Appendix C

Scoping Meeting Handouts and Informational Materials

Appendix C-1

Scoping Meeting Handouts

- Self-Addressed Comment Form
- Speaker Registration Card
- Meeting Agenda
- Translation Request Form
- Fact Sheets
  - Coolwater-Lugo Transmission Project
  - Transmission Line Construction
  - Electric Transmission
  - Transmission System Components
  - Transmission Structures
  - Public Involvement During Scoping
  - Comparison of EIS and EIR Procedures and EIR/EIS Process
  - CPUC Process

Comment Form

Coolwater-Lugo Transmission Project EIR/EIS

Please print clearly. Thank you for your comments.

For more information, visit the project web site: www.cpuc.ca.gov/Environment/info/aspen/cltp/cltp.htm

Date: _____

Name*: _____

Affiliation (*if any*):* _____

Address:* _____

City, State, Zip Code:* _____

Telephone Number:* _____

Email:* _____

Comment:* _____

_____

_____

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Please send me notifications by: ☐ **email** ☐ **mail** ☐ **I do not want to be on the project mailing list**

**This information may be released if requested under the Freedom of Information Act. Individual respondents may request that their home address be withheld from the record, which will be honored to the extent allowable by law. If you wish to withhold your name and/or address, you must state this prominently at the beginning of your written comments. All submissions from organizations or businesses will be available for public inspection in their entirety.*

Submit comments by mail using this comment sheet (fold, stamp, and mail); attach additional sheets if needed. Please submit comments by September 3, 2014.

You may also submit comments by email to CLTP-EIR-EIS@aspeneg.com or send a fax to (888) 423-2220.

Place
Postage
Here

Coolwater-Lugo Scoping
c/o Aspen Environmental Group
5020 Chesebro Road, Suite 200
Agoura Hills, CA 91301

Speaker Registration Card

(Please Print Clearly) **Coolwater-Lugo Transmission Project EIR/EIS**

Name: _____

Affiliation (if any): _____

Address: _____

City, State, and Zip: _____

Phone: _____

Email: _____

Speaker Registration Card

(Please Print Clearly) **Coolwater-Lugo Transmission Project EIR/EIS**

Name: _____

Affiliation (if any): _____

Address: _____

City, State, and Zip: _____

Phone: _____

Email: _____

MEETING AGENDA

PUBLIC SCOPING MEETING
Coolwater-Lugo Transmission Project EIR/EIS

I. **Meeting Presentation**

Welcome and Introduction	*Chester Britt*
CEQA Lead Agency Role and Process	*Andrew Barnsdale*
NEPA Lead Agency Role and Process	*Noel Ludwig*
Overview of the Proposed Project	*Jon Davidson*
Environmental Review Process	*Jon Davidson*
Public Comments	*Chester Britt*

II. **Information Stations** will be open for you to ask additional questions, review the materials, or to submit your written comments

Meeting Format

Oral Comments. To make oral comments at this meeting, please fill out a speaker card and turn it in at the sign-in table. Please fill out the card as completely as possible, providing your name and address for the record; this information will become public. During the public comment portion of the meeting, speakers will be called to the microphone individually by the meeting facilitator. Speakers will be called according to the order that speaker cards are received.

Written Comments. For written comments, please complete the comment form provided at this meeting. Once completed, you may submit your comments at the sign-in table or the designated comment box. Comments may also be submitted via U.S. Mail, fax, or e-mail after the meeting. Comments must be submitted or postmarked by **September 3, 2014**.

Mail: Coolwater-Lugo Scoping
c/o Aspen Environmental Group
5020 Chesebro Road, Suite 200
Agoura Hills, CA 91301

E-mail: CLTP-EIR-EIS@aspeneg.com
Fax/Voicemail: (888) 423-2220

For more information and project updates, visit the project websites at:

CPUC Website: www.cpuc.ca.gov/Environment/info/aspen/cltp/cltp.htm
BLM Website: www.blm.gov/ca/st/en/fo/barstow/renewableenergy/coolwater_lugo.html

Other Reminders:

- Please be respectful of other people's opinions.
- Factsheets and display boards have been set up at the meeting (Information Stations) so that you can get more information directly from technical staff.
- We are here to provide more information about the project. If you have questions about the project, please ask us so that you have a better understanding about the project and the CEQA/NEPA review processes.
- We may not have all of the answers now. If we cannot answer your questions at this meeting, we will follow up with you as soon as we have the requested information.

All comments will become public information.

Translation Request Form

☐ Welcome, all the materials for this project are provided in English, but can also be made available in Spanish, Traditional Chinese, Simplified Chinese, Vietnamese, Armenian and Korean. To receive materials in any of these languages, please check the appropriate box and fill out the contact information at the bottom of this page. You can submit this form to any of the persons sitting at the registration table. Some one will contact you within the next business day to speak with you about your translation needs.

☐ Bienvenido, todos los materiales para este proyecto están en inglés pero también pueden estar disponibles en español, chino tradicional, chino simplificado, vietnamita, armenio y coreano. Para recibir materiales en cualquiera de estos idiomas, por favor seleccione la casilla apropiada y llene la información de contacto al final de esta página. Puede presentar este formulario a cualquiera de las personas presentes en la mesa de registro. Alguien se comunicará con usted al siguiente día laboral para hablar acerca de sus necesidades de traducción.

☐ Chào mừng quý vị, tất cả các tài liệu cho dự án này đều được viết bằng tiếng Anh, nhưng cũng có cả bản dịch tiếng Tây ban nha, tiếng Quang thoại phổ thông, tiếng Quảng đông phổ thông, tiếng Việt, tiếng Armeni và tiếng Hàn quốc. Để lấy bản dịch bằng các ngôn ngữ này, xin đánh dấu vào ô thích hợp và điền địa chỉ liên lạc ở cuối trang. Quý vị có thể nộp mẫu điền này cho bất kỳ ai ngồi tại bàn ghi danh. Sẽ có người liên lạc với quý vị trong ngày làm việc hôm sau để nói chuyện về nhu cầu cần chuyển ngữ tài liệu của quý vị.

☐ 歡迎您！本工程的所有資料皆使用英文，但也有西班牙文、繁體中文、簡體中文、越南文、亞美尼亞文及韓文版本。如欲獲得上述語言版本的資料，請在適當的方格打勾，並在本頁末尾填寫您的聯絡資訊。您可以將此表格遞交給登記櫃檯的任一人員。相關人員將在下一個工作日內聯絡您，並討論您的翻譯需求。

☐ 欢迎您！本工程的所有资料皆使用英文，但也有西班牙文、繁体中文、简体中文、越南文、亚美尼亚文以及韩文版本。如欲获得上述语言版本的资料，请在相应的方框内打勾，并在本页末尾填写您的联系方式。您可将此表格递交给登记柜台的任一人员。相关人员将在下一个工作日内联系您，并讨论您的翻译需求。

☐ Ողջույն: Այս ծրագրին վերաբերվող բոլոր նյութերը ներկայացվում են անգլերենով, բայց նաև կարող են տրամադրվել իսպաներենով, դասական չինարենով, պարզեցրած չինարենով, վիետնամերենով, հայերենով և կորեերենով: Այս լեզուներից ցանկացածով նյութեր ստանալու համար, խնդրում ենք նշել համապատասխան քառակուսում և լրացնել այս էջի ներքևում գտնվող տեղեկությունը կապի մասին: Այս ձևաթուղթը կարող եք ներկայացնել գրանցման սեղանի հետևը նստած որևէ անձի: Ինչ-որ անձ կապ կհաստատի ձեզ հետ հաջորդ աշխատանքային օրվա ընթացքում, որպեսզի ձեզ հետ քննարկի ձեր թարգմանչական կարիքները:

☐ 환영합니다. 이 프로젝트에 대한 모든 자료는 영어로 제공되지만 스페인어, 번체자 중국어, 간체자 중국어, 베트남어, 아르메니안어, 한국어로도 이용이 가능합니다. 이러한 언어로 자료를 받아보고 싶으신 분은 해당 박스에 체크하시고 페이지 하단에 있는 연락처 정보를 작성해 주십시오. 작성하신 양식을 안내데스크에 있는 사람에게 제출해 주십시오. 다음 업무일 내에 귀하에게 필요한 번역 서비스에 대한 상담을 위해 저희 직원이 연락드릴 것입니다.

Name:_____

Address:_____City:_____Zip:_____

Phone:_____E-mail:_____

Coolwater-Lugo Transmission Project

The **Coolwater-Lugo Transmission Project** proposed by Southern California Edison (SCE) includes new transmission infrastructure along approximately 63 miles of new and existing rights-of-way (ROW) from the existing Coolwater Generation Station Switchyard (Coolwater Switchyard) in Daggett, California, to the existing Lugo Substation in Hesperia, California. The proposed transmission lines (T/Ls) would transverse approximately 15 miles of lands managed by the U.S. Department of Interior Bureau of Land Management (BLM), with the remainder on private or other public lands within San Bernardino County. Approximately 44 miles of the proposed T/L route would parallel or be within existing overhead utility ROWs. To enable construction of the proposed T/L, approximately 43 miles of existing T/L would need to be removed. The project also includes a new substation to support transmission line termination and new telecommunication facilities for a Special Protection System to maintain transmission system reliability.

(Future Simulation) Looking southeast from the Lucerne Valley Cutoff, North Lucerne Valley. (Proposed Segment 2)

SCE has filed an application (No. 13-08-023) with the California Public Utilities Commission (CPUC) for a Certificate of Public Convenience and Necessity for the Coolwater-Lugo Transmission Project. SCE has also submitted a Right-of-Way Application to BLM.

Why is the Coolwater-Lugo Transmission Project Needed?

The CLTP is proposed by SCE to:

- Provide the additional transmission capacity to help alleviate the transmission bottlenecks between the existing Kramer and Lugo Substations, and between the Lucerne Valley area and Lugo Substation;
- Facilitate the interconnection of planned generation projects in the Kramer and Lucerne Valley areas and provide for full delivery of the 275-megawatt Mojave Solar Project, which is currently under construction; and
- Accommodate future load serving (electrical demand) in the High Desert Region, particularly the Town of Apple Valley, and improve transmission system reliability.

What is the Coolwater-Lugo Transmission Project?

The proposed project includes the following route segments (presented from north to south) and components:

- **Segment 12:** Construct about 1.2 miles of double-circuit 220-kV T/L in new ROW from the Coolwater Switchyard south to just past Interstate 40.
- **Segment 1:** Construct about 16.7 miles of double-circuit 220-kV T/L from just south of Interstate 40 south to the intersection of Power Line Road and Camp Rock Road, then crossing under the Los Angeles Department of Water and Power (LADWP) transmission corridor, to parallel the existing T/Ls southwest within new, adjacent ROW to just west of Stoddard Wells Road.
- **Segment 2:** Construct about 11.9 miles of double-circuit 220-kV T/L in new ROW from the LADWP transmission corridor parallel to Stoddard Wells Road, and then southeast parallel to Lucerne Valley Cutoff Road to a point just west of State Route (SR) 247.
- **Segment 3:** Construct about 3.9 miles of double-circuit 220-kV T/L in new ROW from Lucerne Valley Cutoff Road/SR-247 south/southeast, parallel to the west side of SR-247, to just northwest of SR-247/Haynes Road.

(Future Simulation) Desert View Substation facing west from Milpas Road, Apple Valley. (Proposed, Segment 5A)

- **Segment 5:** Construct about 12.7 miles of double-circuit 220-kV T/L from just northwest of SR-247/Haynes Road south within new ROW until crossing under the existing SCE transmission corridor. Segment 5 would continue southwest within the existing corridor (existing ROW), in place of the Lugo-Pisgah No. 1 line, which would be removed along this portion of the ROW. Segment 5 would continue southwest to just west of the intersection of Desert View Road and Milpas Drive.
- **Segment 5A:** Construct about 0.7 mile of double-circuit 220-kV T/L in new ROW from just west of Desert View Road/Milpas Drive and continuing generally northwest to terminate on the east side of the new Desert View Substation.

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- **Segment 7:** Construct about 15.7 miles of single-circuit 500-kV T/L (initially operated at 220 kV) extending 0.85 miles in new ROW from the west side of the Desert View Substation southwest to SCE's existing Lugo-Pisgah No. 1 and No. 2 transmission line corridor, and then continuing southwest in this existing ROW replacing the existing Lugo-Pisgah No. 1 and No. 2 single-circuit 220-kV T/Ls.
- **T/L Removals:** About 28 miles of the existing Lugo-Pisgah No. 1 220-kV T/L would be removed from just southwest of the intersection of Haynes Road/SR-247 and the Lugo Substation, and about 16 miles of the existing Lugo-Pisgah No. 2 220-kV T/L would be removed between the Desert View Substation and Lugo Substation.

