNS Energy Corporation, which is a subsidiary of Fortis, Inc. Fortis, a leader in the North American regulated electric and gas utility industry, owns utilities that serve more than 3 million customers across Canada and in the United States and the Caribbean.

How will the Project tie into the United States and Mexico?

In the U.S., the Project will interconnect with the UNSE system, which is interconnected with the Western Electric Coordinating Council grid serving the western United States. UNSE is a subsidiary of UniSource Energy Services (UES), which provides electric service to more than 95,000 customers in Santa Cruz and Mohave Counties.

In Mexico, the Project will interconnect with the Red Nacional de Transmisión (RNT). The RNT is the state owned transmission grid operated by the Centro Nacional de Control de Energía (CENACE). CENACE is a governmental organization with operational control of Mexico's RNT, acting as the independent system operator. CENACE makes decisions on economic dispatch of existing generation facilities, controls power imports and exports, manages the wholesale electricity market, and ensures open access to the RNT.

What coordination has taken place to interconnect the Project?

In the U.S., the Project filed an interconnection request with UNSE on April 28, 2016, and executed a System Impact Study Agreement. UNSE has performed studies to ensure system reliability will not be adversely affected and a final report is being drafted.

In Mexico, extensive planning and coordination efforts have taken place with several Mexican entities involved with the RNT. On May 31, 2016, the Mexican Secretary of Energy published the "PRODESEN", the Development Program which contains plans for transmission and distribution lines projects in Mexico, which included facilities necessary to interconnect the Nogales Interconnection Project with the Nogales Aeropuerto substation in Mexico.

PROJECT DEVELOPMENT

How will the Project be permitted?

The Project will undergo multiple comprehensive permitting and approval processes, including the following:

Federal Level

As the Project will cross the U.S.-Mexico border, the Project has submitted a Presidential Permit Application for the cross-border electrical interconnection. Before a Presidential Permit may be issued for an electric transmission line, the U.S. Department of Energy (DOE) must determine that the Project is in the U.S. national interest. In making that determination, the DOE evaluates the impacts of the proposed federal action and reasonable alternatives pursuant to the National Environmental Policy Act of 1969, determines the Project's impact on electric reliability of the U.S. electric power supply system, and any other factors that the DOE may also consider relevant to the public interest.

The Presidential Permit Application filed by Nogales Transmission, L.L.C. with the DOE can be reviewed at: <http://energy.gov/oe/downloads/application-presidential-permit-oe-docket-no-pp-420-nogales-transmission-llc>

State Level

The Project requires a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission (ACC) for the siting of the transmission lines. The Project Team anticipates submitting a CEC application in the summer of 2017.

Local Level

At the local level, it is anticipated that the Project will require a Conditional Use Permit from the City of Nogales for the Gateway Substation, and that local right-of-way use, floodplain use, and dust abatement permits will be required.

Are there other actions required to facilitate the Project?

Yes. Based on engineering studies initiated by the Project's filing of an interconnection request with UNSE, upgrades to a portion of UNSE's existing line serving the Nogales area are required to facilitate the Project. These upgrades are referred to as the Nogales Tap to Kantor Upgrade project and include replacement of the existing poles and conductor for an approximately 27.5-mile segment between a point just south of Western Area Power Administration's existing Nogales Tap station and the existing UNSE Kantor Substation. The Nogales Tap to Kantor Upgrade project will require a CEC from the ACC before it can be constructed. The CEC Application to be filed with the ACC will include both the Nogales Interconnection Project and the Nogales Tap to Kantor Upgrade project.

How were the Project route alternatives developed?

The process of selecting the Project's alternative routes was guided by an approach to minimize impacts by evaluating existing infrastructure and seeking corridors with minimal impacts. This approach focused on:

- Working within or next to existing corridors to the extent practical.
- Working with landowners and stakeholders to avoid or minimize impacts to sensitive areas.
- Integrating information from existing federal and state energy and land use planning efforts, such as from the U.S. Forest Service and Arizona Department of Transportation.
- Integrating information from the route previously approved by the Arizona Line Siting Committee in 2001 for the Sahuarita-Nogales Transmission Line Project (ACC Docket Number L-00000C-01-0111-00000).

A Project preferred route was identified during the National Environmental Policy Act (NEPA) analysis process and is presented in the DOE Draft Environmental Assessment (EA). The Final Preferred Route will be subject to approval by the DOE pursuant to the request for the Presidential Permit and by the ACC pursuant to a request for a CEC.

What outreach efforts will be made by the Project?

The Nogales Interconnection Project Team is committed to effective public engagement through direct outreach, as well as federal, state, and local processes to communicate Project information, along with a Project website.

Information about the Nogales Interconnection Project is available at www.huntpower.com/nogalesdctie.aspx. The website will be updated regularly with information on how the public can get involved as the Project progresses through the permitting process.

Past public outreach has included:

- February 2015 Open House Meeting in Nogales.
- February 2015 Meeting with Government Agencies and Non-Governmental Organizations (NGO).
- September 2015 Agency and NGO Meeting and Site Visit.
- June 2017 Open House Meeting in Nogales.

Upcoming opportunities for public involvement include:

- Providing comments on the Draft Environmental Assessment published by the Department of Energy (comment period open from July 5, 2017 to August 3, 2017).
- Providing comments during the Arizona CEC process. Application expected to be filed in summer 2017 with the process running through late 2017.

PROJECT ECONOMICS

What is the estimated cost of the Project?

Current cost estimates for the Project are approximately \$80 million. These cost estimates are subject to change based on the final Project design, regulatory approvals, and routing. Costs estimates for the second phase of the HVDC tie have not yet been determined.

Will this Project have an impact on costs paid by UES electric customers?

UES customers should benefit from reduced costs as a result of the Project. The Project will result in increased usage of the UES transmission system thereby reducing the unit price of transmission service on the company's system. Today, UES electric customers pay for all transmission costs. With the Project in service, a portion of UES transmission service costs will be allocated to new wholesale customers, reducing the percentage of these costs that are paid by UES' electric customers.

Additionally, UES electric customers are charged for generation costs through the Power Purchase and Fuel Charges. If UES incurs lower generation costs as a result of an economic energy transaction with Mexico, the charges borne by customers will decrease.

FOR MORE INFORMATION

www.huntpower.com/nogalesdctie.aspx

1-800-240-5718

ACERCA DEL PROYECTO

¿Qué es el Proyecto de Interconexión Nogales?

El Proyecto de Interconexión Nogales (Proyecto) es un proyecto de interconexión de 300 megavatios (MW) de corriente directa (DC), también conocido como un enlace DC, y otras instalaciones eléctricas, las cuales permitirán una interconexión asíncrona entre la red eléctrica del Sur de Arizona y la red eléctrica en la región noroeste de México.

El Proyecto será construido en dos etapas. La primera etapa del Proyecto incluirá los componentes que se presentan a continuación y la capacidad del convertidor será de 150 MW, el cual será puesto en servicio a mediados de 2019. La segunda etapa, cuya fecha de construcción no ha sido establecida, expandirá la capacidad del enlace DC a 300 MW.

El Proyecto constará de los siguientes componentes:

1. Una nueva subestación eléctrica Gateway de 11 acres en donde se ubicarán el enlace DC y otras instalaciones de la subestación.
2. Una nueva línea de transmisión de aproximadamente 3 millas de 138- kilovoltios (kV) de corriente alterna (AC) entre la existente subestación eléctrica Valencia, propiedad de UNS Electric, Inc. (UNSE) y la nueva subestación Gateway.
3. Una nueva línea de transmisión de aproximadamente 2 millas de 230-kV de corriente alterna que se extenderá de la nueva subestación Gateway al punto de cruce en la frontera internacional.

¿Cuál es el propósito del Proyecto de Interconexión Nogales?

El propósito del Proyecto es proveer una interconexión asíncrona en el área de Nogales, Arizona la cual habilitará la capacidad de transferencia bi-direccional de electricidad entre el Western Electricity Coordinating Council (WECC) y México con el objetivo de facilitar transacciones comerciales internacionales y mejorar la confiabilidad de la red de transmisión.

¿Cuáles son los beneficios del Proyecto?

El Proyecto proveerá importantes beneficios:

- Permitirá ahorro en costos a través de transacciones de energía y diversidad en patrones de demanda máxima en ambos lados de la frontera.
- Apoyará la confiabilidad al proveer flujo bi-direccional de energía y soporte de voltaje en ambos lados de la frontera.
- Creará asistencia de emergencia para los sistemas eléctricos para Estados Unidos y México.
- Apoyará el crecimiento económico al mejorar el sistema eléctrico y la capacidad de la región para satisfacer los futuros requerimientos de capacidad eléctrica.

¿Por qué el Proyecto incluye un enlace DC?

Las redes eléctricas en Arizona y Sonora no pueden ser conectadas directamente con una conexión síncrona dado que las frecuencias están en fase.

Con un enlace DC, corriente alterna proveniente de una red será convertida en corriente directa, para posteriormente ser convertida de nuevo a corriente alterna con características que estén de acuerdo a la red receptora. Este proceso es bi-direccional, lo que significa que la energía puede fluir hacia ambas direcciones, pero lo hace de forma que mantiene ambas redes completamente separadas.

¿Cuál es la capacidad del Proyecto de Interconexión Nogales?

Según lo propuesto, el Proyecto de Interconexión Nogales será diseñado para un máximo de capacidad de transferencia de potencia de 300 MW. La capacidad del proyecto está determinada por el tamaño de la unidad convertidora DC, la cual será inicialmente de 150 MW. El sitio existente de Gateway es de más de 30 acres y es lo suficientemente grande para añadir un segundo enlace de corriente directa de 150 MW sin incrementar el tamaño del territorio existente de Gateway. Cualquier expansión subsecuente ocurriría solo si las circunstancias lo permiten después de obtener las aprobaciones regulatorias necesarias.

¿El Proyecto puede ser utilizado para importar y exportar energía desde y hacia México?

Sí, el Proyecto permitirá la importación de energía desde México y la exportación de energía hacia México. Toda exportación hacia México sucederá bajo condiciones que no afecten la confiabilidad del sistema eléctrico de Estados Unidos.

ACERCA DE LOS PARTICIPANTES DEL PROYECTO

¿Quién está desarrollando el Proyecto de Interconexión Nogales?

El Proyecto de Interconexión Nogales está siendo desarrollado en conjunto por Nogales Transmission L.L.C. y MEH Equities Management Company (MEH).

Nogales Transmission L.L.C. es propiedad de Hunt Power, L.P. Hunt Power, L.P. desarrolla y adquiere activos de transmisión y distribución eléctrica tanto no regulados como regulados, ya sea a través de la adquisición de los activos existentes o a través de nuevos proyectos incrementales de construcción. Hunt Power es parte de un grupo de empresas de propiedad privada, con sede en Dallas, Texas, y gestionado por la familia de Ray L. Hunt que se dedica a la exploración de petróleo y gas, refinación, energía, bienes raíces, ganadería, e inversiones de capital privado.

MEH es una compañía de inversiones y una subsidiaria de UNS Energy Corporation, basada en Arizona, la cual es una subsidiaria de Fortis, Inc. Fortis es líder en la industria regulada de servicios públicos de electricidad y gas, que posee utilidades que dan servicio a más de 3 millones de usuarios en Canadá, Estados Unidos y en el Caribe.

¿Cómo se conectará el Proyecto entre Estados Unidos y México?

En Estados Unidos, el Proyecto se interconectará con el sistema de UNSE, el cual está interconectado con el Western Electric Coordinating Council que da servicio al occidente de Estados Unidos. UNSE es una subsidiaria de UniSource Energy Services (UES), que provee servicio eléctrico a más de 95,000 usuarios en los condados de Santa Cruz y Mohave.

En México, el Proyecto se interconectará con la Red Nacional de Transmisión (RNT). La RNT es una red de transmisión propiedad del estado operado por el Centro Nacional de Control de Energía (CENACE). CENACE es una organización gubernamental que posee el control de operación de la RNT, actuando como un operador independiente de servicio. CENACE toma decisiones económicas sobre instalaciones de generación, controla la importación y exportación de energía, administra el mercado eléctrico y asegura el acceso a la RNT.

¿Qué coordinación ha sucedido para interconectar el Proyecto?

En Estados Unidos, el Proyecto entregó una solicitud de interconexión a UNSE el 28 de abril de 2016, y ejecutó un Acuerdo de Estudios de Impacto en el Sistema (System Impact Study en inglés). UNSE ha realizado estudios para asegurar la confiabilidad del sistema y que éste no será afectado y se está trabajando un reporte final del mismo.

En México, esfuerzos de planeación y coordinación extensivos han sucedido con diferentes entidades Mexicanas involucradas en la RNT. El 31 de mayo de 2016, la Secretaría de Energía (SENER) publicó el Proyecto de Desarrollo del Sistema Eléctrico Nacional (PRODESEN), el cual contiene planes de desarrollo para proyectos de líneas de transmisión y distribución en México, el cual incluye las instalaciones necesarias para interconectar el Proyecto de Transmisión Nogales con la subestación Nogales Aeropuerto en México.

¿Cómo se obtendrán los permisos necesarios para el Proyecto?

El Proyecto pasará por múltiples procesos de permisos y aprobación, incluyendo los siguientes:

Nivel Federal

Dado que el Proyecto cruzará la frontera entre Estados Unidos y México, el Proyecto ha presentado una aplicación de solicitud para un Permiso Presidencial para la interconexión eléctrica transfronteriza. Antes que el Permiso Presidencial sea expedido, el Departamento de Energía de Estados Unidos (DOE) considera el impacto ambiental del Proyecto de conformidad al National Environmental Policy Act de 1969 (NEPA), determinando el impacto del Proyecto en la confiabilidad eléctrica en el sistema de suministro de energía eléctrica de los Estados Unidos y cualquier otro factor que el DOE pudiera considerar relevante para el interés público.

La solicitud del Permiso Presidencial presentada por Nogales Transmission, L.L.C, al DOE puede ser consultada en el siguiente enlace: <http://energy.gov/oe/downloads/application-presidential-permit-oe-docket-no-pp-420-nogales-transmission-llc>.

Nivel Estatal

El Proyecto requiere de un Certificado de Compatibilidad Ambiental (CEC) de la Arizona Corporation Commission (ACC) para designar la ubicación de líneas de transmisión. Los Participantes del Proyecto anticipan presentar la aplicación del CEC durante el verano de 2017.

Nivel Local

A nivel local, está anticipado que el Proyecto necesitará un Permiso de Uso Condicional (CUP) de la Ciudad de Nogales para la subestación Gateway, y permisos locales de derecho de vía, reducción de polvo, entre otros.

¿Se necesitan otras acciones para facilitar el Proyecto?

Sí. Con base en estudios ingenieriles iniciados por la solicitud de interconexión ante UNSE, se determinó que se requieren mejorar a una porción de una línea de transmisión existente propiedad de UNSE, que da servicio al área de Nogales para facilitar el Proyecto. Dichas mejoras se nombran como Proyecto de Mejora Nogales Tap a Kantor e incluye el remplazo de estructuras existentes y un conductor de un segmento de aproximadamente 27.5 millas al sur de la existente subestación Nogales Tap, propiedad de Western Area Power Administration y la subestación existente Kantor, propiedad de UNSE. El Proyecto de Mejora Nogales Tap a Kantor necesitará un CEC ante la ACC antes de ser construido. La aplicación para el CEC que será presentada ante la ACC, incluirá el Proyecto de Interconexión Nogales y el Proyecto de Mejora Nogales Tap a Kantor.

¿Cómo fueron desarrolladas las rutas alternativas del Proyecto?

El proceso de selección de las rutas alternativas del Proyecto fue guiado con el enfoque de minimizar los impactos, evaluando infraestructura existente y considerando corredores con impactos mínimos. Dicho enfoque se centró en:

- Trabajar dentro o junto a corredores existentes a medida sea posible.
- Trabajar con los propietarios y los interesados para entender, evitar y minimizar impactos en zonas sensibles.
- Integrar información de los esfuerzos de planeación federales y estatales, así como los del U.S. Forest Service y el Arizona Department of Transportation.
- Integrar información de la ruta previamente aprobada por el Arizona Line Siting Committee en el 2001 para el Proyecto de Línea de Trasmisión Sahuarita-Nogales (Número de ACC Docket L-00000C-01-0111-00000).

La identificación de una ruta preferida sucedió durante el proceso de análisis de NEPA y es presentado en el borrador del Environmental Assesment (EA) presentado por el DOE. La selección final de la ruta está sujeto a la aprobación por el DOE conforme a la solicitud del Permiso Presidencial y conforme a la solicitud de un CEC por la ACC.

¿Qué esfuerzos de alcance público han sido realizados por el Proyecto?

El Proyecto de Interconexión Nogales está comprometido a un alcance público efectivo a través de alcance directo, además de procesos informativos federales, estatales y locales para comunicar la información del Proyecto, y con una página web robusta para el Proyecto.

Información acerca del Proyecto de Interconexión Nogales está disponible en la página web www.huntpower.com/nogalesdctie.aspx. La página web será actualizada regularmente con información sobre como el público se puede involucrar en los procesos de obtención de permisos.

Esfuerzos de alcance público pasados incluyen:

- Febrero de 2015 Reunión Pública en Nogales.
- Febrero de 2015 Reunión con agencias gubernamentales y no-gubernamentales (NGO).
- Septiembre de 2015 Reunión con agencias y ONGs y visita al área del Proyecto.
- Junio de 2017 Reuniones Públicas en Nogales.

Oportunidades futuras para involucramiento público incluyen:

- Tiempo de comentarios en el borrador del reporte del EA publicado por el DOE (periodo de comentarios abierto del 5 de julio de 2017 al 3 de agosto de 2017).
- Tiempo de comentarios durante el proceso de CEC en Arizona. Se espera que la aplicación sea presentada durante el verano de 2017, con tiempo de comentarios sucediendo hasta finales de 2017.

ECONOMÍA PROYECTO

¿Cuál es el costo estimado del Proyecto?

La estimación actual del costo del Proyecto es de aproximadamente US \$80 millones. Estas estimaciones de costos están sujetas a cambios basados en el diseño final del Proyecto, aprobaciones regulatorias y la selección de una ruta final. Los costos estimados de la segunda fase del enlace DC no han sido determinados.

¿El Proyecto tendrá un impacto sobre los costos pagados por usuarios de UES?

Usuarios de UES deberán beneficiarse de costos reducidos como resultado del Proyecto. El Proyecto resultará en uso incrementado del sistema de transmisión de UES, resultando en la reducción del precio unitario del sistema de transmisión en el sistema de la compañía. En la actualidad, los usuarios de UES pagan por todos los costos de transmisión. Con el Proyecto en servicio, una porción de los costos de transmisión de UES será asignada a nuevos usuarios, reduciendo el porcentaje de estos costos que son pagados por los usuarios de UES.

Adicionalmente, los usuarios de UES pagan por los costos de generación a través de compra de energía y cargos de combustible. Si UES incurre en costos de generación reducidos como resultado de transacciones económicas de energía con México, los costos cubiertos por los usuarios se van a reducir.

PARA MÁS INFORMACIÓN

www.huntpower.com/nogalesdctie.aspx

1-800-240-5718

Exhibit J-2(b) – Nogales Interconnection Project June 2017 Fact Sheet

What is the Nogales Interconnection Project?

The Nogales Interconnection Project (Project) is a proposed 300 megawatt (MW) direct current (DC) interconnection (commonly known as a DC Tie) and associated electric facilities, which will allow for an asynchronous interconnection between the electric grid in southern Arizona and the electric grid in the northwest region of Mexico.

The Project will be constructed in two phases. The first phase of the Project will include the components listed below and a converter capacity of 150 MW with a planned in-service date of mid-2019. The second phase, to be constructed at a time that has not yet been determined, will expand the DC Tie capacity to 300 MW.

The Project will consist of the following components:

- 1 A new, approximately 11-acre Gateway Substation where the DC Tie and other substation facilities will be located.
- 2 A new, approximately 3-mile, 138-kilovolt (kV) alternating current (AC) transmission line between the existing UNS Electric, Inc. Valencia Substation and the new Gateway Substation.
- 3 A new, approximately 2-mile, 230-kV AC transmission line extending south from the new Gateway Substation to the proposed international border crossing.



Anticipated Project Timeline

2014 - 2016	2017	2018	2019
<ul style="list-style-type: none"> - Initiate preliminary project planning - Initiate and conduct public outreach - Conduct project feasibility and design - Begin federal permitting - Initiate survey work 	<ul style="list-style-type: none"> - Continue federal, and initiate state permitting - Begin right-of-way acquisition 	<ul style="list-style-type: none"> - Finalize federal, state, and local permitting - Finalize right-of-way acquisition - Begin construction 	<ul style="list-style-type: none"> - Finalize construction - Place project in service

What purpose does the Nogales Interconnection Project serve?

The purpose of the Project is to provide an asynchronous interconnection in the vicinity of Nogales, Arizona, that will enable bi-directional electricity transfer capability between the Western Electricity Coordinating Council and Mexico in order to facilitate cross-border commercial electricity transactions and to enhance transmission grid reliability.

What are the Project benefits?

The Project will provide several important benefits:

- Enabling cost savings through firm and non-firm energy transactions and diversity of peak demand patterns on both sides of the border.
- Supporting reliability by providing bi-directional power flow and voltage support to each side of the border.
- Creating emergency assistance options for the electrical systems of both the U.S. and Mexico.
- Supporting economic growth by improving the electric grid and region's ability to meet future electric capacity requirements.

¿Qué es el Proyecto de Interconexión Nogales?

El Proyecto de Interconexión Nogales (Proyecto) es un proyecto de interconexión de 300 megavatios (MW) de corriente directa (DC), también conocido como un enlace DC, y otras instalaciones eléctricas, las cuales permitirán una interconexión asíncrona entre la red eléctrica del Sur de Arizona y la red eléctrica en la región noroeste de México.

El Proyecto será construido en dos etapas. La primera etapa del Proyecto incluirá los componentes que se presentan a continuación y la capacidad del convertidor será de 150 MW, el cual será puesto en servicio a mediados de 2019. La segunda etapa, cuya fecha de construcción no ha sido establecida, expandirá la capacidad del enlace DC a 300 MW.

El proyecto constará de los siguientes componentes:

- 1 Una nueva subestación eléctrica Gateway de 11 acres en donde se ubicarán el enlace DC y otras instalaciones de la subestación.
- 2 Una nueva línea de transmisión de aproximadamente 3 millas de 138- kilovoltios (kV) de corriente alterna (AC) entre la existente subestación eléctrica Valencia, propiedad de UNS Electric, Inc. y la nueva subestación Gateway.
- 3 Una nueva línea de transmisión de aproximadamente 2 millas de 230-kV de corriente alterna que se extenderá de la nueva subestación Gateway al punto de cruce en la frontera internacional.



Calendario

2014 - 2016	2017	2018	2019
<ul style="list-style-type: none"> - Iniciar el análisis ambiental preliminar. - Iniciar y llevar a cabo la comunicación pública - Llevar a cabo estudios de factibilidad y diseño del Proyecto - Comenzar procesos de permisos federales - Iniciar estudios ambientales 	<ul style="list-style-type: none"> - Continuar con procesos de permisos federales e iniciar proceso estatal - Comenzar con la adquisición de derecho de vía 	<ul style="list-style-type: none"> - Finalizar procesos de permisos federales, estatales y locales - Finalizar la adquisición de derecho de vía - Comenzar construcción 	<ul style="list-style-type: none"> - Finalizar la construcción - Proyecto puesto en servicio

¿Cuál es el propósito del Proyecto de Interconexión Nogales?

El propósito del Proyecto es proveer una interconexión asíncrona en el área de Nogales, Arizona la cual habilitará la capacidad de transferencia bi-direccional de electricidad entre el Western Electricity Coordinating Council y México con el objetivo de facilitar transacciones comerciales internacionales y mejorar la confiabilidad de la red de transmisión.

¿Cuáles son los beneficios del proyecto?

El Proyecto proveerá importantes beneficios:

- Permitirá ahorro en costos a través de transacciones de energía y diversidad en patrones de demanda máxima en ambos lados de la frontera.
- Apoyará la confiabilidad al proveer flujo bi-direccional de energía y soporte de voltaje en ambos lados de la frontera.
- Creará asistencia de emergencia para los sistemas eléctricos para Estados Unidos y México.
- Apoyará el crecimiento económico al mejorar el sistema eléctrico y la capacidad de la región para satisfacer los futuros requerimientos de capacidad eléctrica.

Para obtener más información, por favor visite nuestra página web www.huntpower.com/nogalesdctie.aspx o llame al 1-800-240-5718.

Exhibit J-2(c) – Notice Flyer for June 2017 Open House Meetings

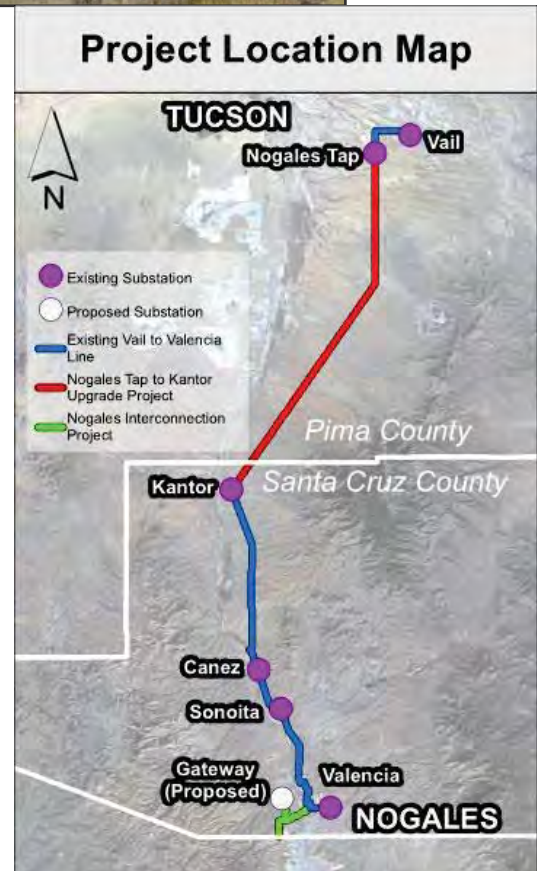
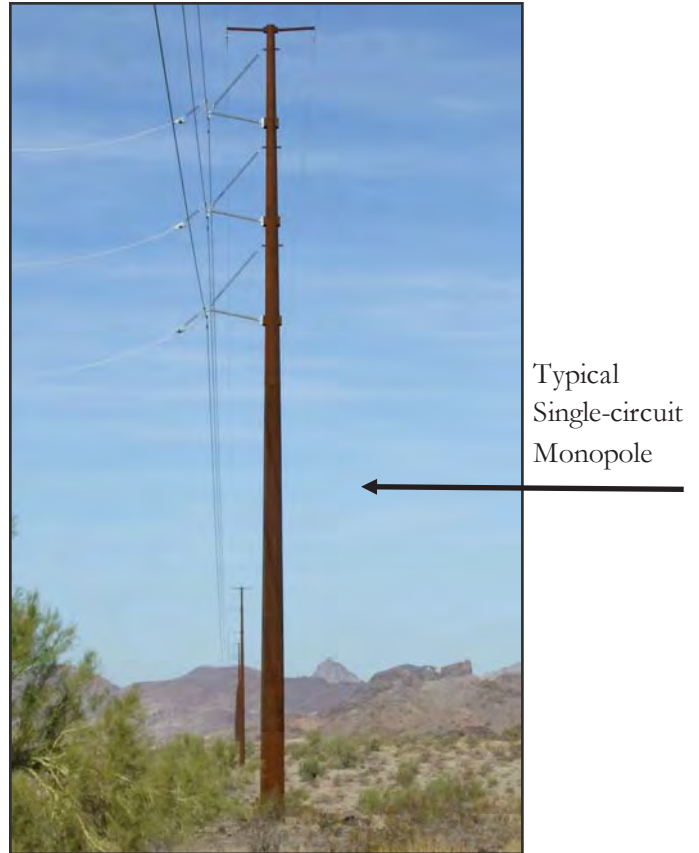
Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project

UniSource Energy Services (UES), its subsidiary UNS Electric, Inc. (UNSE), and Hunt Power are holding open house meetings on June 21 and June 22, 2017 to share information related to two transmission projects, described below as the Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project (Projects).

The Projects will support the reliability of the electric system by providing bi-directional power flow and voltage support, and emergency assistance, as needed, for the electric system both north and south of the U.S.-Mexico border.

These proposed Projects include the following components:

- A 27.5-mile segment of an existing UNSE 138-kV transmission line that serves Santa Cruz County. Upgrading the 27.5-mile segment between a point near the Western Area Power Administration Nogales Tap switchyard and UNSE’s Kantor Substation is necessary to provide the transmission capacity to support the Nogales Interconnection Project.
- The proposed new Gateway Substation in Santa Cruz County, which will be the location of the High Voltage Direct Current (HVDC) converter equipment and 138-kV equipment.
- A new approximately three-mile double circuit 138-kV transmission line in Santa Cruz County—one circuit of the line will extend the existing UNSE Vail to Valencia line from a point near USNE’s Valencia Substation to the proposed Gateway Substation and one circuit will connect the Gateway Substation to the Valencia Substation.
- A new approximately two-mile single circuit 230-kV transmission line on double-circuit capable structures in Santa Cruz County connecting the proposed Gateway Substation to the United States-Mexico border, beyond which it will interconnect with a transmission line to be constructed in Mexico.



Please join us at one of the open house meetings on June 21 or June 22 to learn more about the Projects and provide comments.



**Nogales Tap to Kantor Upgrade Project
and Nogales Interconnection Project**



OPEN HOUSE MEETINGS

Wednesday, June 21, 2017 5-8 p.m.

Sahuarita High School Auditorium, POD B
350 W. Sahuarita Road
Sahuarita, AZ 85629

Thursday, June 22, 2017 5-8 p.m.

Holiday Inn Express
850 W. Shell Road
Nogales, AZ 85621

**Additional information regarding the
Projects and more detailed maps can be
viewed at:**

www.huntpower.com/nogalesdctie.aspx

and

<https://www.uesaz.com/projects>

**Or you may call 1-800-240-5718 to speak to
someone regarding the Projects.**

**Información en español acerca de los
Proyectos se encuentra disponible en las
páginas web:**

www.huntpower.com/nogalesdctie.aspx

y

<https://www.uesaz.com/projects>

**También puede llamar al 1-800-240-5718 para
solicitar información acerca de los Proyectos.**

IMPORTANT PROJECT INFORMATION INSIDE

UniSource Energy Services
88 E. Broadway Blvd.
Mail Stop HQE-613
Tucson, AZ 85701
Attn: Renee Darling

Exhibit J-2(d) – Mailing List for Notice of June 2017 Open House Meetings

Returned to Sender	Full Name	Business	City	State	ZIP Code
X	ALBA EUGENE R & DEBRA L CP / RS		SAHUARITA	AZ	85629-8432
X	ALTA REAL ESTATE L L C		RIO RICO	AZ	85648-4187
X	ANDERSON DIANA S & LOPEZ ELANE G JT / RS		GREEN VALLEY	AZ	85622-0989
X	AYERS, LEE A	AYERS, LEE	NOGALES	AZ	85621-4111
X	BARNES KYLE R		SAHUARITA	AZ	85629
X	BENTLEY ZACHARY S & JEANNINE E CP / RS		AMADO	AZ	85645
X	BRIDGORD PHILIP C & TEPE DENISE		SAHUARITA	AZ	85629-9184
X	CAMERON, WILLIAM	CAMERON, CONSUELO	FLORENCE	SC	29502
X	CHASE CURTIS M & MICHELLE CP / RS		SAHUARITA	AZ	85629-9184
X	CISMO INVESTMENTS LLC		NOGALES	AZ	85621-4124
X	COX PETE J		SAHUARITA	AZ	85629-0877
X	DIBENE, JOSE LUIS		NOGALES	AZ	85621
X	DON SMITH PROPERTIES LLC		NOGALES	AZ	85628-1606
X	DUWEL GARRY & ARLEEN CP / RS		BAY SHORE	NY	11706-6127
X	ERAZO PORVI A & MARTHA E JT / RS		SAHUARITA	AZ	85629-9386
X	FLORES CARLOS R & VIVIANA G CP / RS		SAHUARITA	AZ	85629-0846
X	GUDGER KELSEY		SAHUARITA	AZ	85629-8445
X	GYLES R A & GLOVE J D 1 / 3 ET AL		TUCSON	AZ	85746-3616
X	H & R WOOD TRUST	ATTN: HERBERT & RITA WOOD TR	AMADO	AZ	85645-9743
X	HARVEY FAMILY LIMITED PARTNERSHIP	ARIZONA LIMITED PARTNERSHIP	RIO RICO	AZ	85648-4588
X	HARVEY, LAURENCE E		RIO RICO	AZ	85648-4588
X	HEIN JAMES R & CAROL S JT / RS 1 / 9 & WEBB	RICHARD G & CYNTHIA A 1/9 & FLORES	SAHUARITA	AZ	85629-0387
X	JOHNSON LORA F & DAVID CP / RS		SAHUARITA	AZ	85629
X	JORDAN DAMON V & ZANNA L CP / RS		AMADO	AZ	85645-9530
X	JUAREZ TASHA L & BOTHWELL GARY &	MELANIE ALL JT/RS	SAHUARITA	AZ	85629-9069
X	KILIAN LAWRENCE SCOTT & AMY JT / RS		AMADO	AZ	85645-9503
X	LA MAMA DE LOS POLLITOS L L C		NOGALES	AZ	85628-6942
X	LAD BACK NOGALES L L C		SCOTTSDALE	AZ	85266-8870
X	LANDMARK TITLE AGENCY OF ARIZONA L L C	TRUST NO 1823	NOGALES	AZ	85621
X	LAWYERS TITLE OF AZ TR #7214	BARR JAMES N & DEBORAH W	NOGALES	AZ	85621-4577
X	LOWRANCE GENELLE M		SAHUARITA	AZ	85629-8628
X	MAG SANTA CAROLINA LIMITED PARTNERSHIP		IRVING	TX	75016-7928
X	MAILLOUX JESSE D		AMADO	AZ	85645-9739
X	MARKER RICHARD E & GIBBS JEANNE		SAHUARITA	AZ	85629-9381
X	MASTICK FAMILY TR, LIM PART		NOGALES	AZ	85621-4120
X	MIV CORPORATIVO AUTOMOTRIZ		NOGALES	AZ	85628-0541
X	MOYLAN STUART M & PATRICIA D CP / RS	DBA CARLOS GRILL	SAHUARITA	AZ	85629
X	MUN INVESTMENTS LLC	PRESTACIONES Y SERVICIOS S A DE CV	NOGALES	AZ	85621-1123
X	PERRY JAMES M & FLORENCE M JT / RS		GREEN VALLEY	AZ	85622-0013
X	RIVERO, OLGA S		NOGALES	AZ	85621-1111
X	RODRIGUEZ MARIA		SAHUARITA	AZ	85629
X	SAVINON, GUILLERMO MIRABAL		NOGALES	AZ	85628-6012
X	SIMMET SOPHIA		TUCSON	AZ	85745-9717
X	STRAND TODD 1 / 2 & SHAY JOHN P 1 / 2		SAHUARITA	AZ	85629-8372
X	SUNRISE OIL INC		TUCSON	AZ	85718-4567

X	SWALWELL GREG E & SANCHEZ ALICE JT / RS	SAHUARITA	AZ	85629-9251
X	UNITED STATES OF AMERICA THE GENERAL SERVICES ADMINISTRATION	SAN FRANCISCO	CA	94102
X	VALDEZ, YOLANDA	NOGALES	AZ	85621-4124
X	VALENZUELA, MARIA GUADALUPE	NOGALES	AZ	85621-3908
X	VILLA SAN SIMON HOMEOWNERS ASSOCIATION INC	GREEN VALLEY	AZ	85614
X	WETHERBEE ALLEN R & EMILY I JT / RS	SAHUARITA	AZ	85629-9387
X	WOLFE RHONDA & WOLFE ROY JT / RS	SCOTTSDALE	AZ	85262-7994
X	ZAHORCHAK JAMES C & MAC WILLIAM KIMBERLEY A CP / RS	SAHUARITA	AZ	85629-9257
X		NOGALES	AZ	85621-1730
X		NOGALES	AZ	85621-2426
X		NOGALES	AZ	85621-2426
X		NOGALES	AZ	85621-2426
X		NOGALES	AZ	85621-4556
X		NOGALES	AZ	85621-4565
X		NOGALES	AZ	85621-4565
X		NOGALES	AZ	85621-1021
X		NOGALES	AZ	85621-4592
X		NOGALES	AZ	85621-4590
X		NOGALES	AZ	85621-4590
X		NOGALES	AZ	85621-4503
X		NOGALES	AZ	85621-4503
X		NOGALES	AZ	85621-1351
X		NOGALES	AZ	85621-4525
X		NOGALES	AZ	85621-1155
X		NOGALES	AZ	85621-4031
X		NOGALES	AZ	85621-4031
X		NOGALES	AZ	85621-1007
X		NOGALES	AZ	85621-1038
X		NOGALES	AZ	85621-1041
X		NOGALES	AZ	85621-2427
X		NOGALES	AZ	85621-2484
X		NOGALES	AZ	85621-2483
X		NOGALES	AZ	85621-1041
X		NOGALES	AZ	85621-4114
X		NOGALES	AZ	85621-1041
X		NOGALES	AZ	85621-1043
X		NOGALES	AZ	85621-1044
X		NOGALES	AZ	85621-1015
X		NOGALES	AZ	85621-1024
X		NOGALES	AZ	85621-1024
X		NOGALES	AZ	85621-1044
X		NOGALES	AZ	85621-1073
X		NOGALES	AZ	85621-1076
X		NOGALES	AZ	85621-5027
X		NOGALES	AZ	85621-2410
X		NOGALES	AZ	85621-1127

X	BUSINESS OCCUPANT	NOGALES	AZ	85621-1127
X	BUSINESS OCCUPANT	NOGALES	AZ	85621-1127
X	BUSINESS OCCUPANT	NOGALES	AZ	85621-1127
X	BUSINESS OCCUPANT	NOGALES	AZ	85621-4578
X	BUSINESS OCCUPANT	NOGALES	AZ	85621-1148
X	CRESCENT JEWELERS	NOGALES	AZ	85621-1154
X	DAVIDS SERVICE INTL INC	NOGALES	AZ	85621-2427
X	DESERET MEDICAL	NOGALES	AZ	85621-4589
X	GLOBAL CUSTOM SOLUTIONS	NOGALES	AZ	85621-4555
X	HARBOR FREIGHT TOOLS	NOGALES	AZ	85621-5027
X	ID LOGISTICS	NOGALES	AZ	85621-4577
X	L M BROKERAGE	NOGALES	AZ	85621-4555
X	MICO INC	NOGALES	AZ	85621-4555
X	PRESTOLITE WIRE LLC	NOGALES	AZ	85621-4536
X	QUICK FIX TRAILER & TRUCK RPR	NOGALES	AZ	85621-4591
X	RDI MARKETING SVC	NOGALES	AZ	85621-4564
X	RENT-A-CENTER	NOGALES	AZ	85621-1044
X	RENT-A-CTR	NOGALES	AZ	85621-1044
X	RESIDENT	NOGALES	AZ	85621-1753
X	RESIDENT	NOGALES	AZ	85621-1754
X	RESIDENT	NOGALES	AZ	85621-1756
X	RESIDENT	NOGALES	AZ	85621-1757
X	RESIDENT	NOGALES	AZ	85621-1757
X	RESIDENT	NOGALES	AZ	85621-1761
X	RESIDENT	NOGALES	AZ	85621-1763
X	RESIDENT	NOGALES	AZ	85621-1765
X	RESIDENT	NOGALES	AZ	85621-1766
X	RESIDENT	NOGALES	AZ	85621-1766
X	RESIDENT	NOGALES	AZ	85621-1770
X	RESIDENT	NOGALES	AZ	85621-1771
X	RESIDENT	NOGALES	AZ	85621-1776
X	RESIDENT	NOGALES	AZ	85621-1776
X	RESIDENT	NOGALES	AZ	85621-1779
X	RESIDENT	NOGALES	AZ	85621-1711
X	RESIDENT	AMADO	AZ	85645-9521
X	RESIDENT	SAHUARITA	AZ	85629-7976
X	RESIDENT	SAHUARITA	AZ	85629-8340
X	RESIDENT	SAHUARITA	AZ	85629-8391
X	RESIDENT	NOGALES	AZ	85621-2474
X	RESIDENT	NOGALES	AZ	85621-5007
X	RESIDENT	NOGALES	AZ	85621-5010
X	RESIDENT	NOGALES	AZ	85621-5003
X	RESIDENT	NOGALES	AZ	85621-1102
X	RESIDENT	NOGALES	AZ	85621-4116
X	RESIDENT	NOGALES	AZ	85621-4123
X	RESIDENT	AMADO	AZ	85645-9564

X	RESIDENT	SAHUARITA	AZ	85629-9308
X	RESIDENT	SAHUARITA	AZ	85629-9311
X	RESIDENT	SAHUARITA	AZ	85629-9313
X	RESIDENT	SAHUARITA	AZ	85629-9313
X	RESIDENT	SAHUARITA	AZ	85629-9316
X	RESIDENT	SAHUARITA	AZ	85629-9316
X	RESIDENT	SAHUARITA	AZ	85629-9316
X	RESIDENT	SAHUARITA	AZ	85629-9318
X	RESIDENT	SAHUARITA	AZ	85629-9318
X	RESIDENT	SAHUARITA	AZ	85629-9318
X	RESIDENT	SAHUARITA	AZ	85629-9318
X	RESIDENT	SAHUARITA	AZ	85629-9319
X	RESIDENT	SAHUARITA	AZ	85629-9327
X	T-MOBILE	NOGALES	AZ	85621-1044
X	US CUSTOM BROKERS INC	NOGALES	AZ	85621-2424
X	USDA INSPECTION	NOGALES	AZ	85621-4555
		TUCSON	AZ	85728-4298
		NOGALES	AZ	85621-4626
		AMADO	AZ	85645-9743
		TUCSON	AZ	85718-2087
		TUCSON	AZ	85711-6808
		TUCSON	AZ	85706-4241
		NOGALES	AZ	85621-3451
		SAHUARITA	AZ	85629-0714
		PLANT CITY	FL	33563-1108
		SAHUARITA	AZ	85629-8368
		NOGALES	AZ	85621-1727
		NOGALES	AZ	85621-2100
		SAHUARITA	AZ	85629-8864
		NOGALES	AZ	85628-1087
		SAHUARITA	AZ	85629-8435
		AMADO	AZ	85645-9712
		AMADO	AZ	85645-9738
		SAHUARITA	AZ	85629-1008
		SAHUARITA	AZ	85629-1008
		RIO RICO	AZ	85648-3600
		NOGALES	AZ	85621-4104
		NOGALES	AZ	85621-4104
		SAHUARITA	AZ	85629-8768
		TUCSON	AZ	85719-1311
		CASA GRANDE	AZ	85194-8788
		SAHUARITA	AZ	85629-8800
		AMADO	AZ	85645-9797
		TUCSON	AZ	85718-6577
		NOGALES	AZ	85628-0722
		NOGALES	AZ	85621-3868
	1440 MARIPOSA L L C			
	7659 PROPERTIES LLC			
	ABERNETHY JAMES J & JOAN M JT / RS			
	ABRAHAM JAMES E & JEAN M CP / RS			
	ACEVES SARA M			
	ACOSTA GRACIELA & OLIVAS AMANDO R &			
	ACOSTA, FRANCISCO			
	ADAMS BRADFORD P			
	AG-MART PRODUCE INC			
	AGUAYO GLORIA ALICIA			
	AGUILA, ERNESTO			
	AGUIRRE PROPERTIES LLC			
	AGUIRRE RICHARD & PETRA CP / RS			
	ALBERTO MAYER FAMILY LIMITED PARTNERSHIP			
	ALBRIGHT JOHN & CARRIE CP / RS			
	ALFING BRIAN D & NANCY E JT / RS			
	ALLRED BERNIE D & BETTY JO JT / RS			
	ALLTOP JEFF M			
	ALLTOP RUSS & SUZANNE W CP / RS			
	AMADO, ESPERANZA C			
	AMADOR, RAUL			
	AMADOR, RAUL			
	AMEZCUA BENJAMIN & MARIA ANGELICA JT / RS			
	AMLING CHARLES M & ELAINE KAY JT / RS			
	ANDERSEN & HAMMOCK CATTLE CO LLC			
	ANDERSON CHRISTINA E			
	ANDERSON JACKIE			
	ANDRADA WILMOT 180 LLC			
	ANDRADE, GERMAN			
	ARAUJO PROPERTIES LLC			
	ATTN: DIAMOND VENTURES INC			
	DBA JUMPING JACK GAS			