(Future Simulation) Looking southwest from Kimball Street, Hesperia. (Proposed, Segment 7)

- **Desert View Substation:** A new 86-acre unstaffed, automated 500/220/115/12-kV substation (at full build-out) would be constructed on an approximately 160-acre site southeast of the Town of Apple Valley and west of Lucerne Valley, which would initially be constructed as a switching station. The existing Lugo-Pisgah No. 1 and No. 2 220-kV lines would terminate into this substation. Full build-out of the substation would occur in the future as dictated by load growth, reliability needs, and generation requests.
- **Telecommunication Lines:** New telecommunication lines would be installed between the Apple Valley Substation and the new Desert View Substation (approximately 11 miles) and between the Gale Substation (located near Daggett) and the Pisgah Substation (located between Newberry Springs and Ludlow) (approximately 29 miles). The majority of the cable would be installed on existing poles, which would require new cross arms.

What are the Alternatives to the Coolwater-Lugo Transmission Project?

In its applications to the CPUC and BLM, SCE identified seven alternative T/L routes, as well as an alternate substation location. Other alternatives may be considered and developed as part of the environmental review process . Additionally, the CPUC and BLM will consider a No Project/No Action Alternative.

- **Segments 11, 9, 8:** Combined, these segments provide an alternate to Segment 1. This alternative route heads west from south of Interstate 40 (Segment 12) through the Marine Corps Logistics Base (MCLB) Barstow and then southwest parallel to SR-247 and then parallel to Stoddard Wells Road until Stoddard Valley Road. About 20.5 miles of double-circuit 220-kV T/L would be constructed.

(Future Simulation) Looking east from Bowden Ranch Road in Arrastre Canyon, Lucerne Valley. (Alternative, Segment 6)

- **Segment 10:** This is an alternative to Segment 9, and would proceed farther south before heading west to avoid crossing the MCLB. About 7.6 miles of double-circuit 220-kV T/L would be constructed, which is one mile less than Segment 9.
- **Segment 4:** This is an alternative to Segment 3. Segment 4 proceeds farther west to avoid paralleling SR-247. About 4.3 miles of double-circuit 220-kV T/L would be constructed.
- **Segment 5B and Alternate Desert View Substation:** SCE identified an alternate approximately 150-acre site immediately west of the proposed site for the Desert View Substation. Segment 5B is an alternative to Segment 5A and provides a minor reroute of the T/L to the alternate substation site. About 1.9 miles of double-circuit 220-kV T/L would be constructed and terminate on the east side of the alternate substation site.
- **Alternative Segment 6:** This segment is an alternative to Segment 7, and would head south from the Alternate Desert View Substation and then generally west parallel to SCE's existing ROW located south of the Ord Mountains. About 19.7 miles of single-circuit 500-kV T/L would be constructed.

For more information about the Coolwater-Lugo Transmission Project:

Project E-mail: CLTP-EIR-EIS@aspeneg.com

Project Fax and Voicemail: (888) 423-2220

CPUC Project Website:
www.cpuc.ca.gov/Environment/info/aspen/cltp/cltp.htm

BLM Project Website:
www.blm.gov/ca/st/en/fo/barstow/renewableenergy/coolwater_lugo.html

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Transmission Line Construction

Construction of transmission lines involves the following activities:

- ***Site Preparation***
- ***Foundation Construction***
- ***Structure Construction***
- ***Wire-Stringing Operations***

Transmission line tower construction site.

Site Preparation

Tower locations are cleared of vegetation prior to construction of the towers. Access roads may need to be upgraded or new roads constructed to accommodate construction vehicles and equipment access to each tower site.

Foundation construction for an LST.

Foundation Construction

Most structures have a concrete foundation. The size of the foundation depends on the type of structure and the terrain. Foundation construction begins with the auguring of holes for footings (four for lattice steel towers [LSTs] and one for tubular steel poles [TSPs]). For LSTs, each hole is usually 3 to 4 feet wide and 15 to 30 feet deep. TSPs require one hole that is up to 8 to 12 feet wide and 40 to 60 feet deep. Regardless of the structure type, foundations typically have a slight projection above the ground.

After the footing holes are excavated, they are reinforced with steel and then concrete is poured into the holes. Once the concrete has cured, crews can begin the construction of the structure itself.

Structure Construction

Generally, structures are built from the ground up. Structures are assembled in sections near the new tower location and a crane is used to lift the sections into place. Crews then bolt the sections together.

TSPs are either completely assembled near the tower location and then erected at once, or are assembled in sections. The method used is determined by terrain and available space next to the structure site.

Tower erection is usually performed by crane, but helicopters are used in areas that are inaccessible to large ground-based construction equipment.

A crane carrying the top section of a LST for installation.

A sky crane helicopter carrying the top section of a LST.

Note: This information is applicable to electric transmission systems in general and not specific to any project.

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Wire-Stringing Operations

Wire stringing includes all activities associated with the installation of the primary conductors onto the transmission line structures. These activities include the installation of conductor, ground wire, insulators, stringing sheaves (rollers or travelers), vibration dampeners, weights, suspension and dead-end hardware assemblies for the entire length of the route. Wire stringing involves the following four operations:

Wire-stringing operations.

- **Stringing the pilot line to install the conductor.** A light-weight sock line (pilot line) is flown from tower to tower by helicopter, threading the sock line through wire rollers attached to the insulators on each structure. A clamlock device secures the sock line in the rollers.
- **Pulling.** The sock line is attached to a conductor pulling rope/cable, which is connected to a tensioning machine on a truck. The conductors are then pulled through by a puller machine. The puller and tensioner work together during the pulling operation to ensure that the conductor maintains the proper ground clearance at all times. Wire set-up sites or pulling stations, where the associated pulling machinery and equipment are staged, are located at intervals along the span.
- **Sagging and dead-ending.** Once the conductor is pulled through the length of the line, the tensioner is then used to sag the conductors to the proper tension. Conductors expand and contract with changes in temperature (they are longest at high temperatures), so they need to be installed at the proper tension such that they do not sag too low when temperatures are at a maximum. All phases (or bundled phases) between two towers must be sagged to the same tension.
- **Splicing.** Once the conductor is pulled in and the proper tension of the conductor is reached, mid-span splicing is performed at dead-end tower locations to connect or splice segments together. Any temporary pulling splices are removed and replaced with permanent splices. Implosive sleeves may be used for splicing, which involves placing a layer of explosives around an aluminum sleeve. The layer of explosive is designed to create the required compression of the sleeve around the conductor. After splicing and sagging, conductors are affixed to dead-end towers.

Pulling phase of a wire-stringing operation. Note the reel of conductor on the right side of the photo.

- **Clipping-in, spacers.** After the conductors are spliced and affixed to dead-end towers, they are "clipped in", or attached to tangent towers. This process involves removing the rollers and replacing them with clamps and other final insulator hardware to secure the conductors to the insulators. Vibration dampeners, weights, and spacers between the conductors of a bundled phase are then installed. Once construction is complete, crews clean up work areas and restore disturbed areas.

Guard poles or guard structures may be installed at transportation, flood control, utility crossings, parks, and other sensitive locations to protect these underlying areas during wire stringing operations. The guard structures intercept wire should it drop below a conventional stringing height, preventing damage to underlying structures. These guard structures are temporary and are removed after conductor installation is complete.

A guard structure being erected at a street crossing.

Note: This information is applicable to electric transmission systems in general and not specific to any project.

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Electric Transmission

Electric power transmission is the bulk transfer of electrical energy from generating power plants to electrical substations. Electricity is transported over long distances at high voltages, which minimizes the loss of electricity. Electric power distribution includes the local wiring between high-voltage substations and customers. Combined, these form a network known as the "power grid". This network consists of the generating facilities, transmission lines, subtransmission lines, distribution lines, and substations. The process of generating and transmitting electricity is described below:

(1) Electricity is produced in generators at a **Generating Station** (power plant). The generator converts mechanical energy to electrical energy by forcing electrical current to flow through an external circuit. Typically an electric conductor, such as copper, spins within a magnetic field to produce electricity. The energy used to spin the conductor can come from natural gas, coal, falling water, nuclear energy, and renewable resources such as wind and solar energy. At generating stations, electricity is typically produced at less than 30,000 volts (30 kV). Before entering the transmission lines, the electricity is "stepped up" to high voltages by transformers (devices that increase or decrease the voltage on a circuit).

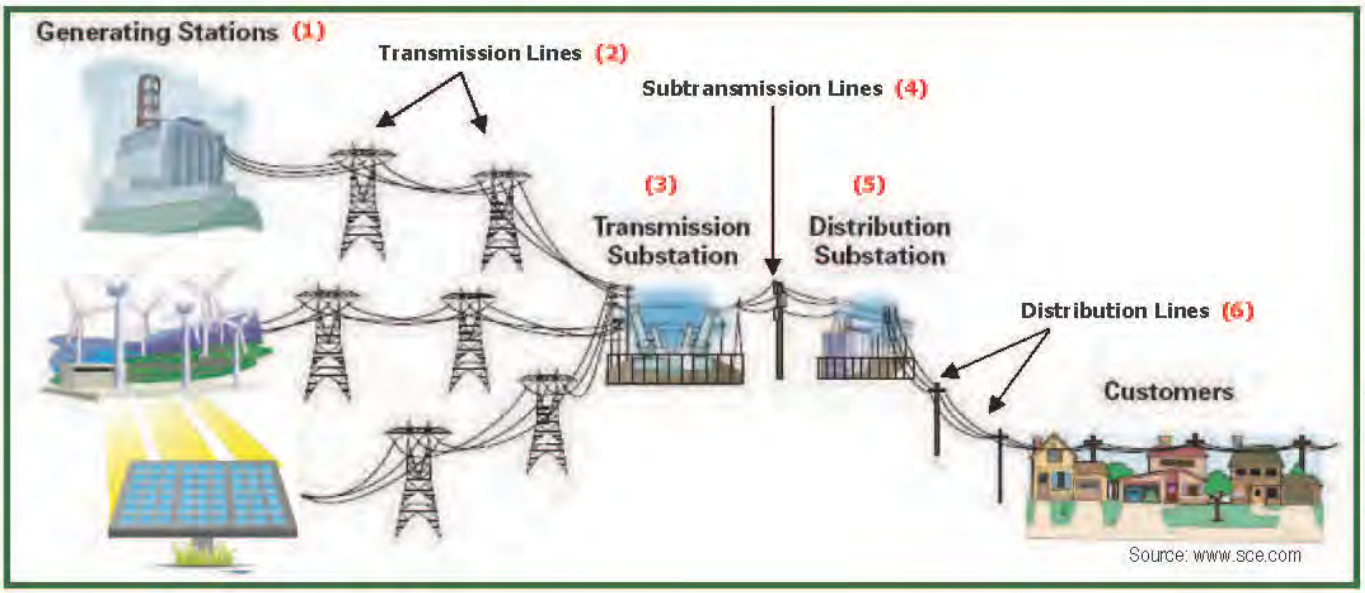
(2) The **Transmission Lines** carry electricity over long distances, from the generating facility to areas of demand. The electricity in transmission lines is transported at voltages of over 200 kV to maximize efficiency. Voltages of 220 kV to 500 kV are typical. Transmission lines are usually attached to large lattice steel towers or tubular steel poles.

(3) A **Transmission Substation** connects two or more transmission lines and contains high-voltage switches that allow lines to be connected or isolated for maintenance (also referred to as a **Switching Station**). The substation may have transformers to convert between two transmission voltages, or equipment such as phase angle regulators to control power flow between two adjacent power systems. A large transmission substation can cover many acres with multiple voltage levels, and a large amount of protection and control equipment (capacitors, relays, switches, breakers, voltage and current transformers).

(4) **Subtransmission Lines** carry electricity at voltages less than 200 kV; typically 66 kV or 115 kV. Subtransmission lines are usually suspended on tall wood or light-weight steel poles. They can also be placed underground.

(5) A **Distribution Substation** reduces voltage from the high-voltage transmission system to a lower voltage suitable for the local distribution system of an area. It is uneconomical to directly connect electricity consumers to the high-voltage transmission network, unless they use large amounts of energy. Distribution substations are generally located closer to the consumers.

(6) From the Distribution Substation, electricity is transferred to **Distribution Lines.** These lines cover much shorter distances, and are typically energized at 16 kV, 12 kV, or 4 kV. Lower-voltage distribution lines carry electricity to neighborhoods on shorter wooden poles or underground. Transformers located on distribution poles, on a concrete pad on the ground, or underground further step down the voltage before it is ultimately delivered to homes and businesses.



Note: This information is applicable to electric transmission systems in general and not specific to any project.

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Substation

Substations: The electricity in homes is typically 120 volts (1 kV = 1,000 volts). When electricity moves from transmission lines to subtransmission lines to distribution lines, the voltage must be "stepped down" by transformers. This occurs at ***substations***, like the one in the photo on the left.

Power is most often distributed via ***alternating current***, although ***direct current*** is sometimes used for long-distance, high-voltage transmission.

Alternating current (AC) changes direction periodically. A cycle is one full period, where current flows first in one direction and then in the other. In North America, the standard frequency of alternation is 60 cycles per second (60 hertz [Hz]). Most transmission lines transport AC power because electricity is generated and used as alternating current, and a transformer can be used to change the voltage where necessary.

Direct current (DC) flows in one direction and is useful to transmit electricity over very large distances and between asynchronous grids (because DC electricity does not cycle, it can be used to connect two grids that are not in synch or at the same frequency). However, transformers cannot change the voltage of direct current; it must be converted back into alternating current to be stepped down for distribution.

High voltage (500-kV) AC transmission lines

Subtransmission lines

Distribution lines

Note: This information is applicable to electric transmission systems in general and not specific to any project.

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Transmission System Components

A variety of components are required to successfully deliver electricity from generating stations to local residential and commercial areas. The primary components include the transmission structures, conductors, insulators, and ground wires.

Transmission structures are the most visible component of transmission lines. Transmission structures come in many different designs, but two common types are:

- ***Lattice Steel Towers (LST)*** consist of a steel framework of individual structural components that are bolted or welded together.
- ***Tubular Steel Poles (TSP)*** are hollow steel poles fabricated either as one piece or as several pieces fitted together.

Conductors ("wires") are comprised of materials that readily conduct electric current. Conductors used in transmission lines are usually aluminum placed over a steel core for reinforcement. Transmission line conductors are not insulated; insulation is provided by the air.

500-kV single-circuit LST

500-kV single-circuit TSP

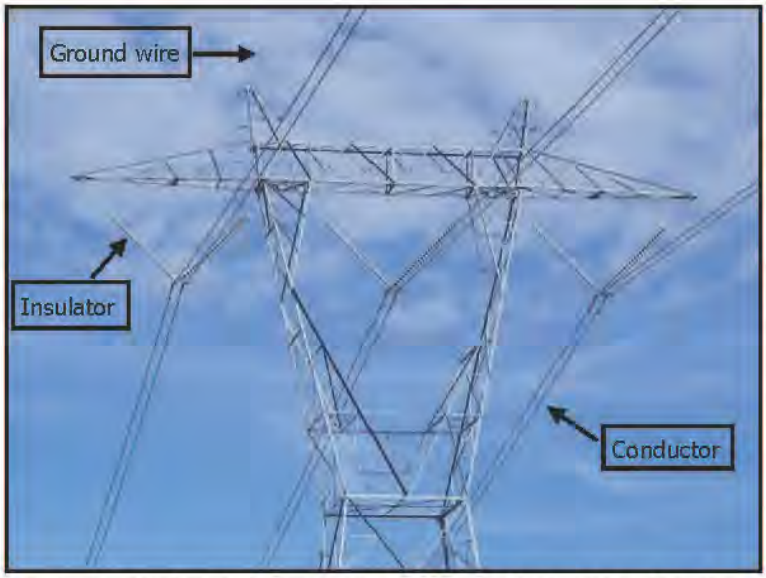
Conductors are connected to towers via **insulators** that support the conductors on the tower. They must withstand normal operating voltage and surges due to switching and lightning. Insulators have commonly been comprised of porcelain or toughened glass, which need routine cleaning to eliminate dust build-up that can lead to insulator flashover and noise. Newer insulators are composed of polymer or silicon, which are lightweight and shatter-resistant. There are two common types of insulators:

- ***Horizontal post-type***, which supports the conductor to the side of the structure.
- ***Suspension-type***, which suspends the conductor below the structure (see photo below).

A **circuit** is made up of three phases (for alternating current). Towers can carry one or more circuits, depending on the design (e.g., single-circuit vs. double-circuit towers). For voltages up to 200 kV, a phase is typically a ***single conductor*** (3 wires total per circuit). For voltages over 200 kV, ***bundled conductors*** are often used to increase the current-carrying capability of the line and reduce power loss. Bundled conductors consist of two or more conductor cables connected by non-conducting spacers. 220-kV and 500-kV lines often have two conductors per phase (6 wires total per circuit).

Voltage in a phase conductor is not constant; surges can happen, and fluctuations occur due to demand at any given time. A 500-kV line can accommodate up to and slightly above 500 kV, but usually carries lower voltages.

Ground wires (also called shield or earth wires) are strung along the tops of the towers to protect the system from lightning strikes. High-voltage systems usually have two ground wires. Transmission systems must have reliable communications for control of the lines and substations. For example, substations have built-in mechanisms to detect problems and shut down line sections. Telecommunication lines can be attached to the transmission towers or installed in separate locations, such as nearby streets. The ground wire sometimes incorporates a fiber optic communications line.



Single-circuit LST illustrating three phases supported by insulators. Note the three sets of bundled conductors which combine to make one circuit. Two ground wires are located at the top of the structure on raised peaks.

Note: This information is applicable to electric transmission systems in general and not specific to any project.

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Substations and Switchyards

- ***Substation.*** The function of a substation is to transform voltage to a lower or higher level of voltage, and to provide the ties, transformation, switching, and protection for the transmission and distribution systems. Substations contain transformers in order to convert voltage levels, as well as circuit breakers, and a large amount of protection and control equipment. Substations can vary in size, depending on the amount of voltage being transferred and the number of lines terminating at or originating from the substation. There are various types and classifications assigned to different substations, based on the amount of voltage, transformation desired, and equipment on site. Substations can be manned or unmanned.

Electric substation, with transformers and associated equipment shown in the foreground, and transmission towers and lines present in the background. (photo credit: www.ethospower.in)

- ***Switchyard.*** A switchyard is a substation without transformers which operates only at a single voltage level. These systems can be associated with a transformer substation, or can be a separate, stand-alone facility. Switchyards can be manned or unmanned. Switchyards are mainly used for connections and interconnections. The switchyard delivers generated power from the power source to the nearest grid or transmission line.

Note: This information is applicable to electric transmission systems in general and not specific to any project.

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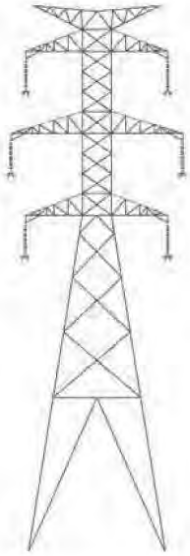
Transmission Structures

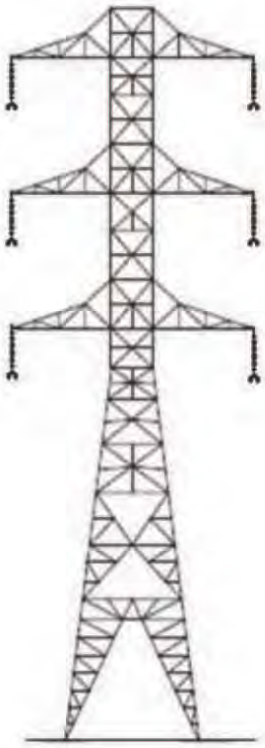
Transmission structures are one of the most visible elements of the electric transmission system. They support the conductors used to transport electric power from generation sources to customer load. Transmission lines carry electricity over long distances at high voltages, typically between 115 kV and 765 kV (115,000 volts and 765,000 volts).

There are many different designs for transmission structures. Two common types are:

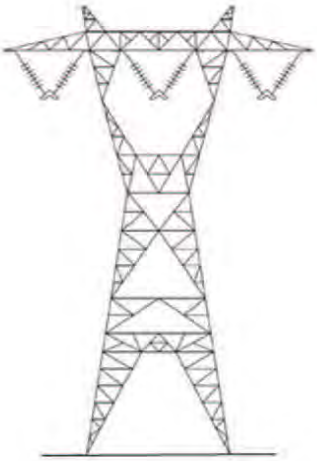
- **Lattice Steel Towers (LST)**, which consist of a steel framework of individual structural components that are bolted or welded together
- **Tubular Steel Poles (TSP)**, which are hollow steel poles fabricated either as one piece or as several pieces fitted together.



220-kV double-circuit LST
(Height range: 110-200 ft.)



500-kV double-circuit LST
(Height Range: 150-215 ft.)



500-kV single-circuit LST
(Height range: 80-200 ft.)

Both LSTs and TSPs can be designed to carry either one or two electrical circuits, referred to as **single-circuit** and **double-circuit** structures (see examples above). Double-circuit structures typically hold the conductors in a vertical or stacked configuration, whereas single-circuit structures typically hold the conductors horizontally. Due to the vertical configuration of the conductors, double-circuit structures are taller than single-circuit structures. On lower voltage lines, structures sometimes carry more than two circuits.

A single-circuit alternating current (AC) transmission line has three **phases**. At low voltages, a phase usually consists of one conductor. At high voltages (over 200 kV), a phase can consist of multiple conductors (bundled) separated by short spacers. A double-circuit AC transmission line has two sets of three phases.

Dead-end towers are used where a transmission line ends; where the transmission line turns at a large angle; on each side of a major crossing such as a large river, highway, or large valley; or at intervals along straight segments to provide additional support. A dead-end tower differs from a suspension tower in that it is built to be stronger, often has a wider base, and has stronger insulator strings.

Note: This information is applicable to electric transmission systems in general and not specific to any project.

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Example of a 500–kV single-circuit LST.

Example of a 220-kV double-circuit LST.

Structure sizes vary depending on voltage, topography, span length, and tower type. For example, double-circuit 500-kV LSTs generally range from 150 to over 200 feet tall, and single-circuit 500-kV towers generally range from 80 to 200 feet tall. Double-circuit structures are taller than single-circuit structures because the phases are arranged vertically and the lowest phase must maintain a minimum ground clearance, while the phases are arranged horizontally on single-circuit structures. As voltage increases, the phases must be separated by more distance to prevent any chance of interference or arcing. Thus, higher voltage towers and poles are taller and have wider horizontal cross arms than lower voltage structures.

220-kV double-circuit TSP
(Height Range: 70-200 feet)

220-kV single-circuit TSP
(Height Range: 70-200 ft.)

220-kV single-circuit H-frame TSP
(Height range: 55-200 ft.)

Note: This information is applicable to electric transmission systems in general and not specific to any project.

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Public Involvement During Scoping

What is Scoping?

The process of determining the focus and content of the environmental analysis for a project is called "scoping". Scoping is an opportunity for agencies and the public to provide input on issues to be evaluated in the Environmental Impact Report/Environmental Impact Statement (EIR/EIS).

Comments provided during the scoping process can help the California Public Utilities Commission (CPUC) and U.S. Department of the Interior, Bureau of Land Management (BLM) to:

- Identify the people and organizations interested in the project
- Identify environmental issues that may need to be analyzed in the EIR/EIS
- Identify gaps in important data and information
- Identify potential alternatives to be considered in the environmental analysis
- Identify possible ways to reduce or avoid adverse environmental impacts

Suggestions for Effective Participation in Scoping

- Review project information available at the scoping meeting and on the project website
- Ask questions at the scoping meeting to understand the project and the environmental review process
- Suggest reasonable alternatives that may meet the need for and purpose of the proposed project
- Suggest measures that may help avoid or minimize potential adverse effects on the environment
- Submit written comments to explain important environmental issues that may need to be considered in the environmental analysis

Environmental Resources and Issues

Typical environmental resources and issues addressed in an EIR/EIS include:

- Air Resources
- Biological Resources
- Climate Change
- Cultural Resources
- Environmental Justice
- Geology and Soil Resources
- Hazards and Hazardous Materials
- Lands Use
- Mineral Resources
- Noise
- Paleontological Resources
- Recreation
- Transportation and Traffic
- Utilities and Public Services
- Visual Resources
- Water Resources
- Wildland Fire
- Growth-Inducing Effects

How to Submit Comments

Scoping comments will be accepted through **September 3, 2014**. You can submit comments by filling out a comment card or sending a letter or an e-mail.