BLAYDEN DENNIS & CYNTHIA CP / RS	AMADO	AZ	85645-9526
BLEVINS MERLE MARTIN & LA TRILLA FERN TR	EDMONDS	WA	98020-3328
BOLLING JOHN R & SU H YU JT / RS	GREEN VALLEY	AZ	85614-2639
BOND, GEORGE THOMAS	GEORGE THOMAS BOND REVOCABLE LIVING TRU	NOGALES	85621-1071
BORBON, LUIS ALBERTO	NOGALES	AZ	85621-1807
BORDER LOT LLC	NOGALES	AZ	85621-3202
BORDER WAREHOUSE L L C	SAN DIEGO	CA	92121-1798
BORDERPRO LLC	NOGALES	AZ	85621-4500
BOSE INTERNATIONAL INV FUND LLC DBA BOSE INTRNTL	SAHUARITA	AZ	85629-9205
BOTHWELL GARY & MELANIE CP / RS	SAHUARITA	AZ	85629-9498
BOYLE PATRICK J	TUCSON	AZ	85733-4076
BOYS & GIRLS CLUB OF SANTA CRUZ	NOGALES	AZ	85621-2300
BRACAMONTE WALTER H & HORTENSIA N JT / RS	AMADO	AZ	85645-9780
BREGEN, DOUGLAS M	NOGALES	AZ	85621-3645
BROOKS MICHAEL D	AMADO	AZ	85645-9728
BROOKS ROBERT W & LESLIE G CP / RS	SAHUARITA	AZ	85629-1010
BROWN ROBERT A & VALENCIA J JT / RS	AMADO	AZ	85645-9702
BROWN ROBERT W SR & JO AN M JT / RS	SAHUARITA	AZ	85629-0772
BROWN STEVE ANTHONY	SAHUARITA	AZ	85629-9266
BROWN, LARRY ALLEN	NOGALES	AZ	85621-1719
BRUBAKER GALEN WAYNE & JACQUELINE M	SAHUARITA	AZ	85629-9209
BRUBAKER, ROBERT	NOGALES	AZ	85621-1706
BRUNO ANTHONY J & BARBARA L & BRUNO ANTHONY R ALL	AMADO	AZ	85645-9776
BUNN, JOHN T	PARADISE VALLEY	AZ	85253-4119
BURBAS & HARVEY LEASING & RENTAL LLC	NOGALES	AZ	85621-4534
BURKETT THOMAS R & MAYNARD KATHLEEN AJT / RS	SAHUARITA	AZ	85629-8385
BURROWS KEITH J & TERESA M CP / RS	SAHUARITA	AZ	85629-0525
BUSSEY KENNETH & VIRGINIA CP / RS	SAHUARITA	AZ	85629-9229
BUSTAMANTE, CLOTILDE	NOGALES	AZ	85621-4122
BUSTAMANTE, LUIS E	NOGALES	AZ	85621-1713
C & D RENT-ALL INC	NOGALES	AZ	85621-1028
CADENA, CARLOS GERMAN	NOGALES	AZ	85621-4122
CAGE REAL ESTATE L L C	NOGALES	AZ	85621-2742
CAIN ANDREW NATHANIEL	SAHUARITA	AZ	85629-9320
CAIN MICHAEL J	GREEN VALLEY	AZ	85622-3301
CALDERON ANTONIO & EVANGELINE	AMADO	AZ	85645-9564
CALDERON, ADELINA L	NOGALES	AZ	85621-1109
CALIXTRO, FRANK A	NOGALES	AZ	85621-3644
CAMPBELL MANUEL A & PATRICIA CP / RS	SAHUARITA	AZ	85629-7972
CANNIFF TIMOTHY & PATCH-CANNIFF KELLI CP / RS	SAHUARITA	AZ	85629-9067
CAPIN HILL PROPERTIES LLC	NOGALES	AZ	85621-4517
CAPIN VYBORNY PROPERTIES L L C	NOGALES	AZ	85621-4517
CAROLAN LIVING TR	TEMPE	AZ	85283-2443
CARRASCO JR, FERNANDO	NOGALES	AZ	85621-1710
CARREON, VICTALINA	NOGALES	AZ	85621-3805
CARSON DEBRA E REVOC TR	AMADO	AZ	85645-9557

CARTAGENA LUIS	LAS VEGAS	NV	89149-4658
CARTER MORRIS S	AMADO	AZ	85645-9526
CASHMAN MATTHEW & KAREN CP / RS	ELKO	MIN	55020-9544
CASILLAS OSCAR	SAHUARITA	AZ	85629-9216
CASTILLO BERNARDO & MICHELE CP / RS	TUCSON	AZ	85735-9760
CASTILLO SUSAN & ROBERT	SAHUARITA	AZ	85629-0997
CASTRO JESUS M & CONCEPCION G & CASTRO	AMADO	AZ	85645-9602
CASTRO, JUAN R	NOGALES	AZ	85621-1710
CAVA ENTERPRISES PARTNERSHIP	KINGMAN	AZ	86402-3839
CFT DEVELOPMENTS L L C	ROSEMEAD	CA	91770-3711
CHASE, JPMORGAN NA	DALLAS	TX	75381-0490
CHILD & FAMILY RESOURCES INC	TUCSON	AZ	85716-5310
CHILDS FAMILY LIVING TR	AMADO	AZ	85645-9743
CHIQUETE ROBERTO V & GENOVEVA R &	AMADO	AZ	85645-9733
CIRCLE K STORES INC	PHOENIX	AZ	85072-2085
CITY OF NOGALES	NOGALES	AZ	85621-2262
CITY OF TUCSON	TUCSON	AZ	85726-7210
CLARKE DAVID & MARY CP / RS	SAHUARITA	AZ	85629-8823
CLAVES MICHAEL ANDREW	COCHISE	AZ	85606-8521
CLEWETT GEORGE W & DONNA M & PORTER	GREEN VALLEY	AZ	85622-4805
CMV LLC	NOGALES	AZ	85621-4568
COBB MICHAEL P	SAHUARITA	AZ	85629-9283
COCHRAN DAVID D & NADINE R CP / RS	SAHUARITA	AZ	85629-9069
COLLINS DARRELL G TR	AMADO	AZ	85645-9731
COLON AARON CHRISTOPHER	SAHUARITA	AZ	85629-0783
COMERICA BANK TR	AMADO	AZ	85645-9557
CONDES, EDGAR	NOGALES	AZ	85621-1724
CONINE SHARON L & LA BRACK STEFAN JT / RS	TUCSON	AZ	85731-8792
CONSOLO PAUL L & PATTIE L JT / RS	SAHUARITA	AZ	85629-9298
COPENHAVER HAROLD L & HAZEL E JT / RS	AMADO	AZ	85645-9732
CORNELIUSEN BRAD & JO ANN JT / RS	GREEN VALLEY	AZ	85622-1988
CORONADO FRANCISCO J	AMADO	AZ	85645-9563
CORONADO GABRIEL A	TUCSON	AZ	85746-6233
CORONADO, BERTHA E	NOGALES	AZ	85621-1111
CORRECTIONS CORPORATION OF AMERICA	NASHVILLE	TN	37215-6105
COSTA GERARDO M & GABRIELA JT / RS	SAHUARITA	AZ	85629-8877
COSTA GILBERT & YOLANDA GLORIA CP / RS	TUCSON	AZ	85704-2530
COSTA MELINDA	SAHUARITA	AZ	85629-9208
COUVILLER, MARIA LOURDES	NOGALES	AZ	85628-2795
COVARRUBIAS, JESUS	NOGALES	AZ	85621-3844
COX JOHN E JR	SAHUARITA	AZ	85629-0688
COY DAVID G	AMADO	AZ	85645-9543
CRABTREE JAMES & DICOCHEA HIRAM	TUCSON	AZ	85711-6311
CRAMER RICHARD & LINDA K CP / RS	SAHUARITA	AZ	85629-8801
CRANE BARBARA JANE & VARNEY JAMES KELLY JT / RS	GREEN VALLEY	AZ	85614-5587
CRESENT REALTY INC	EAST DUBUQUE	IL	61025-4418

CREVELONE, MICHAEL	CREVELONE, KIMBERLY	NOGALES	AZ	85621-4169
CRIFE, MANFRED LEE	CRIFE, ADELINE E	NOGALES	AZ	85621-2412
CRONK CAROL E FAMILY TR		APPLE VALLEY	CA	92308-5346
CROWDER ROBERT S & KELLEY L CP / RS		AMADO	AZ	85645-9564
CUNNINGHAM HAROLD A & SHERRI R CP / RS		SAHUARITA	AZ	85629-9397
CUNNINGHAM STEVE & GALLEGO ESPERANZA JT / RS		SAHUARITA	AZ	85629-1001
CURIEL, MIGUEL A	CURIEL, MANUELA G	NOGALES	AZ	85621-1715
CURTISS KELLY R		AMADO	AZ	85645-9784
DABDOUB PROPERTIES LLC		TUCSON	AZ	85751-1840
DABDOUB, ALI BEN CESAR		NOGALES	AZ	85621-4102
DABDOUB, OLGA LILLIANA VAZQUEZ		NOGALES	AZ	85628-1392
DALLMAN WILLIAM M & BOWES MARTHA H		ORO VALLEY	AZ	85737-7338
DAVILA CARLOS B & NAOMI C CP / RS		SAHUARITA	AZ	85629-0177
DAVIS DAVID A & MICHELE CJT / RS		SAHUARITA	AZ	85629-0413
DAVIS DONALD R & PEGGY JONES CP / RS		TUCSON	AZ	85750-9741
DAVIS JEFFERSON C		SAHUARITA	AZ	85629-0612
DAVISON DAVID LYNN & JULIA F CP / RS		SAHUARITA	AZ	85629-8732
DAY DARRELL R & BARBARA R JT / RS		SAHUARITA	AZ	85629-9673
DAZA INVESTMENTS LLC		NOGALES	AZ	85621-1426
DE BRECENY TINA M		AMADO	AZ	85645-9776
DE DIAZ, MARIA DEL REFUGIO		NOGALES	AZ	85621-1721
DE GASTELUM, CONCEPCION M MONROY		NOGALES	AZ	85621-3322
DE LA CRUZ SHEILA E		AMADO	AZ	85645-9792
DE LA MORA, JOSE JESUS CASTELLANOS	DE LA OSSA, FRANCES T	NOGALES	AZ	85621-1108
DE LA OSSA, ALBERTO	WADE ALLEN ALL JT/RS	NOGALES	AZ	85621-1719
DECKER STEVEN DALE & DIANA & DECKER		TUCSON	AZ	85746-7937
DEL CASTILLO ROBERT T & GLORIA M TR		AMADO	AZ	85645-9798
DEL RINCON ANTONIO & DEL RINCON ANA Q	REVOC TR(THE)	TUCSON	AZ	85704-2834
DELONG, RICHARD	CLAPPER JR, LOUIS	NOGALES	AZ	85621-1719
DELTA PROPERTIES L L P	ARIZONA LIMITED LIABILITY PARTNERSHIP	NOGALES	AZ	85628-1806
DEMERS MELISSA F		SAHUARITA	AZ	85629-8365
DEPPE FABIAN & CARITINA JT / RS		SAHUARITA	AZ	85629-9398
DESCH JOHN P LIVING TR		GREEN VALLEY	AZ	85622-0209
DESERT COASTAL INVESTMENTS LLC		FONTANA	CA	92337-7002
DESROSIER DAVID E		SAHUARITA	AZ	85629-1007
DEWITT, GARY W		NOGALES	AZ	85621-4122
DIAZ ED & REBECCA CP / RS		SAHUARITA	AZ	85629-8734
DIAZ, LOURDES	DIAZ, ELIZABETH	NOGALES	AZ	85621-4101
DJS FAMILY LIMITED PARTNERSHIP		NOGALES	AZ	85628-0668
DOMINGUEZ JUAN R & ROSA G CP / RS		GREEN VALLEY	AZ	85622-5378
DOMKE, DONALD P	DOMKE, ALMA A	RIO RICO	AZ	85648-2904
DON SMITH PROPERTIES L L C	ARIZONA LIMITED LIABILITY COMPANY	NOGALES	AZ	85621-1073
DOUBLE K INC		SHOW LOW	AZ	85901-2982
DOVE WAY WELL ASSOCIATION INC		GREEN VALLEY	AZ	85614-3019
DRAKE BRYAN & TERRY JT / RS		TUCSON	AZ	85710-2805
DUARTE JUAN D & ANEDINA CP / RS		TUCSON	AZ	85746-3200

DULIK RICHARD P & ANNA M CP / RS				22066-4216
DURAN, JOSE I	FBO, THE ENTRUST	VA	NOGALES	85621-2453
DURAN, SARA	WOOLSEY, ALAM	AZ	NOGALES	85621-4100
DURAZO, CARLOS H	DURAZO, MARTHA S	AZ	NOGALES	85628-0414
E J B HOLDINGS L L C		AZ	NOGALES	85621-3664
ECHAVE DEANNA & ECHAVE CLARISSA LYNN JT / RS		AZ	SAHUARITA	85629-0999
EDMINSON ROBERT H & CINDY L CP / RS		AZ	SAHUARITA	85629-8872
EDWARDS DENISE G SEPARATE PROPERTY TR		AZ	SAHUARITA	85629-8584
ELIAS, ANA JULIA		AZ	NOGALES	85628-2724
ELIAS, CASILDA F		AZ	NOGALES	85621-4109
ELIAS, FERNANDA MARIA		AZ	NOGALES	85621-4101
ELIAS, GABRIELLA M		AZ	NOGALES	85621-4104
ENGLE KENNETH D & KATHLEEN M JT / RS		AZ	AMADO	85645-6395
ENRIQUEZ, EDMUNDO V	ENRIQUEZ, BERTHA	AZ	NOGALES	85621-1130
EQUINE VOICES RESCUE & SANCTUARY		AZ	AMADO	85645-9791
ERLING RICHARD G & PHILLIPS SARAH L CP / RS		AZ	GREEN VALLEY	85614-3019
ESCALADA FAMILY LIMITED PARTNERSHIP		AZ	NOGALES	85628-0668
ESPINOZA, ANA LOURDES		AZ	NOGALES	85621-4100
ESSON LESLIE GAY		AZ	AMADO	85645-9564
ESTRADA RICARDO G & ELIZABETH JT / RS		AZ	GREEN VALLEY	85614-4439
ESTRADA, PEDRO	ESTRADA, GUADALUPE	AZ	NOGALES	85621-2412
EVANS HEIDI & RUBE JT / RS		AZ	SAHUARITA	85629-9021
FELIX, VICTOR R	FELIX, CLARA I	AZ	TUCSON	85704-1941
FENDERSON JAMES DALE & KIMBERLEY ANN JT / RS		AZ	SAHUARITA	85629-8625
FERNANDEZ, ROBERTO H	FERNANDEZ, MARIA G	AZ	NOGALES	85621-1727
FICKETT FRED W & RUTH T	% BRUNO BARBARA	AZ	AMADO	85645-9776
FIDELITY NATIONAL TITLE TR 10808	ATTN: KOLB CORRIDOR LP	AZ	TUCSON	85712-1108
FIGUEROA FRED HERNANDEZ & MARTHA P JT / RS		AZ	SAHUARITA	85629-8369
FIGUEROA JESUS V & ROSEMARIE A JT / RS		AZ	TUCSON	85718-6940
FIGUEROA, JUAN ANTONIO		AZ	NOGALES	85621-1128
FISHER TERRY L & ARAYNA CP / RS		AZ	SAHUARITA	85629-1007
FLEISCHER, KAREN GAYLE		AZ	NOGALES	85621-1275
FLETCHER, ROBERT D	M & B INVESTMENT CO	TX	AUSTIN	78703-3260
FLORES CATHERINE ALICIA LIVING TR		AZ	SAHUARITA	85629-6625
FORBES WILLIAM M & LYNNE M CP / RS		AZ	AMADO	85645-9791
FOWLER LYDIA BROBST (TRUSTEE) THE LYDIA FOWLER BROBST LIVING TRUST		AZ	TUCSON	85719-4909
FRAJO KAREN 1 / 9 ETAL		AZ	SAHUARITA	85629-0378
FRANK REED LAND L L C		AZ	NOGALES	85621-2490
FRASHER FRED		AZ	SAHUARITA	85629-8371
FREEMAN DANIEL R & SHELLY I CP / RS		AZ	GREEN VALLEY	85622-1094
FREESTONE THOMAS L		AZ	SAHUARITA	85629-8734
FREGOSO JOE R & TERESA A JT / RS		AZ	AMADO	85645-9778
FREIG CARRILLO, JAVIER MARTIN	FREIG FAMILY TRUST	AZ	NOGALES	85621-4100
FREIG FAMILY TR 1 / 3 & FREIG JUAN ALVARO 1 / 3	& FREIG JORGE OCTAVIO 1/3	AZ	NOGALES	85621-4505
FREIG RODRIGUEZ PROPERTIES LLC		AZ	NOGALES	85621-4505
FREIG, JUAN ALVARO	DE FREIG, MARIA D COUVILLIER	AZ	NOGALES	85621-4111

HACKETT NOREEN M				AMADO	AZ	85645-0602
HAINLINE, DELIA O		OROPEZA, DELIA		NOGALES	AZ	85621-1716
HALEY DANIEL LEE				TUCSON	AZ	85716-2900
HAMILTON CHARLES R				SAHUARITA	AZ	85629-1005
HANNON ETHEL LUTORO		ATTN: ETHEL L MCCCLINTOCK		TUCSON	AZ	85742-8716
HARCUS PENNIE A				AMADO	AZ	85645-9786
HARDING RICHARD D				SAHUARITA	AZ	85629-9021
HARKSON KAREN L				AMADO	AZ	85645-9791
HARO, JOSE FRANCISCO				NOGALES	AZ	85621-1724
HARO, RAMON		HARO, ANA LUZ		NOGALES	AZ	85621-1713
HARRIS ERIN S & CLAUDIA J CP / RS				AMADO	AZ	85645-9578
HARTZELL JEFF & CHRISTA JT / RS				SAHUARITA	AZ	85629-9216
HARVEY, LAURENCE E				NOGALES	AZ	85621-3782
HATCHER GARY W & RACHEAL JT / RS				AMADO	AZ	85645-9504
HENDERSON, RONALD G		HENDERSON, YOLANDA M		NOGALES	AZ	85621-2411
HENTGES NORMA R & HENTGES RUTH A JT / RS				SAHUARITA	AZ	85629-1009
HERNANDEZ MARIA IMELDA				SAHUARITA	AZ	85629-9234
HERNANDEZ, JESUS		MARIA, ANNA Y		NOGALES	AZ	85628-0606
HERRERA PAUL C & IRENE B JT / RS				TUCSON	AZ	85748-6804
HGC / MW DEVELOPMENT LIMITED PARTNERSHIP				MEMPHIS	TN	38101-2198
HICKS WALTER F & CATHERINE L GARLAND CP / RS				SAHUARITA	AZ	85629-8775
HIDALGO, MARIO		HIDALGO, LUZ MARIA		NOGALES	AZ	85621-1454
HILL CARELYN K				KALISPELL	MT	59901-1206
HILL TINA M & HURLEY BILLY J JT / RS				AMADO	AZ	85645-9573
HILL, ROBERT L				NOGALES	AZ	85621-9625
HINSLEY ELMER & SHIRLEY CP / RS				LAKESIDE	AZ	85929-0372
HOBACK DANIEL R & DIANE M JT / RS				AMADO	AZ	85645-9786
HODGES WILLIAM SCOTT & SHAWN C &		BOATWRIGHT R L ALL JT/RS		AMADO	AZ	85645-9565
HODGSON JAMES L & RUSSELL NANCY J JT / RS				WEST HILLS	CA	91307-3406
HOELSCHER MICHAEL L				GREEN VALLEY	AZ	85614-4948
HOGAN ADAM M & CHELSEY ANN CP / RS				SAHUARITA	AZ	85629-9285
HOME DEPOT USA INC				ATLANTA	GA	30348-5842
HOPKINS, MARTIN GABRIEL SOTO		FLORES, ZOILA MARITZA LERMA		NOGALES	AZ	85621-1711
HORNE 1777 L L C		ARIZONA LIMITED LIABILITY CO		CHANDLER	AZ	85224-4120
HORTON ROGER W & BONNIE S CP / RS				SAHUARITA	AZ	85629-8828
HOYE MICHAEL T & KAREN A JT / RS				AMADO	AZ	85645-9569
HUDECEK CHRISTOPHER A & TERRI D JT / RS				AMADO	AZ	85645-9776
HUERTA, JOSE LUIS		HUERTA, MARIA CECILIA D		NOGALES	AZ	85621-4533
HUERTA, MANUEL V				NOGALES	AZ	85628-7089
HUISH DAVID M & ANNELLA F JT / RS				AMADO	AZ	85645-9551
HUNTER JAMES S III		IBARRA, LILY A		COLUMBIA	MO	65203-9724
IBARRA, FRANCISCO A				NOGALES	AZ	85621-4101
IBARROLA, ESTEBAN M				NOGALES	AZ	85621-1734
ICE EDGAR T				TUCSON	AZ	85716-3814
INGRAM MICHAEL & KALANI CP / RS				SAHUARITA	AZ	85629-9184
INSKO, DAVID C		INSKO, ROSALIA		NOGALES	AZ	85628-6007

ISLAS, MELINA ELIZABETH				NOGALES	AZ	85628-6652
J M B SALES & RENTALS LLC				NOGALES	AZ	85621-2059
JAUREQUI FELIPE				AMADO	AZ	85645-0673
JENKINS JOSIELYN & MICHAEL CP / RS				SAHUARITA	AZ	85629-9259
JIMENEZ, JOSE C				NOGALES	AZ	85621-4123
JIMENEZ, NORMA JUDITH				NOGALES	AZ	85621-4101
JIMENEZ, OLIVIA S				NOGALES	AZ	85621-1120
JOFFROY HOLDINGS LLC		DUTY FREE AMERICAS		HOLLYWOOD	FL	33024-7983
JOFFROY, RODOLFO Q		JOFFROY, EDUARDO Q		NOGALES	AZ	85621-4512
JOHNSON CHRISTOPHER & DAFNE CP / RS				SAHUARITA	AZ	85629-8826
JOHNSON DEBORAH L & KEITH R JT / RS				AMADO	AZ	85645-9522
JOHNSON FAMILY TR			ATTN: ROGER NEIL JOHNSON TR	TUCSON	AZ	85749-9239
JOHNSON NEIL R				SAHUARITA	AZ	85629-9528
JONES ROY TRAVIS & WHITMER KIMBERLY JT / RS				SAHUARITA	AZ	85629-1007
JUHLIN BENSON J & MICHELLE L JT / RS				AMADO	AZ	85645-9564
K V C COMPANY INC				TUCSON	AZ	85704-3002
KATEN DAVID W				AMADO	AZ	85645-9564
KEEGAN SEAN E & ROBIN A CP / RS				SAHUARITA	AZ	85629-8775
KEI INVESTING LLC				TUCSON	AZ	85737-9495
KESSLER CHARLEY N & ROBYN R				AMADO	AZ	85645-9784
KIDD KATHY M & DURON JESUS H JT / RS				AMADO	AZ	85645-9523
KINNAMAN JAMES M				SAHUARITA	AZ	85629-8901
KITICA L L C				NOGALES	AZ	85621-3575
KNOWLTON NANCY GAIL				SAHUARITA	AZ	85629-8807
KNUDSON DUANE & FARRIS CP / RS				GREEN VALLEY	AZ	85614-3903
KONRATH JR EDWIN J & CYNTHIA L CP / RS				TUCSON	AZ	85730-5626
KOREAN CHRUCH, OF NOGALES			KORY, CECILIA ORTIZ	NOGALES	AZ	85621-1071
KORY, RAYMOND EDWARD				NOGALES	AZ	85621-3622
KOZIELSKI VALENTINE & CAROL ANN JT / RS				SAHUARITA	AZ	85629-0950
KYRIAKIS, APOSTOLOS			KYRIAKIS, MARIA ISABEL	NOGALES	AZ	85628-1506
LA LOMA GRANDE L L C				NOGALES	AZ	85628-2080
LA, DE ALICIA				GREEN VALLEY	AZ	85614-4412
LA, PLACITA PLAZA				SCOTTSDALE	AZ	85251-3819
LAETSCH DANIEL R & STACY A JT / RS				SAHUARITA	AZ	85629-9236
LAHTI ANN M				SAHUARITA	AZ	85629-9184
LAILY LLC				FORTUNA	ND	58844-0121
LANDMARK TITLE ASSURANCE AGENCY L L C				NOGALES	AZ	85621-4626
LAWYERS TITLE OF ARIZONA INC				NOGALES	AZ	85628-1263
LAWYERS TITLE OF ARIZONA TR#7589				GREEN VALLEY	AZ	85614-3315
LAWYERS TITLE OF AZ #7486 BARR G				NOGALES	AZ	85621-4626
LEA DAVID				SAHUARITA	AZ	85629-8585
LEAL EFFRAIN I & LORENA B CP / RS				SAHUARITA	AZ	85629-9375
LEE CRAIG				SAHUARITA	AZ	85629-9259
LEE FAMILY TR				GREEN VALLEY	AZ	85614-4948
LEHMAN ROBERTA L & AMADO			ATTN: ROBERT N & LOIS M LEE TR	AMADO	AZ	85645-0851
LEICHTENBERG ROBERT JOHN			GUSTAVO A JR CP/RS	SAHUARITA	AZ	85629-8831

LEMAS CALLEJA, CARLOS MANUEL	LEMAS, CATALINA C	NOGALES	AZ	85621-1710
LEMKE JAMES C & MARY LYNN JT / RS		GREEN VALLEY	AZ	85622-0955
LEUCHTENBERGER MARY J LIVING TR		TUCSON	AZ	85712-2703
LEVINSON YASMIN		SAHUARITA	AZ	85629-0952
LEVISION MARVIN M & RUTH J TR		TUCSON	AZ	85711-3036
LEYVA JOSE		TUCSON	AZ	85705-4616
LICEA, MARISELA		NOGALES	AZ	85621-1728
LINDEMAN VERLIN C & TERESA JT / RS		AMADO	AZ	85645-9730
LINDEMOEN GENE & DONNA JT / RS		AMADO	AZ	85645-9553
LLAMAS RUBEN JR & VERONICA G JT / RS		SAHUARITA	AZ	85629-0319
LM INVESTMENTS L L C		NOGALES	AZ	85621-4021
LOCHNER JAMES E & MARY BETH CP / RS		TUCSON	AZ	85730-2917
LOGAN (NOGALES) ASSOC LLC		NOGALES	AZ	85621-1339
LOMA LINDA MALL LLC		TUCSON	AZ	85712-2316
LOPEZ JOSE LUIS & ELIAZAR CP / RS		SAHUARITA	AZ	85629-9127
LOPEZ, FRANCISCA ALICIA		NOGALES	AZ	85621-1734
LOPEZ, FRANCISCA G		NOGALES	AZ	85628-6760
LOPEZ, GLORIA F		NOGALES	AZ	85628-6760
LOPEZ, MIGUEL L	AREVALO, MARIA JESUS	NOGALES	AZ	85621-2412
LOTOCKA LLC		OKARGHE	OK	73762-0495
LUCERO, ARMANDO	LUCERO, MANUELA G	NOGALES	AZ	85621-1727
LUGO, MIRNA		NOGALES	AZ	85621-4108
LUNDQUIST ALFRED J & OREY PAMELA L	UND 1/2 INT EA	GRAND MARAIS	MI	49839-0232
LUTZ KEVIN C		TUCSON	AZ	85749-8751
MA THENA PROPERTIES L L P	ARIZONA LIMITED LIABILITY PARTNERSHIP	NOGALES	AZ	85628-1806
MAAZ L L C		SEATTLE	WA	98199-3261
MAC AULIFFE JANICE C & PHILIP A JT / RS		AMADO	AZ	85645-9563
MACHUCA, SERGIO	MACHUCA, LUCIA	NOGALES	AZ	85628-2185
MACIAS FRANCISCO B & ALICIA MARIE CP / RS		SAHUARITA	AZ	85629-9251
MADISON PATRICIA A REVOC LIVING TR		AMADO	AZ	85645-9784
MAGYAR MICHAEL ANTHONY		SAHUARITA	AZ	85629-9252
MAILLOUX TODD D		AMADO	AZ	85645-9505
MAJALCA JOE A W & KATHERINE G		AMADO	AZ	85645-0566
MANSON PROPERTIES L L C		NOGALES	AZ	85628-1269
MANUFACTURERS BANK NA TR	ATTN: ANNE K WYER	AMADO	AZ	85645-0637
MARCOTTE ELVIA & MARCOTTE ROBERT JT / RS		AMADO	AZ	85645-9730
MARGINEAU COSTIN		TUCSON	AZ	85708-0327
MARIPOSA BUSINESS COMPLEX L L C	ARIZONA LIMITED LIABILITY CO	NOGALES	AZ	85621-4521
MARIPOSA COMMUNITY HEALTH CENTER	WELDEN JAMES R	NOGALES	AZ	85621-1063
MARIPOSA LAND MANAGEMENT LLC		NOGALES	AZ	85621-4626
MARIPOSA MANOR COMMUNITY LLC		NOGALES	AZ	85621-4027
MARIPOSA ROAD SELF STORAGE ASSOCIATES		TUCSON	AZ	85712-1282
MARIPOSA SHOPPING CENTER INVESTMENTS LLC		NEWPORT BEACH	CA	92660-2744
MARITEL PROPERTIES LLC		NOGALES	AZ	85621-1150
MARKLAND INVESTMENTS		TUCSON	AZ	85718-7803
MARTIN, MANUEL L		NOGALES	AZ	85621-4100

MARTINEZ HECTOR I				SAHUARITA	AZ	85629-9067
MARTINEZ IRENE				SAHUARITA	AZ	85629-0587
MARTINEZ, ALEJANDRO		MARTINEZ, LUPITA J		RIO RICO	AZ	85648-2530
MARTINEZ, CARLOS D		MARTINEZ, OLIVIA		NOGALES	AZ	85621-1111
MARTINEZ, RENE Z				NOGALES	AZ	85621-1808
MARTINEZ-ELIAS OSCAR D				TUCSON	AZ	85746-3319
MASTICK, ANNETE S			ANNETTE SUZY MASTICK REV LIVING TR	TUCSON	AZ	85750-2338
MAVAL PROPERTIES L L C				NOGALES	AZ	85628-0371
MAYER, EDWARD C				NOGALES	AZ	85621-1739
MAYMAR PROPERTIES L L C				NOGALES	AZ	85621-1524
MC DUFFIE DOAK S & MARY ANNE JT / RS				TUCSON	AZ	85745-4206
MC GUNN KATHLEEN A 1 / 2 & MCGUNN-KIM			KATHLEEN A 1/2	SANTA FE	NM	87505-3331
MC NAIR LARRY				AMADO	AZ	85645-0841
MCDONALDS CORP				COLUMBUS	OH	43218-2989
MEADOW PROPERTIES LLC				TUCSON	AZ	85728-4146
MEDINA, DELIA				NOGALES	AZ	85621-2926
MEINTEL SCOTT A				AMADO	AZ	85645-9711
MEJIA, ENRIQUE			MEJIA, AMALIA	NOGALES	AZ	85621-1111
MENDELSON MARSHA S				AMADO	AZ	85645-9731
MERRELL JASON A & ARNOLD JENNIFER L JT / RS				SAHUARITA	AZ	85629-9374
MERRICK VINCENTA TR				CAMP VERDE	AZ	86322-6323
MEYER ALEX M & REBECCA S JT / RS				VAIL	AZ	85641-2389
MICHAELIS KENNETH & SHARON K JT / RS				AMADO	AZ	85645-9559
MICKLE, PATRICK C			MICKLE, JANET Y	SAN CLEMENTE	CA	92673-6225
MILES JOE S				RIO RICO	AZ	85648-1911
MILLER DAYTON L				AMADO	AZ	85645-9557
MILLER, KAREN S				RIO RICO	AZ	85648-7004
MIMIAGA, JUAN MANUEL			MIMIAGA, LUCETTE	NOGALES	AZ	85621-3866
MITTENDORF WALTER J & AVERILL-MITTENDORF			R CATHERINE JT/RS	SAHUARITA	AZ	85629-8813
MOLERA ALVAREZ LAND DEVELOPMENT L L C				PHOENIX	AZ	85013-3422
MONROY, HECTOR M			MONROY, ANA MARGOT	NOGALES	AZ	85621-1346
MONTANO LIBRADO E & CATHERINE J JT / RS				SAHUARITA	AZ	85629-9234
MONTIEL, ARNOLDO C			MONTIEL, MARIA G	NOGALES	AZ	85621-1724
MOORE KENNETH L & HERRERA EILEEN M JT / RS				SAHUARITA	AZ	85629-0447
MOORE, DAVID A				NOGALES	AZ	85621-2801
MORALES LEOCADIO L			MORALES, MARTHA	SAHUARITA	AZ	85629-9292
MORALES, ARMANDO			MORALES, MARIA CHRISTINA	NOGALES	AZ	85621-1735
MORALES, JORGE				NOGALES	AZ	85621-1735
MORALES, RACHEL A				NOGALES	AZ	85621
MORENO ENRIQUE A & ROSALBA T JT / RS			MORENO, OLIVIA	AMADO	AZ	85645-9557
MORENO, BERNARDO			MORENO, GUSTAVO	NOGALES	AZ	85621-4105
MORENO, CLAUDIA C				NOGALES	AZ	85628-2968
MORENO, GERMAN ANTONIO				NOGALES	AZ	85621-4101
MT INDUSTRIES CORP				NOGALES	AZ	85628-6608
MUIR JOHN & DEO MARYANN JT / RS				AMADO	AZ	85645-9778
MULLER JR, JULIO			DE MULLER, BEATRIZ ELENA A	NOGALES	AZ	85628-1065

MULTI METALS INC	ARBO ARTHUR W ETAL	NOGALES	AZ	85628-2184
MURNER PETER A & MARIE E CP / RS		AMADO	AZ	85645-9553
NADERHOFF CLIFTON J & PATRICIA J CP / RS		SAHUARITA	AZ	85629-8872
NAGEL FRED R & SALLY B CP / RS		AMADO	AZ	85645-9783
NAJAR, JONATHAN A		NOGALES	AZ	85621-4102
NAULT JOSEFINA		TUCSON	AZ	85712-3456
NEALE JAMES E		GREEN VALLEY	AZ	85614-3745
NEGOCIOS, INTERNACIONALES	DE NOGALES S A DE S, V	NOGALES	AZ	85621-4105
NELSON ROGER & RENEE &	NELSON LORI LYNNE ALL JT/RS	SAHUARITA	AZ	85629-9375
NELSON RYAN G & KIMBERLY L CP / RS		SAHUARITA	AZ	85629-9298
NEUMANN LEO R & DARLENE E CP / RS		AMADO	AZ	85645-9571
NEW IDEAS NETWORK LLC	ATTN: JEROLD V & KATHLEEN A TUCKER	TUCSON	AZ	85750-0715
NICKELS LARRY & RUBY CP / RS		TUCSON	AZ	85746-8272
NICKERSON TEDDY E JR & DONNA LEE CP / RS		SAHUARITA	AZ	85629-9184
NOGALES CITY OF		NOGALES	AZ	85621
NOGALES CITY OF		NOGALES	AZ	85621-2262
NOGALES REAL ESTATES DEVELOPMENT L L C		NOGALES	AZ	85621-2121
NOGALES SELF STORAGE ASSOCIATES L L C		TUCSON	AZ	85712-1282
NOGALES SPANISH CONGREGATION, OF JEHOVAHS		NOGALES	AZ	85621-4099
NOGALES UNIFIED SCHOOL DIST #1		NOGALES	AZ	85621
NOGALES UNIFIED SCHOOL DIST #1	NOGALES HIGH SCHOOL	NOGALES	AZ	85621-2613
NOPERI ADRIAN L & ROBERTA L CP / RS	NOGALES HIGH SCHOOL	SAHUARITA	AZ	85629-9336
NUNEZ HEDDY & FREIG MABEL		NOGALES	AZ	85621-4505
OASIS CENTER L L C	ARIZONA LIMITED LIABILITY CO	NOGALES	AZ	85628-0668
OASIS CENTER LLC	ARIZONA LIMITED LIABILITY CO	SCOTTSDALE	AZ	85251-3819
OASIS THEATRE 9 LLC		ELKHART	KS	67950-0427
OBREGON, FRANCISCO	OBREGON, BEATRIZ E	NOGALES	AZ	85621-4108
OCEAN GARDE PRODUCTS INC		PHOENIX	AZ	85004-2554
OCHOA SANDRA A		SANTA ANA	CA	92704-1907
OCHOA, ADRIAN JR		NOGALES	AZ	85621-1701
OCHOA, JEFI JEANNETTE	JEFI JEANNETTE OCHOA FAMILY REVOCABLE LI	NOGALES	AZ	85621-1702
OCHOA, LUIS LOPEZ		NOGALES	AZ	85628-1562
ODLE BERT E & LENNA R		SAHUARITA	AZ	85629-0206
OGC PROPERTIES L L C		NOGALES	AZ	85628-6524
OHRT FREDERICK P SR		AMADO	AZ	85645-9727
OJEDA, MANUEL V	DEL, MARIA G	NOGALES	AZ	85621-1243
OLVERA MARIE L LIVING TR	ATTN: MARIE L OLVERA & ROSITA F	SAHUARITA	AZ	85629-0115
ORTA ANNETTE Y		SAHUARITA	AZ	85629-9383
ORTIZ CARL & M ELENA JT / RS		AMADO	AZ	85645-9719
ORTIZ JUAN & ROSA JT / RS		TUCSON	AZ	85745-8908
ORTIZ, ESTELA G		NOGALES	AZ	85621-1130
OSORIO, CLAUDIA		NOGALES	AZ	85621-1055
OSTLER, JESUS LOURDES		NOGALES	AZ	85621-4100
OTANEZ REAL ESTATE HOLIDINGS LLC	ARIZONA LIMITED LIABILITY CO	RIO RICO	AZ	85648-4769
OTC-2 LLC		NOGALES	AZ	85628-0668
OVERMAN TED & JULIE CP / RS		RIO VISTA	CA	94571-2268

REYNAGA, ELVIA C			TUCSON	AZ	85746-1347
REYNOLDS JAMES ALMOND & SUSAN GRACE CP / RS			SAHUARITA	AZ	85629-1010
REYNOLDS JOHN B			AMADO	AZ	85645-9782
REYNOLDS KIMBERLEY A & ROBERT J JT / RS			SAHUARITA	AZ	85629-9251
RIBA NEAL T & DIANE K			AMADO	AZ	85645-9564
RICE MITCHELL A & STACY CP / RS			AMADO	AZ	85645-9777
RILEY MICHAEL D & BETSY A JT / RS			SAHUARITA	AZ	85629-0501
RILEY-BURKARD CAROLYN S			GREEN VALLEY	AZ	85622-0301
ROBERTS LARRY LIVING TR			AMADO	AZ	85645-9577
ROBINSON KENNETH R JR & LUZ I			SAHUARITA	AZ	85629-0485
ROBINSON RICK			SAHUARITA	AZ	85629-9256
ROBINSON, GUILLERMO		ROBINSON, ELVIA B	NOGALES	AZ	85628-2235
RODRIGUEZ DAVID M SR & DONNA D			AMADO	AZ	85645-9533
RODRIGUEZ EDUARDO & YOLANDA JT / RS			AMADO	AZ	85645-0811
RODRIGUEZ, EMILY			NOGALES	AZ	85621-2629
RODRIGUEZ, ISMAEL		RODRIGUEZ, YMELDA JT	NOGALES	AZ	85621-1721
RODRIGUEZ, LUIS A		RODRIGUEZ, MARCELA V	NOGALES	AZ	85621-4122
RODRIGUEZ, LUZ ARACELI			NOGALES	AZ	85621-4111
ROJAS, RENATO JR			NOGALES	AZ	85621-1711
ROMERO, RODOLFO G			NOGALES	AZ	85621
ROMO CAROLINA A			AMADO	AZ	85645-0567
ROMO PETER A & ANNA ELVIRA M JT / RS			AMADO	AZ	85645-9731
ROSEMONT COPPER COMPANY			TUCSON	AZ	85711-7401
ROWE, HILDA H		ATTN: LAND	RIO RICO	AZ	85648-3530
RUBIO ALEJANDRO & MARIA LUCIA CP / RS			SAHUARITA	AZ	85629-9498
RUIZ, ALBA ROBINSON			NOGALES	AZ	85621-2115
RUIZ, DE LILIA			CORONADO	CA	92118-4040
RUIZ, FRANCISCO A		RUIZ, ELIZABETH	SIERRA VISTA	AZ	85650-9144
RUSSELL SUSAN B & JOSEPH M CP / RS			AMADO	AZ	85645-9728
S & M L L C			GREEN VALLEY	AZ	85614-3315
SADER DAVID PAUL & SUSAN DIANE JT / RS			AMADO	AZ	85645-9602
SADOWY KAREN A & HARACOURT MICHAEL L CP / RS			SAHUARITA	AZ	85629-0820
SAHUARITA FOUR LLC		ATTN: DEBBY LAMB	SAHUARITA	AZ	85629-9524
SAHUARITA KOLB 135 LLC			TUCSON	AZ	85718-6577
SAHUARITA SUNSET INVESTMENTS LP		ATTN: DEBBY LAMB	SAHUARITA	AZ	85629-9524
SAINZ FAMILY REGISTERED L L P, ARIMEX			RIO RICO	AZ	85648-1685
SALAZAR, BEATRIZ			NOGALES	AZ	85621-1728
SALCEDO, EDUARDO			NOGALES	AZ	85621-4122
SALCIDO DAVID L & KATHLEEN L JT / RS			SAHUARITA	AZ	85629-9187
SALIDO, EDUARDO		SALIDO, ANA JULISA	TUCSON	AZ	85741-4358
SALVA VINCE & TERRI CP / RS			SAHUARITA	AZ	85629-8445
SANCHEZ LUIS & LILLY N CP / RS			SAHUARITA	AZ	85629-7000
SANCHEZ, JORGE ESTEBAN			NOGALES	AZ	85621-4100
SANCHEZ, NORMA A			NOGALES	AZ	85621-4104
SANDERS, GEORGINA			NOGALES	AZ	85621-4105
SANDIA PARTNERSHIP		FERNANDEZ, MARIA DEL CARMEN GARCIA	NOGALES	AZ	85621-4770