E-mail: CLTP-EIR-EIS@aspeneg.com

Mail: Coolwater-Lugo Scoping Comments
c/o Aspen Environmental Group
5020 Chesebro Road, Suite 200
Agoura Hills, CA 91301

Fax: (888) 423-2220

Project Websites:
www.cpuc.ca.gov/Environment/info/aspen/cltp/cltp.htm
www.blm.gov/ca/st/en/fo/barstow/renewableenergy/coolwater_lugo.html

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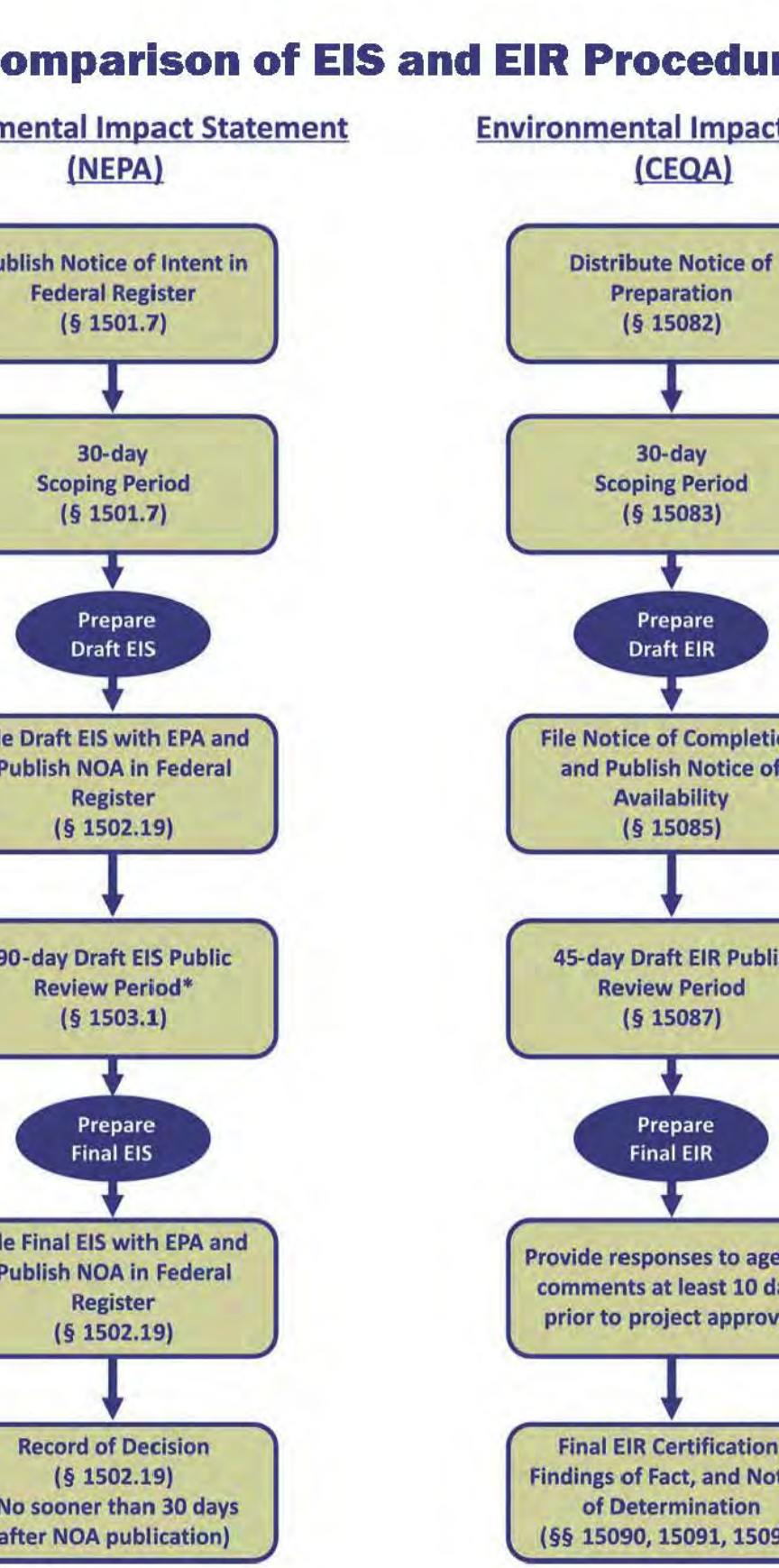
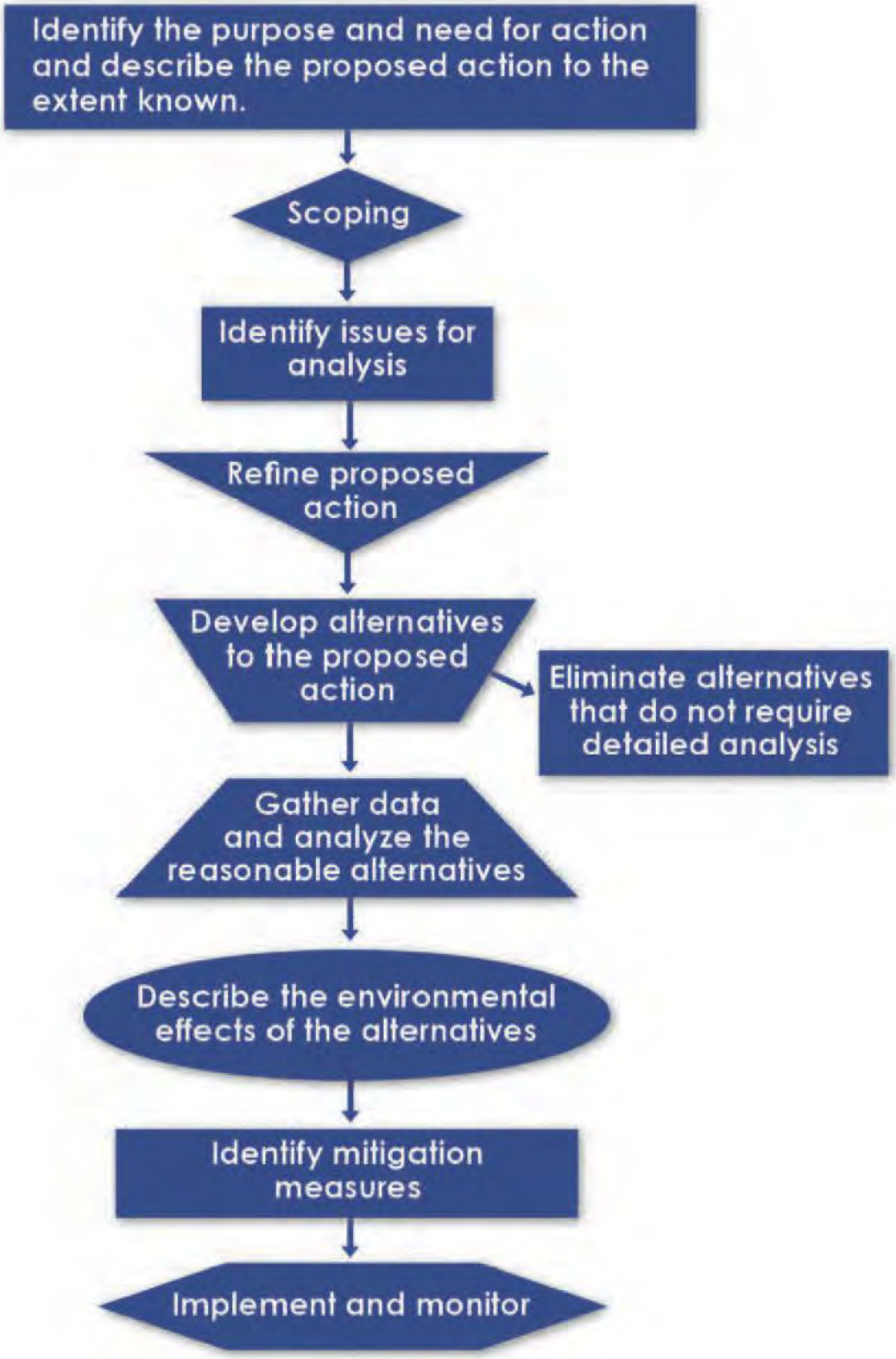
Comparison of EIS and EIR Procedures



* Because the project involves a plan amendment, BLM's procedures require a 90-day review period for the Draft EIS.

EIR/EIS Process



California Public Utilities Commission

The Transmission Line Application Process

A Step-By-Step Guide

- **Utility files CPCN application** – A utility files an application with the CPUC for a Certificate of Public Convenience and Necessity (CPCN) to construct a transmission line. The CPCN application will include a proponent's Environmental Assessment (PEA). The need for the project may be based on economic, reliability, or renewable goals, or any combination of the three.
- **Parties respond or protest** – Parties generally respond to or protest an application within 30 days of the filing of the application, or as set by the assigned Administrative Law Judge (ALJ).
- **CPUC staff review application** - CPUC staff review the CPCN application, and the PEA, for completeness and notify the utility-applicant of whether the application is complete, or identify any deficiencies with the application within 30 days of the filing date.
- **Application deemed complete** - Once deficiencies have been corrected, CPUC staff sends a letter to the applicant deeming the application "complete."
- **ALJ holds a prehearing conference** - At any time after the filing of the CPCN application, the ALJ may schedule a pre-hearing conference to discuss issues such as the proper scope of the proceeding, discovery rules, the service list, and the schedule for the proceeding.
- **Notices of Intent to Seek Compensation** - Qualified groups or individuals planning to seek intervenor compensation must file and serve a notice within 30 days of the prehearing conference.
- **Discovery**– Parties may engage in discovery; written data requests are the most common method of discovery in CPUC proceedings. Often, the ALJ, Assigned Commissioner, or the full Commission will set limits on the time for discovery.
- **Scoping Memo** - Some time after the prehearing conference, the Assigned Commissioner issues a written ruling defining the issues the Commission will consider in the proceeding, and setting the schedule.
- **Initial environmental study** - When it is not clear whether the Commission must issue either an environmental impact report or a negative declaration under CEQA, CPUC staff will first prepare an initial study. When it is clear that the Commission must issue an environmental impact report, the staff can skip this step. If the proposed project involves federal land, the CPUC may develop a joint CEQA/NEPA environmental document with the relevant federal agency.
- **Public environmental review process begins** – CPUC environmental review staff and their consultants conduct public scoping meetings to help identify the range of actions, alternatives, environmental effects, methods of assessment, and mitigation measures that the Commission will evaluate in its environmental review process.

- **Draft EIR issues** – CPUC environmental staff issues a draft environmental impact report (EIR) for at least 45 days of public comment. The CPUC usually sponsors public meetings in the area of the project during the comment period.
- **Testimony served** – Parties serve expert witness testimony on parties to the proceeding to address the issues within the scope of the proceeding, including the need for the project and alternatives to the project.
- **Evidentiary hearings** – If there are disputed facts, the ALJ holds evidentiary hearings where parties may cross examine the experts who filed testimony.
- **Briefs filed** – At the conclusion of the evidentiary hearings, parties file briefs (and, often, reply briefs) regarding the conclusions the CPUC should reach in the proceeding. In opening briefs, parties offer arguments to support their positions, citing applicable facts that have been offered in evidence and received by the Commission, as well as citing applicable law, and referring to prior Commission decisions that may be informative. In reply briefs, parties are limited to pointing out errors of law or fact in the opening briefs provided by other parties.
- **Final EIR issues** – CPUC environmental review staff issues a final EIR, addressing the public comments made on the draft EIR.
- **Proposed decision mailed** – The ALJ writes the proposed decision based on the record in the proceeding and the Commission distributes it to parties. Individual Commissioners have the option of preparing proposed decisions of their own, called alternate decisions. If the Assigned Commissioner wishes to sponsor an alternate, he or she must mail it at the same time as the proposed decision. Parties have an opportunity to file comments on the proposed and alternate decision(s).
- **Commission vote** – The ALJ may amend the proposed decision in response to comments received. Similarly, a commissioner offering an alternate may amend it. No sooner than 30 days after the CPUC mails the proposed decision to the parties, the CPUC commissioners may vote on the decision. The Commission may reject or accept a proposed or alternate decision in its entirety, or change it in any way consistent with the law and evidentiary record.
- **Private or "*ex parte*" communications in CPCN proceedings** – The ALJ will not entertain any communication involving substantive issues in the proceeding that is not made either in a properly-noticed public hearing or in the form of sanctioned written pleadings that are simultaneously provided to all parties. As a general rule, if the CPCN proceeding is categorized as "rate setting," (as most are) a party seeking an *ex parte* communication with a commissioner must first receive the Commissioner's consent, and then serve a notice of the meeting on all parties several days in advance. The party must also file and serve a written report of the communication within three working days. All other parties then have the right to a follow-up meeting of equal length to discuss the same issues. A Commissioner's advisor can receive an *ex parte* communication if the party receives prior consent, and if within three working days, the party sends a notice to all parties describing the discussion. For additional information regarding the CPUC's rules regarding *ex parte* communications with decisionmakers, please refer to the CPUC's Rules of Practice and Procedure, Rules 7 and 7.1, available at:

http://www.cpuc.ca.gov/PUBLISHED/RULES_PRAC_PROC/70731.htm

Appendix C-2

Poster Boards Presented at Scoping Meetings

- Biological Resources
- Biological Resources (map)
- Cultural Resources
- Land Designations and Uses
- Land Designations and uses (map)
- Transmission Line Construction
- Project Map (3 boards)
- EIR/EIS Process
- Visual Simulations (2 boards)

Vegetation and Wildlife

GOAL: To Identify and Mitigate Impacts to Biological Resources from the Construction and Operation of the Coolwater-Lugo Transmission Project

Important Biological Considerations in the Project Area

VEGETATION

The project spans a variety of native and disturbed vegetation communities including:

- Creosote bush scrub, saltbush scrub, riparian habitat, Joshua tree and Juniper woodland, and ruderal vegetation

RARE PLANTS

The range of soil types in the region supports a diverse array of State and federally sensitive plants including:

- Mojave monkeyflower, small flowered androstephium, Barstow woolly sunflower, San Bernardino dudleya, and various cacti

WILDLIFE

The vegetation and topography in the region supports an array of State and federally sensitive wildlife including:

- **Invertebrates**: Shoulderband snails and Ford's Indra swallowtail butterfly
- **Amphibians and Reptiles**: Desert tortoise, Mojave fringe-toed lizard, coast horned lizard, rosy boa, and arroyo toad
- **Birds**: Golden eagle, Bendire's thrasher, burrowing owls, least Bell's vireo, and southwestern willow flycatcher
- **Mammals**: Mohave ground squirrel, desert kit fox, American badger, big horn sheep, and various bats

STATE AND FEDERAL JURISDICTIONAL WATERS

Ephemeral and intermittent drainages are common in the region and provide important habitat for many desert species. Some of these features include:

- The Mojave River and Daggett wash
- Numerous large and small ephemeral washes
- Lake Lucerne, Rabbit Lake, and other desert basins

DESIGNATED NATURAL AREAS AND HABITATS

The project traverses or is near areas designated as important habitat for plants and wildlife by State and federal agencies. Some of these include:

- Ord-Rodman Desert Wildlife Management Area
- Ord-Rodman Desert Tortoise Critical Habitat
- Mojave Monkeyflower Area of Critical Environmental Concern
- Bendire's Thrasher Area of Critical Environmental Concern
- Juniper Flats Area Critical Environmental Concern

Examples of Potential Impacts to Sensitive Vegetation and Wildlife

Activity	Types of Impacts
	Sensitive Plants and Vegetation
Earth moving, grading, habitat/vegetation removal	• Direct loss of rare plants • Disruption of soil surfaces, native seed bank or compaction of soils • Establishment of ruts or depressions that can alter soil conditions and hydrology • Increase risk of colonization by invasive weeds
Dust	• Interference with photosynthesis
Wildfires	• Change in plant composition or increased fire frequency
	Wildlife
Earth moving, grading, habitat/vegetation removal	• Direct mortality to small or less mobile species • Crushing of burrows, disruption of soil surfaces, compaction of soils, and displacement of native species • Fugitive dust and habitat loss • Degradation of water quality in breeding areas from erosion and sedimentation • Displacement of breeding birds and the abandonment of active nests • Loss of foraging habitat
Noise and vibration	• Interference with breeding or foraging activities and movement patterns • Interference with hearing resulting in increased predation • Abandonment of nests
Placement and use of access roads	• Crushing of ground nests • Invasive weeds, increased fires, human intrusion
Traffic	• Accidental mortality of opportunistic predators and scavengers (such as carrion birds) feeding on road kill • Disruption of breeding, foraging, and movement of bird species resulting in nest, roost, or territory abandonment and subsequent reproductive failure (during breeding season) • Ingestion of microtrash (i.e., broken glass and small pieces of metal) or ethylene glycol antifreeze
Operation	• Collision and electrocution with new transmission lines or towers • Road kill, increased prey sources, and perching opportunities

Mojave Monkeyflower

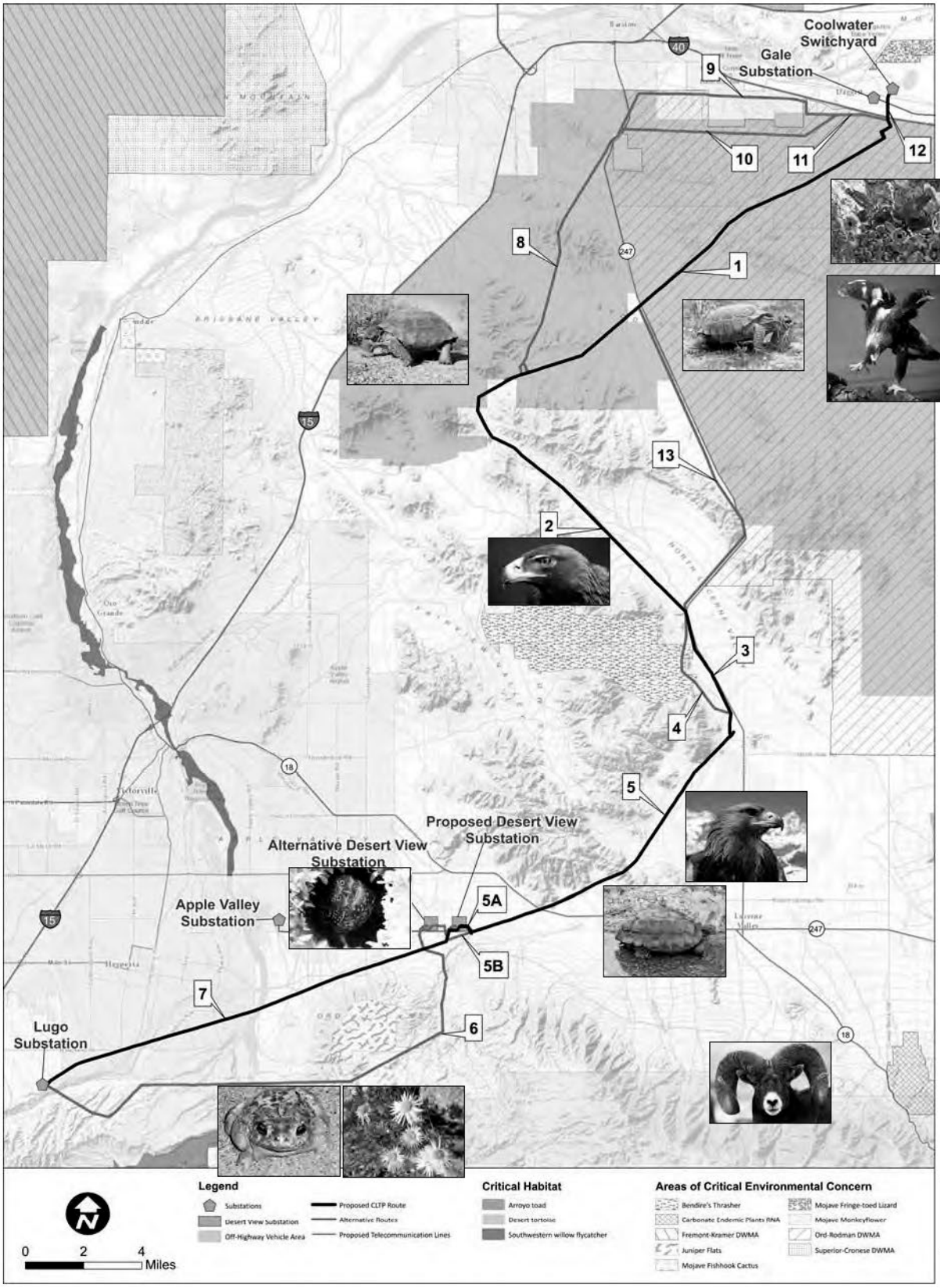
Desert Tortoise

Burrowing Owl

Big Horn Sheep

Golden Eagle

Vegetation and Wildlife



Cultural and Paleontological Resources

GOAL: To Identify and Mitigate Impacts to Significant Cultural and Paleontological Resources from the Construction and Operation of the Coolwater-Lugo Transmission Project

Why is it Important to Protect Cultural and Paleontological Resources?

Federal, State, and public lands contain diverse and important cultural landscapes, historical structures, and archaeological sites that belong to all of us. These resources represent a shared history and are part of our national heritage. Cultural and paleontological resources are an informative and irreplaceable part of our heritage. It is essential that they are preserved and protected for the benefit and enjoyment of future generations.

Cultural Resources

Prehistoric Archaeological Sites:

The project includes a variety of prehistoric archaeological sites dating from 10,000 years ago to European Contact. These include:

- Village Sites
- Temporary Camps
- Flaked Stone Tool and/or Plant Processing Locales
- Tool Stone Quarries
- Native Trails

Quartz Cottonwood Projectile Point

Historical Archaeological Sites:

Historic-era archaeological sites in the project area include a diverse array of site types relating to settlement of the Mojave Desert Frontier spanning 1820 to present. These include:

- Agricultural Homesteads
- Historic Debris Scatters
- Mines and Quarries
- Historic Trails and Transportation Routes

Historical Can Scatter

Historical Dishes

Built Environment Resources:

The project includes a variety of built environment resources relating to development of the Mojave in the Nineteenth and Twentieth centuries. These include:

- Electrical Transmission and Power Lines
- Electrical Transmission Substations
- Water Conveyance Facilities (e.g., California Aqueduct, Irrigation Ditches, Canals, etc.)
- Historical Buildings and Structures
- BNSF Railroad
- National Old Trails Highway/US Route 66

Lugo Substation Garage

BNSF Railroad Grade

Native American Resources:

The project intersects ethnographic territories of multiple Native American groups including the Desert Serrano, or Vanyume Tribe, Mojave and related Yuman speakers of the Lower Colorado, the Chemehuevi-branch of the Southern Paiute, and the Kawaiisu. Significant Native American Resources may include:

- Traditional Cultural Properties and Places of Spiritual Importance
- Ethnographic Village Sites
- Cemeteries and Burial Sites

Paleontological Resources

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). In general, fossils are considered to be greater than 5,000 years old (Middle Holocene) and are typically preserved in sedimentary rocks.

Partial Prehistoric Rock Ring

The project area consists of Paleozoic to Mesozoic aged undifferentiated igneous and metamorphic rocks, Paleozoic Fumace limestone and dolomite, Miocene terrestrial sediments, and Quatemary alluvial and eolian deposits. Known fossil localities are in the highly sensitive Crowder and Barstow Formations and the moderately sensitive Quaternary older alluvium. These include:

- Camel
- Horse
- Saber Tooth Cat
- Pronghorn Antelope
- Dog
- Cat
- Rodents, Snakes, Lizards, Tortoise

Historical Structure

Bear Skull

Baby Woolly Mammoth Jaw

Activity	Types of Impacts
Earth Moving, Grading, Habitat/Vegetation Removal.	Destruction (or partial destruction) or modification of cultural and/or paleontological resources, degradation of a cultural or paleontological resource's integrity, impairment of the ability to recover important information from significant resources. Intrusions on the visual setting and context of cultural resources, and the discovery (and potential damage to or destruction of) previously unknown cultural and paleontological resources.
Tower site preparation, construction, removal, replacement. Substation improvements.	
Construction of new access roads, staging areas, material yards, extra work spaces.	

Land Designations and Uses

Recreation Resources

BLM-designated OHV Areas:

- Stoddard Valley
- Johnson Valley
- Ord Mountain Route Network
- El Mirage Dry Lake

Non-BLM recreation areas near the proposed route:

Horseman's Center Park, Rabbit Dry Lake, and a community trail within SCE's existing transmission line corridor in the City of Hesperia.

Wilderness Areas

BLM Wilderness Areas:

- Newberry Mountains
- Rodman Mountains
- Bighorn Mountain

Recreation activities allowed in wilderness areas:

Hunting, fishing, and non-commercial trapping are allowed under State and local laws; horseback riding; and camping is limited to 14 days. Mechanized or motorized vehicles are not permitted.

Grazing Allotments

BLM-designated grazing allotments:

- Stoddard Mountain Allotment
- Valley Well Allotment
- Round Mountain Allotment
- Ord Mountain Allotment

Grazing allotments maintain open spaces, provide habitat for wildlife, offer recreational opportunities, and help preserve the rural character of surrounding communities while also providing livestock-based economic opportunities.