SWIFT TRANSPORTATION INC				PHOENIX	AZ	85043
TADEO AMADO				MODESTO	CA	95358-1326
TANORI, EDMUNDO		TANORI, OLIVIA		NOGALES	AZ	85621-3310
TAPPE ROBERT & CATHY JT / RS				SAHUARITA	AZ	85629-8823
TELLEZ JOHN B & REBECA JT / RS				SAHUARITA	AZ	85629-8432
TERRIBLE JOSEPH & ROXANNE JT / RS				VAIL	AZ	85641-0304
THE RUIZ PEREZ PLIEGO TRUST AGREEMENT		PLIEGO, MARTHA ELENA PEREZ		NOGALES	AZ	85621-4122
THE UNITED STATES OF AMERICA		CUSTOMS & BORDER PROTECTION		LAGUNA NIGUEL	CA	92607-0080
THERRIEN EMILE & ANN CP / RS				SAHUARITA	AZ	85629-0067
THETA PROPERTIES L L P		ARIZONA LIMITED LIABILITY PARTNERSHIP		NOGALES	AZ	85628-1806
THETA PROPERTIES LLP				NOGALES	AZ	85628-1172
THOMPSON ANN POOLE 50% & BAKER ALANA POOLE 50%				BENSON	AZ	85602-7809
THOMPSON WILLIAM E				AMADO	AZ	85645-9737
THREE FRONTIERS EXPRESS INC				EL PASO	TX	79928-5265
THYNG JAMES & LEANN M CP / RS				AMADO	AZ	85645-9576
TORMEY INVESTMENTS LLC				DEERFIELD	IL	60015-6002
TORRES WILLIAM G & MARGARET JEAN JT / RS				SAHUARITA	AZ	85629-1004
TRETO, YOLANDA LOPEZ				NOGALES	AZ	85621-1713
TROTTER ROBERT A & GLADY R CP / RS				SAHUARITA	AZ	85629-8803
TRUAX, MARIA DE JESUS				NOGALES	AZ	85628-0006
TRUAX, ROBERT L		TRUAX, MARIA DE JESUS		NOGALES	AZ	85621-1504
TRUST #7659 PROPERTY LLC		BARR GEORGE		NOGALES	AZ	85621-4626
TURNER JEFF E & KELLY L JT / RS				AMADO	AZ	85645-9522
TYSZKIEWICZ JOHN W 1 / 2 & TYSZKIEWICZ		JOHN W & SANDRA JT/RS 1/2		SAHUARITA	AZ	85629-9256
UNITED CHURCHES FELLOWSHIP INC				NOGALES	AZ	85628-0476
UNITED STATES OF AMERICA				LAGUNA NIGUEL	CA	92607-0080
URQUHART HELEN JENNETTE LIVING TR				TUCSON	AZ	85756-3054
URQUHART SHIRLEY J REVOC TR				AMADO	AZ	85645-9741
URQUIDEZ, TERESA G		URQUIDEZ, DAVID		NOGALES	AZ	85621-1718
VALDEZ ANTHONY J & ADELA M JT / RS				AMADO	AZ	85645-9797
VALDEZ ARNULFO C & MARIA J JT / RS				AMADO	AZ	85645-0984
VALDEZ EDMUND F & PAULA L CP / RS				AMADO	AZ	85645-0004
VALENCIA WAREHOUSE PROPERTIES LLC				NOGALES	AZ	85621-4573
VALENZUELA JUAN & OLGA ROBLES CP / RS				SAHUARITA	AZ	85629-9396
VALENZUELA MARIA C				SAHUARITA	AZ	85629-8365
VALERO JOHN J & STELLA				SAHUARITA	AZ	85629-9287
VALLEY DEBRA J				SAHUARITA	AZ	85629-9069
VAN DE LOO HARLEY J & KAREN JT / RS				THOUSAND OAKS	CA	91362-1259
VANDIVER LARRY D & PATRICIA S REVOC TR				AMADO	AZ	85645-9723
VANVORCE TERRY				SAHUARITA	AZ	85629-0387
VARCO INC				SAN DIEGO	CA	92101-6704
VARONA MARCELINO JR & DEBRA JEAN				NOGALES	AZ	85621-1720
VASQUEZ ARAUJO CO LLC		AN ARIZONA LIMITED LIABILITY COMPANY		NOGALES	AZ	85621-4522
VAZQUEZ BELEN OLGA DANIZA ZELMA, D		BECERRIL VAZQUEZ FAMILY TRUST		NOGALES	AZ	85621-3645
VAZQUEZ, JULIANA ESTELA LEDINICH				NOGALES	AZ	85621-1130
VELASCO, ROBERTO CARLOS				RIO RICO	AZ	85648-2850

VELASQUEZ MANUEL V				AMADO	AZ	85645-9732
VELASQUEZ, PERLA				NOGALES	AZ	85621-4111
VELAZQUEZ, JESUS R		VELAZQUEZ, CRISTINA S		NOGALES	AZ	85621-4123
VEO DEBRA S				AMADO	AZ	85645-9551
VERDUZCO, ADRIANA GUTIERREZ				NOGALES	AZ	85621-4584
VERNON PHILLIP E & JUDITH L JT / RS				AMADO	AZ	85645-9567
VERTS WILLIAM & RUETER ANGELA JT / RS				SAHUARITA	AZ	85629-9184
VETERANS AFFAIRS SECRETARY OF				PHOENIX	AZ	85012-2436
VICKERY GEORGE L REVOC TR				SUAMICO	WI	54313-8401
VICTORIA, LUCIA				NOGALES	AZ	85621-1715
VIDAL WAREHOUSES LLC				NOGALES	AZ	85621-4620
VIDAL WAREHOUSES LLC				NOGALES	AZ	85621-4607
VIDAL, MARTHA R		VIDAL TRUST		NOGALES	AZ	85621-3875
VILLA MARIPOSA H / O ASSOC				NOGALES	AZ	85621-4124
VILLA PARAISO LP		CORELOGIC COML TAX SRVCS		FORT WORTH	TX	76161-0009
VILLA SAN SIMONE HOMEOWNERS ASSN INC				GREEN VALLEY	AZ	85614-3315
VILLA, SERGIO A		VILLA, LAURA G		NOGALES	AZ	85621-4747
VILLAESCUSA, ALFREDO F		VILLAESCUSA, BEATRIZ C		NOGALES	AZ	85621-4116
VILLAGRAN, JAVIER		VILLAGRAN, GLORIA		NOGALES	AZ	85621-1106
VILLAENOR, BERENICE O		BERENICE O VILLAENOR REVOCABLE TRUST		NOGALES	AZ	85628-6028
VILLEGAS PEDRO V & DELIA C JT / RS				AMADO	AZ	85645-9505
VISOTSKI WILLIAM J & BRENDA JT / RS				SAHUARITA	AZ	85629-9252
VOMBERG ULRIKE				AMADO	AZ	85645-9502
VROOM DAVID H & MARSHA L JT / RS 1 / 2 &		FICKETT DONALD L & ROXANNE L JT / RS 1/2		ORO VALLEY	AZ	85755-9443
WAER ROY & OLIVIA CP / RS				SAHUARITA	AZ	85629-8624
WAGNER DAVID G TR				GREEN VALLEY	AZ	85614-3933
WAGON WHEEL REAL ESTATE LLC				GREEN VALLEY	AZ	85622-1655
WALKER STEVEN LEE & LINDA KAREN TR				AMADO	AZ	85645-9559
WALL TR				TUCSON	AZ	85750-1316
WAL-MART STORES INC		ATTN: AMY WALL & GARY PAYNE TR		BENTONVILLE	AR	72712-8055
WARDEN JUDYE				AMADO	AZ	85645-9740
WEAR RONALD & CHRISTINA CP / RS				SAHUARITA	AZ	85629-9338
WEGER CINDY A & COSTELOW VANCE JT / RS				SAHUARITA	AZ	85629-9267
WEICHBRODT WALTER WESLEY				FLORENCE	OR	97439-8508
WEISER DONALD E & JENNIFER CP / RS				SAHUARITA	AZ	85629-9270
WELDON JAMES B & ANNETTE M CP / RS				TUCSON	AZ	85730-3709
WERCH DEBRA J & WILLIAM B CP / RS				SAHUARITA	AZ	85629-9274
WHITE BRIAN & HOPE M CP / RS				SAHUARITA	AZ	85629-0361
WHITE CHARLES R & FIORITA LIVING TR				BEAVERTON	OR	97005-3028
WHITE DIANNE				SAHUARITA	AZ	85629-8831
WIGHT BRAYTON L				SAHUARITA	AZ	85629-8608
WILKINSON JASON & AMBER JT / RS				SAHUARITA	AZ	85629-1008
WILLIAMS DONALD M & LEANN R JT / RS				SAHUARITA	AZ	85629-8813
WILLIAMS JAY G				AMADO	AZ	85645-9723
WILSON MATILDE				SAHUARITA	AZ	85629-8826
WILSON THEODORE A D & ANGELA K CP / RS				AMADO	AZ	85645-9708

BUSINESS OCCUPANT	NOGALES	AZ	85621-1021
BUSINESS OCCUPANT	NOGALES	AZ	85621-2449
BUSINESS OCCUPANT	NOGALES	AZ	85621-4542
BUSINESS OCCUPANT	NOGALES	AZ	85621-4542
BUSINESS OCCUPANT	NOGALES	AZ	85621-4536
BUSINESS OCCUPANT	NOGALES	AZ	85621-4539
BUSINESS OCCUPANT	NOGALES	AZ	85621-4543
BUSINESS OCCUPANT	NOGALES	AZ	85621-4511
BUSINESS OCCUPANT	NOGALES	AZ	85621-4583
BUSINESS OCCUPANT	NOGALES	AZ	85621-4512
BUSINESS OCCUPANT	NOGALES	AZ	85621-4555
BUSINESS OCCUPANT	NOGALES	AZ	85621-4555
BUSINESS OCCUPANT	NOGALES	AZ	85621-4555
BUSINESS OCCUPANT	NOGALES	AZ	85621-4555
BUSINESS OCCUPANT	NOGALES	AZ	85621-4504
BUSINESS OCCUPANT	NOGALES	AZ	85621-4621
BUSINESS OCCUPANT	NOGALES	AZ	85621-4621
BUSINESS OCCUPANT	NOGALES	AZ	85621-1346
BUSINESS OCCUPANT	NOGALES	AZ	85621-1480
BUSINESS OCCUPANT	NOGALES	AZ	85621-1480
BUSINESS OCCUPANT	NOGALES	AZ	85621-1346
BUSINESS OCCUPANT	NOGALES	AZ	85621-4504
BUSINESS OCCUPANT	NOGALES	AZ	85621-1346
BUSINESS OCCUPANT	NOGALES	AZ	85621-4500
BUSINESS OCCUPANT	NOGALES	AZ	85621-4554
BUSINESS OCCUPANT	NOGALES	AZ	85621-4522
BUSINESS OCCUPANT	NOGALES	AZ	85621-4504
BUSINESS OCCUPANT	NOGALES	AZ	85621-4540
BUSINESS OCCUPANT	NOGALES	AZ	85621-4540
BUSINESS OCCUPANT	NOGALES	AZ	85621-4540
BUSINESS OCCUPANT	NOGALES	AZ	85621-4540
BUSINESS OCCUPANT	NOGALES	AZ	85621-4540
BUSINESS OCCUPANT	NOGALES	AZ	85621-4540
BUSINESS OCCUPANT	NOGALES	AZ	85621-4507
BUSINESS OCCUPANT	NOGALES	AZ	85621-4507
BUSINESS OCCUPANT	NOGALES	AZ	85621-4118
BUSINESS OCCUPANT	NOGALES	AZ	85621-4505
BUSINESS OCCUPANT	NOGALES	AZ	85621-4521
BUSINESS OCCUPANT	NOGALES	AZ	85621-4508
BUSINESS OCCUPANT	NOGALES	AZ	85621-4505
BUSINESS OCCUPANT	NOGALES	AZ	85621-4557
BUSINESS OCCUPANT	NOGALES	AZ	85621-4557
BUSINESS OCCUPANT	NOGALES	AZ	85621-4557
BUSINESS OCCUPANT	NOGALES	AZ	85621-4557
BUSINESS OCCUPANT	NOGALES	AZ	85621-1367
BUSINESS OCCUPANT	NOGALES	AZ	85621-4531
BUSINESS OCCUPANT	NOGALES	AZ	85621-4590
BUSINESS OCCUPANT	NOGALES	AZ	85621-4508

BUSINESS OCCUPANT	NOGALES	AZ	85621-4534
BUSINESS OCCUPANT	NOGALES	AZ	85621-4594
BUSINESS OCCUPANT	NOGALES	AZ	85621-4505
BUSINESS OCCUPANT	NOGALES	AZ	85621-4547
BUSINESS OCCUPANT	NOGALES	AZ	85621-4547
BUSINESS OCCUPANT	NOGALES	AZ	85621-4547
BUSINESS OCCUPANT	NOGALES	AZ	85621-4547
BUSINESS OCCUPANT	NOGALES	AZ	85621-4547
BUSINESS OCCUPANT	NOGALES	AZ	85621-4515
BUSINESS OCCUPANT	NOGALES	AZ	85621-2419
BUSINESS OCCUPANT	NOGALES	AZ	85621-2423
BUSINESS OCCUPANT	NOGALES	AZ	85621-1371
BUSINESS OCCUPANT	NOGALES	AZ	85621-4532
BUSINESS OCCUPANT	NOGALES	AZ	85621-2496
BUSINESS OCCUPANT	NOGALES	AZ	85621-1039
BUSINESS OCCUPANT	NOGALES	AZ	85621-4613
BUSINESS OCCUPANT	NOGALES	AZ	85621-4569
BUSINESS OCCUPANT	NOGALES	AZ	85621-4581
BUSINESS OCCUPANT	NOGALES	AZ	85621-4562
BUSINESS OCCUPANT	NOGALES	AZ	85621-4597
BUSINESS OCCUPANT	NOGALES	AZ	85621-4567
BUSINESS OCCUPANT	NOGALES	AZ	85621-4577
BUSINESS OCCUPANT	NOGALES	AZ	85621-4561
BUSINESS OCCUPANT	NOGALES	AZ	85621-4606
BUSINESS OCCUPANT	NOGALES	AZ	85621-2419
BUSINESS OCCUPANT	NOGALES	AZ	85621-1040
BUSINESS OCCUPANT	NOGALES	AZ	85621-4560
BUSINESS OCCUPANT	NOGALES	AZ	85621-2459
BUSINESS OCCUPANT	NOGALES	AZ	85621-4033
BUSINESS OCCUPANT	NOGALES	AZ	85621-1013
BUSINESS OCCUPANT	NOGALES	AZ	85621-2489
BUSINESS OCCUPANT	NOGALES	AZ	85621-4031
BUSINESS OCCUPANT	NOGALES	AZ	85621-1338
BUSINESS OCCUPANT	NOGALES	AZ	85621-1369
BUSINESS OCCUPANT	NOGALES	AZ	85621-1013
BUSINESS OCCUPANT	NOGALES	AZ	85621-2470
BUSINESS OCCUPANT	NOGALES	AZ	85621-1135
BUSINESS OCCUPANT	NOGALES	AZ	85621-1135
BUSINESS OCCUPANT	NOGALES	AZ	85621-1135
BUSINESS OCCUPANT	NOGALES	AZ	85621-1135
BUSINESS OCCUPANT	NOGALES	AZ	85621-1141
BUSINESS OCCUPANT	NOGALES	AZ	85621-2423
BUSINESS OCCUPANT	NOGALES	AZ	85621-1058
BUSINESS OCCUPANT	NOGALES	AZ	85621-1058
BUSINESS OCCUPANT	NOGALES	AZ	85621-1032
BUSINESS OCCUPANT	NOGALES	AZ	85621-1032

BUSINESS OCCUPANT	NOGALES	AZ	85621-1032
BUSINESS OCCUPANT	NOGALES	AZ	85621-1064
BUSINESS OCCUPANT	NOGALES	AZ	85621-1064
BUSINESS OCCUPANT	NOGALES	AZ	85621-1064
BUSINESS OCCUPANT	NOGALES	AZ	85621-2485
BUSINESS OCCUPANT	NOGALES	AZ	85621-1339
BUSINESS OCCUPANT	NOGALES	AZ	85621-1064
BUSINESS OCCUPANT	NOGALES	AZ	85621-1386
BUSINESS OCCUPANT	NOGALES	AZ	85621-1386
BUSINESS OCCUPANT	NOGALES	AZ	85621-1386
BUSINESS OCCUPANT	NOGALES	AZ	85621-2457
BUSINESS OCCUPANT	NOGALES	AZ	85621-2457
BUSINESS OCCUPANT	NOGALES	AZ	85621-2457
BUSINESS OCCUPANT	NOGALES	AZ	85621-2457
BUSINESS OCCUPANT	NOGALES	AZ	85621-1339
BUSINESS OCCUPANT	NOGALES	AZ	85621-4121
BUSINESS OCCUPANT	NOGALES	AZ	85621-4126
BUSINESS OCCUPANT	NOGALES	AZ	85621-4126
BUSINESS OCCUPANT	NOGALES	AZ	85621-4119
BUSINESS OCCUPANT	NOGALES	AZ	85621-4119
BUSINESS OCCUPANT	NOGALES	AZ	85621-1339
BUSINESS OCCUPANT	NOGALES	AZ	85621-1027
BUSINESS OCCUPANT	NOGALES	AZ	85621-1067
BUSINESS OCCUPANT	NOGALES	AZ	85621-1341
BUSINESS OCCUPANT	NOGALES	AZ	85621-1341
BUSINESS OCCUPANT	NOGALES	AZ	85621-1341
BUSINESS OCCUPANT	NOGALES	AZ	85621-1341
BUSINESS OCCUPANT	NOGALES	AZ	85621-1341
BUSINESS OCCUPANT	NOGALES	AZ	85621-1341
BUSINESS OCCUPANT	NOGALES	AZ	85621-2177
BUSINESS OCCUPANT	NOGALES	AZ	85621-2177
BUSINESS OCCUPANT	NOGALES	AZ	85621-1341
BUSINESS OCCUPANT	NOGALES	AZ	85621-1100
BUSINESS OCCUPANT	NOGALES	AZ	85621-1110
BUSINESS OCCUPANT	NOGALES	AZ	85621-1007
BUSINESS OCCUPANT	NOGALES	AZ	85621-1007
BUSINESS OCCUPANT	NOGALES	AZ	85621-1007
BUSINESS OCCUPANT	NOGALES	AZ	85621-1137
BUSINESS OCCUPANT	NOGALES	AZ	85621-1137
BUSINESS OCCUPANT	NOGALES	AZ	85621-1038
BUSINESS OCCUPANT	NOGALES	AZ	85621-1038
BUSINESS OCCUPANT	NOGALES	AZ	85621-1038
BUSINESS OCCUPANT	NOGALES	AZ	85621-1041

BUSINESS OCCUPANT	NOGALES	AZ	85621-1073
BUSINESS OCCUPANT	NOGALES	AZ	85621-1073
BUSINESS OCCUPANT	NOGALES	AZ	85621-1073
BUSINESS OCCUPANT	NOGALES	AZ	85621-1073
BUSINESS OCCUPANT	NOGALES	AZ	85621-1075
BUSINESS OCCUPANT	NOGALES	AZ	85621-1075
BUSINESS OCCUPANT	NOGALES	AZ	85621-5027
BUSINESS OCCUPANT	NOGALES	AZ	85621-5027
BUSINESS OCCUPANT	NOGALES	AZ	85621-5027
BUSINESS OCCUPANT	NOGALES	AZ	85621-2409
BUSINESS OCCUPANT	NOGALES	AZ	85621-2408
BUSINESS OCCUPANT	NOGALES	AZ	85621-2499
BUSINESS OCCUPANT	NOGALES	AZ	85621-2499
BUSINESS OCCUPANT	NOGALES	AZ	85621-2499
BUSINESS OCCUPANT	NOGALES	AZ	85621-2400
BUSINESS OCCUPANT	NOGALES	AZ	85621-1723
BUSINESS OCCUPANT	NOGALES	AZ	85621-1723
BUSINESS OCCUPANT	NOGALES	AZ	85621-1723
BUSINESS OCCUPANT	NOGALES	AZ	85621-1732
BUSINESS OCCUPANT	NOGALES	AZ	85621-1732
BUSINESS OCCUPANT	NOGALES	AZ	85621-1079
BUSINESS OCCUPANT	NOGALES	AZ	85621-1127
BUSINESS OCCUPANT	NOGALES	AZ	85621-1127
BUSINESS OCCUPANT	NOGALES	AZ	85621-1741
BUSINESS OCCUPANT	NOGALES	AZ	85621-4627
BUSINESS OCCUPANT	NOGALES	AZ	85621-4546
BUSINESS OCCUPANT	NOGALES	AZ	85621-4579
BUSINESS OCCUPANT	NOGALES	AZ	85621-4545
BUSINESS OCCUPANT	NOGALES	AZ	85621-4545
BUSINESS OCCUPANT	NOGALES	AZ	85621-4545
BUSINESS OCCUPANT	NOGALES	AZ	85621-1738
BUSINESS OCCUPANT	NOGALES	AZ	85621-1078
BUSINESS OCCUPANT	NOGALES	AZ	85621-2441
BUSINESS OCCUPANT	NOGALES	AZ	85621-1099
BUSINESS OCCUPANT	NOGALES	AZ	85621-1148
BUSINESS OCCUPANT	NOGALES	AZ	85621-1148
BUSINESS OCCUPANT	NOGALES	AZ	85621-1148
BUSINESS OCCUPANT	NOGALES	AZ	85621-2481
BUSINESS OCCUPANT	NOGALES	AZ	85621-2481
BUSINESS OCCUPANT	NOGALES	AZ	85621-2481
BUSINESS OCCUPANT	NOGALES	AZ	85621-1729
BUSINESS OCCUPANT	NOGALES	AZ	85621-1016
BUSINESS OCCUPANT	NOGALES	AZ	85621-2409
BUSINESS OCCUPANT	NOGALES	AZ	85621-4517
BUSINESS OCCUPANT	NOGALES	AZ	85621-1071
BUSINESS OCCUPANT	NOGALES	AZ	85621-4518

BUSINESS OCCUPANT	NOGALES	AZ	85621-4517
BUSINESS OCCUPANT	NOGALES	AZ	85621-1736
BUSINESS OCCUPANT	NOGALES	AZ	85621-1736
BUSINESS OCCUPANT	NOGALES	AZ	85621-4603
BUSINESS OCCUPANT	NOGALES	AZ	85621-4603
BUSINESS OCCUPANT	NOGALES	AZ	85621-4603
BUSINESS OCCUPANT	NOGALES	AZ	85621-1725
BUSINESS OCCUPANT	NOGALES	AZ	85621-1020
BUSINESS OCCUPANT	NOGALES	AZ	85621-1749
BUSINESS OCCUPANT	AMADO	AZ	85645-9641
BUSINESS OCCUPANT	SAHUARITA	AZ	85629-9311
BUSINESS OCCUPANT	SAHUARITA	AZ	85629-9331
BUSTAMANTE REFRIGERATION	NOGALES	AZ	85621-1705
CELLUCAP	NOGALES	AZ	85621-4539
COLLECTRON INTERNATIONAL MGMT	NOGALES	AZ	85621-2428
CORAZON BEHAVIORAL HEALTH SVC	NOGALES	AZ	85621-1025
CPP NOGALAS	NOGALES	AZ	85621-2428
DA VITA NOGALES DIALYSIS	NOGALES	AZ	85621-4576
DAVIDS SERVICE INC	NOGALES	AZ	85621-4620
DISH NETWORK	NOGALES	AZ	85621-1023
ELITE LOGISTICS	NOGALES	AZ	85621-2426
FEDEX SHIP CENTER	NOGALES	AZ	85621-4620
FISHING SAN CARLOS	NOGALES	AZ	85621-2449
GLOBAL INDUSTRIAL SOLUTIONS	NOGALES	AZ	85621-4589
HOT SHOTZ EMBROIDERY SCREEN	NOGALES	AZ	85621-1346
INTACTIC LLC	NOGALES	AZ	85621-1736
INTERNATIONAL PAPER CO	NOGALES	AZ	85621-4517
INTERSTATE FREIGHT BROKERS	NOGALES	AZ	85621-4593
KELPAC MEDICAL	NOGALES	AZ	85621-4505
LAWYERS TITLE	NOGALES	AZ	85621-1013
LIVINGSTON INTERNATIONAL INC	NOGALES	AZ	85621-2457
M & G FORWARDING LLC	NOGALES	AZ	85621-2176
MARIPOSA MALL	NOGALES	AZ	85621-1023
MARIPOSA PROPERTIES	NOGALES	AZ	85621-4577
MAVAL WAREHOUSE	NOGALES	AZ	85621-4513
MICHAEL ROLLINS OD	NOGALES	AZ	85621-1046
MINIATURE PRECISION COMPONENTS	NOGALES	AZ	85621-4567
NFPP & C	NOGALES	AZ	85621-1007
NOGALES CELLULAR	NOGALES	AZ	85621-1023
NOGALES PROPERTY MANAGEMENT	NOGALES	AZ	85621-2121
PAYLESS SHOE SOURCE	NOGALES	AZ	85621-1044
RESIDENT	AMADO	AZ	85645-9505
RESIDENT	AMADO	AZ	85645-9505
RESIDENT	NOGALES	AZ	85621-1750
RESIDENT	NOGALES	AZ	85621-1750
RESIDENT	NOGALES	AZ	85621-1750

RESIDENT	NOGALES	AZ	85621-1764
RESIDENT	NOGALES	AZ	85621-1764
RESIDENT	NOGALES	AZ	85621-1764
RESIDENT	NOGALES	AZ	85621-1765
RESIDENT	NOGALES	AZ	85621-1765
RESIDENT	NOGALES	AZ	85621-1766
RESIDENT	NOGALES	AZ	85621-1766
RESIDENT	NOGALES	AZ	85621-1767
RESIDENT	NOGALES	AZ	85621-1767
RESIDENT	NOGALES	AZ	85621-1767
RESIDENT	NOGALES	AZ	85621-1768
RESIDENT	NOGALES	AZ	85621-1768
RESIDENT	NOGALES	AZ	85621-1768
RESIDENT	NOGALES	AZ	85621-1769
RESIDENT	NOGALES	AZ	85621-1769
RESIDENT	NOGALES	AZ	85621-1769
RESIDENT	NOGALES	AZ	85621-1770
RESIDENT	NOGALES	AZ	85621-1770
RESIDENT	NOGALES	AZ	85621-1770
RESIDENT	NOGALES	AZ	85621-1771
RESIDENT	NOGALES	AZ	85621-1771
RESIDENT	NOGALES	AZ	85621-1771
RESIDENT	NOGALES	AZ	85621-1773
RESIDENT	NOGALES	AZ	85621-1773
RESIDENT	NOGALES	AZ	85621-1773
RESIDENT	NOGALES	AZ	85621-1773
RESIDENT	NOGALES	AZ	85621-1774
RESIDENT	NOGALES	AZ	85621-1774
RESIDENT	NOGALES	AZ	85621-1774
RESIDENT	NOGALES	AZ	85621-1774
RESIDENT	NOGALES	AZ	85621-1775
RESIDENT	NOGALES	AZ	85621-1775
RESIDENT	NOGALES	AZ	85621-1775
RESIDENT	NOGALES	AZ	85621-1776
RESIDENT	NOGALES	AZ	85621-1776
RESIDENT	NOGALES	AZ	85621-1777
RESIDENT	NOGALES	AZ	85621-1777
RESIDENT	NOGALES	AZ	85621-1777
RESIDENT	NOGALES	AZ	85621-1778
RESIDENT	NOGALES	AZ	85621-1778

RESIDENT	NOGALES	AZ	85621-2472
RESIDENT	NOGALES	AZ	85621-2487
RESIDENT	NOGALES	AZ	85621-2472
RESIDENT	NOGALES	AZ	85621-2472
RESIDENT	NOGALES	AZ	85621-2472
RESIDENT	NOGALES	AZ	85621-2473
RESIDENT	NOGALES	AZ	85621-2473
RESIDENT	NOGALES	AZ	85621-2473
RESIDENT	NOGALES	AZ	85621-2471
RESIDENT	NOGALES	AZ	85621-2473
RESIDENT	NOGALES	AZ	85621-2473
RESIDENT	NOGALES	AZ	85621-2473
RESIDENT	NOGALES	AZ	85621-2488
RESIDENT	NOGALES	AZ	85621-2473
RESIDENT	NOGALES	AZ	85621-2474
RESIDENT	NOGALES	AZ	85621-2474
RESIDENT	NOGALES	AZ	85621-2474
RESIDENT	NOGALES	AZ	85621-2474
RESIDENT	NOGALES	AZ	85621-2471
RESIDENT	NOGALES	AZ	85621-2474
RESIDENT	NOGALES	AZ	85621-2474
RESIDENT	NOGALES	AZ	85621-2474
RESIDENT	NOGALES	AZ	85621-2475
RESIDENT	NOGALES	AZ	85621-2476
RESIDENT	NOGALES	AZ	85621-2476
RESIDENT	NOGALES	AZ	85621-2476
RESIDENT	NOGALES	AZ	85621-2494
RESIDENT	NOGALES	AZ	85621-2477
RESIDENT	NOGALES	AZ	85621-2477
RESIDENT	NOGALES	AZ	85621-2471
RESIDENT	NOGALES	AZ	85621-2477
RESIDENT	NOGALES	AZ	85621-2477
RESIDENT	NOGALES	AZ	85621-2477
RESIDENT	NOGALES	AZ	85621-2477
RESIDENT	NOGALES	AZ	85621-2477
RESIDENT	NOGALES	AZ	85621-2478
RESIDENT	NOGALES	AZ	85621-2478
RESIDENT	NOGALES	AZ	85621-2478
RESIDENT	NOGALES	AZ	85621-2482
RESIDENT	NOGALES	AZ	85621-2471
RESIDENT	NOGALES	AZ	85621-2482
RESIDENT	NOGALES	AZ	85621-2482
RESIDENT	NOGALES	AZ	85621-2482
RESIDENT	NOGALES	AZ	85621-2479
RESIDENT	NOGALES	AZ	85621-2479

RESIDENT	NOGALES	AZ	85621-2479
RESIDENT	NOGALES	AZ	85621-2479
RESIDENT	NOGALES	AZ	85621-2479
RESIDENT	NOGALES	AZ	85621-2479
RESIDENT	NOGALES	AZ	85621-2493
RESIDENT	NOGALES	AZ	85621-2471
RESIDENT	NOGALES	AZ	85621-2479
RESIDENT	NOGALES	AZ	85621-2471
RESIDENT	NOGALES	AZ	85621-2471
RESIDENT	NOGALES	AZ	85621-2472
RESIDENT	NOGALES	AZ	85621-4109
RESIDENT	NOGALES	AZ	85621-4110
RESIDENT	NOGALES	AZ	85621-4110
RESIDENT	NOGALES	AZ	85621-4107
RESIDENT	NOGALES	AZ	85621-4110
RESIDENT	NOGALES	AZ	85621-4110
RESIDENT	NOGALES	AZ	85621-4111
RESIDENT	SAHUARITA	AZ	85629-8608
RESIDENT	AMADO	AZ	85645-9719
RESIDENT	NOGALES	AZ	85621-1109
RESIDENT	NOGALES	AZ	85621-1111
RESIDENT	NOGALES	AZ	85621-5000
RESIDENT	NOGALES	AZ	85621-5007
RESIDENT	NOGALES	AZ	85621-5007
RESIDENT	NOGALES	AZ	85621-5007
RESIDENT	NOGALES	AZ	85621-5007
RESIDENT	NOGALES	AZ	85621-5007
RESIDENT	NOGALES	AZ	85621-5000
RESIDENT	NOGALES	AZ	85621-5007
RESIDENT	NOGALES	AZ	85621-5007
RESIDENT	NOGALES	AZ	85621-5007
RESIDENT	NOGALES	AZ	85621-5007
RESIDENT	NOGALES	AZ	85621-5007
RESIDENT	NOGALES	AZ	85621-5008
RESIDENT	NOGALES	AZ	85621-5008
RESIDENT	NOGALES	AZ	85621-5008
RESIDENT	NOGALES	AZ	85621-5009
RESIDENT	NOGALES	AZ	85621-5009
RESIDENT	NOGALES	AZ	85621-5009
RESIDENT	NOGALES	AZ	85621-5009
RESIDENT	NOGALES	AZ	85621-5000
RESIDENT	NOGALES	AZ	85621-5009
RESIDENT	NOGALES	AZ	85621-5009
RESIDENT	NOGALES	AZ	85621-5009
RESIDENT	NOGALES	AZ	85621-5009
RESIDENT	NOGALES	AZ	85621-5010
RESIDENT	NOGALES	AZ	85621-5000
RESIDENT	NOGALES	AZ	85621-5011

RESIDENT	NOGALES	AZ	85621-5011
RESIDENT	NOGALES	AZ	85621-5011
RESIDENT	NOGALES	AZ	85621-5011
RESIDENT	NOGALES	AZ	85621-5011
RESIDENT	NOGALES	AZ	85621-5000
RESIDENT	NOGALES	AZ	85621-5011
RESIDENT	NOGALES	AZ	85621-5011
RESIDENT	NOGALES	AZ	85621-5011
RESIDENT	NOGALES	AZ	85621-5011
RESIDENT	NOGALES	AZ	85621-5000
RESIDENT	NOGALES	AZ	85621-5000
RESIDENT	NOGALES	AZ	85621-5000
RESIDENT	NOGALES	AZ	85621-5000
RESIDENT	NOGALES	AZ	85621-5001
RESIDENT	NOGALES	AZ	85621-5001
RESIDENT	NOGALES	AZ	85621-5001
RESIDENT	NOGALES	AZ	85621-5001
RESIDENT	NOGALES	AZ	85621-5001
RESIDENT	NOGALES	AZ	85621-5003
RESIDENT	NOGALES	AZ	85621-5003
RESIDENT	NOGALES	AZ	85621-5003
RESIDENT	NOGALES	AZ	85621-5003
RESIDENT	NOGALES	AZ	85621-5003
RESIDENT	NOGALES	AZ	85621-5003
RESIDENT	NOGALES	AZ	85621-5003
RESIDENT	NOGALES	AZ	85621-5003
RESIDENT	NOGALES	AZ	85621-5003
RESIDENT	NOGALES	AZ	85621-5000
RESIDENT	NOGALES	AZ	85621-5004
RESIDENT	NOGALES	AZ	85621-5004
RESIDENT	NOGALES	AZ	85621-5005
RESIDENT	NOGALES	AZ	85621-5005
RESIDENT	NOGALES	AZ	85621-5005
RESIDENT	NOGALES	AZ	85621-5005
RESIDENT	NOGALES	AZ	85621-5005
RESIDENT	NOGALES	AZ	85621-5005
RESIDENT	NOGALES	AZ	85621-5005
RESIDENT	NOGALES	AZ	85621-5006
RESIDENT	NOGALES	AZ	85621-5006
RESIDENT	NOGALES	AZ	85621-5006
RESIDENT	NOGALES	AZ	85621-5006
RESIDENT	NOGALES	AZ	85621-5007
RESIDENT	AMADO	AZ	85645-9723
RESIDENT	AMADO	AZ	85645-9787
RESIDENT	AMADO	AZ	85645-9522
RESIDENT	NOGALES	AZ	85621-1128

RESIDENT	NOGALES	AZ	85621-4116
RESIDENT	NOGALES	AZ	85621-4116
RESIDENT	NOGALES	AZ	85621-4116
RESIDENT	NOGALES	AZ	85621-4116
RESIDENT	NOGALES	AZ	85621-4116
RESIDENT	NOGALES	AZ	85621-4123
RESIDENT	NOGALES	AZ	85621-4123
RESIDENT	NOGALES	AZ	85621-4123
RESIDENT	NOGALES	AZ	85621-4123
RESIDENT	NOGALES	AZ	85621-4123
RESIDENT	NOGALES	AZ	85621-4123
RESIDENT	NOGALES	AZ	85621-4123
RESIDENT	NOGALES	AZ	85621-4123
RESIDENT	AMADO	AZ	85645-9564
RESIDENT	AMADO	AZ	85645-9564
RESIDENT	AMADO	AZ	85645-9564
RESIDENT	AMADO	AZ	85645-9573
RESIDENT	AMADO	AZ	85645-9532
RESIDENT	AMADO	AZ	85645-9776
RESIDENT	AMADO	AZ	85645-9776
RESIDENT	AMADO	AZ	85645-9550
RESIDENT	NOGALES	AZ	85621-4104
RESIDENT	NOGALES	AZ	85621-4104
RESIDENT	NOGALES	AZ	85621-4101
RESIDENT	NOGALES	AZ	85621-4101
RESIDENT	NOGALES	AZ	85621-4101
RESIDENT	NOGALES	AZ	85621-4101
RESIDENT	AMADO	AZ	85645-9575
RESIDENT	AMADO	AZ	85645-9575
RESIDENT	SAHUARITA	AZ	85629-8927
RESIDENT	SAHUARITA	AZ	85629-9184
RESIDENT	SAHUARITA	AZ	85629-9186
RESIDENT	SAHUARITA	AZ	85629-9300
RESIDENT	SAHUARITA	AZ	85629-8369
RESIDENT	SAHUARITA	AZ	85629-8807
RESIDENT	SAHUARITA	AZ	85629-9187
RESIDENT	SAHUARITA	AZ	85629-8445
RESIDENT	SAHUARITA	AZ	85629-9287
RESIDENT	SAHUARITA	AZ	85629-9287
RESIDENT	SAHUARITA	AZ	85629-9287
RESIDENT	SAHUARITA	AZ	85629-8708
RESIDENT	SAHUARITA	AZ	85629-9398
RESIDENT	SAHUARITA	AZ	85629-8708
RESIDENT	SAHUARITA	AZ	85629-8708
RESIDENT	SAHUARITA	AZ	85629-8708
RESIDENT	SAHUARITA	AZ	85629-9285
RESIDENT	SAHUARITA	AZ	85629-8708
RESIDENT	SAHUARITA	AZ	85629-9292

RESIDENT	SAHUARITA	AZ	85629-9319
RESIDENT	SAHUARITA	AZ	85629-9319
RESIDENT	SAHUARITA	AZ	85629-9319
RESIDENT	SAHUARITA	AZ	85629-9319
RESIDENT	SAHUARITA	AZ	85629-9319
RESIDENT	SAHUARITA	AZ	85629-9327
RESIDENT	SAHUARITA	AZ	85629-9327
RESIDENT	SAHUARITA	AZ	85629-9327
RESIDENT	SAHUARITA	AZ	85629-9328
RESIDENT	SAHUARITA	AZ	85629-9328
RESIDENT	SAHUARITA	AZ	85629-9329
RESIDENT	SAHUARITA	AZ	85629-9329
RESIDENT	SAHUARITA	AZ	85629-9330
RLP SERVICES	NOGALES	AZ	85621-2419
RUIZ WAREHOUSE LLC	NOGALES	AZ	85621-4534
SALAZARS FREIGHT FORWARDING	NOGALES	AZ	85621-4563
SAULS PRODUCE	NOGALES	AZ	85621-1136
SOUTHWESTERN EYE CTR	NOGALES	AZ	85621-1046
SPRINT	NOGALES	AZ	85621-1007
STAGE	NOGALES	AZ	85621-1024
TFC BROADBAND SOLUTIONS	NOGALES	AZ	85621-2423
TRANSPORTE TORO BRAVO	NOGALES	AZ	85621-4593
U P S & RENTALS	NOGALES	AZ	85621-2490
UNI SOURCE ENERGY SVC	NOGALES	AZ	85621-1338
UNITED TECHNOLOGIES INTL	NOGALES	AZ	85621-4563
VALENCIA POWER PLANT	NOGALES	AZ	85621-1338
VAMA LOGISTICS INC	NOGALES	AZ	85621-4589
WALBRO ENGINE MANAGEMENT	NOGALES	AZ	85621-4517
Z B SUPPLIES	NOGALES	AZ	85621-2410

Exhibit J-2(e) – E-mail List for Notice of June 2017 Open House Meetings

Agency/Tribe/NGO	Contact
US Forest Service	Jim Copeland
US Border Patrol	Jacob Stukenberg
US Border Patrol	Kenn Heriter
IBWC - Nogales Field Office and Wastewater Treatment Plant	Lorenzo Ortiz
Arizona Game and Fish Department (AGFD)	Kristin Terpening
State Historic Preservation Office	David Jacobs
Department of Energy	Melissa Pauley
US Army Corps of Engineers (USACE)	Robert Dummer
US Fish and Wildlife Service (USFWS)	Jean Calhoun, Assistant Field Supervisor
Arizona Department of Transportation (ADOT)	Ayman Ghadban Peter Steere, Tribal Historic Preservation Officer
Tohono O'odham Nation	Peter Yucupicio
Pascua Yaqui Tribe	Veronica La Motte Darnell
Pascua Yaqui Tribe	Jan Holder, Executive Director
Sky Island Alliance	Jan Holder
Friends of the Tumacacori Highlands	
Sierra Club - Grand Canyon Chapter	Dan Millis
Sierra Club - Grand Canyon Chapter	Dan Millis
Friends of Santa Cruz River	Scott Vandervoet
Center for Biological Diversity	Kieran Suckling, Executive Director
The Nature Conservancy	Amanda Amoros
The Nature Conservancy	Tana Kappel/Rob Marshall
Tucson Audubon Society	Karen Fogas
Coalition for Sonoran Desert Protection	Carolyn Campbell
AZ State Land Department	Ruben Ojeda

Exhibit J-2(f) – Publication and Affidavits of Publication for Notice of June 2017 Open House Meetings

Affidavit of Publication

Before me, a Notary Public, personally appeared

Melissa Bosley

Name (please print)

Accounting

Title

To certify that the Unisource Public Notice Advertising appeared in the

Nogales International

Newspaper Name (please print)

A product of the Nogales International and Wick Communications

On June 16, 2017 as ordered by Unisource Energy Services.

Date

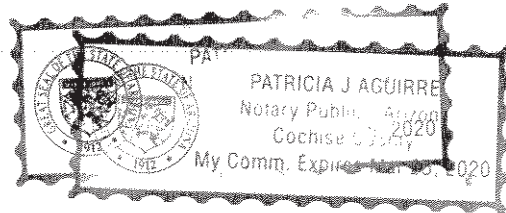
M Bosley
Signature

State of Arizona

County of Cochise

Sworn to and subscribed before me this

19 day of June, 2017



Patricia J. Aguirre
Notary Public Signature

Mar 25, 2020
Commission Expires

Affidavit of Publication

Before me, a Notary Public, personally appeared

Melissa Bosley

Name (please print)

Accounting

Title

To certify that the Unisource Public Notice Advertising appeared in the

Sahuarita Sun

Newspaper Name (please print)

A product of the Green Valley News and Wick Communications

On June 14, 2017 as ordered by Unisource Energy Services.