Mining Claims

Locatable Minerals:

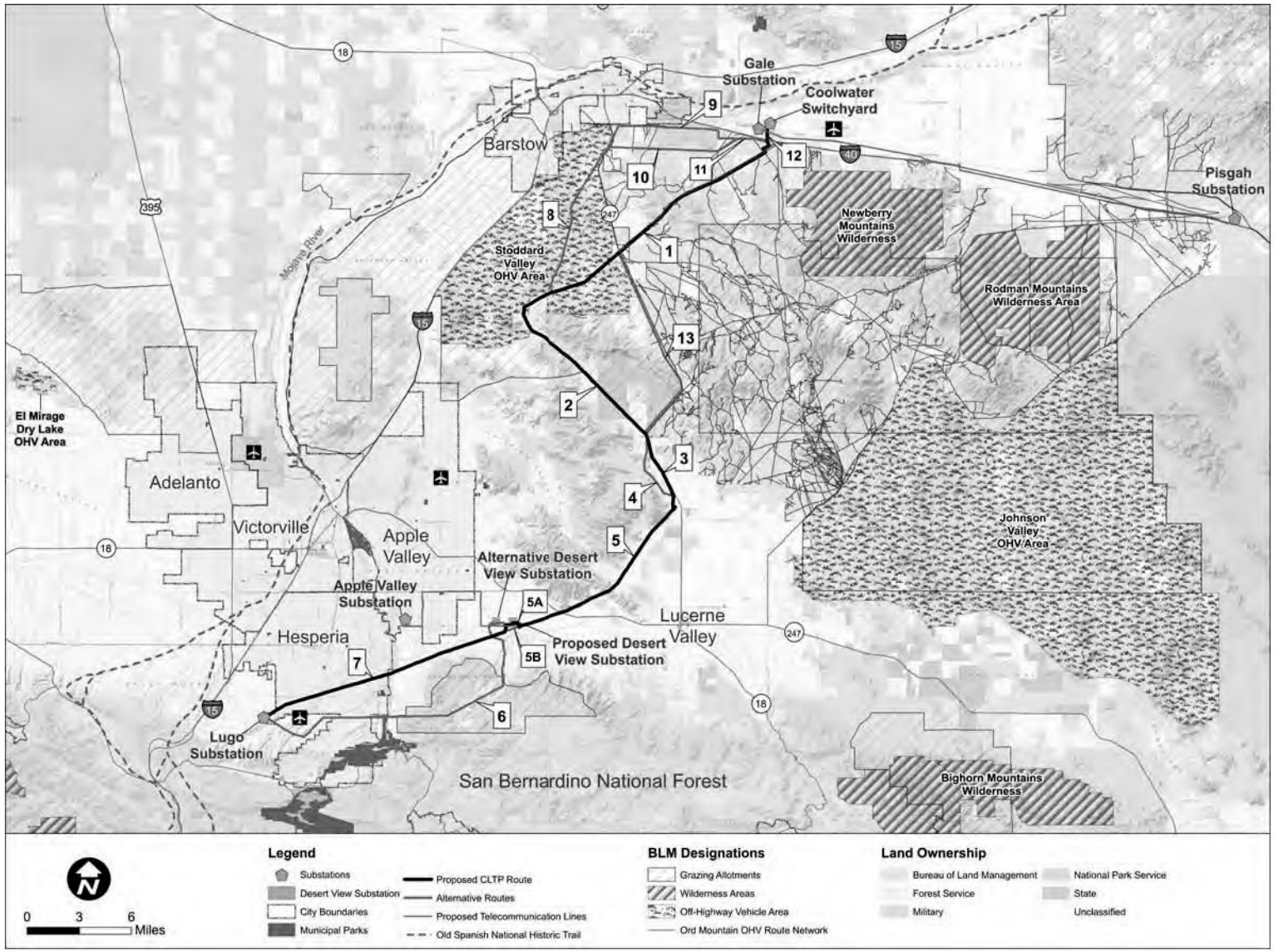
Includes hardrock resources that are typically metals with a unique or special use, such as gold and silver. There are several mining claims in the project area, though none are active.

Saleable Minerals:

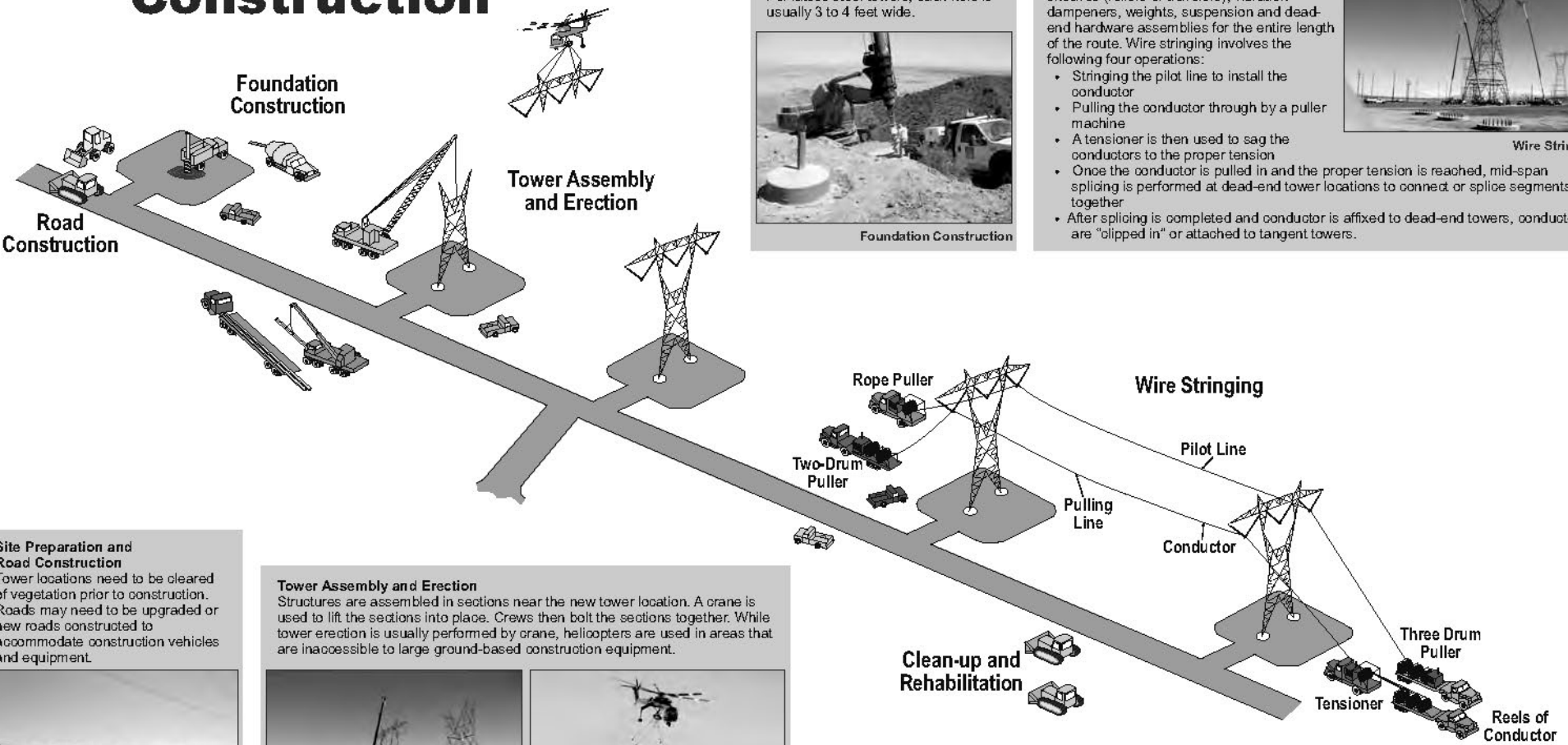
Includes common variety of materials such as sand, stone, and gravel. There are several mining claims for saleable minerals in the project area, specifically sand and gravel, though most are past producers and are not active.

There are no records of oil, gas, or geothermal resources or claims within the vicinity of the proposed route.

Land Designations and Uses



Transmission Line Construction



Foundation Construction
Foundation construction begins with the auguring of holes for footings. For lattice steel towers, each hole is usually 3 to 4 feet wide.

Foundation Construction

Wire-Stringing Operations
These activities include the installation of conductor, ground wire, insulators, stringing sheaves (rollers or travelers), vibration dampeners, weights, suspension and dead-end hardware assemblies for the entire length of the route. Wire stringing involves the following four operations:

- Stringing the pilot line to install the conductor
- Pulling the conductor through by a puller machine
- A tensioner is then used to sag the conductors to the proper tension
- Once the conductor is pulled in and the proper tension is reached, mid-span splicing is performed at dead-end tower locations to connect or splice segments together
- After splicing is completed and conductor is affixed to dead-end towers, conductors are "clipped in" or attached to tangent towers.

Wire Stringing

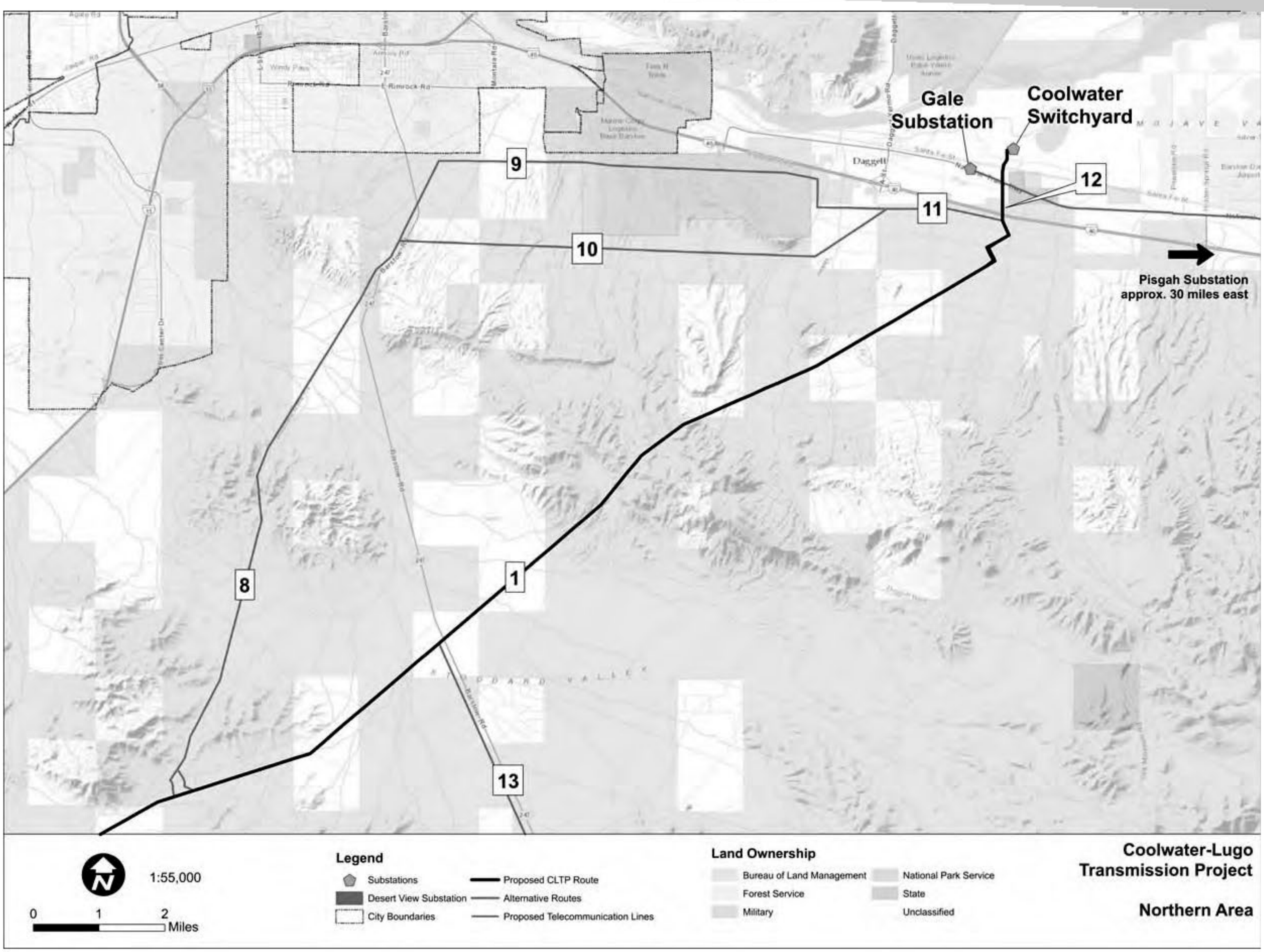
Site Preparation and Road Construction
Tower locations need to be cleared of vegetation prior to construction. Roads may need to be upgraded or new roads constructed to accommodate construction vehicles and equipment.


Road Construction

Tower Assembly and Erection
Structures are assembled in sections near the new tower location. A crane is used to lift the sections into place. Crews then bolt the sections together. While tower erection is usually performed by crane, helicopters are used in areas that are inaccessible to large ground-based construction equipment.