Date

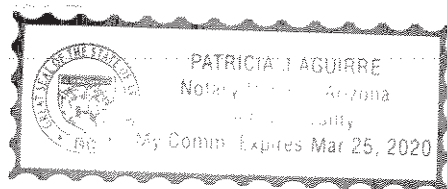
Melissa Bosley
Signature

State of Arizona

County of Cochise

Sworn to and subscribed before me this

19 day of June, 2017



Patricia I. Aguirre
Notary Public Signature

Mar 25, 2020
Commission Expires

Affidavit of Publication

Before me, a Notary Public, personally appeared

Melissa Bosley

Name (please print)

Accounting

Title

To certify that the Unisource Public Notice Advertising appeared in the

Green Valley News

Newspaper Name (please print)

A product of the Green Valley News and Wick Communications

On June 18, 2017 as ordered by Unisource Energy Services.

Date

Melissa Bosley

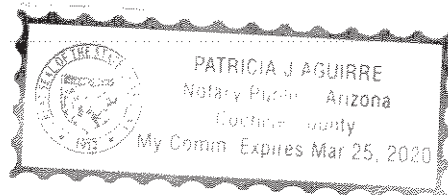
Signature

State of Arizona

County of Cochise

Sworn to and subscribed before me this

19 day of June, 2017



Patricia J. Aguirre

Notary Public Signature

Mar 25, 2020

Commission Expires

PUBLIC NOTICE

Notice of Trustee's Sale... Public Notice... Notice of Trustee's Sale Order No. 17012238-AZ-V01

Pub: Nogales International... Date: May 26, June 2, 9, 16, 2017

PUBLIC NOTICE

Notice of Trustee's Sale Order No. 17012238-AZ-V01... Public Notice... Notice of Trustee's Sale Order No. 1715-8121-JY

PUBLIC NOTICE

Notice of Trustee's Sale Order No. 23704912/23704829... Public Notice... Notice of Trustee's Sale Order No. 1715-8121-JY

Maps and Plats at Page 34 thereof... Public Notice... NOTICE OF TRUSTEE'S SALE... Trustee's Sale No. 14170387

PUBLIC NOTICE

NOTICE OF TRUSTEE'S SALE... Trustee's Sale No. 14170387... Public Notice... Trustee's Sale No. 14170387

Pub: Nogales International... Date: June 16, 23, 30, July 7, 2017

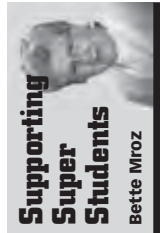
Public Notice / Noticia Pública

UnjSource Energy Services (UES) and Hunt Power are holding open house meetings... Open House Meetings... Wednesday, June 21, 2017, 5-8 p.m.

UnjSource Energy Services (UES) and Hunt Power llevarán a cabo reuniones públicas... Reuniones Públicas... Miércoles 21 de junio de 2017, 5-8 p.m.

Introducing... The Insiders... Advice from local experts... Tires & Car Repair Insider, Health Insider, Pest Control Insider, Insurance Insider

Help create order in your children's lives



Supporting Super Students
Bette Mroz

for everything, and make sure you put things back into those places. Parents should not need to pick up things after their children when you come home after a busy day at work.

See that your children follow through with the directions you give them on your family bulletin board. Set consequences if you must — loss of privileges, screen time, etc. You must be consistent for your children to learn order. You must practice it yourselves, as a family.

As part of that order, make time for reading and thinking. Give your children freedom to explore things of interest to them and to share them with you. Give each of your children time to talk to you.

Schedule it if that works, but help each child know you value them and their interests. On their list of duties, write sharing time with you.

Chaos was the law of nature; order was the dream of man. — Henry Adams

Southern Arizona resident Bette Mroz is a former teacher, reading specialist and grandmother. She continues to help her family learn. She can be contacted at bettemroz@gmail.com.

Order is a step in the right direction. You want your children to succeed in school; you want your children to be ready for their sports and music practices this summer. What if they can't find the "tools" they need to get to their practices or school on time? You must teach your children to have order. Put things in the same place every time to be able to find them as you exit the house so you can be on time.

Order increases efficiency, saves time, eliminates confusion and uncertainty, and prevents pressure and loss. Children need to practice order for them to learn it. Putting their dishes in the sink or dishwasher needs to be done consistently. Putting their shoes beside the door when they enter helps them have them ready to go outdoors or into the car to go with you.

Order needs to be learned one step at a time. The beginning of summer vacation is a good time to begin to practice order. It will surely make a happier and less stressful family time. Routines are part of this order. Establish morning routines such as checking a "family information center." This can be on a bulletin board on which you write

Public Notice

UniSource Energy Services (UES) and Hunt Power are holding open house meetings June 21-22, 2017, to share information about the proposed Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project. These Projects would link the electric system in southern Arizona with the electric system in the northwest region of Mexico, strengthening regional electric reliability. These proposed projects include several components, including a 27.5-mile upgrade to an existing transmission line, approximately five miles of new transmission lines, and a new substation.

Residents and others are invited to attend these open house meetings to learn about why these Projects are needed and potential benefits for the region. Representatives from UES and Hunt Power will be present to discuss the Projects.

Open House Meetings

Wednesday, June 21, 2017, 5-8 p.m.
Sahuarita High School Auditorium, POD B
350 W. Sahuarita Road
Sahuarita, AZ 85629

Thursday, June 22, 2017, 5-8 p.m.
Holiday Inn Express
850 W. Shell Rd
Nogales, AZ 85621

For more information about the Nogales Tap to Kantor Transmission Line Upgrade, please visit uesaz.com/projects.

For more information about the Nogales Interconnection Project, please visit huntpower.com/nogalesdcie.aspx, call (800) 240-5718 or email www.nogalesdcie@huntpower.com.

Evangelical Free Church of Green Valley
Leading all people into an ever-deepening relationship with Jesus Christ.

Sunday Worship Services
8:45 am - Contemporary
10:30 am - Traditional
5:00 pm - Evening Service

Sunday Adult Bible Classes
8:45 & 10:30 am

1393 W. Mission Twin Buttes Rd.
West of Camino del Sol
www.efcgreenvalley.org
648-6781

GRACE LUTHERAN CHURCH
A Member of the WELS

Sunday Worship 10am
Bible Study/Sunday School at 9am

578-3538
www.GraceLutheranSAZ.org
17675 S. La Canada Dr.
(2 miles south of Sahuarita Rd.)

PHOTO: JEFFREY...

Across the Valley

Wisdom party to aid kids

Herb Wisdom, the man behind the bar at Wisdom's Cafe for decades, is retiring. Sort of. Wisdom's family opened the cafe in Tuma-coori in 1944, and he took it over in 1980 after a 20-year law enforcement career and a hitch in the Navy.



Herb Wisdom

But he also has been deeply involved in the community serving kids through sports. His retirement party July 4 will be a fundraiser for Wisdom Sports & Scholars, the non-profit he set up to ensure his Field of Dreams baseball field is built in Tubac, a pursuit he'll continue after retirement.

Wisdom served in the Navy, was a police officer in California and police chief in Nogales for 10 years. His love for sports was fed through a stint with the AAA California Angels team in Mexico, the Philippines and Japan. He also helped the

Long Beach Nitehawks earn 10 world fast-pitch softball championships. He was inducted into the International Softball Congress Hall of Fame in 2000.

His retirement party will be on July 4 from 5 to 9 p.m. at St. Ann's Park in Tubac. Cost is \$20 and includes catering and music. Bring a chair and blanket sit in the field and watch the fireworks.

Info: wisdomsportsand-scholars.org.

Jacome community service honor

David Jacome of Green Valley was honored by AARP for more than 50 hours of community service.

Jacome is coordinator of The First Tee of Tucson's locations at the Country Club of Green Valley. The program teaches young life skills and develops character through golf.

Jacome is a licensed sales agent with United-Healthcare.



David Jacome

OUT & ABOUT



Cruisin' along

LEFT: Carol Bates-Smith, right, and her daughter-in-law, Bonnie Kottong of Warden, Washington, enjoyed a Viking River Cruise down the Danube River from Nuremberg, Germany, to Budapest, Hungary in May. They took the Green Valley News for some down time.

For a job well done

RIGHT: Volunteers Constance and Bill O'Brien are recognized by Green Valley Council president Don Weaver, center, at the GVC Board of Representatives meeting May 18. The couple took charge of the community Household Hazardous Waste Collection April 1, after the previous coordinator had to bow out. The O'Briens oversaw the event for several years, but have since retired from the duty.

Kitty Bottemiller Green Valley News



CEMETERY

Continued from B1

One grave has a large, thick stone-and-concrete slab erected on top of con-

crete blocks. However, the crosses have long since fallen from their perch and the outer shell of the concrete has worn away or collapsed in places. Desert shrubbery has encroached on most

of the cemetery.

A FEW MEMORIES

But someone must have visited the cemetery sometime in the recent past. The five graves with markers all have artificial flowers in bright blue, pink and white colors on them.

As to who is buried there, Frances "Kika" Bracamonte, a 90-year-old Sahuarita resident whose family is in the Chavez Cemetery near Tubac, says Manuel Aros was a family friend. According to her account, he died in his early 40s around either Christmas or New Year's.

He was playing cards, but an argument arose that resulted in a fight. Manuel, she said, was hit over the head hard. He

managed to make it home, but collapsed outside his house and wasn't found until the next morning. He was taken to the hospital, but it was too late.

An online search of vital records reveals a death certificate for Manuel Aros, who died Dec. 25, 1949 at the age of 38. He is listed as a tractor driver who lived in Sahuarita and gives his address as the Lee Moore Ranch. He was born in Sonora, Mexico, in 1911, according to the death certificate. The cause of death is listed as a massive epidural hemorrhage due to a linear skull fracture to the right temporal bone, probably due to trauma.

The doctor who signed the certificate said he did not see Manuel while he was alive, so he could

not tell the time of death, whether the injury was an accident or intentional, where it occurred or how. The only inconsistency is the certificate says he was buried in the Johnson Cemetery, in Johnson, Arizona.

MYSTERIES REMAIN

The certificate does list Maria Aros, of Sahuarita, as the next-of-kin to be notified, and Jose Maria Aros, or Manuel Mascareno, but did not find any information of Maria Aros Mascareno, Jose Maria Aros, or Manuel Mascareno, but did find several members of the "Mascarenas" and "Aros/Haros" families living near Amado in the 1920s.

Much about the cemetery remains a mystery.

Internet searches show "Arivaca Junction Cemetery" on lists of historic cemeteries across the state, but without more than just the location.

Bill and Ellie Kurtz, who live a few miles down Arivaca Road from Amado, have taken it upon themselves to search out much of the local history.

Ellie spotted the crosses for the Mascareno/Aros family from the highway, but had no idea it was a full cemetery until she went out there. It's marked on maps prepared by the U.S. Geological Survey, she said, but the neighbors she's talked to were equally in the dark. "Nobody else seemed to know about this," Ellie said.

David Rookhuyzen 547-9728

*Tasteful Cuisine,
Shaded Patio with Mountain Views*

Firefly
RESTAURANT

COMING SOON - NEW SUMMER MENU

520-398-3028 • fireflyrestaurantaz.com
Summer Hours: Mon & Tues 6:00-10:00
Wed - Sat 11am-2pm / 5pm-8pm & Sun 9am-2pm
3001 E. Frontage Rd • Amado, AZ
Exit 48 in Amado Territory

Thank You Southern AZ For Your Loyalty

FIVE-DAY HEARING EVENT

Miracle-Ear

Monday 19 June	Tuesday 20 June	Wednesday 21 June	Thursday 22 June	Friday 23 June
----------------------	-----------------------	-------------------------	------------------------	----------------------

JUNE 19th THRU JUNE 23rd, 8:00 to 5:00

FACTORY TRAINED EXPERT On Site During the Special Event!

PREVIEW the BIGGEST Breakthrough in Hearing Aid History!

NEW GENIUS™ TECHNOLOGY provides you up to **25% BETTER SPEECH RECOGNITION** in challenging listening environments than people with normal hearing.*

NEW GENIUS™ TECHNOLOGY Enjoy more natural sound quality, wherever life takes you:

- Directional Focus helps you hear front and center, blocking unwanted noise around you!
- Wireless Windscreen takes away the wind noise, allowing other sounds to be heard more clearly!
- VoiceTarget 360 zeroes in on the people and conversations you want to hear in any direction!
- HD/Sound processes sound the same way your brain does naturally, because two ears are better than one!

Come & Preview the **Genius™** TECHNOLOGY from America's #1 Hearing Aid Brand

SPECIAL MANUFACTURER DISCOUNT PRICING

Don't miss this opportunity to explore the best options for your health... at prices that may not be repeated!

0% FINANCING for 12 months OAC

Mike Arpasi
Hearing Care Specialist

I'm Mike Arpasi and I care about your hearing and your overall healthcare. That's why I am excited to sponsor these Special Events. Your well-being is important to living a full life. Please come in and find out the best options for you!

FREE* Battery Charger

Miracle-Ear Mirag™ 100% Limited-Time Special Technology EX-123

Buy One, Get One FREE

Schedule a FREE COMPLETE HEARING EVALUATION & Receive a \$20 Fry's Gift Card

Miracle-Ear Center 115 W. Esperanza Blvd. Ste 1, Green Valley, AZ 520-329-4029

Miracle-Ear miracle-ear-greenvalleyaz.com

*Studies conducted at the University of Northern Colorado (2014) and Oldenburg Horzantum (2013) showed that Speech Recognition Thresholds (SRT) in cocktail-party situations improved up to 2.9 dB for wearers with mild to moderate hearing loss using GENIUS with Directional Focus, compared to people with normal hearing. This corresponds to over 25% improvement in speech understanding. **Our hearing evaluation and video otoscopic inspection are always free. Hearing evaluation is an audiometric test to determine proper amplification needs only. These are not medical exams or diagnoses nor are they intended to replace a physician's care. If you suspect a medical problem, please seek treatment from your doctor. System limited warranty on most hearing aids. See store for details © 2015 Miracle-Ear, Inc.

Public Notice

UniSource Energy Services (UES) and Hunt Power are holding open house meetings June 21-22, 2017, to share information about the proposed Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project. These Projects would link the electric system in southern Arizona with the electric system in the northwest region of Mexico, strengthening regional electric reliability. These proposed projects include several components, including a 27.5-mile upgrade to an existing transmission line, approximately five miles of new transmission lines, and a new substation.

Residents and others are invited to attend these open house meetings to learn about why these Projects are needed and potential benefits for the region. Representatives from UES and Hunt Power will be present to discuss the Projects.

Open House Meetings

Wednesday, June 21, 2017, 5-8 p.m.
Sahuarita High School Auditorium, POD B
350 W. Sahuarita Road
Sahuarita, AZ 85629

Thursday, June 22, 2017, 5-8 p.m.
Holiday Inn Express
850 W. Shell Rd
Nogales, AZ 85621

For more information about the Nogales Tap to Kantor Transmission Line Upgrade, please visit uesaz.com/projects.

For more information about the Nogales Interconnection Project, please visit huntpower.com/nogalesdctie.aspx, call (800) 240-5718 or email www.nogalesdctie@huntpower.com.

Exhibit J-2(g) – June 2017 Open House Meetings Newspaper Article

Unisource to present cross-border grid-connection plan

Nogales International



Map from unipower.com
The proposed Nogales Interconnect Project includes new power lines and a new Gateway Substation on the west side of the city.

Unisource Energy

Service wants to connect its electric grid in Southern Arizona with the grid in northwest Mexico by constructing new power lines and an additional substation in Nogales, and it's holding public meetings this week to offer information and solicit comments.

The local meeting is set for 5-8 p.m. Thursday, June 22, at the Holiday Inn Express at 850 W. Shell Rd. Another meeting will be held at the same time on Wednesday, June 21, at Sahuarita

High School.

The proposed project includes upgrading a 27.5-mile segment of UES' existing 138-kilovolt (kV) transmission line that serves customers in Santa Cruz County, and building a new substation on the west side of Nogales.

The substation would occupy an 11-acre site west of Mariposa Road (State Route 189) and north of La Quinta Road. It would be connected to the existing Valencia Substation at N. Grand Avenue and White Park Drive by a new, approximately three-mile, 138-kV alternating current

transmission line, and also connect to a new, approximately two-mile, 230-kV AC transmission line extending south to the U.S.-Mexico border. The work is expected to be completed by mid-2019.

The so-called Nogales Tap to Kanor Upgrade and Nogales Interconnect project "will support the reliability of the electric system by providing bi-directional power flow and voltage support and emergency assistance, as needed, for the electric system both north and south of the U.S.-Mexico border," UES said in an announcement.

Ducimae advuata sauciae Datanania minima watschdan of humariciv

Exhibit J-2(h) – June 2017 Open House Meetings Materials and Posters

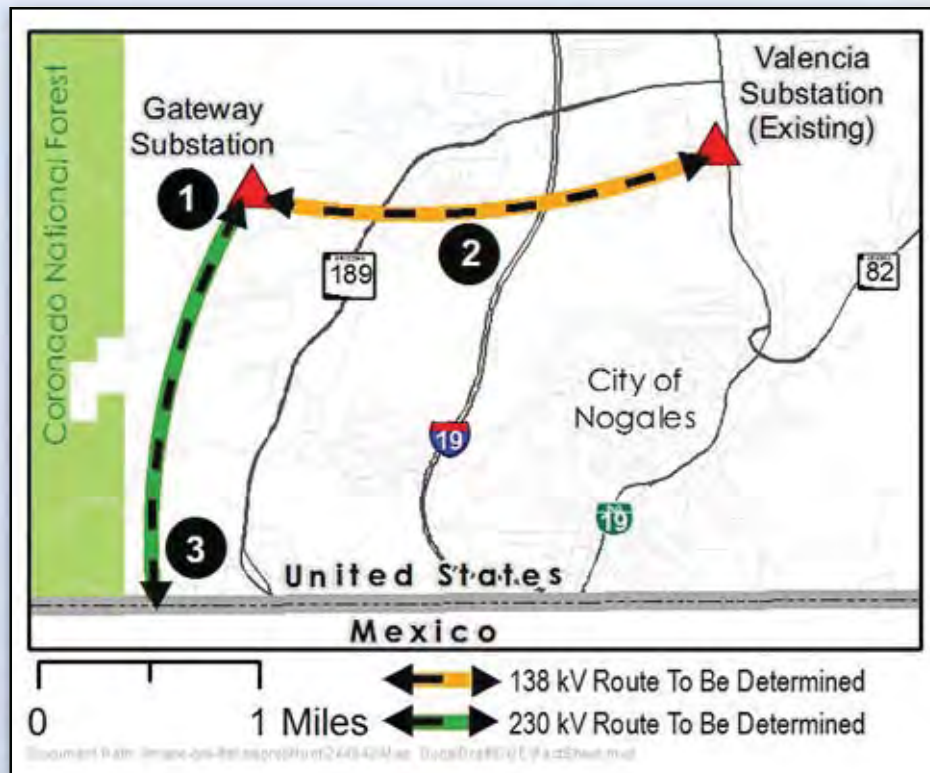
Project Overview

The Nogales Interconnection Project is a proposed 300 megawatt direct current interconnection (commonly known as a DC Tie) and associated electric facilities, which will allow for an asynchronous interconnection between the electric grid in southern Arizona and the electric grid in the northwest region of Mexico.

The Project will be constructed in two phases. The first phase of the Project will include the components listed below and a converter capacity of 150 MW with a planned in-service date of mid-2019. The second phase, to be constructed at a time that has not yet been determined, will expand the DC Tie capacity to 300 MW.

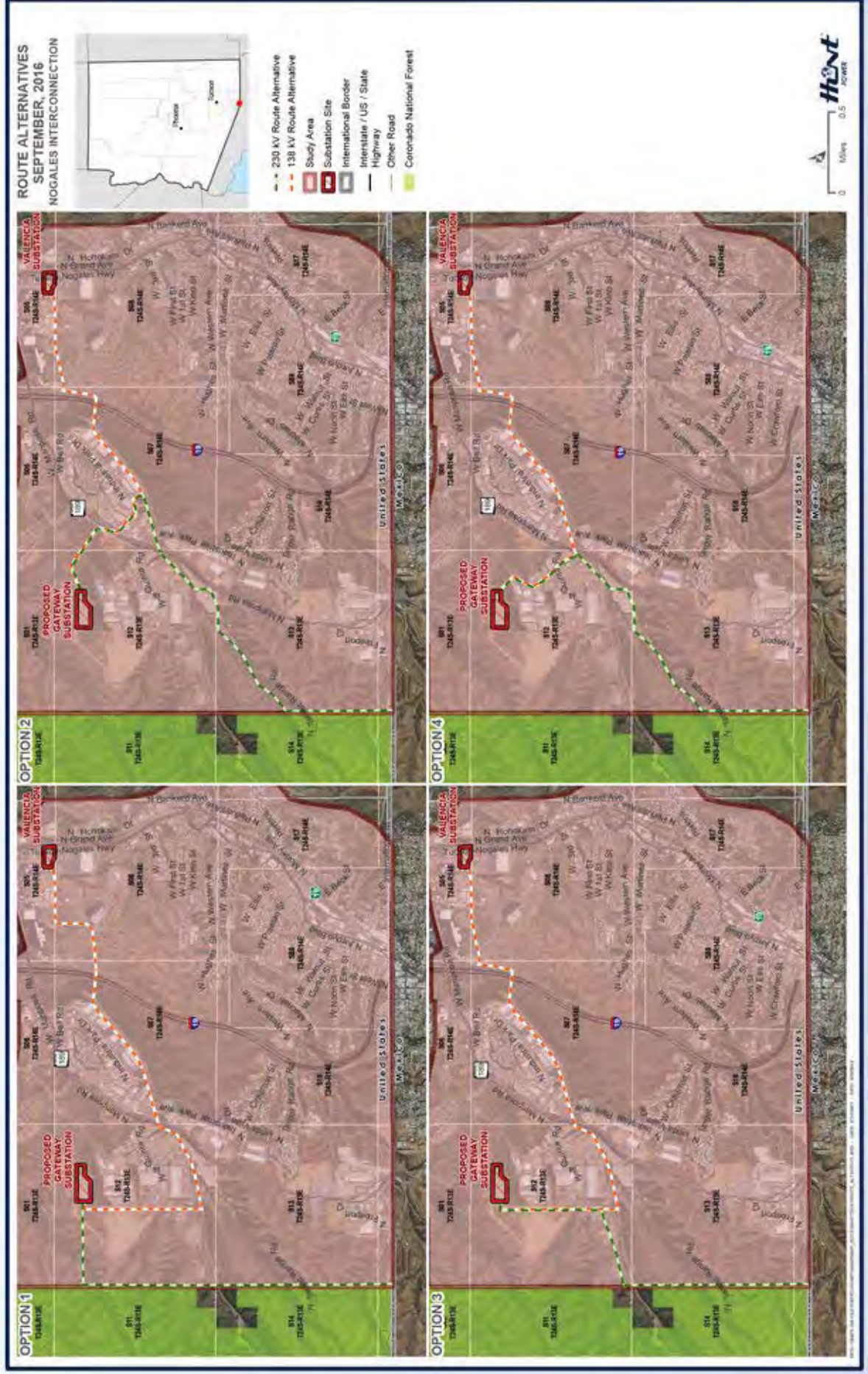
The Project includes the following components:

1. A new, approximately 11-acre Gateway Substation where the DC Tie and other substation facilities will be located.
2. A new, approximately 3-mile, 138-kilovolt (kV) alternating current (AC) transmission line between the existing UNS Electric, Inc. (UNSE) Valencia Substation and the new Gateway Substation.
3. A new, approximately 2-mile, 230-kV AC transmission line extending south from the new Gateway Substation to the proposed international border crossing.



Route Alternatives

The following alignments are being considered and studied by the Department of Energy in the federal environmental review process.



Project Design

138-kV Valencia to Gateway Segment

The Valencia to Gateway segment will consist of a new, approximately 3-mile, 138-kilovolt (kV) alternating current transmission line between the existing UNS Electric, Inc. Valencia Substation and the new Gateway Substation.

Conceptual 138-kV transmission structure. Final pole structures might be modified depending on the final route selection.



Conceptual Valencia to Gateway Double Circuit 138-kV Segment*	
Anticipated Line Length	3 miles
Type of Structure	Tubular steel poles
Approximate Structure Height	75-110 feet
Approximate Structure Spacing	600-1000 feet
Anticipated Number of Structures Per Mile	5-9 (depending on terrain and other factors)
Anticipated Right of-Way Width	Up to 150 feet

*Depending on final route selection, there may be sections of the ROW with 2 sets of poles within the 150 feet corridor, with a single 230-kV circuit on double-circuit poles and two 138-kV circuits on double-circuit poles.

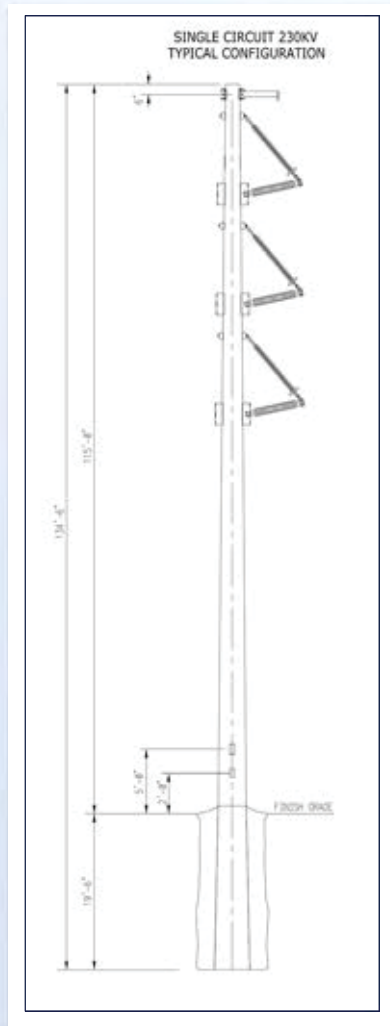
It is also possible that for a section of the route there is one 230-kV circuit and two 138-kV circuits all on triple-circuit capable poles.

Project Design

230-kV Gateway to the U.S.-Mexico Border Segment

The Gateway to the U.S.-Mexico Border segment will consist of a new, approximately 2-mile 230-kV alternating current transmission line extending south from the new Gateway Substation to the proposed international border crossing.

Conceptual Gateway Substation to U.S.-Mexico Border transmission structure. Final pole structures might be modified depending on the final route selection.



Conceptual Gateway to U.S.-Mexico Border Segment: Single/Double-circuit 230-kV*	
Anticipated Line Length	2 miles
Type of Structure	Tubular steel poles
Approximate Structure Height	135 feet
Approximate Structure Spacing	600-1000 feet
Anticipated Number of Structures Per Mile	5-9 (depending on terrain and other factors)
Anticipated Right of-Way Width	Up to 150 feet

*Depending on final route selection, there may be sections of the ROW with 2 sets of poles within the 150 feet corridor, with a single 230-kV circuit on double-circuit poles and two 138-kV circuits on double-circuit poles.

It is also possible that for a section of the route there is one 230-kV circuit and two 138-kV circuits all on triple-circuit capable poles.

Project Design

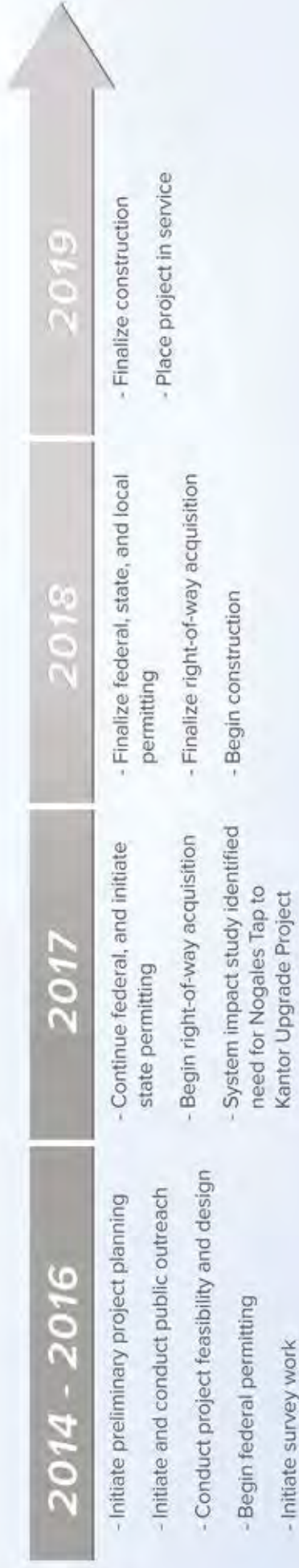
New Gateway Substation

The Project includes a new 11-acre Gateway Substation at a site where DC Tie equipment and other substation facilities will be located.



Pictures of DC tie located in Mission, TX along the Texas-Mexico border.

Anticipated Project Timeline



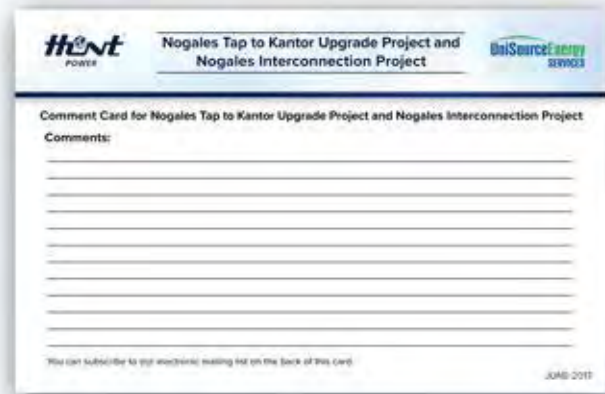
Your Participation

Today:

- Speak with a project team member.
- Provide direct input on project maps.
- Fill out a comment card.

Anytime:

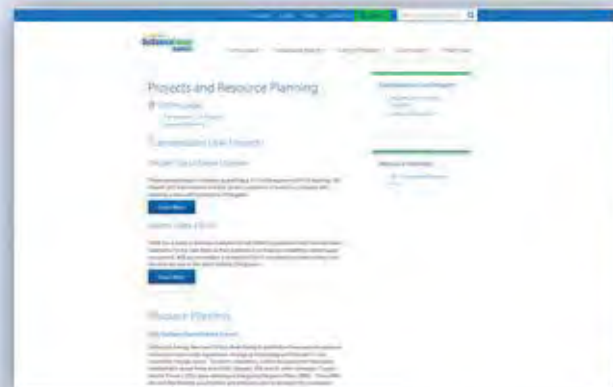
- Email us: nogalesdctie@huntpower.com
- Call us: (800) 240-5718



The image shows a comment card with the Hunt Power and UniSource Energy Services logos at the top. The title is "Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project". Below the title is a section labeled "Comment Card for Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project" with a "Comments:" heading and several horizontal lines for writing. At the bottom, there is a small note: "You can subscribe to our electronic mailing list on the back of this card." and the date "JUNE 2017".

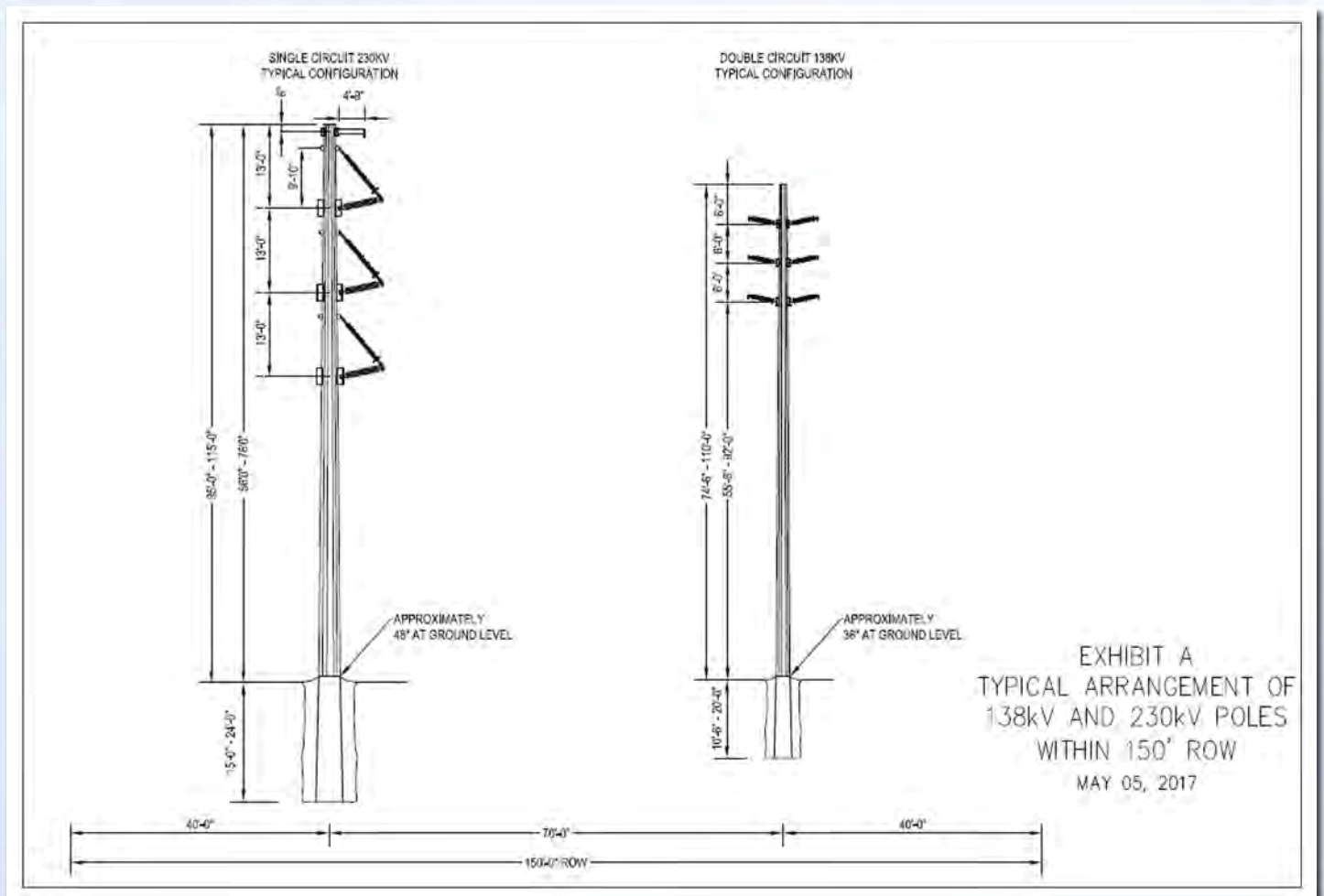
For More Information:

- Visit us at:
Nogales Interconnection Project
www.huntpower.com/nogalesdctie.aspx
Nogales Tap to Kantor Upgrade Project
www.uesaz.com/projects
- Fill out a comment card with a request to sign up for email updates.



Project Design

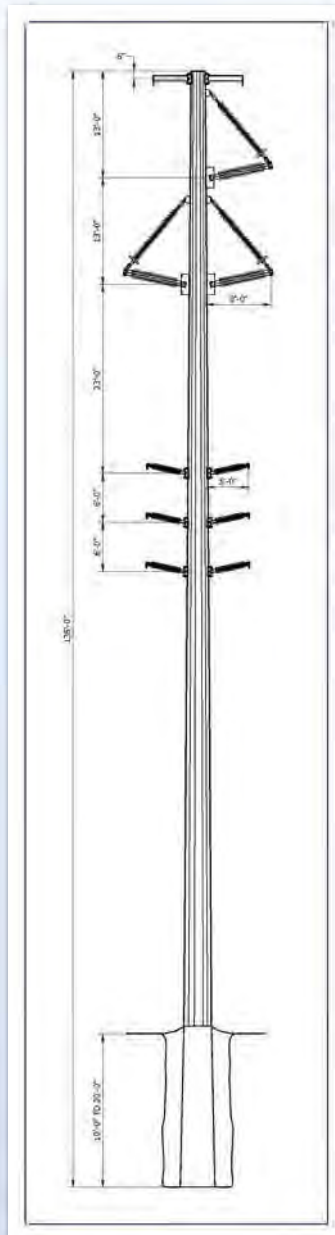
Depending on final route selection, there may be sections of the ROW with 2 sets of poles within the 150 feet corridor, with a single 230-kV circuit on double-circuit poles and two 138-kV circuits on double-circuit poles. If Alternative 3 or 4 is selected for construction, this configuration will occur for approximately 0.7 or 0.6 miles respectively.



Typical arrangement of 138-kV and 230-kV poles within 150' ROW

Project Design

Depending on final route selection, there may be a section of the ROW with one 230-kV circuit and two 138-kV circuits all on triple-circuit capable poles. This configuration would occur for approximately 0.9 miles if Alternative 2 is selected for construction.



Typical arrangement of triple circuit capable poles within 150' ROW



**Welcome to the
Nogales Tap to Kantor
Upgrade Project
and the
Nogales Interconnection Project
Public Meeting**

Please Sign In



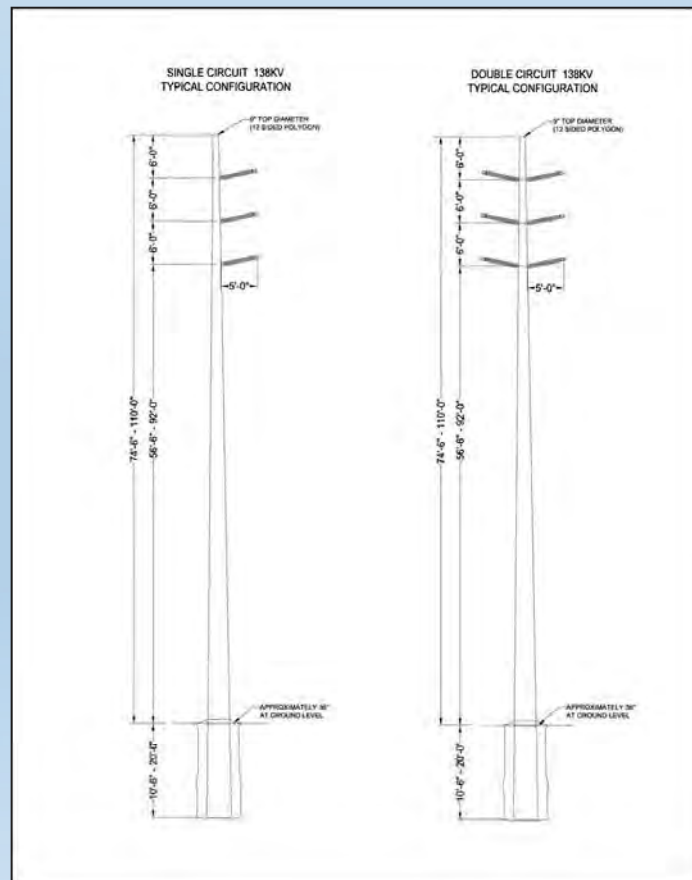
Nogales Tap to Kantor Upgrade Project Design

The **Nogales Tap to Kantor Upgrade Project** consists of upgrading a 27.5-mile segment of an existing UNSE 138-kV transmission line between a point near the Western Area Power Administration Nogales Tap switchyard and UNSE's Kantor Substation.

NOGALES TAP TO KANTOR UPGRADE PROJECT	
Structure Attribute	Proposed
Structure type	Tubular steel monopoles
Structure height	75–110 feet
Span length	600–1,000 feet
Number of structures per mile	5–9 structures
ROW width	Up to 100 feet



Typical 138kV Monopole





Nogales Tap to Kantor Upgrade Project Alternatives

Alternative Route 1 (Applicants Preferred Route)

- ◆ Approximately 27.5 miles in length.
- ◆ Begins 320 feet south of the Nogales Tap on the west side of Wilmot Rd.
- ◆ Continues 9.5 miles south along the west side of Wilmot Rd.
- ◆ Turns southwest and continues diagonally for 18 miles to the Kantor Substation.
- ◆ This alternative would require obtaining new rights-of-way (ROWs) along the west side of Wilmot Rd. and amending existing ROWs along the diagonal section in order to offset the new poles 30 feet from the existing transmission line.

Alternative Route 2

- ◆ Approximately 27.5 miles in length.
- ◆ Begins 320 feet south of the Nogales Tap on the west side of Wilmot Rd.
- ◆ Crosses to the east side of Wilmot Rd. and continues 9.5 miles south.
- ◆ Turns southwest and continues diagonally for 18 miles to the Kantor Substation.
- ◆ This alternative would require amending existing ROWs along the east side of Wilmot Rd., acquiring new ROWs, and amending existing ROWs along the diagonal section in order to offset the new poles 30 feet from the existing transmission line.

Alternative Route 3

- ◆ Approximately 27.5 miles in length.
- ◆ Begins 320 feet south of the Nogales Tap on the west side of Wilmot Rd.
- ◆ Crosses to the east side of Wilmot Rd. and continues 9.5 miles south.
- ◆ Turns southwest and continues diagonally for 18 miles to the Kantor Substation.
- ◆ Upgrade would be built within the existing 50 to 100-foot-wide ROWs.

Alternative 1 is preferable for safety and reliability reasons.

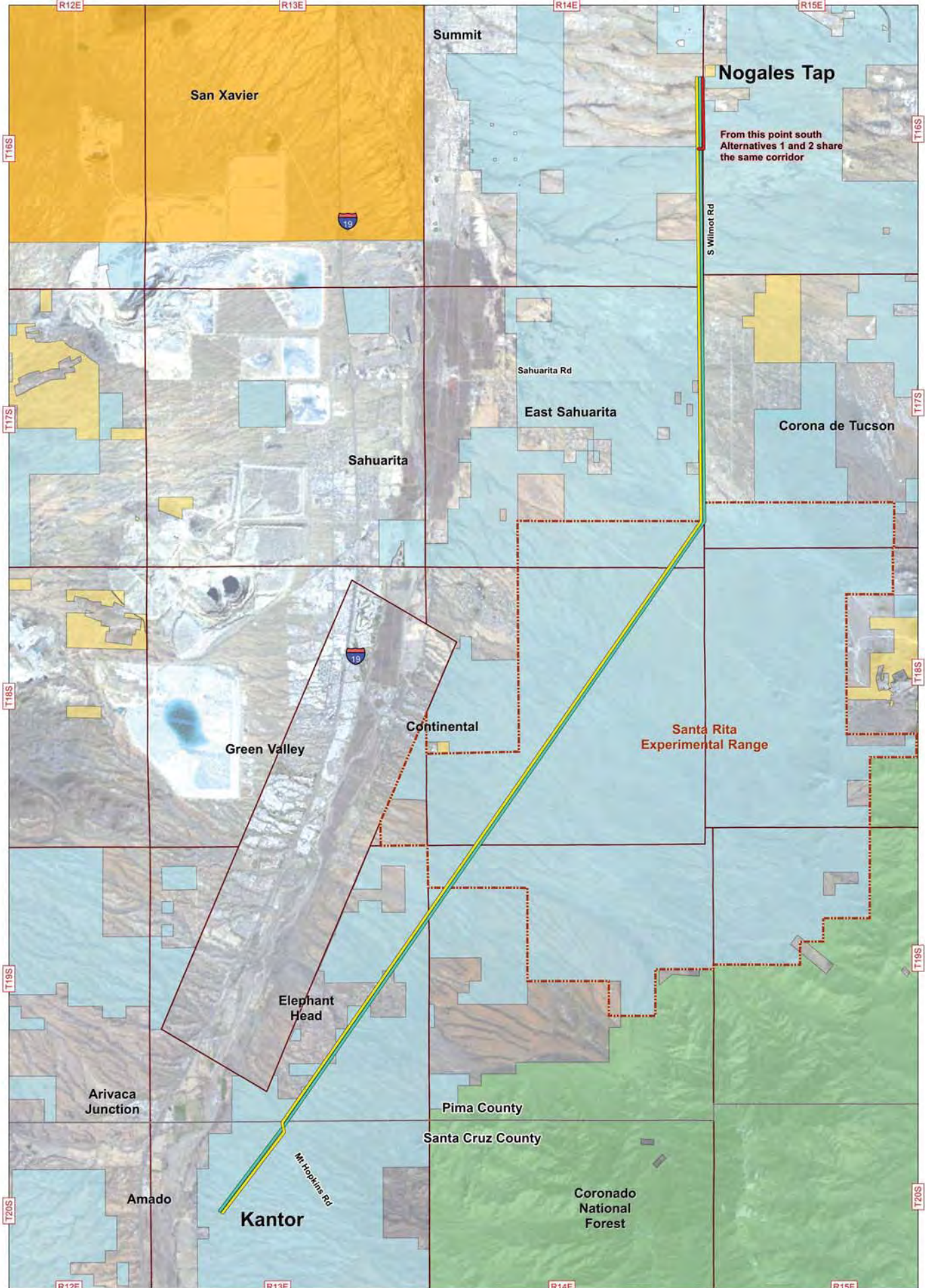
1. Upgrading the transmission line in the existing ROWs would require de-energizing the existing line during construction and it is the sole source of power to Santa Cruz County.
2. Moving the line west of the existing line, while staying east of Wilmot Rd. places the line in close proximity to Wilmot Rd. pavement and shoulder.
3. Moving the line further east is not an option, given existing development east of the existing line.



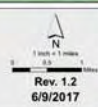
- Legend**
- Existing Vail to Valencia 138kV Transmission Line
 - Existing Nogales Tap to Kantor 138kV Transmission Line (A Segment of the Vail to Valencia Transmission Line)
 - Proposed Nogales Interconnection Project
 - Existing Substations
 - Proposed Substation

1 inch = 10 miles
 Rev. 1.2
 6/9/2017





- Legend**
- Alternative 1 100' Corridor
 - Alternative 2 100' Corridor
 - Alternative 3 Existing LNSE 90-100' Corridor
 - Surface Management
 - Bureau of Land Management (BLM)
 - San Xavier District
 - Private Land (No Color)
 - State Trust Land
 - Coronado National Forest
 - Santa Rita Experimental Range



Rev. 1.2
6/9/2017



Project Location
NOGALES TAP TO KANTOR UPGRADE PROJECT

UNSW Project Location
© 2017 United States Geological Survey
This map is a generalization and does not represent the actual location of any specific feature.

Exhibit J-2(i) – June 2017 Public Meeting Sign-In Sheets and Completed Comment Cards



**Nogales Tap to Kantor Upgrade Project and
Nogales Interconnection Project**



Comment Card for Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project

Comments:

I own a home on Wilmot + Grace Lane. My preference for the new power line is that it be constructed across the street on state land - Alternative #1. I would be able to utilize the west one-third of my property more effectively for horses. It would be less obtrusive and less likely to cause injury by accidents caused by people on private property. I am willing to testify to the above.

Thank you.

Judy Skeldon

You can subscribe to our electronic mailing list on the back of this card.

To join our electronic mailing list and receive email updates:

Name: Judy Sheldon

Organization: _____

Email Address: _____

Phone: _____

To provide additional comments:

Phone: **(800) 240-5718**

Email Address: nogalesdctie@huntpower.com

Mailing Address:

Nogales Interconnection Project

Hunt Power, L.P.

1900 N Akard St.

Dallas, TX 75201

Nogales Tap to Kantor Upgrade Project

UniSource Energy Services

88 E. Broadway Blvd.

Mailstop HQE - 613

Tucson, AZ 85201

Thank you for attending the Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project meeting hosted by UniSource Energy Services and Hunt Power. Your feedback at this stage is important to us.

Information about the federal National Environmental Policy Act (NEPA) environmental review process and state permitting process will be emailed to those subscribed to our mailing list, published on our websites, and will also be available on the Nogales Interconnection Phone line as it becomes available.



Nogales Tap to Kantor Upgrade Project and
Nogales Interconnection Project



Comment Card for Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project

Comments:

I AM ROGER HORTON AND I HAVE RESIDED AT 18297 S. WILMOT RD, SAHUARITA, AZ. 85629 FOR THE PAST 8 YEARS. I BOUGHT THE 5 ACRES 10 YRS AGO WITH THE IDEA OF BUILDING MY & MY WIFE'S DREAM HOME. WE ARE THAT AND NOW HAVE A BEAUTIFUL HOME & GUEST HOUSE EXCEPT FOR ONE "UGLY" HUGE POWER POLE IN THE FRONT OF MY PROPERTY. WE ARE BOTH RETIRED AND ARE WORKING TO IMPROVE THE LOOKS OF OUR PROPERTY. I UNDERSTAND THAT ONE OF THE PROPOSALS FOR THIS NEW POWER LINE IS TO MAKE IT WEST OF WILMOT RD. I SUPPORT THIS PROPOSAL 100% AND HOPE THAT WILL PROVE THE BEST OPTION!!! I AM

You can subscribe to our electronic mailing list on the back of this card. AVAILABLE IF NEEDED TO
ON THE MAILING LIST

To join our electronic mailing list and receive email updates:

Name:

ROGER HORTON

Organization:

RETIRED

Email Address:

Phone:

To provide additional comments:

Phone: (800) 240-5718

Email Address: nogalesdctie@huntpower.com

Mailing Address:

Nogales Interconnection Project

Hunt Power, L.P.

1900 N Akard St.

Dallas, TX 75201

Nogales Tap to Kantor Upgrade Project

UniSource Energy Services

88 E. Broadway Blvd.

Mailstop HQE - 613

Tucson, AZ 85201

Thank you for attending the Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project meeting hosted by UniSource Energy Services and Hunt Power. Your feedback at this stage is important to us.

Information about the federal National Environmental Policy Act (NEPA) environmental review process and state permitting process will be emailed to those subscribed to our mailing list, published on our websites, and will also be available on the Nogales Interconnection Phone line as it becomes available.



Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project



Comment Card for Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project

Comments:

PLEASE CONTACT ME REGARDING POLE PLACEMENT.
 MY PROPERTY IS ADJACENT TO THE POWERLINE.
 MY CONCERN IS AN ADVERSE CHANGE TO MY VIEW OF THE
 SANTA RITA MOUNTAINS

Thank you

You can subscribe to our electronic mailing list on the back of this card.

To join our electronic mailing list and receive email updates:

Name: DEBRA VEC

Organization: _____

Email Address: _____

Phone: _____

To provide additional comments:

Phone: **(800) 240-5718**

Email Address: nogalesdctie@huntpower.com

Mailing Address:

**Nogales Interconnection Project
Hunt Power, L.P.
1900 N Akard St.
Dallas, TX 75201**

**Nogales Tap to Kantor Upgrade Project
UniSource Energy Services
88 E. Broadway Blvd.
Mailstop HQE - 613
Tucson, AZ 85201**

Thank you for attending the Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project meeting hosted by UniSource Energy Services and Hunt Power. Your feedback at this stage is important to us.

Information about the federal National Environmental Policy Act (NEPA) environmental review process and state permitting process will be emailed to those subscribed to our mailing list, published on our websites, and will also be available on the Nogales Interconnection Phone line as it becomes available.



Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project



Comment Card for Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project

Comments:

← OUR MOST PREFERRED OPTION IS ALTERNATIVE 3 AND LEAST DESIRABLE IS ALTERNATIVE 1. THEY RUN ON VERY NARROW ROADS.

← 138 KW LINE IS A PLUS FOR NOGALES GIVING REDUNDANCY TO OUR EXISTING 138 KW LINE.

You can subscribe to our electronic mailing list on the back of this card.

To join our electronic mailing list and receive email updates:

Name: NOHE GARCIA

Organization: LA LOUVA GRANDE

Email Address: _____

Phone: _____

To provide additional comments:

Phone: (800) 240-5718

Email Address: nogalesdctie@huntpower.com

Mailing Address:

**Nogales Interconnection Project
Hunt Power, L.P.
1900 N Akard St.
Dallas, TX 75201**

**Nogales Tap to Kantor Upgrade Project
UniSource Energy Services
88 E. Broadway Blvd.
Mailstop HQE - 613
Tucson, AZ 85201**

Thank you for attending the Nogales Tap to Kantor Upgrade Project and Nogales Interconnection Project meeting hosted by UniSource Energy Services and Hunt Power. Your feedback at this stage is important to us.

Information about the federal National Environmental Policy Act (NEPA) environmental review process and state permitting process will be emailed to those subscribed to our mailing list, published on our websites, and will also be available on the Nogales Interconnection Phone line as it becomes available.

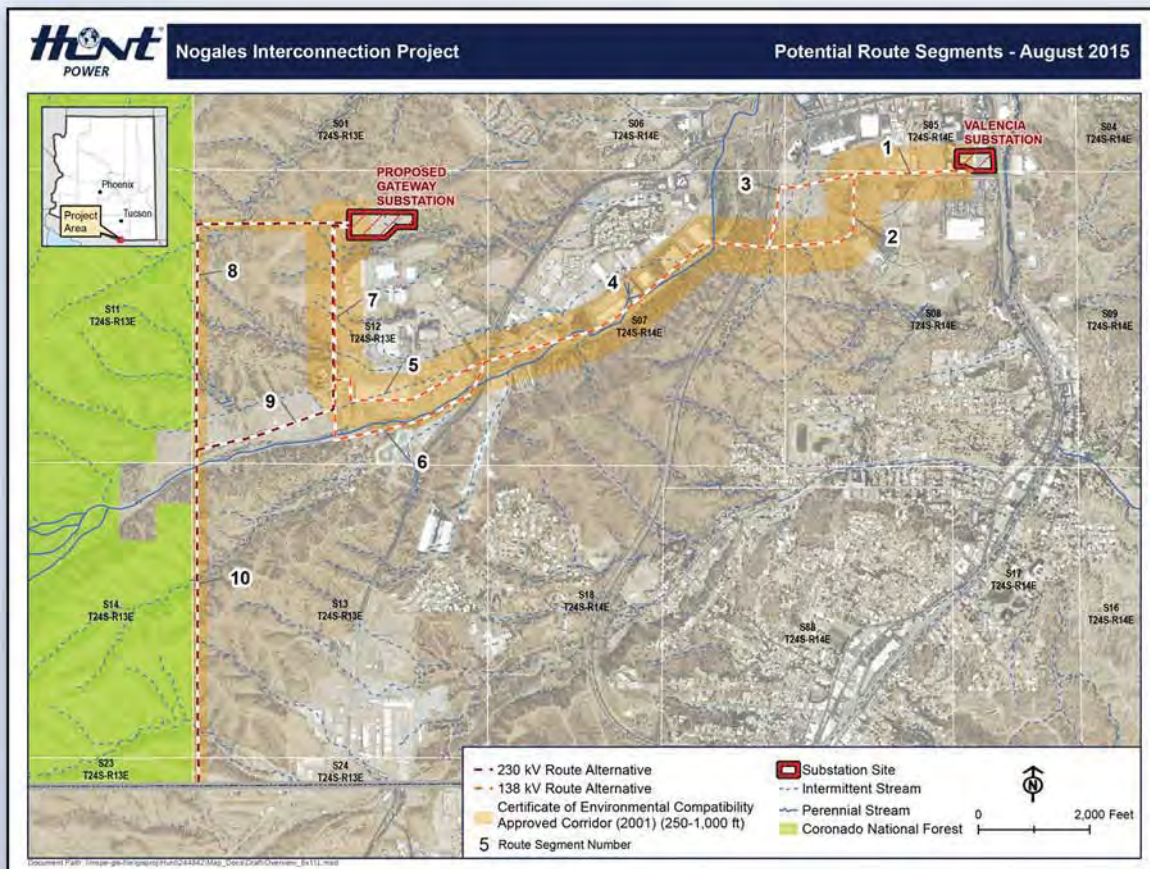
**Exhibit J-2(j) – Nogales Interconnection Project Materials Presented at
September 2015 Agency and NGO Meeting**

Project Overview

The Nogales Interconnection Project (Project) is a proposed 150 megawatt (MW) direct current (DC) interconnection, commonly known as a DC tie, which will allow for an asynchronous interconnection between the electric grid in southern Arizona and the electric grid in the northwest region of Mexico.

The Project will consist of three components:

- A new 10-15 acre Gateway Substation on land currently owned by Tucson Electric Power (TEP), where DC equipment would be located.
- A new, approximately 3-mile, 138-kilovolt (kV) transmission line segment originating at UniSource Energy Services' (UES') Valencia Substation in Nogales, AZ, and extending west and south to the new Gateway Substation.
- A new, approximately 2-mile, 230-kilovolt (kV) transmission line segment extending south from the new Gateway Substation and across the U.S.-Mexico border to interconnect with a transmission line to be constructed by the Comisión Federal de Electricidad (CFE).



Project Design

The Project will also consist of a new 10-15 acre Gateway Substation at a site owned by TEP, where DC tie equipment will be located. The City of Nogales previously issued a conditional use permit allowing development of a substation at this location.

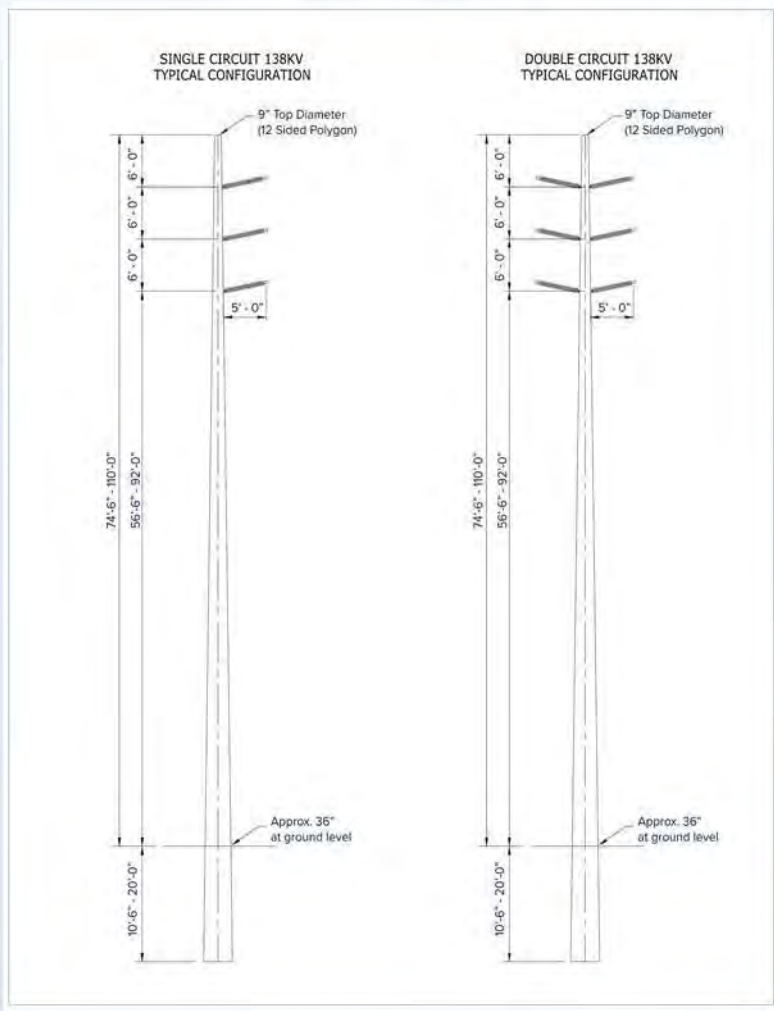


Pictures of DC tie located in Mission, TX along the Texas-Mexico border.

Project Design

Valencia to Gateway Segment

The Valencia to Gateway segment will consist of a new, approximately 3-mile 138-kV transmission line connecting UES' Valencia Substation in Nogales, AZ, to the new Gateway Substation.



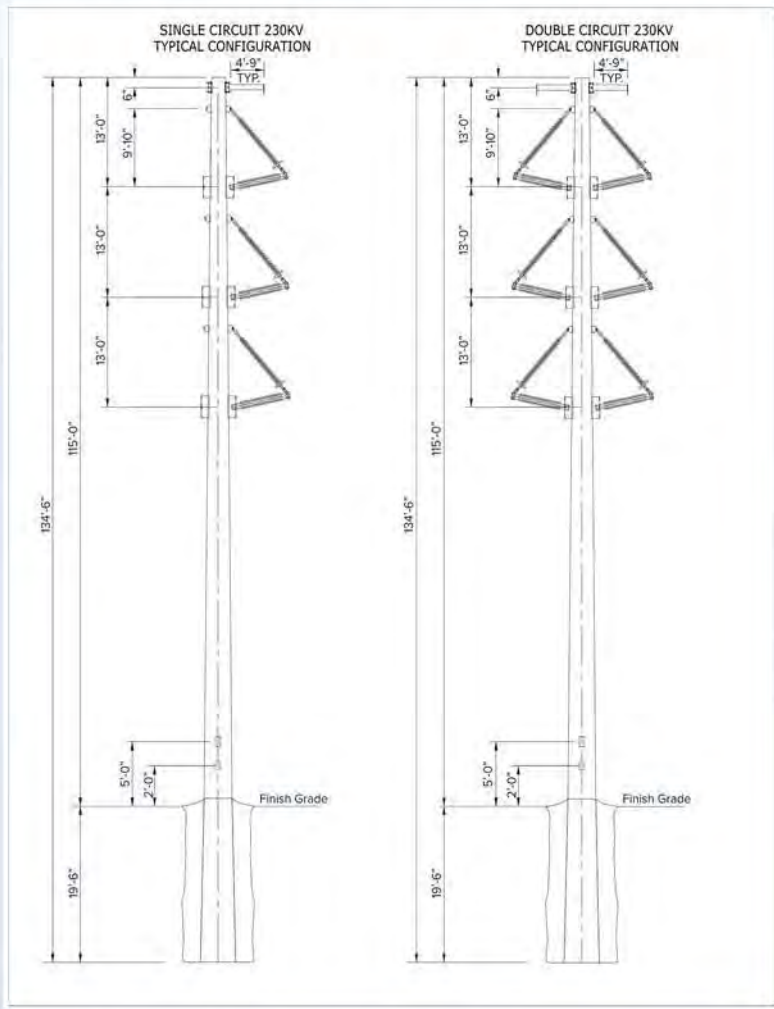
Valencia to Gateway Segment: Single/Double-circuit 138-kV	
Anticipated Line Length	3 miles
Type of Structure	Tubular steel poles
Approximate Structure Height	75-110 feet
Approximate Structure Spacing	600-1000 feet
Anticipated Number of Structures Per Mile	5-9 (depending on terrain and other factors)
Anticipated Right of-Way Width	up to 150 feet

Potential Valencia Substation to Gateway Substation transmission structure.

Project Design

Gateway to the U.S.-Mexico Border Segment

The Gateway to the U.S.-Mexico Border segment will consist of a new, approximately 2-mile 230-kV transmission line extending south from the new Gateway Substation across the U.S.-Mexico border to interconnect with a CFE-constructed transmission line.



Gateway to U.S.-Mexico Border Segment: Single/Double-circuit 230-kV	
Anticipated Line Length	2 miles
Type of Structure	Tubular steel poles
Approximate Structure Height	135 feet
Approximate Structure Spacing	900-1100 feet
Anticipated Number of Structures Per Mile	5-8 (depending on terrain and other factors)
Anticipated Right of-Way Width	up to 150 feet

Potential Gateway Substation to U.S.-Mexico Border transmission structure.

Anticipated Project Timeline

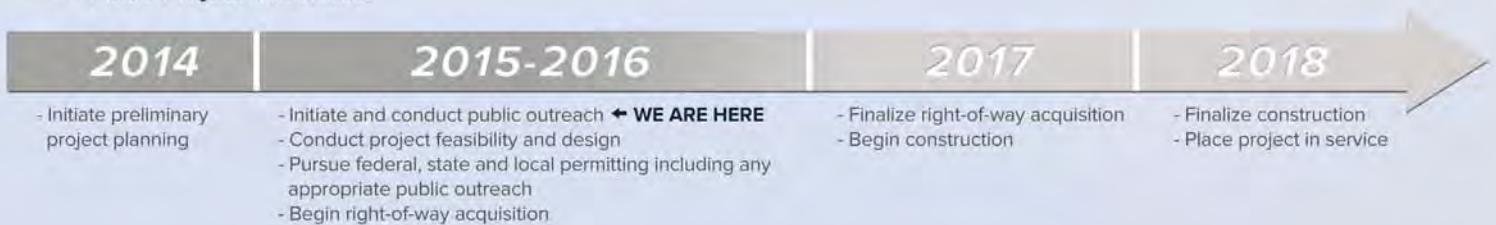
The preliminary Project schedule includes: routing and associated public engagement and permitting through 2016; right-of-way acquisition, engineering and construction beginning in 2017; and project completion in 2018.

2015-2016

- Route selection and public engagement outreach will occur prior to and throughout project development and the permitting process.
- The Nogales Interconnection Project's formal permitting processes will officially begin with the submission of an application in 2015 for a Presidential Permit to construct the facilities.
- In addition to this application, authorization for the Nogales Interconnection Project will include other local, state, and federal permits.
- Many of the federal, state, and local permitting processes have associated public comment periods and public processes. The Nogales Interconnection Project team will publicize information about the public processes associated with the permitting efforts so that stakeholders know how and when to participate.
- Develop WECC project capacity rating utilizing WECC Project Coordination Review Group process.
- Begin preliminary engineering design.
- Federal environmental review.
- Public scoping.
- Begin Right-of-Way (ROW) acquisition.

2017-2018

- Finalize design.
- Finalize ROW acquisition.
- Construct Project.
- Place Project in service.



Siting Philosophy and Planning

The Project's route will be guided by an approach to minimize impacts by following existing infrastructure and developed corridors wherever possible.

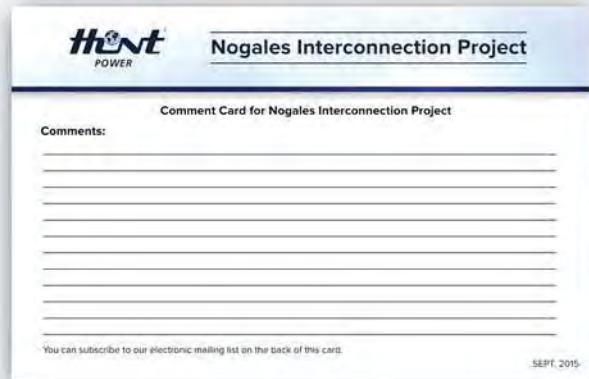
This approach includes:

- Working within or next to existing corridors and previously disturbed areas (such as transmission lines, roads, etc.).
- Working with stakeholders to understand and avoid or minimize impacts to sensitive areas.
- Integrating information from existing federal and state energy and land use planning efforts.
- Developing responsible routes and route alternatives derived from:
 - Public input.
 - Industry experience.
 - Local utility companies.
 - Federal, state, and local agencies.

Your Participation

Today:

- Speak with a project team member.
- Provide direct input on project maps.
- Fill out a comment card.



Anytime:

- Email us: nogalesdctie@huntpower.com
- Call us: **(800) 240-5718**

For More Information:

- Visit us at:
www.huntpower.com/nogalesdctie.aspx
- Fill out a comment card with a request to sign up for email updates.

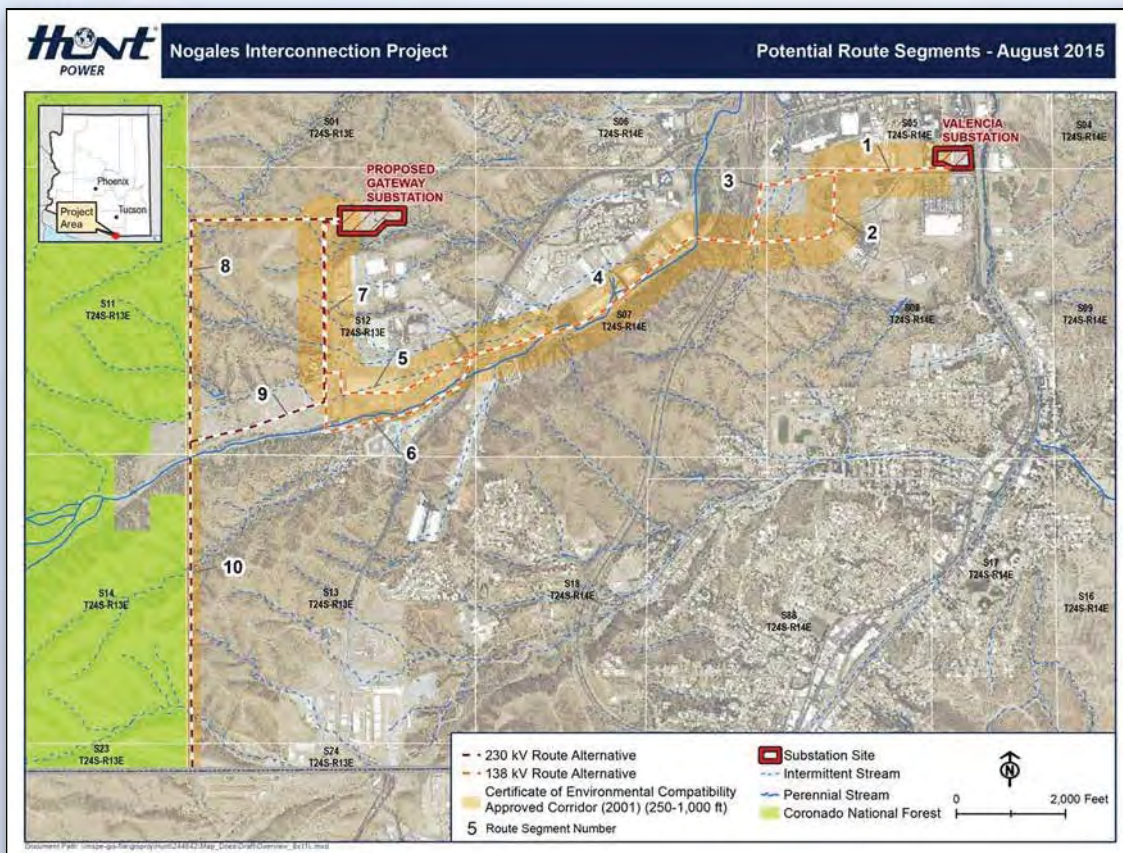


Descripción del proyecto

El Proyecto de Interconexión Nogales (Proyecto) es un proyecto de interconexión de 150 megavatios (MW) de corriente directa (DC), o comúnmente conocido como un enlace de DC, el cual permitirá una interconexión asíncrona entre la red eléctrica en el sur de Arizona y la red eléctrica en la región noroeste de México.

El Proyecto constará de tres componentes:

- Una nueva subestación de entre 10 y 15 acres llamada Gateway, en un terreno que es actualmente propiedad de Tucson Electric Power (TEP), donde se ubicará el equipo de DC.
- Un nuevo segmento de línea de transmisión de aproximadamente 3 millas de 138 kilovoltios (kV) originando en la Subestación Valencia propiedad de UniSource Energy Services (UES) en Nogales, Arizona, y que se extiende al oeste y al sur de la nueva Subestación Gateway.
- Un nuevo segmento de línea de transmisión de aproximadamente 2 millas de 230 kV, extendiéndose desde el sur de la nueva Subestación Gateway y cruzando la frontera México-Estados Unidos para interconectarse con una línea de transmisión que será construida por la Comisión Federal de Electricidad (CFE).



Diseño del Proyecto

El Proyecto constará de una nueva subestación de 10-15 acres llamada Gateway en un terreno propiedad de TEP, donde el equipo DC será colocado. La ciudad de Nogales ha dado un permiso de uso condicional permitiendo el desarrollo de una subestación en esta ubicación.

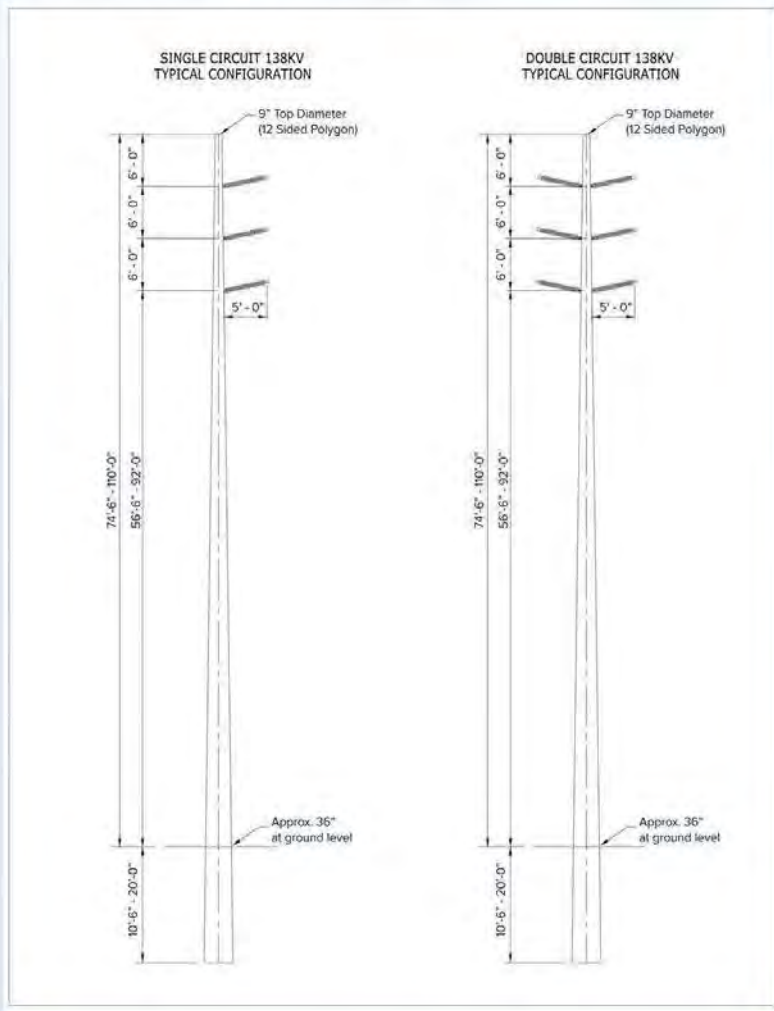


Foto de equipo DC ubicado en Mission, TX, a lo largo de la Frontera entre Texas y México.

Diseño del Proyecto

Segmento de Valencia a Gateway

El segmento de Valencia a Gateway consistirá de aproximadamente 3 millas de una nueva línea de transmisión de 138 kV conectando la subestación Valencia, propiedad de UES, en Nogales, AZ a la nueva subestación Gateway.



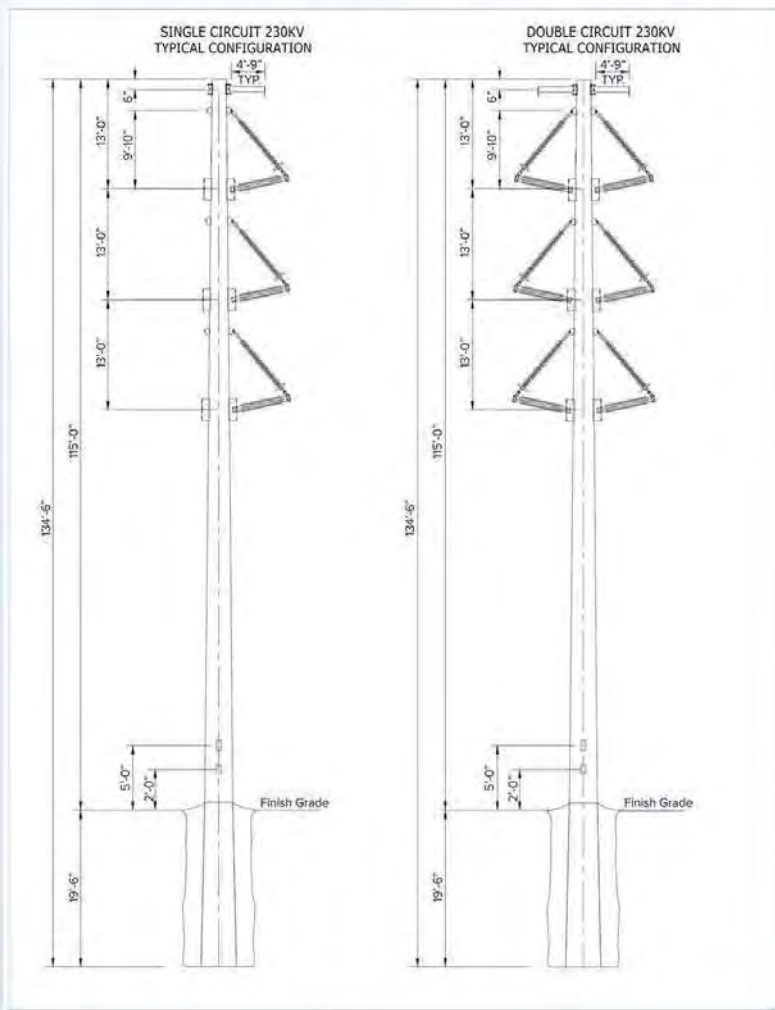
Segmento de Valencia a Gateway: Circuito Sencillo/Doble 138 kV	
Longitud anticipada de la línea	3 millas
Tipo de Estructura	Tubos de acero
Altura anticipada de la estructura	75-110 pies
Espaciamiento aproximado entre estructuras	600-1000 pies
Numero anticipado de estructuras por milla	5-9 (dependiendo del terreno y otros factores)
Anchura anticipada del derecho de vía	hasta 150 pies

Possible estructura de transmisión para la línea de Valencia a Gateway.

Diseño del Proyecto

Segmento de Gateway a la Frontera Estados Unidos- México

El segmento de Gateway a la Frontera Estados Unidos-México consistirá de aproximadamente 2 millas de una nueva línea de transmisión de 230 kV extendiéndose hacia el sur desde la nueva subestación Gateway a través de la frontera Estados Unidos – México para interconectarse con una línea de transmisión que será construida por la CFE.



Segmento Gateway a la Frontera Estados Unidos- México : Circuito Sencillo/Doble 230 kV	
Longitud anticipada de la línea	2 millas
Tipo de Estructura	Tubos de acero
Altura anticipada de la estructura	135 pies
Espaciamiento aproximado entre estructuras	600-1100 pies
Numero anticipado de estructuras por milla	5-8 (dependiendo del terreno y otros factores)
Anchura anticipada del derecho de vía	hasta 150 pies

Posible estructura de transmisión para la línea de Gateway a la Frontera Estados Unidos – México.

Calendario Anticipado del Proyecto

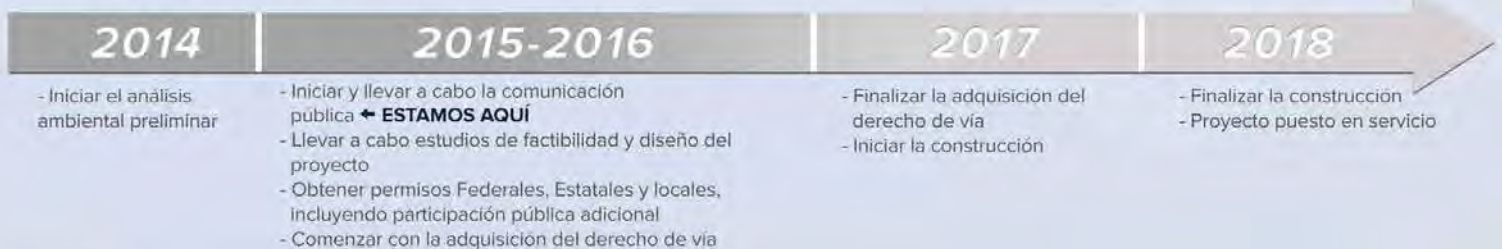
El calendario del proyecto preliminar incluye: el proceso de selección de ruta y la participación pública y obtención de permisos asociada durante el año 2016; adquisición del derecho de vía, ingeniería y construcción a partir de 2017; y la finalización del Proyecto en el año 2018.

2015-2016

- Selección de ruta y la participación pública ocurrirá antes y durante el desarrollo del proyecto y el proceso de obtención de permisos.
- El Proceso formal de obtención de Permisos del Proyecto de Interconexión Nogales comenzará oficialmente con la presentación de una solicitud en 2015 para un Permiso Presidencial para la construcción de las instalaciones.
- Además de esta solicitud, la autorización para el Proyecto de Interconexión Nogales incluirá la obtención de permisos de otras organizaciones locales, estatales y federales.
- Muchos de los procesos de obtención de permisos federales, estatales y locales tienen períodos públicos de comentario y procesos públicos. El equipo del Proyecto de Interconexión Nogales dará a conocer información sobre los procesos públicos asociados a los esfuerzos de manera permitan que los interesados sepan cómo y cuándo participar.
- Desarrollar el proceso de obtención de capacidad nominal de WECC utilizando el proceso del Grupo de Revisión de Coordinación de Proyectos de WECC.
- Comenzar el diseño de ingeniería preliminar.
- Revisión Ambiental Federal.
- Procesos de Participación Pública.
- Comenzar la adquisición del Derecho de Vía.

2017-2018

- Finalizar diseño.
- Finalizar adquisición del derecho de vía.
- Construir el Proyecto.
- Proyecto puesto en servicio.



Filosofía de Planeación y Ubicación

La selección de la ruta del Proyecto estará guiada por un enfoque que minimiza los impactos al seguir rutas de infraestructura existente y corredores desarrollados siempre que sea posible.

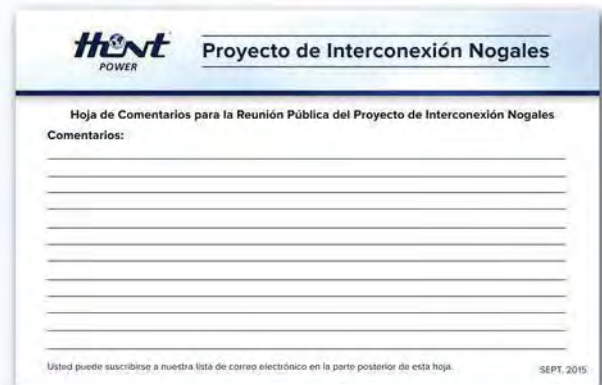
Este enfoque incluye:

- Trabajar dentro o junto a los corredores existentes y áreas previamente perturbadas (tales como líneas de transmisión, carreteras, etc.).
- Trabajar con los interesados para entender y evitar o minimizar los impactos en las zonas sensibles.
- La integración de la información de los esfuerzos federales y estatales de planificación existentes de uso de la energía y del suelo.
- El desarrollo de rutas responsables y rutas alternativas derivadas de:
 - Opinión Pública.
 - Experiencia en la industria.
 - Empresas locales de servicio eléctrico.
 - Agencias federales, estatales y locales.

Su Participación

Hoy:

- Hable con un miembro del equipo del Proyecto.
- Proporcione información directamente sobre los mapas del Proyecto.
- Llenar una hoja de comentarios.



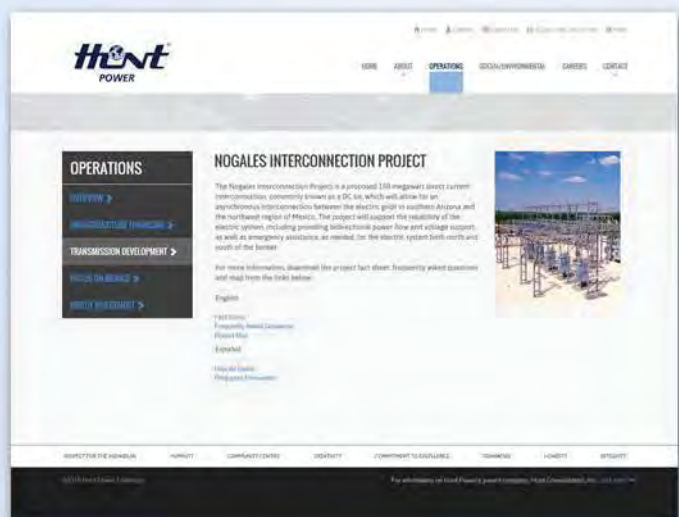
The image shows a document titled "Hoja de Comentarios para la Reunión Pública del Proyecto de Interconexión Nogales". It features the Hunt Power logo and a section for "Comentarios:" with several horizontal lines for writing. At the bottom, it includes a small text box: "Usted puede suscribirse a nuestra lista de correo electrónico en la parte posterior de esta hoja." and the date "SEPT. 2015".

En cualquier momento:

- Envíenos un correo electrónico: nogalesdctie@huntpower.com
- Llámenos: **(800) 240-5718**

Para más información:

- Visítenos en:
www.huntpower.com/nogalesdctie.aspx
- Llene una hoja de comentarios con una solicitud para su inscripción para recibir actualizaciones por correo electrónico.



**Exhibit J-2(k) – Nogales Interconnection Project February 2015
Pre-NEPA Public Meeting Materials**

PUBLIC NOTICE

Hunt Power is hosting an open house and informational meeting on Thursday, February 5, 2015, to inform community members about a proposed electric transmission project. The proposed Nogales Interconnection Project would link the electric system in southern Arizona with the electric system in the northwest region of Mexico, strengthening regional electric reliability. The proposed project includes construction of approximately five miles of new or upgraded transmission lines and an electric converter substation that would be located north and west of Nogales.

We invite you to attend the open house, where you can learn about why the project is needed, what benefits it would bring to the region and how it would be developed. Representatives from Hunt Power and UniSource Energy Services will be present to discuss the project. This is an initial meeting to seek public input before the formal review process begins.

The open house will be held on Thursday, February 5, 2015, from 5:30 p.m. to 8 p.m., at the Holiday Inn Express at 850 West Shell Road, Nogales AZ 85621. A short presentation will be given at 6 p.m.

For more information, please call (800) 240-5718 or email nogalesdctie@huntpower.com.

Welcome to the Nogales Interconnection Project

Public Informational Meeting

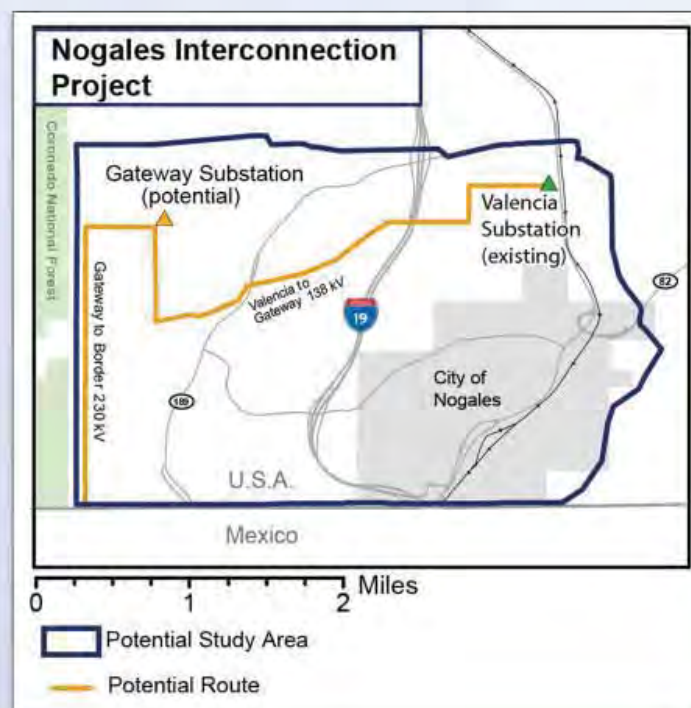
Please Sign In

Project Overview

The Nogales Interconnection Project (Project) is a proposed 150 megawatt (MW) direct current (DC) interconnection, or commonly known as a DC tie, which will allow for an asynchronous interconnection between the electric grid in southern Arizona and the electric grid in the northwest region of Mexico.