Ground-based Assembly


Helicopter Assembly


Gale Substation
Coolwater Switchyard
Daggett
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Pisgah Substation approx. 30 miles east
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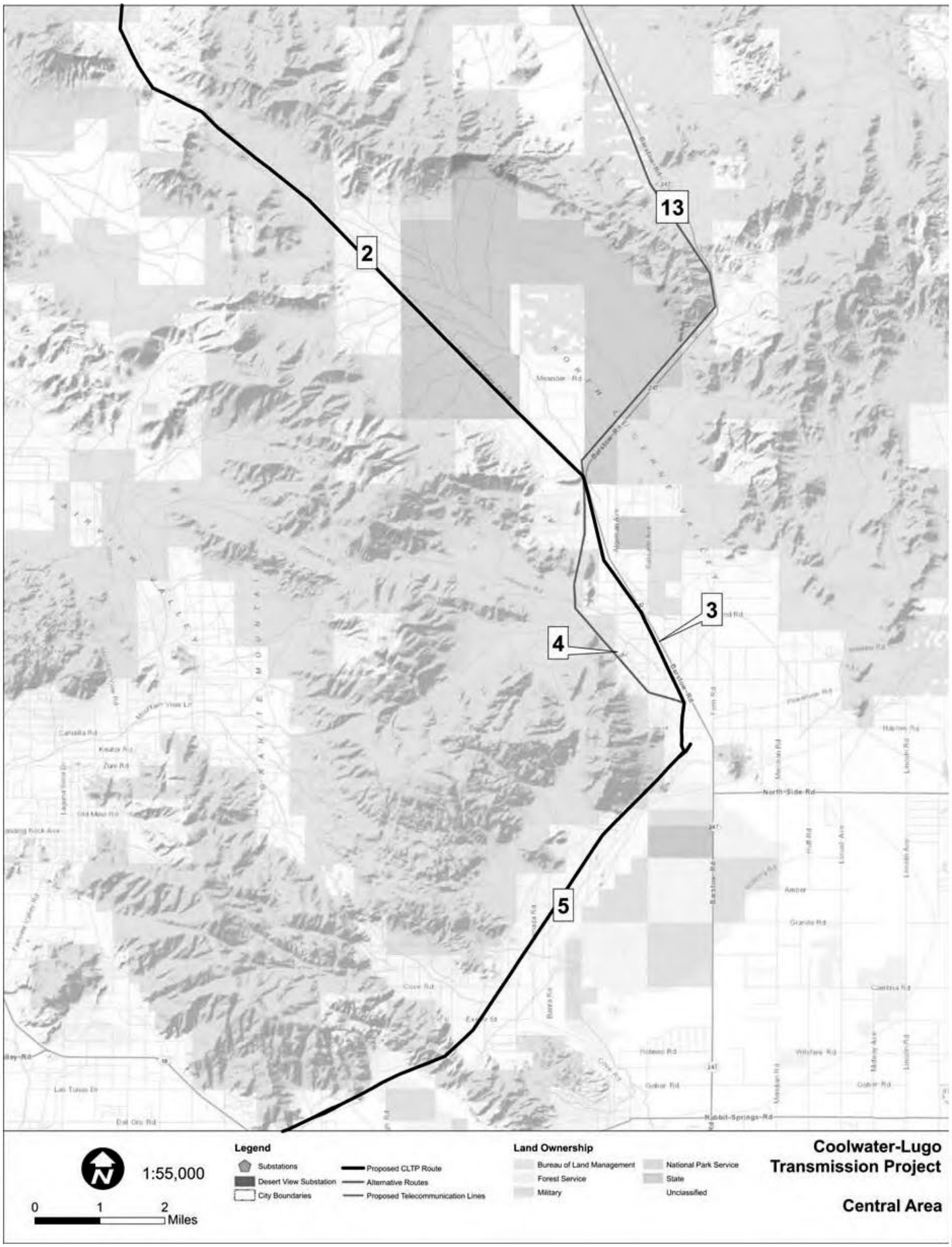
Legend
Substations
Desert View Substation
City Boundaries
Proposed CLTP Route
Alternative Routes
Proposed Telecommunication Lines
Land Ownership
Bureau of Land Management
Forest Service
Military
National Park Service
State
Unclassified
Coolwater-Lugo Transmission Project
Northern Area



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Legend
Substations
Desert View Substation
City Boundaries
Proposed CLTP Route
Alternative Routes
Proposed Telecommunication Lines
Land Ownership
Bureau of Land Management
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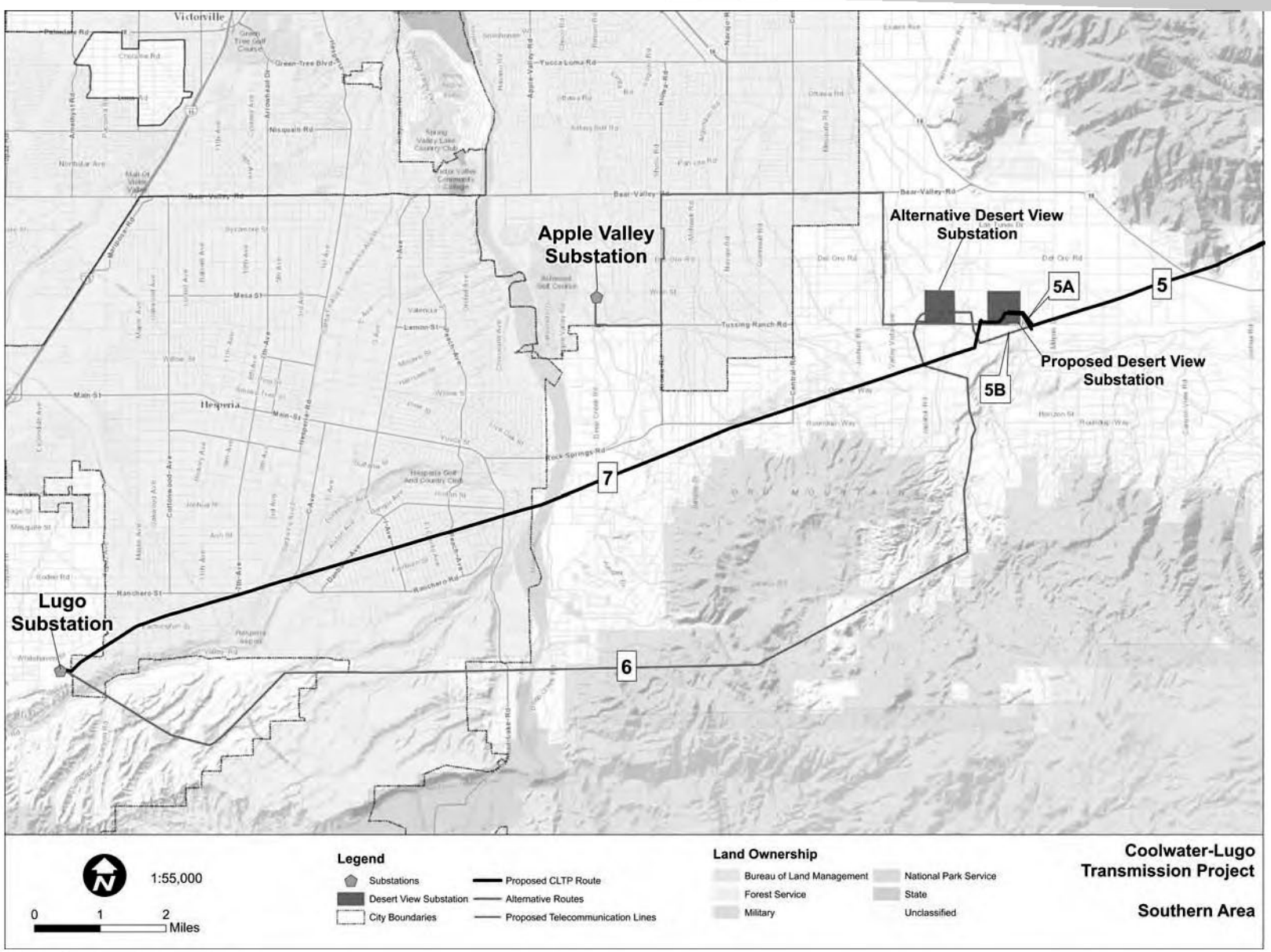
Central Area


Victorville
Apple Valley Substation
Alternative Desert View Substation
Proposed Desert View Substation
Lugo Substation
Hesperia
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5B
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7
Bear Valley Rd
Tussing Ranch Rd
Rock Springs Rd
Ranchero Rd
Main St
Mesa St
Del Oro Rd
Roadrunner Way
1:55,000
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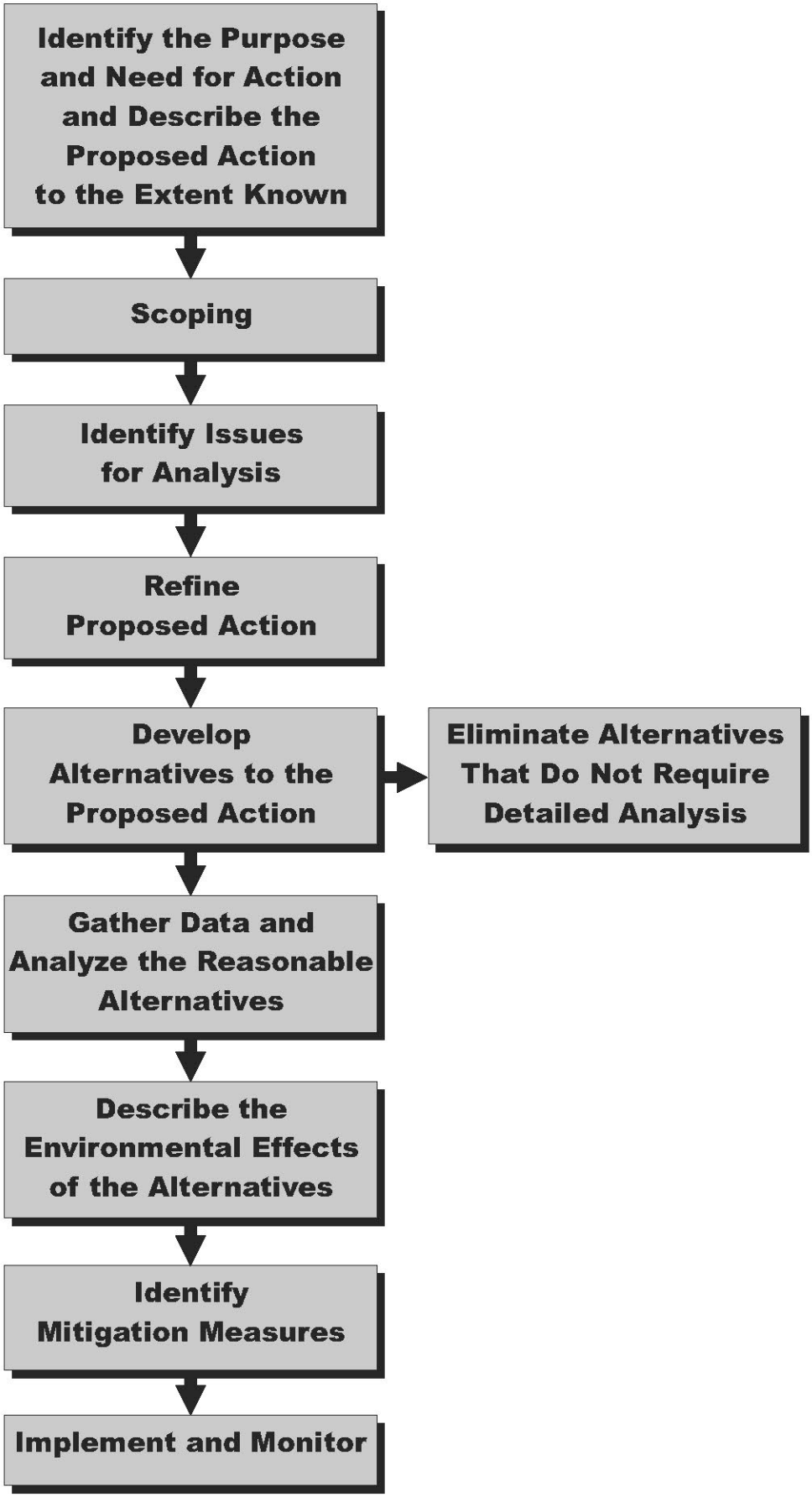
Legend
Substations
Desert View Substation
City Boundaries
Proposed CLTP Route
Alternative Routes
Proposed Telecommunication Lines
Land Ownership
Bureau of Land Management
Forest Service
Military
National Park Service
State
Unclassified
Coolwater-Lugo Transmission Project
Southern Area

EIS/EIR Process



Visual Simulations

Segment 2: Lucerne Valley Cutoff

Existing view southeast from the Lucerne Valley Cutoff in the North Lucerne Valley

Simulated view southeast from the Lucerne Valley Cutoff in the North Lucerne Valley

Segment 3: North Lucerne Valley

Existing view northwest from SR-247 at the intersection of Haynes Road in the Lucerne Valley

Simulated view northwest from SR-247 at the intersection of Haynes Road in the Lucerne Valley

Visual Simulations

Segment 7: Hesperia

Existing view southwest from along Kimball Road, in a residential area at the edge of Hesperia

Simulated view southwest from along Kimball Road, in a residential area at the edge of Hesperia

Desert View Substation

Existing view west from Desert View Road in the Apple Valley area

Simulated view west from Desert View Road in the Apple Valley area

EIR/EIS Scoping Meetings

Coolwater-Lugo Transmission Project

Presentation Agenda

- Welcome and Introduction
- CEQA Lead Agency: California Public Utilities Commission
- NEPA Lead Agency: Bureau of Land Management
- Overview of the Proposed Project
- Environmental Review Process
- Public Comments
- Conclusion

Purpose of the Meeting

- To provide information to the public on the proposed project.
- To describe the environmental review process and subsequent decision making.
- To solicit input from the public on environmental issues and concerns, including alternatives and mitigation measures.
- Please note that the agency representatives at the meeting are responsible for the environmental review of the project, but are not responsible for making decisions to approve or deny the proposed project.