The Project will consist of three components:

- A new 10-15 acre Gateway Substation on land currently owned by Tucson Electric Power (TEP), where DC equipment would be located.
- A new, approximately 3-mile 138-kilovolt (kV) transmission line segment originating at UniSource Energy Services' (UES') Valencia Substation in Nogales, AZ, and extending west and south to the new Gateway Substation.
- A new, approximately 2-mile 138-kV transmission line segment extending south from the new Gateway Substation and across the U.S.-Mexico border to interconnect with a transmission line to be constructed by the Comisión Federal de Electricidad (CFE).

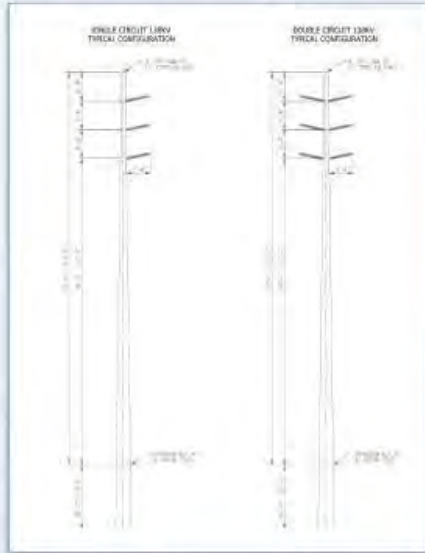


Project Design

The Project will consist of two transmission line segments.

Valencia to Gateway Segment

The Valencia to Gateway segment will consist of a new, approximately 3-mile 138-kV transmission line connecting UES' Valencia Substation in Nogales, AZ, to the new Gateway Substation.

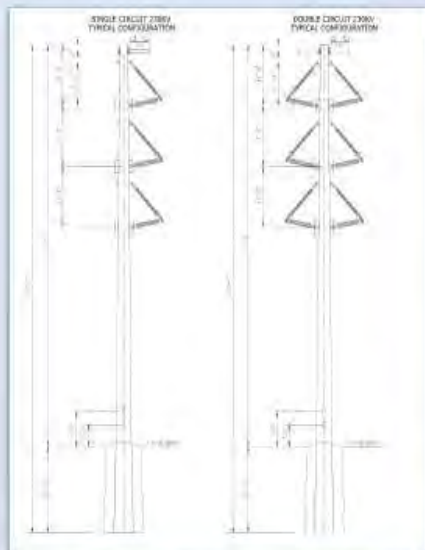


Potential Valencia Substation to Gateway Substation transmission structure.

Valencia to Gateway Segment: Single/Double-circuit 138 kV	
Anticipated Line Length	3 miles
Type of Structure	Tubular steel poles
Approximate Structure Height	75-110 feet
Approximate Structure Spacing	900-1200 feet
Anticipated Number of Structures Per Mile	5-8 (depending on terrain and other factors)
Anticipated Right-of-Way Width	150 feet

Gateway to the U.S.-Mexico Border Segment

The Gateway to the U.S.-Mexico Border segment will consist of a new, approximately 2-mile 230-kV transmission extending south from the new Gateway Substation across the U.S.-Mexico border to interconnect with a CFE-constructed transmission line.



Potential Gateway Substation to U.S.-Mexico Border transmission structure.

Gateway to U.S.-Mexico Border Segment: Single/Double-circuit 230	
Anticipated Line Length	2 miles
Type of Structure	Tubular steel poles
Approximate Structure Height	135 feet
Approximate Structure Spacing	1000-1200 feet
Anticipated Number of Structures Per Mile	5-8 (depending on terrain and other factors)
Anticipated Right-of-Way Width	150 feet

Project Design

The Project will also consist of a new 10-15 acre Gateway Substation at a site owned by TEP, where DC tie equipment will be located. The City of Nogales previously issued a conditional use permit allowing development of a substation at this location.



Pictures of DC tie located in Mission, TX along the Texas-Mexico border.

Project Permitting

The Project will undergo multiple comprehensive permitting and approval processes. While permit applications have not yet been developed or submitted, the Project team anticipates the following federal, state, and local entities to be involved in the review of the Project.

Federal Level

As the Project is anticipated to cross the U.S.-Mexico Border, the Project will need to obtain a Presidential Permit allowing for the cross-border electrical interconnection. The U.S. Department of Energy (DOE) will be the lead federal agency charged with ensuring that the project complies with National Environmental Policy Act (NEPA) requirements.

- U.S. Environmental Protection Agency
- U.S. Forest Service
- U.S. Customs and Border Protection
- International Boundary and Water Commission
- U.S. Fish and Wildlife Service
- U.S. Department of Defense
- U.S. Army Corps of Engineers
- Federal Aviation Administration

State Level

The Project team anticipates coordinating with many, if not all, of the following state-level permitting and regulatory agencies:

- Arizona Corporation Commission, including the Arizona Power Plant and Transmission Line Siting Committee
- Arizona Department of Environmental Quality
- Arizona Department of Transportation
- Arizona Game and Fish Department

Local Level

The Project team will comply with all applicable local permitting requirements, including coordination with the following entities:

- Santa Cruz County
- City of Nogales

Anticipated Project Timeline

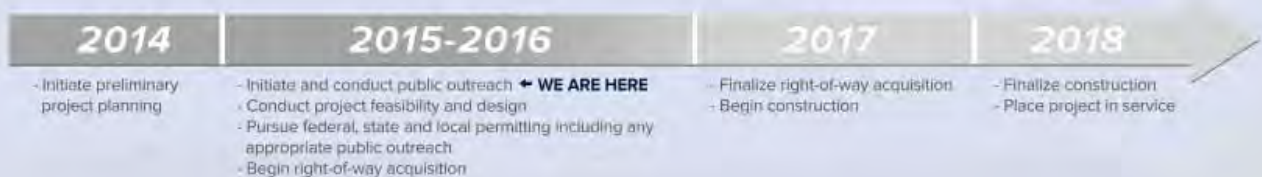
The preliminary Project schedule includes: routing and associated public engagement and permitting through 2016; right-of-way acquisition, engineering and construction beginning in 2017; and project completion in 2018.

2015-2016

- Route selection and public engagement outreach will occur prior to and throughout project development and the permitting process.
- The Nogales Interconnection Project's formal permitting processes will officially begin with the submission of an application in 2015 for a Presidential Permit to construct the facilities.
- In addition to this application, authorization for the Nogales Interconnection Project will include other local, state, and federal permits.
- Many of the federal, state, and local permitting processes have associated public comment periods and public processes. The Nogales Interconnection Project team will publicize information about the public processes associated with the permitting efforts so that stakeholders know how and when to participate.
- Develop WECC project capacity rating utilizing WECC Project Coordination Review Group process.
- Begin preliminary engineering design.
- Federal environmental review.
- Public scoping.
- Begin Right-of-Way (ROW) acquisition.
-

2017-2018

- Finalize design.
- Finalize ROW acquisition.
- Construct Project.
- Place Project in service.



About the Team

The Nogales Interconnection Project team includes three entities:

- Hunt Power, L.P. develops and acquires electric and pipeline transmission and distribution assets—both unregulated and regulated—either through acquisition of existing assets or through new incremental construction projects. Hunt Power is part of a larger privately-owned group of companies, based in Dallas, Texas, and managed by the Ray L. Hunt family, that engages in oil and gas exploration, refining, power, real estate, ranching, and private equity investments.
- Tucson Electric Power (TEP) serves approximately 414,000 customers in and around Tucson and owns the Gateway Substation site.
- UniSource Energy Services (UES) provides electric service to more than 93,000 customers in Santa Cruz and Mohave Counties. UES, TEP and their parent company, UNS Energy, are subsidiaries of Fortis, which owns local utilities that serve more than 3 million customers in Canada, the United States and the Caribbean.

Project Need and Benefits

Project Need

The Project will support the reliability of the electric system, including providing bi-directional voltage support and emergency assistance, as needed, for the electric system both north and south of the border.

Nogales is at the end of the Western Electricity Coordinating Council (WECC) grid, and relies on the approximately 55-mile-long Vail to Valencia 138-kV transmission line for its power supply. The addition of the proposed Gateway Substation and connection to the electrical system in Sonora, Mexico, would provide an additional source of energy for the city of Nogales in the event of a transmission line outage or other problem on the WECC system.

Project Benefits

The Nogales Interconnection would contribute to reliable electric service in Santa Cruz County as energy demand continues to grow. The Project brings the following benefits:

- Supports the reliability of the current system.
- Allows access to additional energy sources and ancillary benefits, such as voltage support.
- Creates regional economic development opportunities. In addition to temporary construction and supply chain jobs, the project will create a more robust electric grid to support business growth in the region.
- Enables both WECC and CFE grids to provide support to the other in times of emergency.
- Create a potential alternative energy resource that would allow UES and CFE to take advantage of diverse energy markets and pass along benefits of reduced costs to customers.

Siting Philosophy and Planning

The Project's route will be guided by an approach to minimize impacts by following existing infrastructure and developed corridors wherever possible.

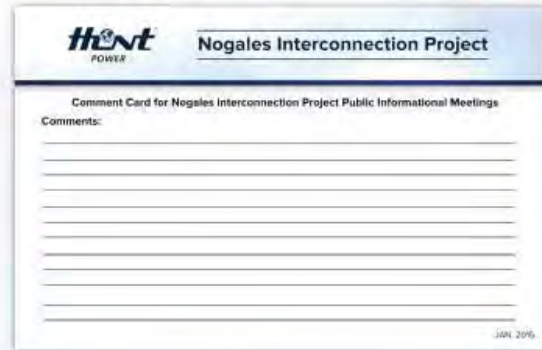
This approach includes:

- Working within or next to existing corridors and previously disturbed areas (such as transmission lines, roads, etc.).
- Working with stakeholders to understand and avoid or minimize impacts to sensitive areas.
- Integrating information from existing federal and state energy and land use planning efforts.
- Developing responsible routes and route alternatives derived from:
 - Public input.
 - Industry experience.
 - Local utility companies.
 - Federal, state, and local agencies.

Your Participation

Today: _____

- Speak with a project team member.
- Provide direct input on project maps.
- Fill out a comment card.



Hunt POWER **Nogales Interconnection Project**

Comment Card for Nogales Interconnection Project Public Informational Meetings

Comments:

JAN. 2015

Anytime: _____

- Email us: nogalesdctie@huntpower.com
- Call us: **(800) 240-5718**

For More Information: _____

- Visit us at:
www.huntpower.com/nogalesdctie.aspx
- Fill out a comment card with a request to sign up for email updates.



Hunt POWER Using Business with Heart Careers News Contact Us

[Selected Representatives](#) [About Hunt Power](#) [Operations Overview](#) [Social / Environmental Stewardship](#) [A Day in the Life of Hunt](#)

NOGALES INTERCONNECTION PROJECT

Nogales Interconnection Project

The Nogales Interconnection Project is a proposed 150 megawatt (MW) direct current (DC) interconnection, or combination of two (2) DC links, with an associated AC interconnection between the electric grid in southern Arizona and the western grid in the northwest region of Mexico. The Project will expand the capability of the area's system, including providing additional power flow and voltage control, as well as emergency assistance, as needed, to the western system with north flow south of the border.

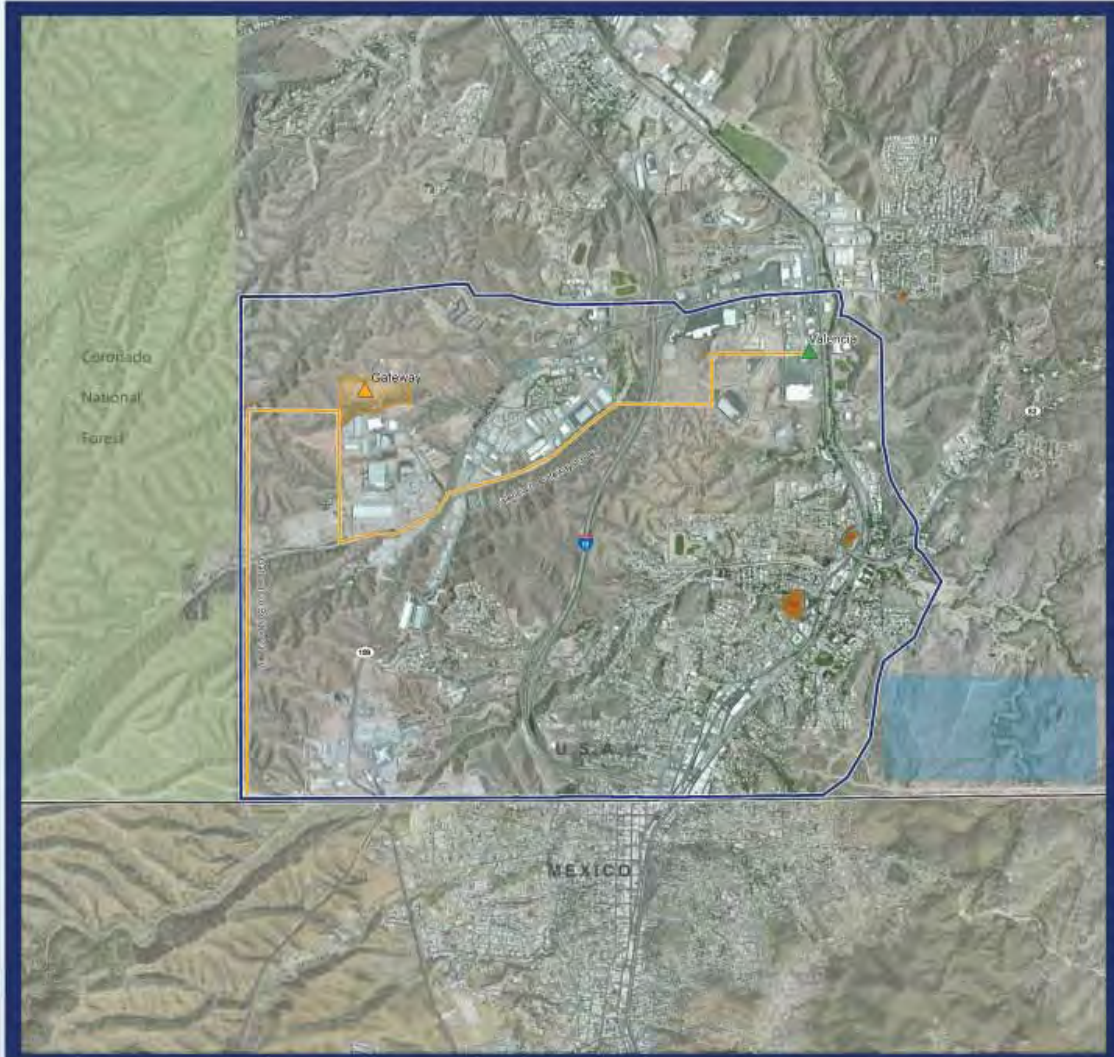
For more information, download the project fact sheet, frequently asked questions, and read from the links below:

- Fact Sheet
- FAQs
- Project Map

©2015 Hunt Power | 1100 Del Webb | Nogales, AZ | 520.288.1100

Comment Station

**Please submit written comments here.
Thank you for providing feedback today.**



Legend

Potential Study Area	Forest Service
Potential Route	Private (transparent)
Potential Substation	State Trust
Potential Substation Site	Parks
Existing Substation	

Hunt
POWER

Nogales Interconnection Project

Esri, Intellicart, Imagery (ESRI), (SMP) 07, 2006, Hunt Power
Coordinate System: NAD 1983 UTM Zone 13N
February 2015

Bienvenido a la Reunión Informativa Pública del Proyecto de Interconexión Nogales

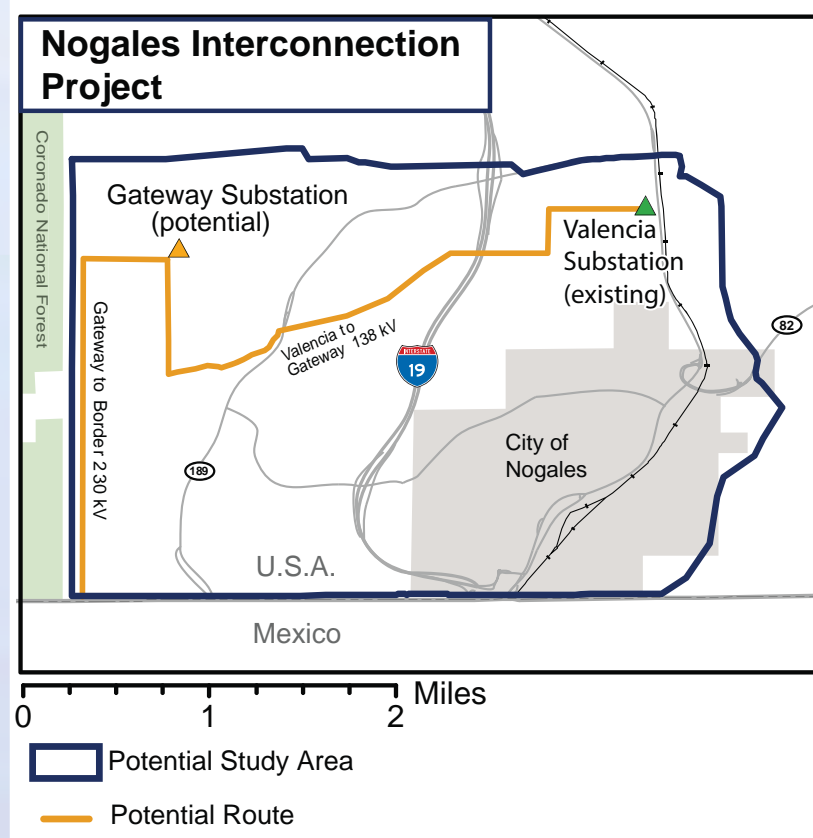
Favor de Registrarse

Descripción del Proyecto

El Proyecto de Interconexión Nogales (Proyecto) es un proyecto de interconexión de 150 megavatios (MW) de corriente directa (DC), o comúnmente conocido como un enlace de DC, el cual permitirá una interconexión asíncrona entre la red eléctrica en el sur de Arizona y la red eléctrica en la región noroeste de México.

El Proyecto constará de tres componentes:

- Una nueva subestación de entre 10 y 15 acres llamada Gateway, en un terreno que es actualmente propiedad de Tucson Electric Power (TEP), donde se ubicará el equipo de DC.
- Un nuevo segmento de línea de transmisión de aproximadamente 3 millas de 138 kilovoltios (kV) originado en la Subestación Valencia propiedad de UniSource Energy Services '(UES)' en Nogales, Arizona, y que se extiende al oeste y al sur de la nueva Subestación Gateway.
- Un nuevo segmento de línea de transmisión de aproximadamente 2 millas de 138 kV, extendiéndose desde el sur de la nueva Subestación Gateway y cruzando la frontera Estados Unidos-México para interconectarse con una línea de transmisión que será construida por la Comisión Federal de Electricidad (CFE).

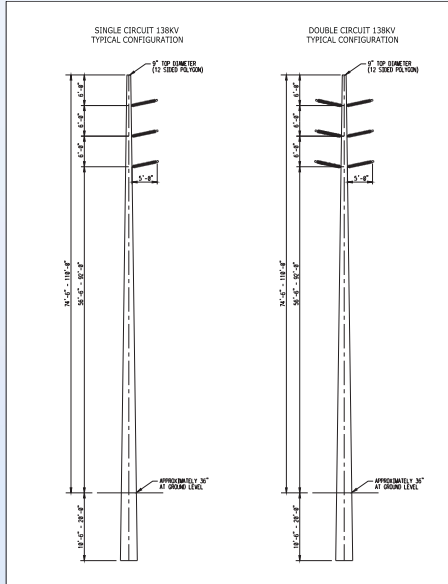


Diseño del Proyecto

El Proyecto consistirá de dos segmentos de línea de transmisión.

Segmento de Valencia a Gateway

El segmento de Valencia a Gateway consistirá de aproximadamente 3 millas de una nueva línea de transmisión de 138 kV conectando la subestación Valencia, propiedad de UES, en Nogales, AZ a la nueva subestación Gateway.



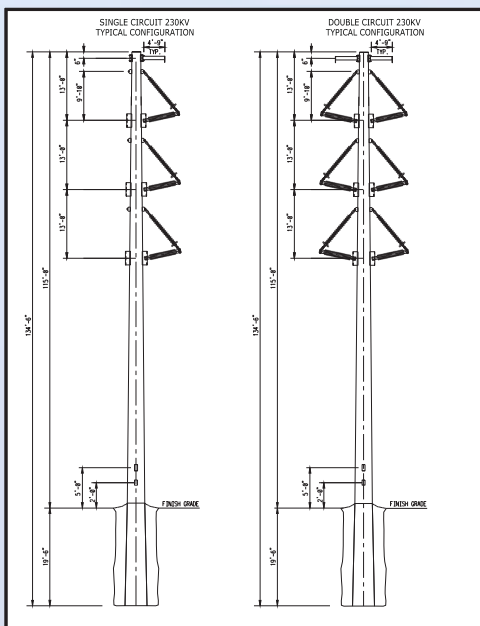
Segmento de Valencia a Gateway: Circuito Sencillo/Doble 138 kV

Longitud anticipada de la línea	3 millas
Tipo de Estructura	Tubos de acero
Altura anticipada de la estructura	75-110 pies
Espaciamiento aproximado entre estructuras	900-1200 pies
Numero anticipado de estructuras por milla	5-8 (dependiendo del terreno y otros factores)
Anchura anticipada del derecho de vía	150 pies

< Posible estructura de transmisión para la línea de Valencia a Gateway.

Segmento de Gateway a la Frontera Estados Unidos- México

El segmento de Gateway a la Frontera Estados Unidos-México consistirá de aproximadamente 2 millas de una nueva línea de transmisión de 230 kV extendiéndose hacia el sur desde la nueva subestación Gateway a través de la frontera Estados Unidos – México para interconectarse con una línea de transmisión que será construida por la CFE.



Segmento Gateway a la Frontera Estados Unidos- México : Circuito Sencillo/Doble 230 kV

Longitud anticipada de la línea	2 millas
Tipo de Estructura	Tubos de acero
Altura anticipada de la estructura	135 pies
Espaciamiento aproximado entre estructuras	1000-1200 pies
Numero anticipado de estructuras por milla	5-8 (dependiendo del terreno y otros factores)
Anchura anticipada del derecho de vía	150 pies

< Posible estructura de transmisión para la línea de Gateway a la Frontera Estados Unidos – México.

Diseño del Proyecto

El Proyecto también constará de una nueva subestación de 10-15 acres llamada Gateway en un terreno propiedad de TEP, donde el equipo DC será colocado. La ciudad de Nogales ha dado un permiso de uso condicional permitiendo el desarrollo de una subestación en esta ubicación.



Foto de equipo DC ubicado en Mission, TX, a lo largo de la Frontera entre Texas y México.

Obtención de Permisos del Proyecto

El Proyecto será sometido a múltiples procesos exhaustivos de obtención de permisos y aprobación. A pesar que las solicitudes de permisos aún no se han desarrollado o presentado, el equipo del Proyecto anticipa que las siguientes entidades federales, estatales, y locales participarán en la revisión del Proyecto.

Nivel Federal

Dado que se prevé que el Proyecto cruzará la frontera entre Estados Unidos y México, los desarrolladores del Proyecto tendrán que obtener un Permiso Presidencial que permite la interconexión eléctrica transfronteriza. El Departamento de Energía de Estados Unidos (DOE) será la agencia federal encargada de asegurar que el Proyecto cumpla con la Ley Nacional de Política Ambiental (NEPA). NEPA requiere que las agencias federales evalúen proyectos de desarrollo para determinar si podrían causar efectos adversos a los recursos ambientales, culturales y sociales, y si es así, mitigar con suficiencia dicho impacto.

DOE coordinará con éstas y potencialmente otras agencias federales:

- U.S. Environmental Protection Agency
- U.S. Forest Service
- U.S. Customs & Border Protection
- International Boundary & Water Commission
- U.S. Fish and Wildlife Service
- U.S. Department of Defense
- U.S. Army Corps of Engineers
- Federal Aviation Administration

Nivel Estatal

El equipo del Proyecto prevé la coordinación con la mayoría, si no es que todos los siguientes organismos reguladores a nivel estatal y de permisos:

- Arizona Corporation Commission, incluyendo los Comités de Arizona Power Plant y Transmission Line Siting
- Arizona Department of Environmental Quality
- Arizona Department of Transportation
- Arizona Game and Fish Department

Nivel Local

El equipo del Proyecto cumplirá con todos los requisitos de permisos locales aplicables, incluyendo la coordinación con las siguientes entidades:

- Condado de Santa Cruz
- Ciudad de Nogales

Calendario Anticipado del Proyecto

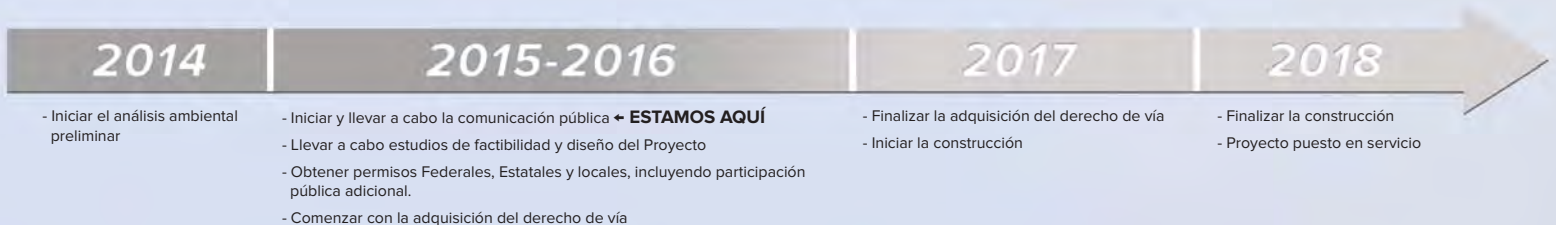
El calendario del Proyecto preliminar incluye: el proceso de selección de ruta, la participación pública y obtención de permisos asociada durante el año 2016; adquisición del derecho de vía, ingeniería y construcción a partir de 2017; y la finalización del Proyecto en el año 2018.

2015-2016

- Selección de ruta y la participación pública ocurrirá antes y durante el desarrollo del Proyecto y el proceso de obtención de permisos.
- El Proceso formal de obtención de Permisos del Proyecto de Interconexión Nogales comenzará oficialmente con la presentación de una solicitud en 2015 para un Permiso Presidencial para la construcción de las instalaciones.
- Además de esta solicitud, la autorización para el Proyecto de Interconexión Nogales incluirá la obtención de permisos de otras organizaciones locales, estatales y federales.
- Muchos de los procesos de obtención de permisos federales, estatales y locales tienen períodos públicos de comentario y procesos públicos. El equipo del Proyecto de Interconexión Nogales dará a conocer información sobre los procesos públicos asociados a los esfuerzos de manera que permitan que los interesados sepan cómo y cuándo participar.
- Desarrollar el proceso de obtención de capacidad nominal de WECC utilizando el proceso del Grupo de Revisión de Coordinación de Proyectos de WECC.
- Comenzar el diseño de ingeniería preliminar.
- Revisión Ambiental (Evaluación Ambiental o Declaración de Impacto Ambiental, dependiendo de la guía provista por el Departamento de Energía (DOE)).
- Procesos de Participación Pública.
- Comenzar la adquisición del Derecho de Vía.

2017 - 2018

- Finalizar diseño. Finalizar adquisición del derecho de vía.
- Construir el Proyecto.
- Proyecto puesto en servicio.



Acerca del Equipo

El equipo de Proyecto de Interconexión Nogales incluye tres entidades:

- Hunt Power, L.P. desarrolla y adquiere activos de transmisión y distribución eléctrica y gasoductos tanto no regulados como regulados, ya sea a través de la adquisición de los activos existentes o a través de nuevos proyectos incrementales de construcción. Hunt Power es parte de un grupo de empresas de propiedad privada con sede en Dallas, Texas, y gestionado por la familia de Ray L. Hunt que se dedica a la exploración de petróleo y gas, refinación, energía, bienes raíces, ganadería e inversiones de capital privado.
- Tucson Electric Power Company (TEP), proporciona servicio eléctrico a aproximadamente 414.000 clientes en Tucson y sus alrededores y posee el terreno para la subestación Gateway.
- UniSource Energy Services (UES), proporciona servicio eléctrico a más de 93,000 clientes en los condados de Santa Cruz y Mohave. UES, TEP y su empresa matriz, UNS Energy, son filiales de Fortis, que es propietaria de empresas de servicios públicos locales que proporcionan servicio a más de 3 millones de clientes en Canadá, Estados Unidos y el Caribe.

Necesidad y Beneficios del Proyecto

Necesidad del Proyecto

El Proyecto proveerá respaldo a la confiabilidad del sistema eléctrico, incluyendo la facultad de soporte bi-direccional de flujo de potencia y de tensión, así como la ayuda en emergencias, según sea necesario, para el sistema eléctrico tanto al norte como al sur de la frontera. Nogales se encuentra al final de la red del Western Electricity Coordinating Council (WECC), y depende de las aproximadamente 55 millas de línea de transmisión de 138 kV de Vail a Valencia como única fuente de energía. La adición de la subestación Gateway propuesta y la conexión al sistema eléctrico en Sonora, México proporcionarán una fuente adicional de energía para la zona de Nogales, Arizona en caso de un corte en la línea de transmisión o de otros problemas de confiabilidad en el sistema WECC.

Beneficios del Proyecto

La Interconexión Nogales proveerá respaldo a la confiabilidad del servicio eléctrico en el condado de Santa Cruz a medida que la demanda de energía sigue creciendo. El Proyecto aporta los siguientes beneficios:

- Respalda la confiabilidad del sistema actual.
- Permite el acceso a fuentes de energía adicionales y beneficios adicionales, como soporte de tensión.
- Crea oportunidades de desarrollo económico regional. Además de los trabajos temporales de construcción y de la cadena de suministro, el Proyecto creará una red eléctrica más robusta para apoyar el crecimiento de la industria en la región.
- Permite a las redes de WECC y de CFE prestar apoyo a la otra en caso de emergencia.
- Crea recursos potenciales de energía alternativa que permitiría que UES y CFE aprovechen los diversos mercados de energía y transfieran los beneficios de la reducción de costos a sus clientes.

Filosofía de Planeación y Ubicación

La selección de la ruta del Proyecto estará guiada por un enfoque que minimiza los impactos al seguir rutas de infraestructura existentes y corredores desarrollados siempre que sea posible.

Este enfoque incluye:

- Trabajar dentro o junto a los corredores existentes y áreas previamente perturbadas (tales como líneas de transmisión, carreteras, etc.).
- Trabajar con los interesados para entender y evitar o minimizar los impactos en las zonas sensibles.
- La integración de la información de los esfuerzos federales y estatales de planificación existentes de uso de la energía y del suelo.
- El desarrollo de rutas responsables y rutas alternativas derivadas de:
 - Opinión Pública.
 - Experiencia en la industria.
 - Empresas locales de servicio eléctrico.
 - Agencias federales, estatales y locales.

Su Participación

Hoy: _____

- Hable con un miembro del equipo del Proyecto.
- Proporcione información directamente sobre los mapas del Proyecto.
- Llenar una hoja de comentarios.



En cualquier momento: _____

- Envíenos un correo electrónico: nogalesdctie@huntpower.com
- Llámenos: **(800) 240-5718**

Para más información: _____

- Visítenos en: www.huntpower.com/nogalesdctie.aspx
- Llene una hoja de comentarios con una solicitud para su inscripción para recibir actualizaciones por correo electrónico.



The screenshot shows the Hunt Power website's page for the Nogales Interconnection Project. At the top, there is a navigation menu with links for 'Selected Representatives', 'About Hunt Power', 'Operations Overview', 'Social / Environmental Stewardship', and 'A Day in the Life of Hunt'. Below the menu, the page title is 'NOGALES INTERCONNECTION PROJECT'. A map on the left shows the project area, including the Gateway (Arling) substation and the City of Nogales. To the right of the map, there is a text block describing the project and a list of links for more information: 'Fact Sheet', 'FAQs', and 'Project Map'. At the bottom of the page, there is a footer with copyright information and contact links.

Estación de Comentarios

Por favor, deje sus comentarios por escrito aquí.

Gracias por proporcionar su retroalimentación el día de hoy.

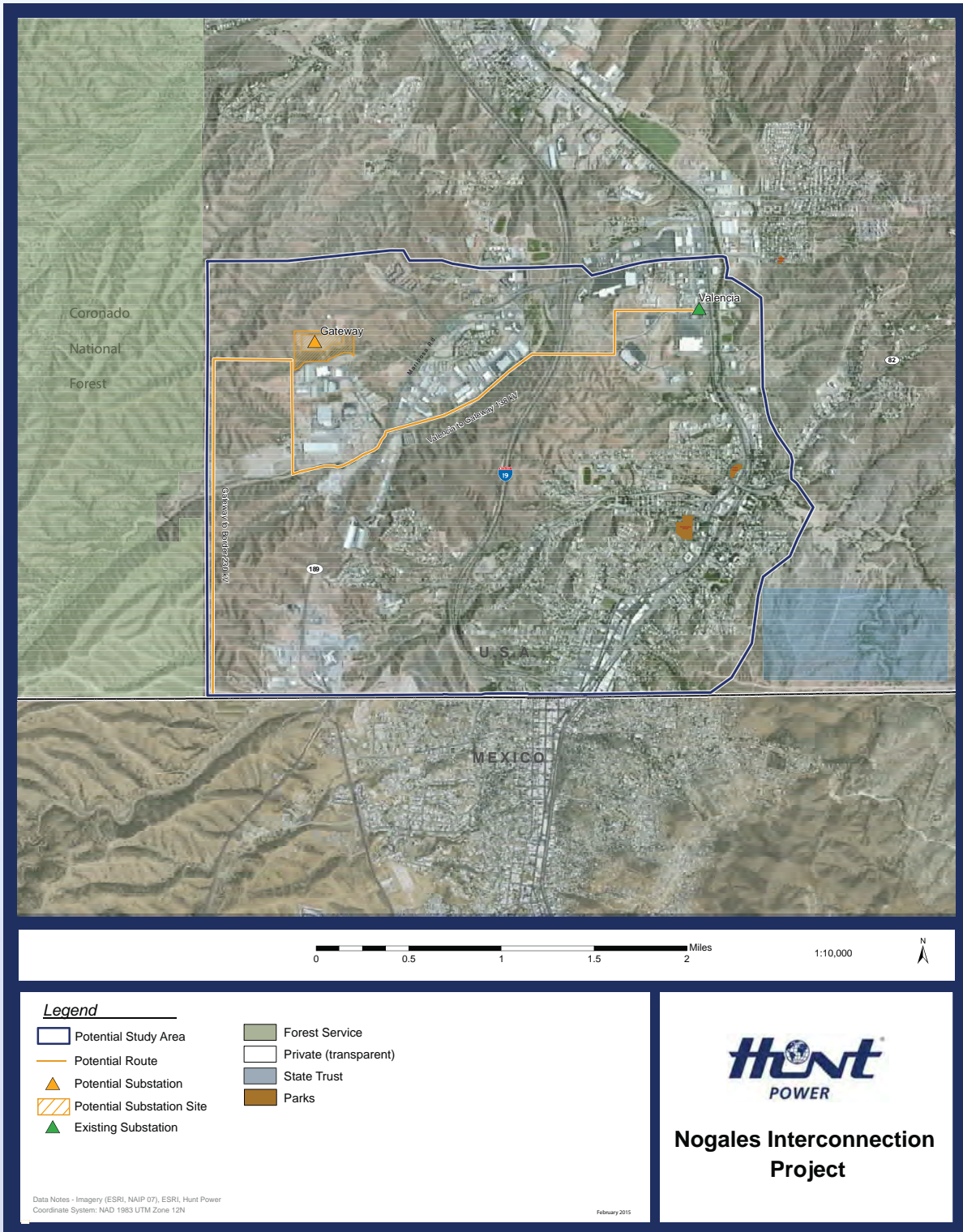


Exhibit J-3 – March 8, 2017 Memorandum of Understanding

Memorandum of Understanding
(“MOU”)
between
The Mexico Comisión Reguladora de Energía
and
Centro Nacional de Control de Energía
and
North American Electric Reliability Corporation

(individually described hereunder as “Party” and collectively described hereunder as the “Parties”)

Section I. - Preamble

WHEREAS, the Mexico *Comisión Reguladora de Energía* (CRE), the *Centro Nacional de Control de Energía* (CENACE) and the North American Electric Reliability Corporation (NERC) have a common interest in the reliability and security of electric power systems in Mexico and the United States of America;

WHEREAS, CRE is an agency of the Centralized Public Administration as a Coordinated Energy Regulator of the United Mexican States, possessing its own legal status and assets, granted by the Organic Law of the Federal Public Administration and regulated by the Law of the Co-ordinated Energy Regulators of Mexico and the Electric Industry Act, and other public laws and has the legal authority to develop, enforce and monitor reliability criteria of the National Electric Power System and therefore has also the authority to execute and comply with the terms of this agreement;

WHEREAS, CENACE is a Public Decentralized body in Mexico’s Federal Public Administration with own legal personality and assets, mandated by the Mexican legal framework to exercise the Operative Control of the National Electric Power System, the operation of the Wholesale Electricity Market and the open and non-unduly discriminatory access to the National Transmission Grid and the General Distribution Grids; to propose the expansion and modernization of the National Transmission Grids and of those elements in the General Distribution Grids pertaining to the Wholesale Electricity Market and to operate the National Electric Power System under conditions of efficiency, quality, reliability, continuity, security and sustainability.

WHEREAS, NERC is a non-profit corporation based in the United States of America responsible for the reliability of the bulk power system in North America, and has been designated by the Federal Energy Regulatory Commission of the United States as the Electric Reliability Organization (ERO) in accordance with the *Energy Policy Act of 2005* issued in the United States and recognized as the ERO by provincial authorities in Canada pursuant to memoranda of understanding. In its role as the ERO, NERC develops and enforces Reliability Standards; assesses long-term reliability; identifies, analyzes, and reports on reliability risks; and monitors the bulk power system through system awareness;

WHEREAS, NERC has delegated to Regional Entities the performance of certain reliability activities through regional delegation agreements so they can perform activities such as compliance monitoring, with a cross-border scope, as defined in the *Energy Policy Act of 2005*;

WHEREAS, CRE and CENACE acknowledge their will to entering into this MOU with NERC, in furtherance of a continuing and cooperative relationship to enhance reliability of electric power systems in Mexico and the United States of America.

NOW THEREFORE, this MOU sets out the understanding of the Parties as follows:

Section II - Objective of the MOU and Collaboration Efforts

1. In view of the established and growing cross-border operations and activities between the United States of America and Mexico, and in recognition of the benefits of mutual cooperation, the objective of this MOU is to establish a collaboration mechanism between the Parties to strengthen their regulatory and technical capacities in order to perform their functions.
2. This MOU identifies initial topics that the Parties intend to focus on in their initial activities and exchange of information. Those activities may include:
 - a) Identification and assessment of risks related to critical infrastructure protection, cyber and physical security, including identification of critical assets and practices for protecting sensitive information;
 - b) Assessing reliability performance and risks, including but not limited to, integration of large amounts of renewable generation into the electric power system;
 - c) Developing practices, tools and techniques for analysis of system events and management of reliability risks identified as a result of system events, and;
 - d) Strengthening technical and regulatory capacities.
3. The Parties may accomplish this cooperation through any mutually acceptable means, including, but not limited to:
 - a) Periodic or *ad hoc* meetings, webinars, teleconferences, or workshops to be held at the Parties' offices or other location that is convenient for the required individual participants;
 - b) Participation in training activities or continuing education programs provided by NERC;
 - c) Joint meetings, internships, or reciprocal site visits between the Parties
 - d) Periodic meetings of senior leadership of the Parties; and
 - e) Joint technical studies or analysis of mutual interest, which may include involvement of industry or third-party experts from the United States of America, Mexico, or both.
4. NERC recognizes the jurisdictions of CRE and CENACE to develop and enforce a reliability framework in Mexico and CRE and CENACE recognize the role of NERC as the ERO in North

America and the benefits of mutual collaboration to enhance reliability of electric power systems in Mexico and the United States of America.

5. CRE and CENACE will make reasonable efforts, upon the Effective Date of this Agreement, to collaborate with NERC to develop a process for possible adoption of NERC Reliability Standards and their inclusion in Mexico's Grid Code or other regulatory instrument, and to continue to explore opportunities for possible formal Mexican participation in the ERO. Whenever adoption and formal participation is of mutual benefit, it should be done in accordance to the Mexican legislation following the due process established by CRE taking into account CENACE's opinion.

Section III. - Operational Guidelines to Conduct this MOU

1. The Parties will conform a group to conduct the activities under this MOU. This group will be comprised of a Steering Group, a Technical Secretariat and Technical Working Groups required for this purpose. The Steering Group will elaborate its rules of procedure once it has been established.
2. The Steering Group will be comprised by a senior member of each Party and will be responsible of approving a work program, finalizing a funding framework for activities conducted under the MOU, setting priorities and objectives and overseeing there is a mutual benefit for the Parties.
3. The Technical Secretariat shall alternate annually by a person designated by either CRE, CENACE, or NERC. The Technical Secretary will be responsible of proposing an annual work program to the Steering Group and facilitating the activities to be carried out ensuring that objectives are being met.
4. The Technical Working Groups will report to the Technical Secretariat and will be comprised by staff people of each Party taking into account their current activities and responsibilities so as to ensure their suitability for each Working Group. These Groups will be responsible for the day-to-day operation of this MOU.

Section IV. - Conflicts

1. The Parties will not take any action that is inconsistent with, or violates, the laws, rules, and regulations applicable to each Party.
2. To the extent that there is a conflict between specific agreements between CRE and CENACE with NERC's Regional Entities and this MOU, this MOU governs.

Section V. - Information Management

1. The Parties shall comply with the obligations of information management in accordance with their applicable transparency legal framework. The information to be shared is framed under the parties' attributions to ensure the reliability of the Electric Power System as stated in the preamble. If the Parties cannot resolve a conflict surrounding the handling of information, then the Disclosing Party will not share the information.

2. Each Disclosing Party must indicate with markings any information that is designated as “Classified Information” or “Confidential Information,” (collectively referred to as “Information”), as applicable.
3. The Parties agree to share Information with each other for the sole purpose of performing the activities under this Agreement, taking in consideration their applicable legal framework.
4. Each Receiving Party is responsible for defining and assuring proper conservation and management of information marked as Classified or Confidential by the Disclosing Party. Disclosure of such information to any person or agency different to the Parties will require the prior written permission of the Disclosing Party. This person or agency will be subject to the same standards imposed to the Parties.
5. Information may not be used for any commercial purpose.
6. In addition to provisions in Mexico’s Transparency Laws, the following will not be considered Information:
 - a. information which at the time of the disclosure to the Receiving Party is in the public domain;
 - b. after disclosure to the Receiving Party, information that became part of the public domain through no fault of the Receiving Party or those for whom it is responsible at law; and
 - c. information that was required by any applicable law to be disclosed, provided that prior to such disclosure,
 - i. the Receiving Party gives notice to the Disclosing Party with the full particulars of the proposed disclosure;
 - ii. the Receiving Party only discloses such information as it is advised by legal counsel is legally required to be disclosed; and
 - iii. the Receiving Party takes reasonable steps to obtain assurances that appropriate treatment will be afforded to the information disclosed.
7. The obligations of each Party being in possession of Classified or Confidential Information shall survive the termination of this Agreement. If any Party’s obligations with respect to maintaining Classified or Confidential Information changes, the Receiving Party must provide the Disclosing Party with prior, written notice.
8. Parties may only pursue remedies in a court of law for any breach of the requirements on handling of information set forth in this Section.

Section VI – Dispute Resolution

1. In the event a dispute arises under this MOU amongst the signatories, representatives with authority to settle the dispute shall meet and confer in good faith in an effort to resolve the dispute in a timely manner.

Section VII - Term, Termination and Amendments

1. This MOU is made effective as of the date that the last Party signs this MOU (“Effective Date”).
2. This MOU commences as of the Effective Date and continues for a term of five years which automatically renews, unless earlier terminated in accordance with the provisions hereof.
3. Any Party may terminate this MOU for any reason by providing 30 days’ prior, written notification to the other two Parties.
4. Any amendment to this MOU requires the written consent of all Parties.

Section VIII – Governing Law

1. This MOU shall be governed by, and interpreted in accordance with the Mexican legislation.

Section IX – Counterparts

1. This MOU may be signed in counterparts, each of which may be deemed an original, and all of which together constitute one and the same agreement.

Section X– Severability

1. Each of the terms or conditions of this MOU is severable from the others. Notwithstanding any possible future finding by a duly constituted authority that a particular term or provision is invalid, void, or unenforceable, this MOU has been made with the clear intention that the validity and enforceability of the remaining parts, terms, and provisions shall not be affected thereby.

Section XI – Notices

1. All notices, requests, formal demands and other communications required or provided for in this MOU shall be given in writing to a signatory at the address set forth below, or at such other address as the signatories shall designate for itself in writing, and shall be delivered by hand or reputable overnight courier or via email. These points of contact can be changed at any time by written notification to the other signatories.

Memorandum of Understanding between CRE, CENACE and NERC

For Mexico Comisión Reguladora De Energía:

José Luis Chávez Calva
General Coordinator of Electric Markets
Boulevard Adolfo Lopez Mateos 172, Benito Juarez
Mexico City, 03930
Mexico
(+52 55) 52831500 Ext. 1905
Email: jchavez@cre.gob.mx

For Centro Nacional de Control de Energía:

Mr. Nemorio González Medina
Director for System's Operations and Planning
Blvd. Adolfo López Mateos 2157, Piso 9, Col. Los Alpes, C. P. 01010
Mexico City, Mexico nemorio.gonzalez@cenace.gob.mx

For North American Electric Reliability Corporation:

Mr. Charles Berardesco
Senior Vice President & General Counsel
1325 G Street N.W., Suite 600
Washington, DC 20005
United States
(202) 400-3000
Email: charles.berardesco@nerc.net

Section XII – Signatures

The duly authorized representatives of the signatories hereby sign this Memorandum of Understanding:

Signed for and on behalf of **Mexico Comisión Reguladora de Energía**

Guillermo Ignacio García Alcocer

Chairman

on _____, 2017

at _____

Signed for and on behalf of **Centro Nacional de Control de Energía**

Eduardo Meraz Ateca

General Director

on _____, 2017

at _____

Signed for and on behalf of **North American Electric Reliability Corporation**

Gerald W. Cauley

President and Chief Executive Officer

North American Electric Reliability Corporation

on _____, 2017

at _____

Exhibit J-4 – 2017 System Impact Study

**Nogales Transmission LLC System
Impact Study
Phase I: 150 MW Transfer Results**

Prepared for
UNS Electric, Inc.
07/20/2017

EXECUTIVE SUMMARY

Nogales Transmission, L.L.C. (“Customer”) has requested an interconnection study of the Nogales Interconnection Project (Project). The first phase of the Project would consist of: 1) a new 150 MW back to back DC tie located at a new Gateway Station; 2) a new 3-mile double circuit 138 kV transmission line in Santa Cruz County. One circuit of the line will extend the existing UNS Vail to Valencia line from a point near UNSE’s Valencia Substation to the proposed Gateway Substation, and one circuit will connect the Gateway Substation to the Valencia Substation; and 3) A new 2-mile 230 kV line from Gateway Substation will extend to the U.S.-Mexico border. The purpose of the proposed Project is to provide asynchronous interconnection in the vicinity of Nogales, Arizona that will enable bi-directional electricity transfer capability between the WECC and Mexico in order to facilitate cross-border commercial electricity transactions and to enhance transmission grid reliability. The project would interconnect UNS Electric INC. (UNSE) and Comisión Federal de Electricidad (CFE) in Mexico. The ultimate size of the 2 phase Project is 300MW and will enable bidirectional power transfers. The first 150MW phase has an expected commercial operation date (COD) in Q2 of 2019 and the second 150MW phase has a COD in Q4 of 2022.

UNSE contracted TransCo.Energy, LLC (TRANSCO) to perform a system impact study for the Project. The system impact study includes steady state power flow, transient stability and voltage stability analysis to determine potential impacts to the UNSE and TEP transmission systems. The study documented in this report is for Phase 1 of the project, with a 2019 in service date and a 150 MW project size. Two different HVDC technologies are studied in the analysis, line commutated converter (LCC) and voltage sourced converter (VSC).

This system impact study concludes that, with the added facilities recommended in this report, system reliability of the UNSE, TEP and WECC systems will not be adversely affected. Instead, the Project will support reliability by providing bidirectional power flow and voltage support for the electric grids in the United States and Mexico, thereby creating a more robust electric grid. Relative to UNSE, which sits at the southern edge of the U.S., transmission grid voltage control in the Nogales area is challenging. The addition of the interconnection with Mexico as well as the investment in new equipment that allows the interconnection will improve UNSE’s ability to control voltage to the Nogales area. The Project will also provide emergency assistance, as needed, for the electric system in the U.S. and Mexico. Because the city of Nogales, Arizona, is at the end of the WECC grid and relies on UNSE’s approximately 55-mile-long, 138-kV Vail to Valencia transmission line for its power supply, any disruptions to the grid north of Nogales, and in particular to the radial line, can cause service interruptions within the Santa Cruz County area of Arizona. The addition of the proposed Gateway Substation and the connection to the electric grid in Sonora, Mexico, would provide an additional source of electricity above and beyond UNSEs existing generation located at Valencia for Nogales from Mexico in the event of a transmission line outage or other problem on the WECC system.

Results from the technical studies identified the following upgrades to the system prior to the in-service date of the 150 MW bi-direction project:

- Network Upgrades (Thermal)
 - Re-Conductor on the UNSE Nogales Tap-Kantor 138kV Line (27.7mi)
 - Re-Conductor on the TEP Orange Grove – Rillito 138kV Line (2mi)
 - Re-Conductor on the TEP Orange Grove - La Cañada 138kV Line (3mi)

- Re-Conductor on the TEP Irvington – Vail 138kV line (11.1mi)
- Re-Conductor on the TEP Tucson-DelCerro 138kV Line (7.3 mi)
- Re-Conductor on the TEP Rancho Vistoso – La Cañada 138kV Line (4.41mi))
- Convert TEP Irvington Substation to Breaker and Half (Currently 2019)
- Change TEP DMP Substation to Breaker and Half (Currently 2021)
- Network Upgrades (Voltage)
 - Two 20 MVAR Capacitor Banks at the UNSE Kantor 138kV Substation
 - LCC option requires:
 - Four 29 MVAR Capacitor Banks at the Gateway 138kV Substation
 - 0-90 MVAR Synchronous Condenser at on the project side of the point of interconnection in order to mitigate voltage instability due to weak grid connection.

The studies in the report also evaluate the impact from two different HVDC technologies; the line commutated converter (LCC), and the voltage sourced converter (VSC). The results for Phase 1 (150 MW transfer) are reported in this document. Results for Phase 2 (300 MW) will be reported at a later date. Both LCC and VSC technologies can be implemented to maintain and improve system reliability. This study concludes the LCC option would require the addition of dynamic VAR support equipment whereas the VSC technology did not. Results from the VSC reactive VAR margin study indicate higher reactive power margins as compared to the pre project case, which indicate that the VSC option increases voltage stability performance of the Vail to Gateway 138kV system.

TABLE OF CONTENTS

EXECUTIVE SUMMARY **1**

INTRODUCTION **4**

PROJECT AND INTERCONNECTION INFORMATION **4**

STUDY BASE CASE DESCRIPTION AND ASSUMPTIONS **5**

STUDY BASE CASES 5

STUDY METHODOLOGY AND EVALUTATION CRITERIA **6**

LOWER QUEUED PROJECTS..... 6

TUCSON AREA LOCAL GENERATION DISPATCH..... 6

LINE COMMUTATED CONVERTER (LCC) HVDC STUDY MODEL 7

VOLTAGE SOURCED CONVERTER (VSC) HVDC STUDY MODEL..... 8

STEADY STATE POWER FLOW ANALYSIS..... 9

POST-TRANSIENT ANALYSIS..... 9

TRANSIENT STABILITY ANALYSIS..... 10

POST TRANSIENT VAR MARGIN RESULTS **10**

2018 REACTIVE VAR MARGIN STUDY RESULTS..... 11

REACTIVE VAR MARGIN SUMMARY OF RESULTS..... 11

POWER FLOW ANALYSIS RESULTS **12**

2018 HEAVY SUMMER POWER FLOW ANALYSIS RESULTS (150 MW TRANSFER)..... 12

TRANSIENT STABILITY ANALYSIS RESULTS **16**

2018 HEAVY SUMMER TRANSIENT STABILITY ANALYSIS RESULTS (150 MW TRANSFER)..... 16

CONCLUSIONS **16**

APPENDIX A: STUDY BASE CASE LISTING

APPENDIX B: POST TRANSIENT VAR MARGIN RESULTS

APPENDIX C: POWER FLOW RESULTS TABLES

APPENDIX D: TRANSIENT STABILITY RESULTS TABLES

APPENDIX E: TRANSIENT STABILITY PLOTS

INTRODUCTION

Nogales Transmission, L.L.C. (“Customer”) has requested an interconnection study of the Nogales Interconnection Project (Project). The first phase of the Project would consist of: 1) a new 150 MW back to back DC tie located at a new Gateway Station; 2) a new 3-mile double circuit 138 kV transmission line in Santa Cruz County. One circuit of the line will extend the existing UNS Vail to Valencia line from a point near UNSE’s Valencia Substation to the proposed Gateway Substation, and one circuit will connect the Gateway Substation to the Valencia Substation; and 3) A new 2-mile 230 kV line from Gateway Substation will extend to the U.S.-Mexico border. The project would interconnect UNS Electric INC. (UNSE) and Comisión Federal de Electricidad (CFE) in Mexico. The purpose of the proposed Project is to provide asynchronous interconnection in the vicinity of Nogales, Arizona that will enable bi-directional electricity transfer capability between the WECC and Mexico in order to facilitate cross-border commercial electricity transactions and to enhance transmission grid reliability. The ultimate size of the 2 phase Project is 300MW and will enable bidirectional power transfers. The first 150MW phase has an expected commercial operation date (COD) in Q2 of 2019 and the second 150MW phase has a COD in Q4 of 2022.

This system impact study includes steady state power flow, transient stability and voltage stability analysis to determine potential impacts to the UNSE and TEP transmission systems. The studies were conducted in accordance with the North American Electric Reliability Corporation (NERC) Transmission Planning (TPL) standards, criteria from the Western Electricity Coordinating Council (WECC) as well as UNSE, and TEP performance criteria. The Project is studied in both the North to South (N-S) and South to North (S-N) directions for the 2018 (150 MW output). OASIS Generator Interconnection Queue projects that are active are included in the analysis.

The studies in the report also evaluate the impact from two different HVDC technologies; the Line Commutated Converter (LCC), and the Voltage Sourced Converter (VSC). The results for Phase 1 (150 MW transfer) are reported in this document. Results for Phase 2 (300 MW) will be reported at a later date.

PROJECT AND INTERCONNECTION INFORMATION

Figure 1 illustrates the proposed HVDC Project with detailed interconnection information for the Gateway 138kV substation. The Project connects to the CFE 230kV network in the south, and connects in to the Sonoita - Valencia 138kV circuit in the north. The Project is capable of transporting up to 150 MW in 2018, in both the N-S and S-N directions.

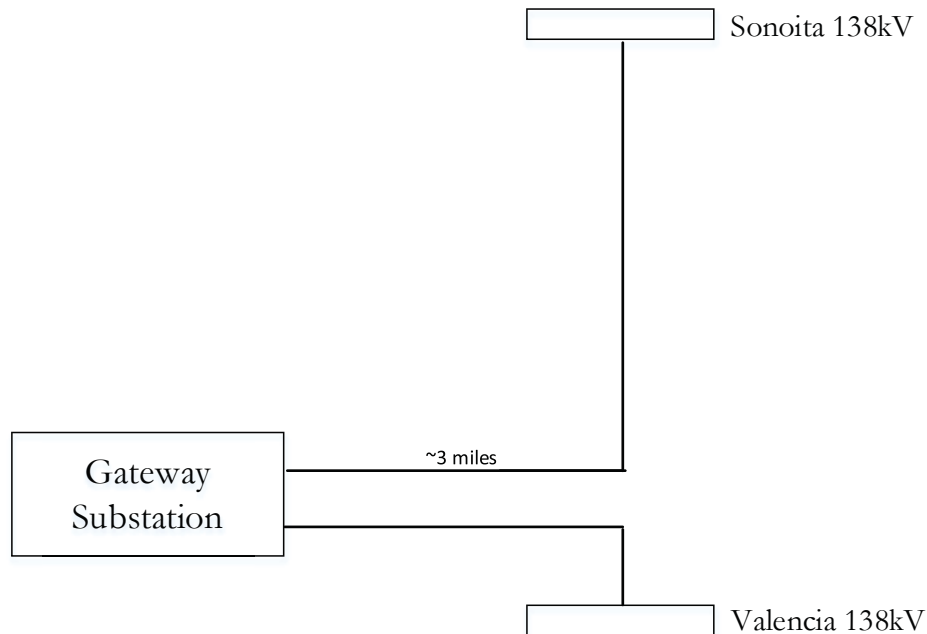


Figure 1: Nogales Interconnection Project Gateway 138kV Interconnection

STUDY BASE CASE DESCRIPTION AND ASSUMPTIONS

This section of the report provides details pertaining to the power flow case development and an overview of the major study assumptions. All steady state, post-transient and transient stability study work is performed using General Electric’s Positive Sequence Load Flow (“GE-PSLF”) version 21.0_02.

Study Base Cases

The analysis is conducted using UNSE/TEP transmission planning base cases, which are built off approved base cases obtained from the WECC, and further updated by Arizona utilities annually. Base case for the 2018 study year is used which correspond to 150 MW transfer of the Project accordingly. Several sets of base cases are developed for the study, all of which are constructed by considering the following:

- Tucson area local generation dispatch levels (294 MW and 419MW)
- Queued Projects online and offline
- Two HVDC Technologies (LCC and VSC)
- South to North (S-N) and North to South (N-S) HVDC dispatch.
- For purposes of case modeling, Gateway Substation is referred to as
 - Gateway North 138kV (UNSE) **and**
 - Gateway South 230kV (CFE)

UNSE/TEP and TRANSCO jointly developed the base cases using the appropriate modeling of the proposed project. Two different HVDC technologies are studied in this analysis (LCC and VSC) which are utilizing models directly coordinated between UNSE/TEP, TRANSCO, and the Customer. A total of 108 base cases were created for the study. A full listing of the base cases and their attributes is provided in Appendix A.

STUDY METHODOLOGY AND EVALUTATION CRITERIA

This section summarizes the methods used to derive the steady-state, post transient, and transient stability results.

The study base cases are developed using lower queued projects, Tucson area generation dispatch levels, and the LCC and VSC technologies. A listing of the lower queued projects and Tucson area generation dispatch is provided in this section, as well as a discussion on the models used for the LCC and VSC technologies. This section concludes with the steady state and transient performance criteria used in the system impact study.

Lower Queued Projects

Several power flow cases are developed with lower queued projects modeled in the power flow cases. Provided in Table 1 is a listing of these lower queued projects. Additional detail as to which cases include these lower queued projects is provided in Appendix A.

TABLE 1: LOWER QUEUED PROJECTS

Q#	Generator Bus #	Dispatch
43	900001	190 MW
19	16530	150 MW
19	16531	150 MW
19	16532	200 MW

Tucson Area Local Generation Dispatch

Several power flow cases are developed with either 294 MW or 419 MW of local generation dispatch in the Tucson areas. Provided in Table 2 are details of the dispatch levels. Additional detail as to which cases the specific 294MW or 419MW Tucson dispatch levels are modeled is provided in Appendix A.

TABLE 2: TUCSON AREA LOCAL DISPATCH

Bus #	Name	Dispatch 294 MW	Dispatch 419 MW
16514	DMPCCT#1	44 MW	44 MW
16504	SUNDTCT	0	0
16504	SUNDTCT	0	0
16507	SUNDTGE1	75 MW	75 MW
16508	SUNDTGE2	75 MW	75 MW
16509	SUNDTGE3	100 MW	100 MW
13503	SUNDTGE4	0	125 MW

Line Commutated Converter (LCC) HVDC Study Model

The model for the LCC technology was provided by the Customer. The LCC technology utilizes the steady state DC model in PSLF. Illustrated in Figures 2 and 3 is the LCC HVDC Model and associated model parameters inserted into the PSLF case at Gateway. Note that the HVDC Model includes a CFE model representation on the CFE side of the HVDC Tie. The connected CFE system is not contiguous from the CFE system modeled in WECC cases near the Imperial Irrigation District and San Diego Gas and Electric systems in southern California, therefore the CFE representation on the HVDC tie is appropriate for this case. The direction models (north to south or south to north) are created by adjusting the values of converter type (Type), mode of operation (MD), and scheduled power (Sched) of the converters shown in Figure 3, and adjusting the CFE system generator to 150 MW from north to south and to -150 MW from south to north. The dynamic data provided for the LCC model is based on a manufacturer specific user written EPCL model utilizing the **dcmt** model in PSLF.

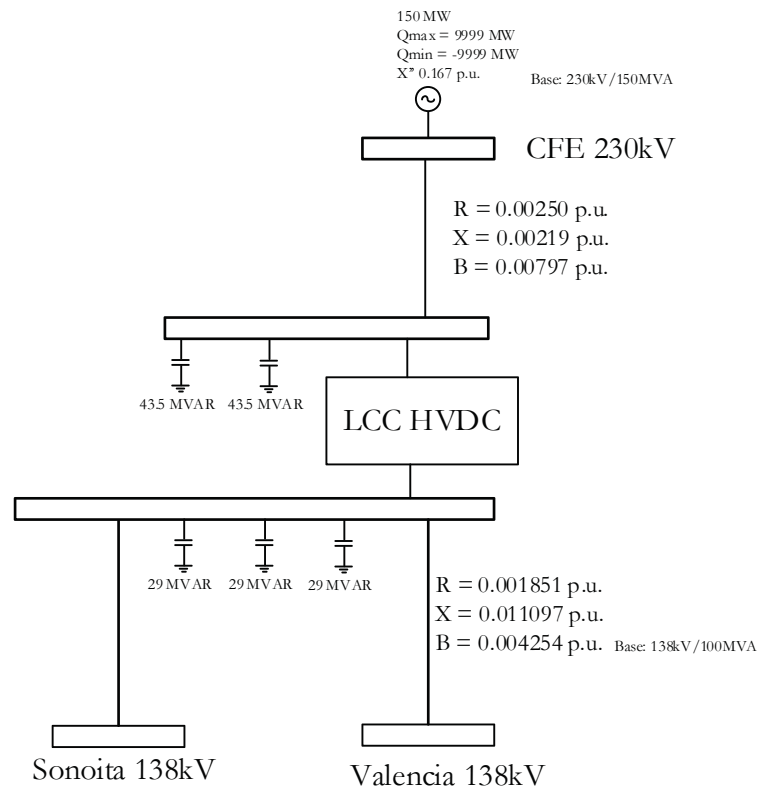


Figure 2: AC System LCC HVDC Model as provided by the Customer

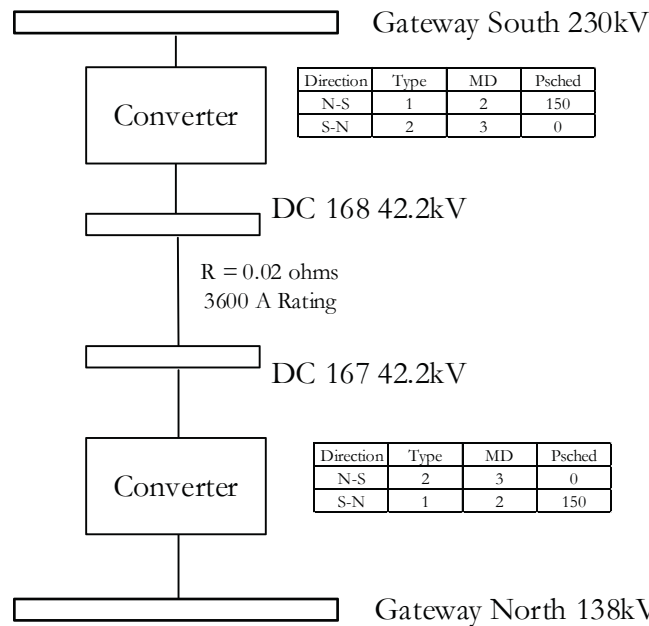


Figure 3: DC System LCC HVDC Model as provided by the Customer

Voltage Sourced Converter (VSC) HVDC Study Model

The model for the VSC technology was provided by the Customer. The VSC technology does not utilize the steady state DC model in PSLF. The VSC technology is modeled in the power flow case as a generator model on both the WECC and CFE sides of the HVDC tie. The direction of the HVDC tie is obtained by dispatching the generator models at Gateway North and South to the corresponding north to south or south to north flow levels. The VSC model and the parameters obtained from the Customer are shown in Figure 4. The dynamic data provided for the VSC model is based on a manufacturer specific user written EPCL model utilizing the **vsdc1** model in PSLF. The 80 MVAR capacitor bank at the Gateway 138 kV station was added to bring steady state voltages in the area up to 1.0 p.u. and it is expected that the capacitor bank will be located in the UNSE 138 kV Gateway station.

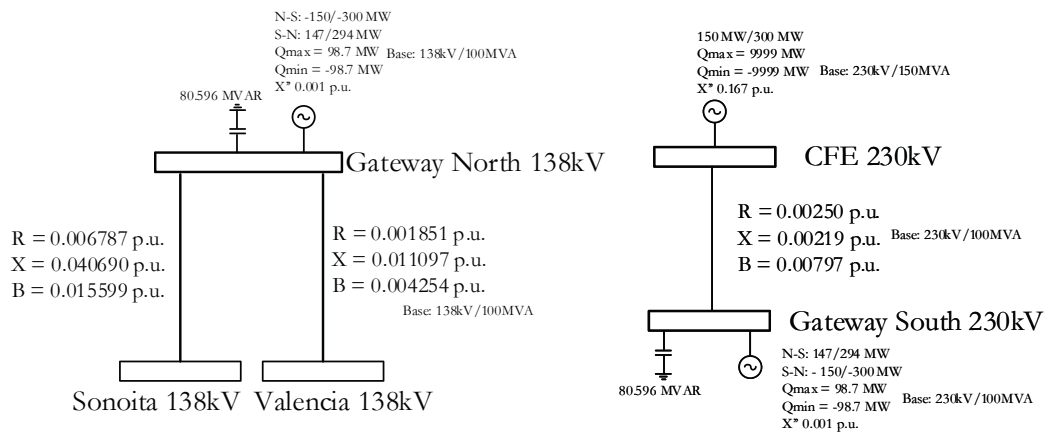


Figure 4: VSC HVDC Model as provided by the Customer

Steady State Power Flow Analysis

Power flow analysis is performed on all power flow cases and simulated the impact of the project on the transmission system during normal operating conditions (N-0), single (N-1), and multiple contingency events contingencies. UNSE provided the contingencies for the study which include over 22,000 contingencies performed on each case. The outages simulated include:

- All single P1-2 transmission circuit outages within the study area.
- All single P1-3 transformer outages within the study area.
- Multiple contingencies for the all lines in-service.

The NERC reliability standards and the WECC System Performance Criteria is used to assess the adequacy of the study results. The power flow analysis related evaluation criteria used are summarized below:

- Steady-state voltages at all applicable Bulk-Electric System (BES) buses shall stay within each of the following limits:
 - 95 percent to 105 percent of nominal for P0 event (system normal)
 - 90 percent to 110 percent of nominal for P1-P7 events (post-contingency)
- Post-contingency steady-state voltage deviation at each applicable BES bus serving load shall not exceed 8% for P1 events
- Pre-disturbance loading to remain within continuous ratings of all equipment and line conductors.
- Post-disturbance loading to remain within emergency ratings of all equipment and line conductors.

Post-Transient Analysis

The post-transient analysis is conducted on the Valencia 138kV bus for both the pre project and post project conditions to determine any voltage stability impacts due to the HVDC project. The worst case scenario (North to South, Queued projects offline (Qoff), 294 MW local Tucson area dispatch) is performed for the 150 MW case. A governor power flow analysis is used to test for post-disturbance voltage and reactive margin limits in the 1 to 3 minute time frame. All reactive margin levels are expected to be positive and near the pre-project levels. The following guidelines are used throughout the study:

- The post transient study is conducted on the Heavy Summer, N-S, Qoff, 294 MW Tucson Area Generation cases.
- The study contingency list can be viewed through the inspection of the post-transient results in Appendix B.
- Reactive Margin results are reported for the Valencia 138kV bus.
- Post Project reactive margins must maintain pre-project margins. If pre-project margins are not maintained in the post-project case, capacitor banks or synchronous condensers are modeled and added to the project.

Transient Stability Analysis

Transient stability runs were simulated for 15 seconds to ensure the system is stable and positively damped. Stability runs that have not fully damped in 15 seconds will warrant a longer than 15 second simulation based on engineering judgment. All faults on 345kV or higher voltage facilities were modeled with a 4-cycle clearing time. Transmission facilities with bus voltages less than 345 kV were modeled with a 5-cycle fault clearing time. All faults were simulated as three-phase faults with zero fault impedance.

The transient stability evaluation criteria that is used to evaluate the impact of the cases include:

- All machines in the interconnected system shall remain in synchronism as demonstrated by their relative rotor angles.
- System stability is evaluated based on the damping of the relative rotor angles and the damping of the voltage magnitude swings.
- System damping is assessed visually with the aid of stability plots.
- Transient voltage deviation is assessed using the TPL-0100-WECC-CRT-3 transient voltage dip criteria:
 - Following fault clearing, the voltage shall recover to 80% of the pre-contingency voltage within 20 seconds of the initiating event for all P1 through P7 events, for each applicable BES bus serving load.
 - Following fault clearing and voltage recovery above 80%, voltage at each applicable BES bus serving load shall neither dip below 70% of pre-contingency voltage for more than 30 cycles nor remain below 80% of pre-contingency voltage for more than two seconds, for all P1 through P7 events.

POST TRANSIENT VAR MARGIN RESULTS

While conducting the first round of post project power flow runs for the HVDC LCC model at 150 MW of flow, a large number of the 22,000 contingencies were resulting in “no solves” as compared to “solved” results in the pre-project case. In addition to the “no solves” the LCC model would not solve in the power flow case under N-0 conditions for 150 MW without placing a synchronous condenser at the Gateway North 138kV bus in the power flow case.

It is commonly known that LCC HVDC technologies have limitations when placed in weak grid connections. With a long 138kV AC transmission line between the Vail 138kV and Gateway 138kV substations, the LCC HVDC model needs the addition of VARs in order for the system with the project in service to be voltage stable. With a simulated fault current obtained from UNSE/TEP of 1924 Amps, the short circuit ratio for the 150 MW and 300 MW flow cases is approximately 3.1 and 1.5 respectively. This range of short circuit ratio for an LCC HVDC application indicates there can potentially be issues with an LCC HVDC application without the help of a device that contributes short circuit current. With the “no solves” issue present in the post-project 150 MW transfer cases, the LCC HVDC model will also require the addition of dynamic VARs that also support the strengthening of the grid. For this study, a synchronous condenser model is utilized to support both dynamic VARs and short circuit current needs.

A post transient VAR margin study was conducted for both the LCC and VSC HVDC models. Several iterations were made for the LCC model, with different size synchronous condenser models. The desired MVAR max output of the synchronous condenser model is highly dependent on the impedance of the circuit from Gateway to Vail, and due to overloads experienced in the power flow runs, upgrades of the Gateway to Vail 138kV circuit are modeled in the post transient VAR Margin study. In addition to the necessary upgrades, two 20 MVAR capacitor banks at the UNSE Kantor 138kV bus are needed, in order to keep the voltage uniform from Gateway to Vail 138kV.

2018 Reactive VAR Margin Study Results

In 2018 post project cases (with the DC tie flow at 150 MW north to south), two 20 MVAR capacitor banks were identified as needed at the UNSE Kantor 138kV Substation, along with an upgrade of a portion of the Nogales Tapto Kantor 138kV circuit in order to deliver 150 MW on the DC tie in both direction. Therefore, all post project cases in the 2018 Reactive VAR Margin Studies include these projects.

Comparing the VSC model with the pre-project case, the VSC model does not require any additional reactive power support devices. Provided in Table B-1 of Appendix B are the results for the 2018 Reactive VAR margin study. Results from the VSC reactive VAR margin study indicated higher reactive power margins as compared to the pre project case, which indicated that the VSC option increases voltage stability performance of the Vail to Gateway 138kV system.

The LCC HVDC model does not provide enough dynamic VARs (from a short circuit producing source) as evidenced by a large number of “no solve” solutions in the power flow runs. In Table B-1 of Appendix B, a synchronous condenser and four 29 MVAR capacitors at the Gateway North 138kV Substation were used to provide the same VAR margin as the pre-project case. As a result, a synchronous condenser of 0-90 MVAR is required for the LCC model. The contingencies and VAR margin results that support the 0-90 MVAR range are highlighted in the red and green cells in Table B-1 of Appendix B.

Reactive VAR Margin Summary of Results

An overview of the results for the VAR Margin study are included in Table 3, as well as the upgrades and system additions required to meet the voltage performance of the 138kV system from Vail to Gateway.

TABLE 3: VAR MARGIN RESULTS SUMMARY

Year	Required Upgrades or Additions	Additional VSC specific Upgrades	LCC Specific Upgrades
2018 (150 MW HVDC transfer)	<ul style="list-style-type: none"> Nogales Tap – Kantor 138kV line upgrade (2) 20 MVAR Capacitor Banks at Kantor 	None	<ul style="list-style-type: none"> 0-90 MVAR synchronous condenser at Gateway North 138kV Four 29 MVAR Capacitor Banks at Gateway North 138kV

--	--	--	--

POWER FLOW ANALYSIS RESULTS

This section details the key findings of the power flow results. NERC/WECC System Performance Criteria are used to assess the adequacy of the study results.

Due to the large number of cases and contingencies performed for the analysis, the full listing of the results tables is provided in an excel file. This file is provided as Appendix C: Power Flow Results tables, and is referred to in this results section.

2018 Heavy Summer Power Flow Analysis Results (150 MW Transfer)

Thermal Results

A full listing of the 2018 Heavy Summer power flow results with the Project at 150 MW transfer are provided in the “2018-HS” tab in Appendix C. Several overloads are observed, and the following Network Upgrades are necessary to support the Project at 150 MW of transfer in either the N-S or S-N directions. These upgrades are not dependent on the selection of LCC or VSC technology. The contingencies related to the overloads requiring the Network Upgrades are documented in Appendix C.

Network Upgrades

- Re-Conductor on the UNSE Nogales Tap-Kantor 138kV Line (27.7mi)
- Re-Conductor on the TEP Orange Grove – Rillito 138kV Line (2mi)
- Re-Conductor on the TEP Orange Grove - La Cañada 138kV Line (3mi)
- Re-Conductor on the TEP Irvington – Vail 138kV line (11.1mi)
- Re-Conductor on the TEP Tucson-DelCerro 138kV Line (7.3 mi)
- Re-Conductor on the TEP Rancho Vistoso – La Cañada 138kV Line (4.41mi))
- Convert TEP Irvington Substation to Breaker and Half (Currently 2019)
- Change TEP DMP Substation to Breaker and Half (Currently 2021)

One potential system issue in the Western Area Power Administration (WAPA) is exacerbated by the Project regarding the Saguaro – ED5 115kV circuit. The circuit is overloaded in the pre-project case; however the loading is exacerbated by an additional 1% of loading in the N-S post project case. This report will be provided to WAPA for their review.

Voltage Results

Provided in Figures 5 and 6 are the pre project, post project, and post Network Upgrades, bus voltages and power flows for the Vail to Gateway 138kV system. Figure 5 represents the LCC HVDC option, and Figure 6 illustrates the VSC HVDC option. The models provided by each vendor provide

capacitor banks that hold the voltage at 1.0 p.u. at the Gateway 138kV substation. Both Figures represent the worst case condition of a 150 MW N-S Project schedule, on the 294 MW local Tucson generation case with queued projects offline. By investigation of the post project (no mitigations) result, voltage support needs to occur near the middle of the Vail – Gateway 138kV line, due to the larger loading from the Project. Two 20 MVAR capacitor banks at Kantor bring the voltage up at the midpoint of the line, and help provide more uniform voltage profile across the Vail – Valencia 138kV circuit.

For all 2018 Heavy Summer studies, mitigations from the post transient studies are modeled in the post project cases. These mitigations are two 20 MVAR capacitor banks at Kantor, and a 0-90 MVAR synchronous condenser with four 29 MVAR capacitor banks for the LCC HVDC option. With these post project mitigations applied and the Network Upgrades from the thermal analysis applied, there are no voltage magnitude or deviation violations under contingency conditions that are attributed to the project.

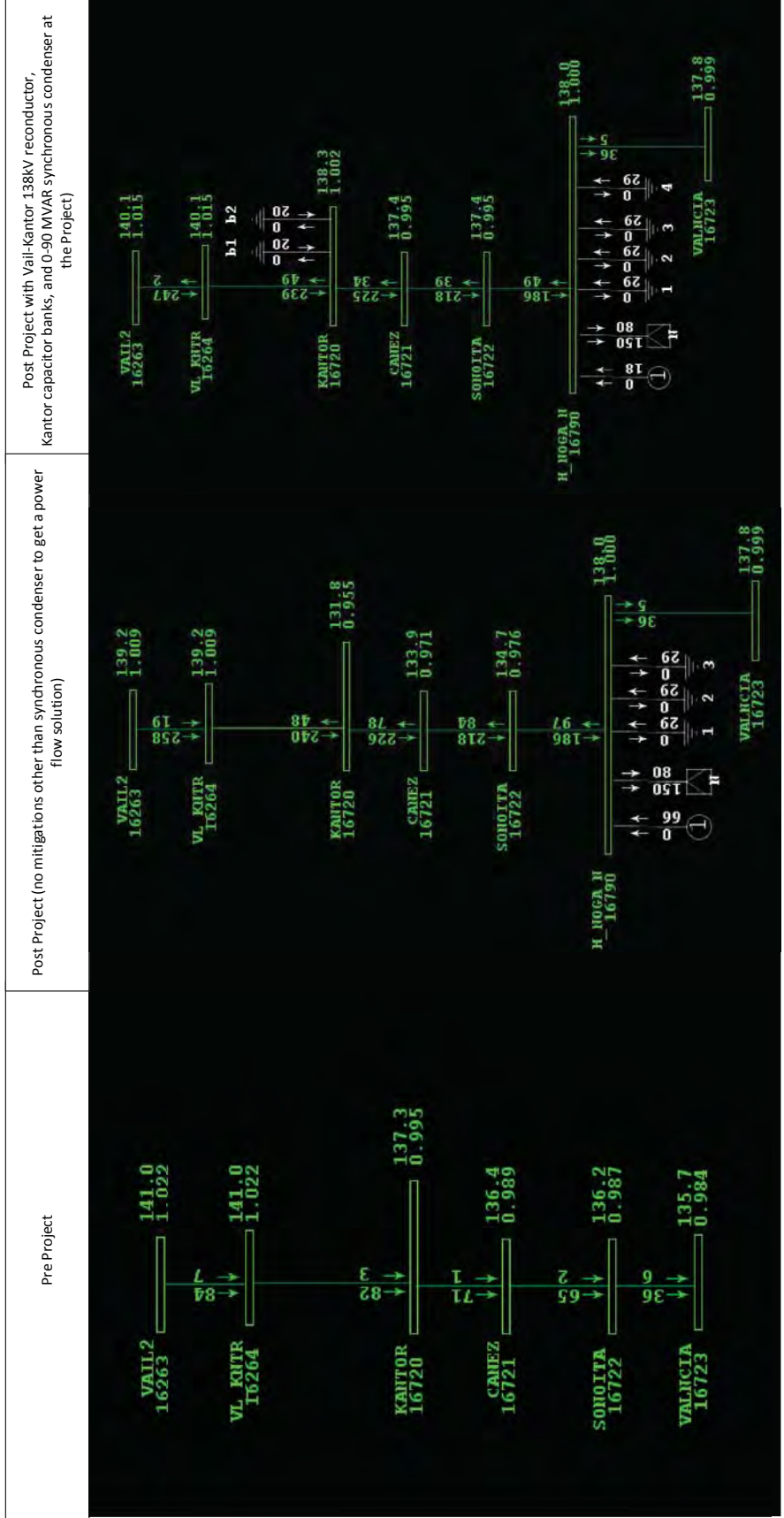


Figure 5: LCC HVDC Vail to Gateway 138kV system power flow map (2018 HS, 150 N-S, 294 Tucson Gen, Queued Projects Offline)

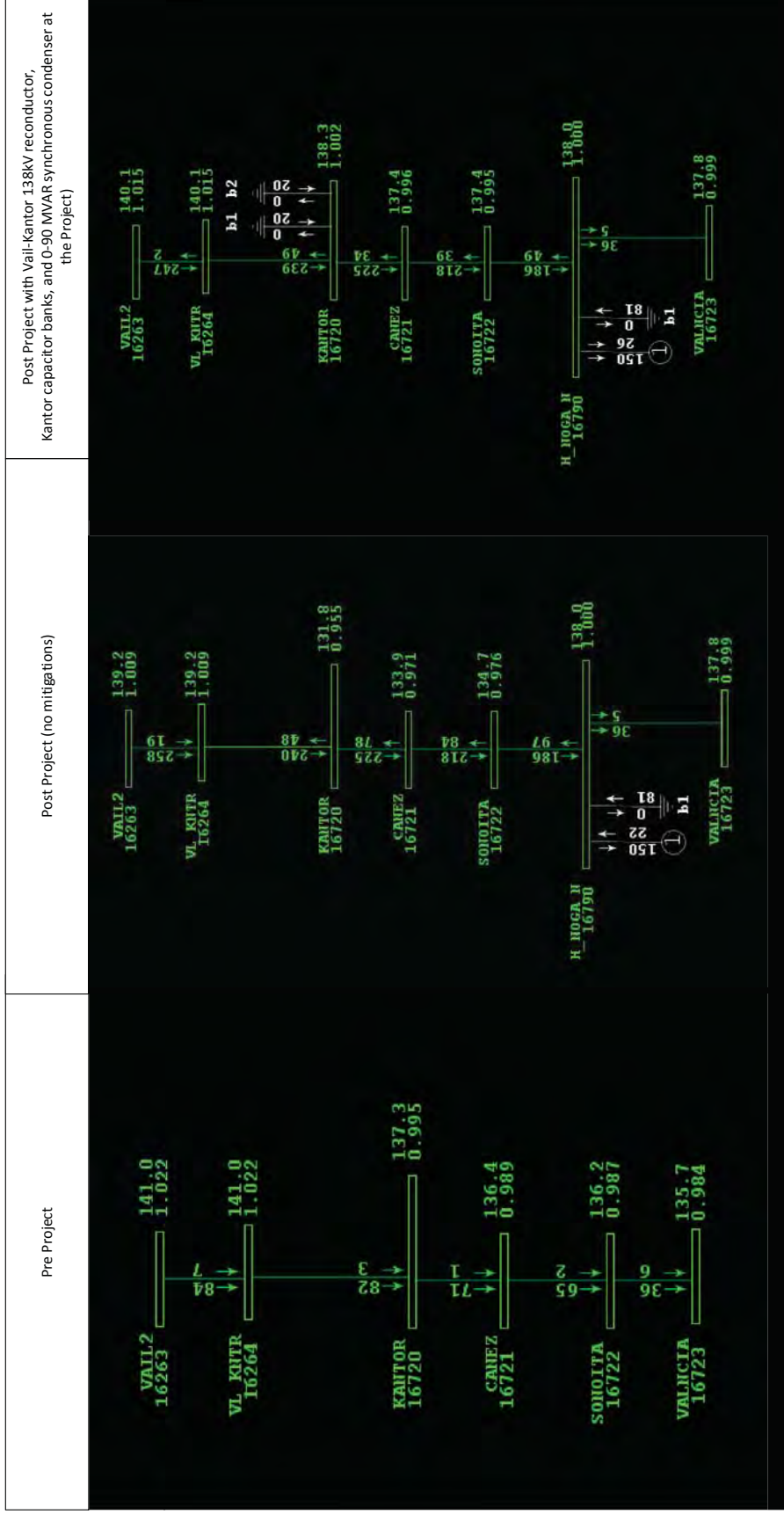


Figure 6: VSC HVDC Vail to Gateway 138kV system power flow map (2018 HS, 150 N-S, 294 Tucson Gen, Queued Projects Offline)

TRANSIENT STABILITY ANALYSIS RESULTS

This section details the key findings of the transient stability results. NERC/WECC System Performance Criteria are used to assess the adequacy of the study results.

2018 Heavy Summer Transient Stability Analysis Results (150 MW Transfer)

Based on the 2018 studies and with the upgrades and dynamic devices documented, the system is shown to remain system stable and reliable. Provided in Appendix E are the transient stability plots in the pre- and post- Project studies. Appendix E is provided upon request, due to the large file size, and 49,700 pages of plots. A listing of the study contingencies and violation results are listed in the tables provided in Appendix D.

CONCLUSIONS

Power flow, post transient and transient stability studies are conducted on the Phase 1 (150 MW) project output of the proposed back to back HVDC tie at the proposed Gateway 138kV substation near Nogales Arizona. Results from the analysis require the following Network Upgrades in order to mitigate the impact of the project for the Phase 1 (150 MW) output:

- Network Upgrades (Thermal)
 - Re-Conductor on the UNSE Nogales Tap-Kantor 138kV Line (27.7mi)
 - Re-Conductor on the TEP Orange Grove – Rillito 138kV Line (2mi)
 - Re-Conductor on the TEP Orange Grove - La Cañada 138kV Line (3mi)
 - Re-Conductor on the TEP Irvington – Vail 138kV line (11.1mi)
 - Re-Conductor on the TEP Tucson-DelCerro 138kV Line (7.3 mi)
 - Re-Conductor on the TEP Rancho Vistoso – La Cañada 138kV Line (4.41mi))
 - Convert TEP Irvington Substation to Breaker and Half (Currently 2019)
 - Change TEP DMP Substation to Breaker and Half (Currently 2021)
- Network Upgrades (Voltage)
 - Two 20 MVAR Capacitor Banks at the UNSE Kantor 138kV Substation
 - LCC option requires:
 - Four 29 MVAR Capacitor Banks at the Gateway 138kV Substation
 - 0-90 MVAR Synchronous Condenser at on the project side of the point of interconnection in order to mitigate voltage instability due to weak grid connection.

The voltage related upgrades result from application of the line commutated converter (LCC) technology as compared to voltage sourced converter (VSC) technology. The LCC HVDC technology requires additional Network Upgrades due to the initial weak condition of the grid (as a result of being at the end of a long radial line) that resulted in negative impact shown in the post transient VAR margin studies. A synchronous condenser of 0-90 MVAR and four 29 MVAR Capacitor Banks are required for Phase 1 with the LCC technology. The VSC HVDC option does not require a synchronous condenser. Furthermore, it does not require any additional VAR support. The capacitors provided in the vendor model are based on maintaining a 1.0 p.u at the Gateway 138kV substation. Results from the VSC reactive VAR margin study indicate higher reactive power margins as compared to the pre project case, which indicate that the VSC option increases voltage stability performance of the Vail to Gateway 138kV system.

APPENDIX A: STUDY BASE CASE LISTING

Provided in this appendix is a table with illustrates all the different base cases used in the study. A total of 108 base cases are developed and studied for the system impact study. The base cases are built using the following:

- Pre Project, Post Project, and Post Project Mitigated analysis
 - Mitigations column is identified as either “No”, “150 MW”, or “300 MW”. If “150 MW” the mitigations identified in the 150 MW case are utilized in the case. This is evident in the 2022 post project cases, which initially include the 150 MW project mitigations.
- Project Dispatch Level (150 MW or 300 MW)
- Dispatch Direction (North to South (N-S) or South to North (S-N))
- Lowered Queued Projects Online (Qon) or Offline (Qoff)
- Tucson local generation dispatch level (294 MW or 419 MW)
- HVDC Technology (LCC or HVDC)

Case Name	Pre Project	Post Project	Mitigations	Project Dispatch Level	Dispatch Direction		LQueue Status		Tucson Local Generation		HVDC Technology	
					N-S	S-N	Qoff	Qon	294 MW	419 MW	LCC	VSC
2018HS_DC_IQ_294_pre.sav	x		No	150 MW					x	x		
2018HS_DC_IQ_294_post_N2S-I-CC-V2.sav		x	No	150 MW	x				x	x		x
2018HS_DC_IQ_294_post_N2S-VSC-V2.sav		x	No	150 MW	x				x	x		x
2018HS_DC_IQ_294_post_S2N-I-CC-V2.sav		x	No	150 MW		x			x	x		x
2018HS_DC_IQ_294_post_S2N-VSC-V2.sav		x	No	150 MW		x			x	x		x
2018HS_DC_IQ_294_post_mit_N2S-I-CC-V2.sav		x	150 MW	150 MW	x				x	x		x
2018HS_DC_IQ_294_post_mit_N2S-VSC-V2.sav		x	150 MW	150 MW	x				x	x		x
2018HS_DC_IQ_294_post_mit_S2N-I-CC-V2.sav		x	150 MW	150 MW		x			x	x		x
2018HS_DC_IQ_294_post_mit_S2N-VSC-V2.sav		x	150 MW	150 MW		x			x	x		x
2018HS_DC_IQ_419_pre.sav	x		No	150 MW						x		
2018HS_DC_IQ_419_post_N2S-I-CC-V2.sav		x	No	150 MW	x					x		x
2018HS_DC_IQ_419_post_N2S-VSC-V2.sav		x	No	150 MW	x					x		x
2018HS_DC_IQ_419_post_S2N-I-CC-V2.sav		x	No	150 MW		x				x		x
2018HS_DC_IQ_419_post_S2N-VSC-V2.sav		x	No	150 MW		x				x		x
2018HS_DC_IQ_419_post_mit_N2S-I-CC-V2.sav		x	150 MW	150 MW	x					x		x
2018HS_DC_IQ_419_post_mit_N2S-VSC-V2.sav		x	150 MW	150 MW		x				x		x
2018HS_DC_IQ_419_post_mit_S2N-I-CC-V2.sav		x	150 MW	150 MW			x			x		x
2018HS_DC_IQ_419_post_mit_S2N-VSC-V2.sav		x	150 MW	150 MW			x			x		x
2018HS_DC_QO_294_pre.sav	x		No	150 MW								
2018HS_DC_QO_294_post_N2S-I-CC-V2.sav		x	No	150 MW	x							
2018HS_DC_QO_294_post_N2S-VSC-V2.sav		x	No	150 MW	x							
2018HS_DC_QO_294_post_S2N-I-CC-V2.sav		x	No	150 MW		x						
2018HS_DC_QO_294_post_S2N-VSC-V2.sav		x	No	150 MW		x						
2018HS_DC_QO_419_pre.sav			No	150 MW								
2018HS_DC_QO_419_post_mit_S2N-I-CC-V2.sav		x	150 MW	150 MW								
2018HS_DC_QO_419_post_mit_S2N-VSC-V2.sav		x	150 MW	150 MW								
2018HS_DC_QO_419_post_mit_N2S-I-CC-V2.sav		x	150 MW	150 MW								
2018HS_DC_QO_419_post_mit_N2S-VSC-V2.sav		x	150 MW	150 MW								
2018HS_DC_QO_294_post_mit_N2S-I-CC-V2.sav		x	150 MW	150 MW								
2018HS_DC_QO_294_post_mit_N2S-VSC-V2.sav		x	150 MW	150 MW								

Case Name	Pre Project	Post Project	Mitigations	Project Dispatch Level	Dispatch Direction		LQueue Status		Tucson Local Generation		HVDC Technology	
					N-S	S-N	Qoff	Qon	294 MW	419 MW	LCC	VSC
2018HS_DC_QO_294_post_mit_S2N+LCC-V2.sav		x	150 MW	150 MW		x	x			x		x
2018HS_DC_QO_294_post_mit_S2N+VSC-V2.sav		x	150 MW	150 MW		x	x					x
2018HS_DC_QO_419_pre.sav	x		No	150 MW			x					
2018HS_DC_QO_419_post_N2S-LCC-V2.sav		x	No	150 MW		x	x				x	
2018HS_DC_QO_419_post_N2S-VSC-V2.sav		x	No	150 MW		x	x				x	
2018HS_DC_QO_419_post_S2N-LCC-V2.sav		x	No	150 MW			x				x	
2018HS_DC_QO_419_post_S2N-VSC-V2.sav		x	No	150 MW			x				x	
2018HS_DC_QO_419_post_mit_N2S-LCC-V2.sav		x	150 MW	150 MW		x	x				x	
2018HS_DC_QO_419_post_mit_N2S-VSC-V2.sav		x	150 MW	150 MW		x	x				x	
2018HS_DC_QO_419_post_mit_S2N+LCC-V2.sav		x	150 MW	150 MW								x
2022hs_DC_IQ_294_pre.sav	x		No	300 MW					x			
2022hs_DC_IQ_294_post_N2S-LCC-V2.sav		x	150 MW	300 MW					x			x
2022hs_DC_IQ_294_post_N2S-VSC-V2.sav		x	150 MW	300 MW								x
2022hs_DC_IQ_294_post_S2N-LCC-V2.sav		x	150 MW	300 MW								x
2022hs_DC_IQ_294_post_S2N-VSC-V2.sav		x	150 MW	300 MW								x
2022hs_DC_IQ_294_post_mit_N2S-LCC-V2.sav		x	300 MW	300 MW		x						x
2022hs_DC_IQ_294_post_mit_N2S-VSC-V2.sav		x	300 MW	300 MW		x						x
2022hs_DC_IQ_294_post_mit_S2N-LCC-V2.sav		x	300 MW	300 MW								x
2022hs_DC_IQ_294_post_mit_S2N-VSC-V2.sav		x	300 MW	300 MW								x
2022hs_DC_IQ_419_pre.sav	x		No	300 MW								
2022hs_DC_IQ_419_post_N2S-LCC-V2.sav		x	150 MW	300 MW								x
2022hs_DC_IQ_419_post_N2S-VSC-V2.sav		x	150 MW	300 MW								x
2022hs_DC_IQ_419_post_S2N-LCC-V2.sav		x	150 MW	300 MW								x
2022hs_DC_IQ_419_post_S2N-VSC-V2.sav		x	150 MW	300 MW								x
2022hs_DC_IQ_419_post_mit_N2S-LCC-V2.sav		x	300 MW	300 MW								x

Case Name	Pre Project	Post Project	Mitigations	Project Dispatch Level	Dispatch Direction		LQueue Status		Tucson Local Generation		HVDC Technology	
					N-S	S-N	Qoff	Qon	294 MW	419 MW	LCC	VSC
2022hs_DC_IQ_419_post_mit_N2S-VSC-V2.sav		x	300 MW	300 MW	x				x			x
2022hs_DC_IQ_419_post_mit_S2N-I-CC-V2.sav		x	300 MW	300 MW		x			x			x
2022hs_DC_IQ_419_post_mit_S2N-VSC-V2.sav		x	300 MW	300 MW		x			x			x
2022hs_DC_QO_294_pre.sav	x		No	300 MW				x		x		
2022hs_DC_QO_294_post_N2S-I-CC-V2.sav		x	150 MW	300 MW	x			x		x		
2022hs_DC_QO_294_post_N2S-VSC-V2.sav		x	150 MW	300 MW	x			x		x		
2022hs_DC_QO_294_post_S2N-I-CC-V2.sav		x	150 MW	300 MW	x			x		x		x
2022hs_DC_QO_294_post_S2N-VSC-V2.sav		x	150 MW	300 MW	x			x		x		x
2022hs_DC_QO_294_post_mit_N2S-I-CC-V2.sav		x	300 MW	300 MW		x				x		
2022hs_DC_QO_294_post_mit_N2S-VSC-V2.sav		x	300 MW	300 MW		x				x		
2022hs_DC_QO_294_post_mit_S2N-I-CC-V2.sav		x	300 MW	300 MW		x				x		
2022hs_DC_QO_294_post_mit_S2N-VSC-V2.sav		x	300 MW	300 MW		x				x		
2022hs_DC_QO_419_pre.sav	x		No	300 MW				x				
2022hs_DC_QO_419_post_N2S-I-CC-V2.sav		x	150 MW	300 MW	x			x				
2022hs_DC_QO_419_post_N2S-VSC-V2.sav		x	150 MW	300 MW	x			x				
2022hs_DC_QO_419_post_S2N-I-CC-V2.sav		x	150 MW	300 MW		x						
2022hs_DC_QO_419_post_S2N-VSC-V2.sav		x	150 MW	300 MW		x						
2022HW_DC_IQ_pre.sav	x		No	300 MW						N/A		
2022HW_DC_IQ_post_N2S-I-CC-V2.sav		x	150 MW	300 MW		x				N/A		
2022HW_DC_IQ_post_N2S-VSC-V2.sav		x	150 MW	300 MW		x				N/A		
2022HW_DC_IQ_post_S2N-I-CC-V2.sav		x	150 MW	300 MW		x				N/A		
2022HW_DC_IQ_post_S2N-VSC-V2.sav		x	150 MW	300 MW		x				N/A		

Case Name	Pre Project	Post Project	Mitigations	Project Dispatch Level	Dispatch Direction		LQueue Status		Tucson Local Generation		HVDC Technology	
					N-S	S-N	Qoff	Qon	294 MW	419 MW	LCC	VSC
2022HW_DC_IQ_post_mit_N2S-I.CC-V2.sav		x	300 MW	300 MW	x			x	N/A	N/A	x	
2022HW_DC_IQ_post_mit_N2S-VSC-V2.sav		x	300 MW	300 MW				x	N/A	N/A		x
2022HW_DC_IQ_post_mit_S2N-I.CC-V2.sav		x	300 MW	300 MW		x		x	N/A	N/A	x	
2022HW_DC_IQ_post_mit_S2N-VSC-V2.sav		x	300 MW	300 MW		x		x	N/A	N/A		x
2022HW_DC_QO_pre.sav	x		No	300 MW				x	N/A	N/A		
2022HW_DC_QO_post_N2S-I.CC-V2.sav		x	150 MW	300 MW	x			x	N/A	N/A	x	
2022HW_DC_QO_post_N2S-VSC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A		x
2022HW_DC_QO_post_S2N-I.CC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A	x	
2022HW_DC_QO_post_S2N-VSC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A		x
2022HW_DC_QO_post_mit_N2S-I.CC-V2.sav		x	300 MW	300 MW		x		x	N/A	N/A	x	
2022HW_DC_QO_post_mit_N2S-VSC-V2.sav		x	300 MW	300 MW		x		x	N/A	N/A		x
2022HW_DC_QO_post_mit_S2N-I.CC-V2.sav		x	300 MW	300 MW		x		x	N/A	N/A	x	
2022HW_DC_QO_post_mit_S2N-VSC-V2.sav		x	300 MW	300 MW		x		x	N/A	N/A		x
2022HW_DC_IQ_pre.sav	x		No	300 MW				x	N/A	N/A		
2022LW_DC_IQ_post_N2S-I.CC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A	x	
2022LW_DC_IQ_post_N2S-VSC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A		x
2022LW_DC_IQ_post_S2N-I.CC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A	x	
2022LW_DC_IQ_post_S2N-VSC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A		x
2022LW_DC_IQ_post_mit_N2S-I.CC-V2.sav		x	300 MW	300 MW		x		x	N/A	N/A	x	
2022LW_DC_IQ_post_mit_N2S-VSC-V2.sav		x	300 MW	300 MW		x		x	N/A	N/A		x
2022LW_DC_IQ_post_mit_S2N-I.CC-V2.sav		x	300 MW	300 MW		x		x	N/A	N/A	x	
2022LW_DC_IQ_post_mit_S2N-VSC-V2.sav		x	300 MW	300 MW		x		x	N/A	N/A		x
2022LW_DC_QO_pre.sav	x		No	300 MW				x	N/A	N/A		
2022LW_DC_QO_post_N2S-I.CC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A	x	
2022LW_DC_QO_post_N2S-VSC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A		x
2022LW_DC_QO_post_S2N-I.CC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A	x	
2022LW_DC_QO_post_S2N-VSC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A		x
2022LW_DC_QO_post_mit_N2S-I.CC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A	x	
2022LW_DC_QO_post_mit_N2S-VSC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A		x
2022LW_DC_QO_post_mit_S2N-I.CC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A	x	
2022LW_DC_QO_post_mit_S2N-VSC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A		x

Case Name	Pre Project	Post Project	Mitigations	Project Dispatch Level	Dispatch Direction		LQueue Status		Tucson Local Generation		HVDC Technology	
					N-S	S-N	Qoff	Qon	294 MW	419 MW	LCC	VSC
2022LW_DC_QO_post_S2N-VSC-V2.sav		x	150 MW	300 MW		x		x	N/A	N/A		x
2022LW_DC_QO_post_mit_N2S-LCC-V2.sav		x	300 MW	300 MW	x			x	N/A	N/A	x	
2022LW_DC_QO_post_mit_N2S-VSC-V2.sav		x	300 MW	300 MW	x			x	N/A	N/A		x
2022LW_DC_QO_post_mit_S2N-LCC-V2.sav		x	300 MW	300 MW		x		x	N/A	N/A	x	
2022LW_DC_QO_post_mit_S2N-VSC-V2.sav		x	300 MW	300 MW		x		x	N/A	N/A		x

**APPENDIX B: POST TRANSIENT VAR MARGIN RESULTS AND LCC
SYNCHRONOUS CONDENSER SIZING**

TABLE 1: 2018 REACTIVE VAR MARGIN STUDY RESULTS AND SYNCHRONOUS CONDENSER SIZING

Contingency	PRE			Post - LCC			Post - LCC			Post - VSC		
	VAR MARGIN	NOSE POINT	NOSE POINT	80 MVAR Sync. Cond. VAR MARGIN	80 MVAR Sync. Cond. NOSE POINT	NOSE POINT	90 MVAR Sync. Cond. VAR MARGIN	90 MVAR Sync. Cond. NOSE POINT	NOSE POINT	VAR MARGIN	NOSE POINT	NOSE POINT
ALJS	-61.6	0.78	0.78	-77.6	0.87	0.87	-86.8	0.87	0.87	-140.1	0.802	0.802
CHSA_SATO_out	-57.5	0.78	0.78	-71	0.86	0.86	-81	0.87	0.87	-134.1	0.804	0.804
ELOOP_N	-60.4	0.78	0.78	-75.6	0.87	0.87	-84.8	0.87	0.87	-137.9	0.81	0.81
ELOOP_S	-67.4	0.78	0.78	-86.2	0.882	0.88	-96.2	0.88	0.88	-148.5	0.81	0.81
GL_3Fault_SPGLWN_out	-56.5	0.78	0.78	-68.4	0.872	0.87	-78.4	0.87	0.87	-131	0.814	0.814
GL_3Fault_WNGLSP_out	-56.5	0.78	0.78	-68.4	0.872	0.87	-78.4	0.87	0.87	-131	0.814	0.814
GL_3_GLHI	-57.4	0.78	0.78	-70.1	0.872	0.87	-80.1	0.87	0.87	-133.1	0.808	0.808
GL_3_GLWN	-61.6	0.78	0.78	-77.6	0.87	0.87	-86.8	0.87	0.87	-140.1	0.802	0.802
GL_3_SPGL	-56.5	0.78	0.78	-68.4	0.872	0.87	-78.4	0.87	0.87	-131	0.814	0.814
IRV_BUS	-64.7	0.78	0.78	-82.8	0.906	0.906	-92	0.906	0.906	-143	0.854	0.854
MK_3_MKSP	-61.7	0.78	0.78	-77.8	0.87	0.87	-87	0.87	0.87	-140.2	0.808	0.808
MK_3_MKYA	-61.6	0.78	0.78	-77.6	0.87	0.87	-86.8	0.87	0.87	-140	0.808	0.808
MK_3_SJMK	-61.8	0.78	0.78	-77.9	0.87	0.87	-87.1	0.87	0.87	-140.4	0.802	0.802
NLOOP_W	-67	0.78	0.78	-85.3	0.882	0.88	-95.3	0.88	0.88	-147.4	0.814	0.814
NE_3_NELPSVC	-57.2	0.78	0.78	-67.8	0.884	0.884	-77.8	0.882	0.882	-130.3	0.818	0.818
PC_3Fault_PCTOT3_out	-56	0.78	0.78	-67.8	0.872	0.87	-77.8	0.87	0.87	-129.8	0.828	0.828
PC_3_PCTO	-57.6	0.78	0.78	-70.4	0.872	0.87	-80.4	0.87	0.87	-133.3	0.812	0.812
PW_3Fault_PWPWSO_out	-43.3	0.78	0.78	-39.5	0.972	0.972	-48.9	0.972	0.972	-96.1	0.928	0.928
PW_3Fault_SOPWPW_out	-43.3	0.78	0.78	-39.5	0.972	0.972	-48.9	0.972	0.972	-96.1	0.928	0.928
PW_3_PWSO	-43.2	0.78	0.78	-39.3	0.972	0.972	-48.7	0.972	0.972	-96	0.924	0.924
PW_3_WWPW	-61.3	0.78	0.78	-77	0.87	0.87	-86.2	0.87	0.87	-139.3	0.81	0.81
SA_3Fault_2SATO_out	-57.7	0.78	0.78	-71.2	0.86	0.86	-81.2	0.87	0.87	-134.2	0.808	0.808

Contingency	PRE			Post - LCC				Post - LCC				Post - VSC	
	VAR MARGIN	NOSE POINT	NOSE POINT	80 MVAR Sync. Cond.		90 MVAR Sync. Cond.		VAR MARGIN	NOSE POINT	VAR MARGIN	NOSE POINT	VAR MARGIN	NOSE POINT
				VAR MARGIN	NOSE POINT	VAR MARGIN	NOSE POINT						
SA_3_CHSA	-57.5	0.78	0.78	-71	0.86	-81	0.87	-134.1	0.804				
SA_3_SATO	-61.6	0.78	0.78	-77.6	0.87	-86.8	0.87	-140.1	0.796				
SO_3Fault_PWSOT2_out	-40.6	0.78	0.78	-34.4	0.986	-44.6	0.984	-90.8	0.938				
SO_3Fault_SOT2T3_out	-46.2	0.78	0.78	-58.9	0.886	-68.9	0.884	-120.4	0.852				
SO_3Fault_T2SOVL_out	-57.9	0.78	0.78	-72	0.884	-82.1	0.87	-134.8	0.806				
SO_3Fault_T3SOPW_out	-40.5	0.78	0.78	-34.2	0.986	-44.4	0.984	-90.6	0.942				
SO_3Fault_VLSOT2_out	-57.9	0.78	0.78	-72	0.884	-82.1	0.87	-134.8	0.806				
SO_3_PWSO	-43.2	0.78	0.78	-39.3	0.972	-48.7	0.972	-96	0.924				
SO_3_SOT2	-60.3	0.78	0.78	-76	0.87	-85.2	0.87	-138.4	0.808				
SO_3_VLSO	-58.7	0.78	0.78	-73.2	0.872	-83.2	0.882	-136	0.808				
SPVL_GLWN_out	-49.3	0.78	0.78	-55.1	0.898	-65.2	0.896	-117.1	0.832				
SPVL_SPGL_out	-32.8	0.78	0.78	0	1.0412	-39.5	0.9856	-54.6	0.99				
SPVL_VLT1_out	-47	0.78	0.78	-51.7	0.886	-61.7	0.884	-113.1	0.85				
SP_1Fault_SP2_SPVL	-51	0.78	0.78	-57.6	0.886	-67.7	0.884	-119.7	0.828				
SP_1Fault_SP3_SPGL	-60.1	0.78	0.78	-75.1	0.858	-84.3	0.858	-137.6	0.806				
SP_1Fault_SPGL_SP3	-60.1	0.78	0.78	-75.1	0.858	-84.3	0.858	-137.6	0.806				
SP_1Fault_SPVL_SP2	-51	0.78	0.78	-57.6	0.886	-67.7	0.884	-119.7	0.828				
SP_3_SP1_trip	-64.5	0.78	0.78	-81.9	0.87	-91.9	0.868	-144.7	0.802				
SP_3_SPCO	-58.7	0.78	0.78	-74.8	0.858	-84	0.858	-137.4	0.804				
SP_3_SPGL	-57.9	0.78	0.78	-71.3	0.86	-81.3	0.858	-134.6	0.8				
SP_3_SPMK	-63.2	0.78	0.78	-80.4	0.858	-90.3	0.856	-143.1	0.802				
SP_3_SPMS	-63	0.78	0.78	-80.1	0.858	-90.1	0.856	-142.9	0.794				
SP_3_SPVL	-49.3	0.78	0.78	-55.1	0.898	-65.2	0.896	-117.1	0.832				

Contingency	PRE		Post - LCC		Post - LCC		Post - VSC	
	VAR MARGIN	NOSE POINT	80 MVAR Sync. Cond.		90 MVAR Sync. Cond.		VAR MARGIN	NOSE POINT
			VAR MARGIN	NOSE POINT	VAR MARGIN	NOSE POINT		
SVC_DELAY	-55.1	0.78	-64.9	0.872	-74.2	0.872	-127.5	0.814
TO138_3Fault_T3TOPC_out	-56	0.78	-67.8	0.872	-77.8	0.87	-129.8	0.828
TO500_3Fault_PCTOT3_out	-56	0.78	-67.8	0.872	-77.8	0.87	-129.8	0.828
TO500_3Fault_T3TOPC_out	-56	0.78	-67.8	0.872	-77.8	0.87	-129.8	0.828
TO_3_PCTO	-57.6	0.78	-70.4	0.872	-80.4	0.87	-133.3	0.812
VL2_3_SPVL	-49.3	0.78	-55.1	0.898	-65.2	0.896	-117.1	0.832
VL12-VLCAPS	-51.2	0.78	-62.4	0.872	-71.7	0.872	-125	0.814
VL_3Fault_T1VLWN_out	-43	0.78	-42.1	0.936	-52.2	0.934	-100.4	0.916
VL_3Fault_WNVL1_out	-43	0.78	-42.1	0.936	-52.2	0.934	-100.4	0.916
VL_3_VLBI	-61.9	0.78	-78.4	0.83	-88.9	0.83	-141.1	0.802
VL_3_VLSO	-60.4	0.78	-1501.2	0.7843	-81.7	0.798	-139.1	0.808
VL_3_VLT1	-61.3	0.78	-73.3	0.8	-83.2	0.8	-140.4	0.802
VL_3_WNVL	-45.8	0.78	-46.7	0.912	-56.8	0.91	-106.3	0.898
WN_3Fault_GLWNVL_out	-45.8	0.78	-46.7	0.912	-56.8	0.91	-106.3	0.898
WN_3Fault_GLWNWN_out	-60.2	0.78	-74.4	0.884	-84.4	0.882	-137.3	0.804
WN_3Fault_VLWNGL_out	-45.8	0.78	-46.7	0.912	-56.8	0.91	-106.3	0.898
WN_3Fault_VLWNWN_out	-45.2	0.78	-45.3	0.924	-55.5	0.922	-104	0.912
WN_3Fault_WNWNGL_out	-60.2	0.78	-74.4	0.884	-84.4	0.882	-137.3	0.804
WN_3Fault_WNWNVL_out	-45.2	0.78	-45.3	0.924	-55.5	0.922	-104	0.912
WN_3_GLWN	-61.6	0.78	-77.6	0.87	-86.8	0.87	-140.1	0.802
WN_3_WNVL	-45.8	0.78	-46.7	0.912	-56.8	0.91	-106.3	0.898
WW_3_WWPW	-61.3	0.78	-77	0.87	-86.2	0.87	-139.3	0.81

TABLE B-2: 2022 REACTIVE LCC VAR MARGIN STUDY RESULTS AND SYNCHRONOUS CONDENSER SIZING

Contingency	PRE			Post - LCC			Post - LCC		
	VAR MARGIN	NOSE POINT	NOSE POINT	90 MVAR Sync. Cond.		100 MVAR Sync. Cond.		NOSE POINT	NOSE POINT
				VAR MARGIN	NOSE POINT	VAR MARGIN	NOSE POINT		
ALIS	-54.7	0.781	0.781	-106.4	0.908	-115.3	0.908	0.908	0.908
CHSA_PCTO	-38.4	0.78	0.78	-33.7	0.972	-43.2	0.9715	0.9715	0.9715
CHSA_SATO	-50.4	0.781	0.781	-95.7	0.91	-105.9	0.908	0.908	0.908
ELOOP_N	-54.5	0.781	0.781	-96.4	0.938	-105.3	0.938	0.938	0.938
ELOOP_S	-61	0.78	0.78	-33.9	1.195	-120.2	0.922	0.922	0.922
GL_3Fault_SPLAWN	-51.3	0.78	0.78	-98.8	0.91	-109	0.908	0.908	0.908
GL_3Fault_WNGLSP	-51.3	0.78	0.78	-98.8	0.91	-109	0.908	0.908	0.908
GL_3_GLHI	-53.1	0.78	0.78	-1344.2	0.7803	-1349.6	0.7793	0.7793	0.7793
GL_3_GLWN	-54.7	0.781	0.781	-106.4	0.908	-115.3	0.908	0.908	0.908
GL_3_SPGL	-51.3	0.78	0.78	-98.8	0.91	-109	0.908	0.908	0.908
IRV_BUS	-52.8	0.78	0.78	-43.4	1.178	-54.5	1.1956	1.1956	1.1956
MK_3_MKSP	-54.9	0.78	0.78	-106.6	0.908	-115.5	0.908	0.908	0.908
MK_3_MKYA	-54.5	0.78	0.78	-105.8	0.908	-114.7	0.908	0.908	0.908
MK_3_SJMK	-55	0.78	0.78	-106.8	0.908	-115.7	0.908	0.908	0.908
NELOOP_W	-58.4	0.78	0.78	-164.4	1.0412	-174.4	1.0412	1.0412	1.0412
NE_3_NELPSVC	-55.2	0.78	0.78	-69.2	0.982	-79.5	0.98	0.98	0.98
PC_3Fault_PCTOT3	-47.1	0.781	0.781	-92.2	0.91	-101	0.91	0.91	0.91
PC_3_PCTO	-49	0.781	0.781	-95.5	0.91	-105.7	0.908	0.908	0.908
PW_3Fault_PWPWSO	-23.9	0.794	0.794	-69.5	0.956	-79.9	0.954	0.954	0.954
PW_3Fault_SOPWPW	-23.9	0.794	0.794	-69.5	0.956	-79.9	0.954	0.954	0.954
PW_3_PWSO	-25	0.79	0.79	-70.1	0.955	-79.8	0.954	0.954	0.954

Contingency	PRE		Post - LCC		Post - LCC	
	VAR MARGIN	NOSE POINT	90 MVAR Sync. Cond.	NOSE POINT	100 MVAR Sync. Cond.	
					VAR MARGIN	NOSE POINT
PW_3_WWPW	-54.6	0.78	-105.8	0.908	-115.3	0.907
SA_3Fault_2SATO	-52	0.78	-97.8	0.91	-108	0.908
SA_3_CHSA	-50.4	0.781	-95.7	0.91	-105.9	0.908
SA_3_SATO	-54.7	0.7805	-106.4	0.908	-115.2	0.908
SO_3Fault_PWSOT2	-13.8	0.83	-66.5	0.956	-76.8	0.954
SO_3Fault_PWSOVL	-41.8	0.78	-39	0.986	-49.8	0.984
SO_3Fault_SOT2T3	-38.1	0.78	-91.6	0.911	-99.8	0.924
SO_3Fault_T2SOVL	-51.2	0.78	-95	0.938	-103.9	0.938
SO_3Fault_T3SOPW	-10.7	0.838	-66.4	0.956	-76.7	0.954
SO_3Fault_VLSOPW	-41.8	0.78	-39	0.986	-49.8	0.984
SO_3Fault_VLSOT2	-51.2	0.78	-95	0.938	-103.9	0.938
SO_3_PWSO	-25	0.79	-70.1	0.955	-79.8	0.954
SO_3_SOT2	-53.2	0.78	-103.1	0.909	-112.6	0.908
SO_3_VLSO	-52.2	0.78	-96.6	0.938	-106.2	0.937
SPVL_GLWN	-22.4	0.8	-76.4	0.982	-86.7	0.98
SPVL_SPGL	-43.5	0.78	-51.8	0.984	-62	0.982
SPVL_VLT1	-11.4	0.836	-71.5	0.982	-81.8	0.98
SP_1Fault_SP2_SPVL	-25.3	0.793	-77.9	0.982	-88.2	0.98
SP_1Fault_SP3_SPGL	-53.6	0.78	-103.1	0.91	-113.3	0.908
SP_1Fault_SPGL_SP3	-53.6	0.78	-103.1	0.91	-113.3	0.908
SP_1Fault_SPVL_SP2	-25.3	0.793	-77.9	0.982	-88.2	0.98
SP_3_SP1_trip	-56.8	0.78	-95	0.907	-119.5	0.907
SP_3_SPCO	-49.8	0.78	-95.8	0.91	-106	0.908

Contingency	PRE			Post - LCC			Post - LCC		
	VAR MARGIN	NOSE POINT	NOSE POINT	90 MVAR Sync. Cond.		100 MVAR Sync. Cond.		VAR MARGIN	NOSE POINT
				VAR MARGIN	NOSE POINT	VAR MARGIN	NOSE POINT		
SP_3_SPGI	-51.3	0.78	0.78	-98.8	0.91	-109	0.908	0.908	
SP_3_SPMK	-54.9	0.78	0.78	-106.6	0.908	-115.5	0.908	0.908	
SP_3_SPMS	-54.7	0.781	0.781	-106.4	0.908	-115.3	0.908	0.908	
SP_3_SPVL	-22.4	0.8	0.8	-76.4	0.982	-86.7	0.98	0.98	
SVC_DELAY	-54.6	0.78	0.78	-88.4	0.954	-98.7	0.952	0.952	
TO138_3Fault_T3TOPC	-47.1	0.781	0.781	-92.2	0.91	-101	0.91	0.91	
TO500_3Fault_PCTOT3	-47.1	0.781	0.781	-92.2	0.91	-101	0.91	0.91	
TO500_3Fault_T3TOPC	-47.1	0.781	0.781	-92.2	0.91	-101	0.91	0.91	
TO_3_PCTO	-49	0.781	0.781	-95.5	0.91	-105.7	0.908	0.908	
VL2_3_SPVL	-22.4	0.8	0.8	-76.4	0.982	-86.7	0.98	0.98	
VL2-VLCAPS	-40.5	0.78	0.78	-83.6	0.911	-92.5	0.911	0.911	
VL_3Fault_T1VWLN	-39.6	0.78	0.78	-73.8	0.913	-80.7	0.928	0.928	
VL_3Fault_WNVLT1	-39.6	0.78	0.78	-73.8	0.913	-80.7	0.928	0.928	
VL_3_VLBI	-54	0.78	0.78	-102	0.924	-110.9	0.924	0.924	
VL_3_VLSO	-52.2	0.78	0.78	-96.6	0.938	-106.2	0.937	0.937	
VL_3_VLT1	-52.6	0.781	0.781	-100.1	0.91	-107.6	0.924	0.924	
VL_3_WNVL	-42.3	0.78	0.78	-81	0.912	-91.2	0.91	0.91	
WN_3Fault_GLWNVL	-42.3	0.78	0.78	-81	0.912	-91.2	0.91	0.91	
WN_3Fault_GLWNWN	-48.3	0.78	0.78	-88.7	0.927	-98.2	0.926	0.926	
WN_3Fault_VLWNGI	-42.3	0.78	0.78	-81	0.912	-91.2	0.91	0.91	
WN_3Fault_VLWNWN	-43.2	0.78	0.78	-82.4	0.912	-92.6	0.91	0.91	
WN_3Fault_WNWNGI	-48.3	0.78	0.78	-88.7	0.927	-98.2	0.926	0.926	
WN_3Fault_WNVNVL	-43.2	0.78	0.78	-82.4	0.912	-92.6	0.91	0.91	

Contingency	PRE			Post - LCC		
	VAR MARGIN	NOSE POINT	NOSE POINT	90 MVAR Sync. Cond.		NOSE POINT
				VAR MARGIN	NOSE POINT	
WN_3_GLWN	-54.7	0.781	0.908	-106.4	-115.3	0.908
WN_3_WNVL	-42.3	0.78	0.912	-81	-91.2	0.91
WW_3_WW/PW	-54.6	0.78	0.908	-105.8	-115.3	0.907

TABLE B-3: 2022 REACTIVE VSC VAR MARGIN STUDY RESULTS AND CAPACITOR BANK SIZING

Contingency	PRE			VSC			VSC
	VAR MARGIN	NOSE POINT (p.u.)	NOSE POINT (p.u.)	POST			
				VAR MARGIN	NOSE POINT (p.u.)	NOSE POINT (p.u.)	
ALIS	-54.7	0.781	0.781	-159.9	0.78	0.781	Post with 20 MVAR Capacitor -171.4
CHSA_PCTO	-38.4	0.78	0.8478	-1143.5	0.8478	0.934	-55.2
CHSA_SATO	-50.4	0.781	0.781	-150.6	0.781	0.78	-162.5
ELOOP_N	-54.5	0.781	0.781	-150.4	0.781	0.78	-162.3
ELOOP_S	-61	0.78	0.781	-163.9	0.781	0.78	-175.8
GL_3Fault_SPLGLWN	-51.3	0.78	0.78	-153.8	0.78	0.78	-165.5
GL_3Fault_WNGLSP	-51.3	0.78	0.78	-153.8	0.78	0.78	-165.5
GL_3_GLHI	-53.1	0.78	0.7735	-1373.9	0.7735	0.7753	-1367.4
GL_3_GLWN	-54.7	0.781	0.78	-159.9	0.78	0.781	-171.4
GL_3_SPLG	-51.3	0.78	0.78	-153.8	0.78	0.78	-165.5
IRV_BUS	-52.8	0.78	0.781	-154.9	0.781	0.781	-166.7
MK_3_MKSP	-54.9	0.78	0.78	-160.1	0.78	0.78	-171.8
MK_3_MKYA	-54.5	0.78	0.78	-159.3	0.78	0.78	-171
MK_3_SJMK	-55	0.78	0.78	-160.3	0.78	0.781	-171.7
NELOOP_W	-58.4	0.78	0.781	-161.5	0.781	0.78	-173.4

Contingency	PRE		VSC		VSC	
	VAR MARGIN	NOSE POINT (p.u.)	POST		Post with 20 MVAR Capacitor	
			VAR MARGIN	NOSE POINT (p.u.)	VAR MARGIN	NOSE POINT (p.u.)
NE_3_NELPSVC	-55.2	0.78	-98.9	0.818	-112.1	0.822
PC_3Fault_PCTOT3	-47.1	0.781	-147	0.78	-158.8	0.78
PC_3_PCIO	-49	0.781	-150.4	0.78	-162.1	0.78
PW_3Fault_PWPWSO	-23.9	0.794	-95.1	0.858	-1524.1	0.7788
PW_3Fault_SOPWPW	-23.9	0.794	-95.1	0.858	-1524.1	0.7788
PW_3_PWSO	-25	0.79	-94.6	0.858	-109.3	0.86
PW_3_WWPW	-54.6	0.78	-158.8	0.781	-170.5	0.781
SA_3Fault_2SAIO	-52	0.78	-152.8	0.78	-164.3	0.781
SA_3_CHSA	-50.4	0.781	-150.6	0.781	-162.3	0.781
SA_3_SAIO	-54.7	0.7805	-159.9	0.78	-171.6	0.78
SO_3Fault_PWSOT2	-13.8	0.83	-89	0.866	-103.9	0.868
SO_3Fault_PWSOVL	-41.8	0.78	-28.4	0.966	-47	0.966
SO_3Fault_SOT2T3	-38.1	0.78	-146.3	0.78	-158	0.78
SO_3Fault_T2SOVL	-51.2	0.78	-148.6	0.78	-160.3	0.78
SO_3Fault_T3SOPW	-10.7	0.838	-1551	0.7733	-104.2	0.864
SO_3Fault_VLSOPW	-41.8	0.78	-28.4	0.966	-47	0.966
SO_3Fault_VLSOT2	-51.2	0.78	-148.6	0.78	-160.3	0.78
SO_3_PWSO	-25	0.79	-94.6	0.858	-109.3	0.86
SO_3_SOT2	-53.2	0.78	-156.9	0.781	-168.6	0.781
SO_3_VLSO	-52.2	0.78	-150.2	0.78	-161.8	0.781
SPVL_GLWN	-22.4	0.8	-94.4	0.876	-1476.4	0.7825
SPVL_SPGL	-43.5	0.78	-37.9	0.962	-56.3	0.962
SPVL_VLT1	-11.4	0.836	-1521.1	0.7733	-104	0.874
SP_1Fault_SP2_SPVL	-25.3	0.793	-1553.5	0.7728	-1538.9	0.7758

Contingency	PRE		VSC		VSC	
	VAR MARGIN	NOSE POINT (p.u.)	POST		Post with 20 MVAR Capacitor	
			VAR MARGIN	NOSE POINT (p.u.)	VAR MARGIN	NOSE POINT (p.u.)
SP_1Fault_SP3_SPGL	-53.6	0.78	-157.9	0.78	-169.6	0.78
SP_1Fault_SPGL_SP3	-53.6	0.78	-157.9	0.78	-169.6	0.78
SP_1Fault_SPVL_SP2	-25.3	0.793	-1553.5	0.7728	-1538.9	0.7758
SP_3_SP1_trip	-56.8	0.78	-163.2	0.78	-174.8	0.781
SP_3_SPCO	-49.8	0.78	-151	0.78	-162.7	0.78
SP_3_SPGL	-51.3	0.78	-153.8	0.78	-165.5	0.78
SP_3_SPMK	-54.9	0.78	-160.1	0.78	-171.8	0.78
SP_3_SPMS	-54.7	0.781	-159.9	0.78	-171.4	0.781
SP_3_SPVL	-22.4	0.8	-94.4	0.876	-1476.4	0.7825
SVC_DELAY	-54.6	0.78	-132.8	0.78	-144.7	0.781
TO138_3Fault_T3TOPC	-47.1	0.781	-147	0.78	-158.8	0.78
TO500_3Fault_PCIOI3	-47.1	0.781	-147	0.78	-158.8	0.78
TO500_3Fault_T3TOPC	-47.1	0.781	-147	0.78	-158.8	0.78
TO_3_PCIO	-49	0.781	-150.4	0.78	-162.1	0.78
VL2_3_SPVL	-22.4	0.8	-94.4	0.876	-1476.4	0.7825
VL2-VLCAPS	-40.5	0.78	-139.4	0.78	-151.1	0.78
VL_3Fault_T1VLWN	-39.6	0.78	-127.9	0.78	-139.8	0.78
VL_3Fault_WNVLT1	-39.6	0.78	-127.9	0.78	-139.8	0.78
VL_3_VLBI	-54	0.78	-157.4	0.78	-169.1	0.78
VL_3_VLSO	-52.2	0.78	-150.2	0.78	-161.8	0.781
VL_3_VLT1	-52.6	0.781	-154.3	0.78	-166	0.78
VL_3_WNVL	-42.3	0.78	-134.8	0.78	-146.6	0.78
WN_3Fault_GLWNVL	-42.3	0.78	-134.8	0.78	-146.6	0.78
WN_3Fault_GLAWNWN	-48.3	0.78	-144.4	0.78	-155.9	0.781

Contingency	PRE		VSC POST		VSC Post with 20 MVAR Capacitor	
	VAR MARGIN	NOSE POINT (p.u.)	VAR MARGIN	NOSE POINT (p.u.)	VAR MARGIN	NOSE POINT (p.u.)
	WN_3Fault_VLWNGL	-42.3	0.78	-134.8	0.78	-146.6
WN_3Fault_VLWNWN	-43.2	0.78	-136.1	0.78	-147.9	0.781
WN_3Fault_WNWNGL	-48.3	0.78	-144.4	0.78	-155.9	0.781
WN_3Fault_WNWNVL	-43.2	0.78	-136.1	0.78	-147.9	0.781
WN_3_GLWN	-54.7	0.781	-159.9	0.78	-171.4	0.781
WN_3_WNVL	-42.3	0.78	-134.8	0.78	-146.6	0.78
WW_3_WW/PW	-54.6	0.78	-158.8	0.781	-170.5	0.781

APPENDIX C: POWER FLOW RESULTS TABLES

See Bookmark

APPENDIX D: TRANSIENT STABILITY RESULTS TABLES

See Bookmark

APPENDIX E: TRANSIENT STABILITY PLOTS

Available Upon Request