Oral Comments

- After the agency presentations, members of the public may provide oral comments on environmental topics.
- To speak, you must first fill out a speaker registration card.
- Speakers will be called to the microphone individually to provide their comments.
- Out of courtesy for others, please limit your comments to no more than three minutes. If you have longer comments, you may come to the microphone a second time after all others have finished their comments.
- Your speaking time may not be allocated to others.

Acronyms

- CPUC: California Public Utilities Commission
- BLM: Bureau of Land Management (Department of Interior)
- CEQA: California Environmental Quality Act
- NEPA: National Environmental Policy Act
- EIR: Environmental Impact Report
- EIS: Environmental Impact Statement
- SCE: Southern California Edison (project applicant)

Key Players

- California Public Utilities Commission
  - Regulates Investor-Owned Utilities in California
  - Responsible for compliance with CEQA
- Bureau of Land Management
  - Administers activities and uses on designated federal lands
  - Responsible for compliance with NEPA and other federal laws
- Southern California Edison
  - Provides electrical service to a large portion of So. California
  - Regulated by the CPUC

California Public Utilities Commission

ENVIRONMENTAL REVIEW PROCESS

What Does the CPUC Regulate?

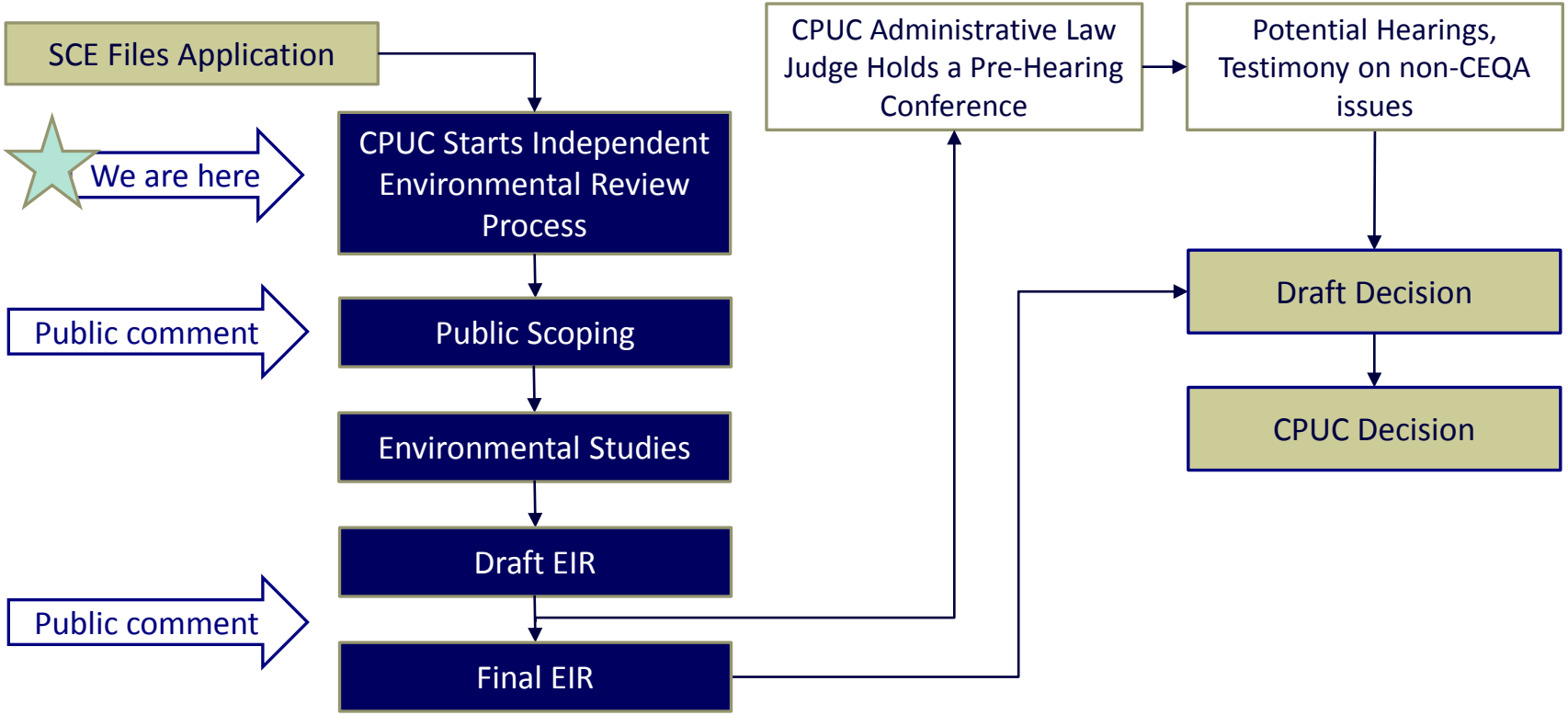
- Investor-Owned Utilities (IOUs)
  - Electricity
  - Telephone Communication
  - Natural Gas
  - Water Supply
  - Transportation and Rail
- Purpose: To ensure that utility services are provided to the public in a safe and reliable manner for a reasonable price.

CPUC Process for Project Review

- The CPUC process has two parts:
  - Ratemaking (need, cost, feasibility, and rates)
  - Environmental Review

Today's meeting is about Environmental Review:
Compliance with the California Environmental Quality Act (CEQA)

CPUC Process for Project Review



For Additional Information

www.cpuc.ca.gov

U.S. Bureau of Land Management

ENVIRONMENTAL REVIEW AND DECISION-MAKING PROCESS

BLM's Role

- BLM Authority
  - Administration of public lands under Federal Land Policy and Management Act of 1976 (FLPMA)
  - Lead agency for NEPA, National Historic Preservation Act, and other federal law compliance
  - Administration of the BLM California Desert Conservation Plan (CDCA 1980, as Amended)
  - Review and processing of an EIS for compliance with NEPA, as well as a CDCA Plan Amendment (PA)
  - Issuance of right-of-way grants for use of federal land
  - Lead agency for consultation with the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act

BLM Authorized Officer's Role

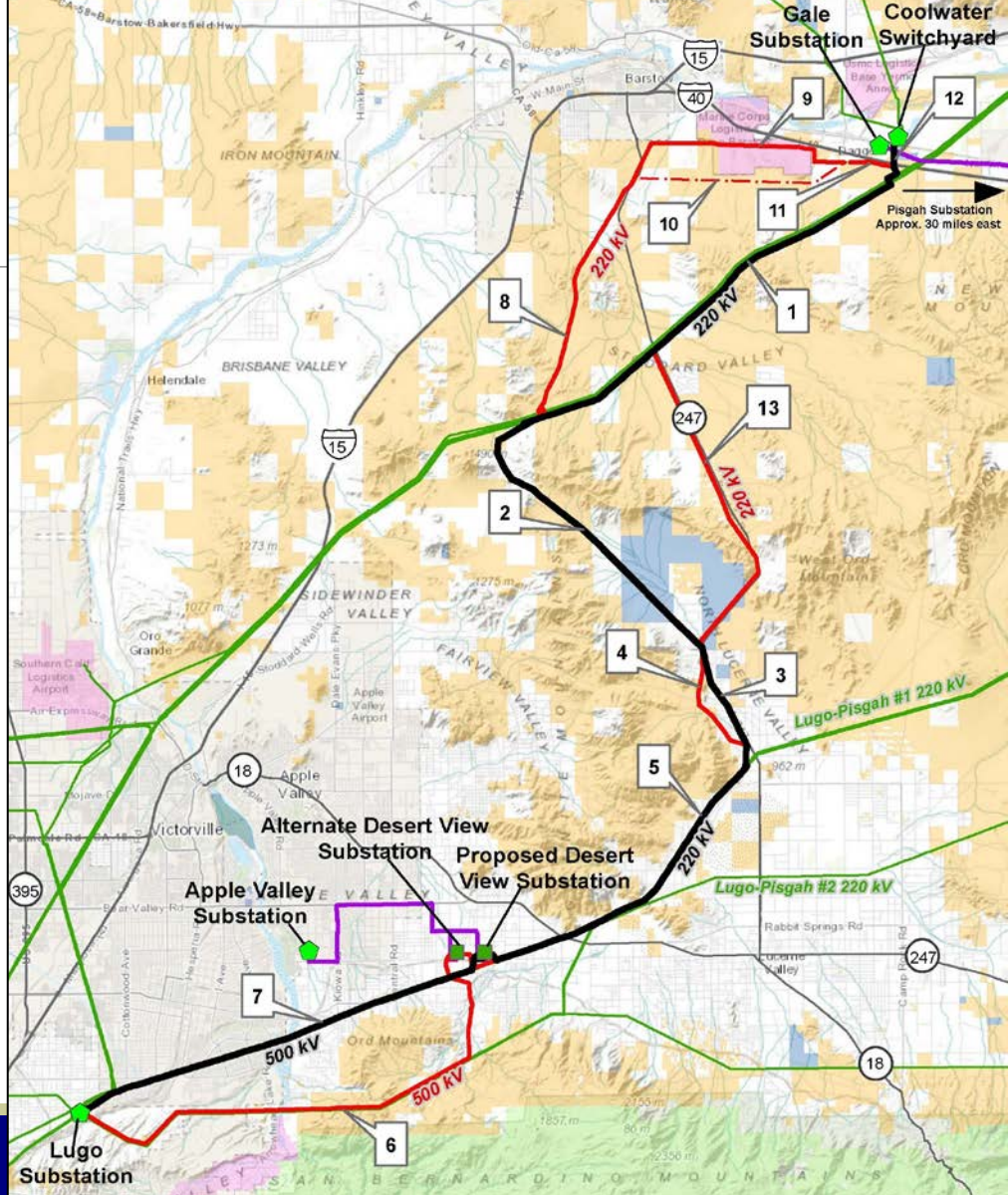
- Initial Response to Proposal
- Pre-application Screening
- Accept Application or Reject Proposal
- Process Application / Land Use Plan Amendment (PA)
  - Conduct Formal Scoping
  - Prepare BLM Planning / NEPA Document (PA/EIS)
  - Conduct Public Comment and Review
  - Finalize BLM Planning / NEPA Document (PA/EIS)
- Approve LUP Amendment / Decision on Application
- Authorize the Use and Establish Monitoring
- Administer Project through Termination of its Right-of-Way

Project Overview

COOLWATER-LUGO TRANSMISSION PROJECT

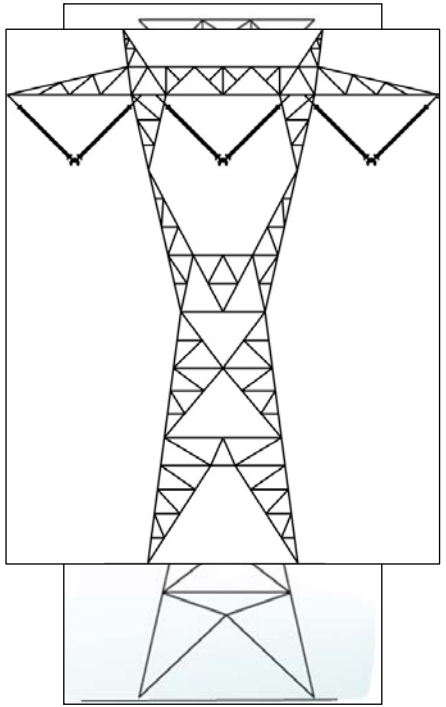
Project Overview

- New high-voltage transmission line extending from the Coolwater Switchyard in Daggett to the Lugo Substation in Hesperia (approx. 64 miles)
- New substation near Apple Valley.
- New telecommunication lines between Apple Valley and Desert View Substations and between Gale and Pisgah Substations.



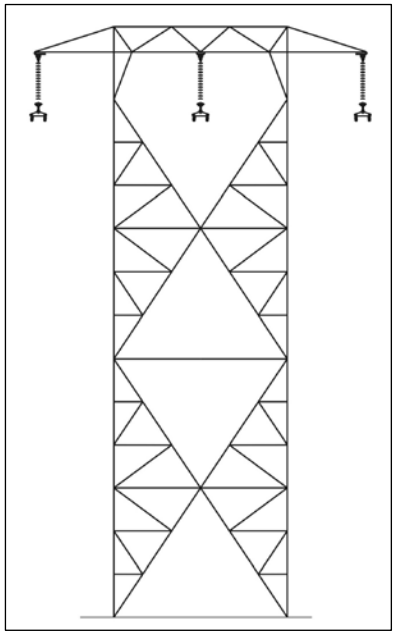
Transmission Structures

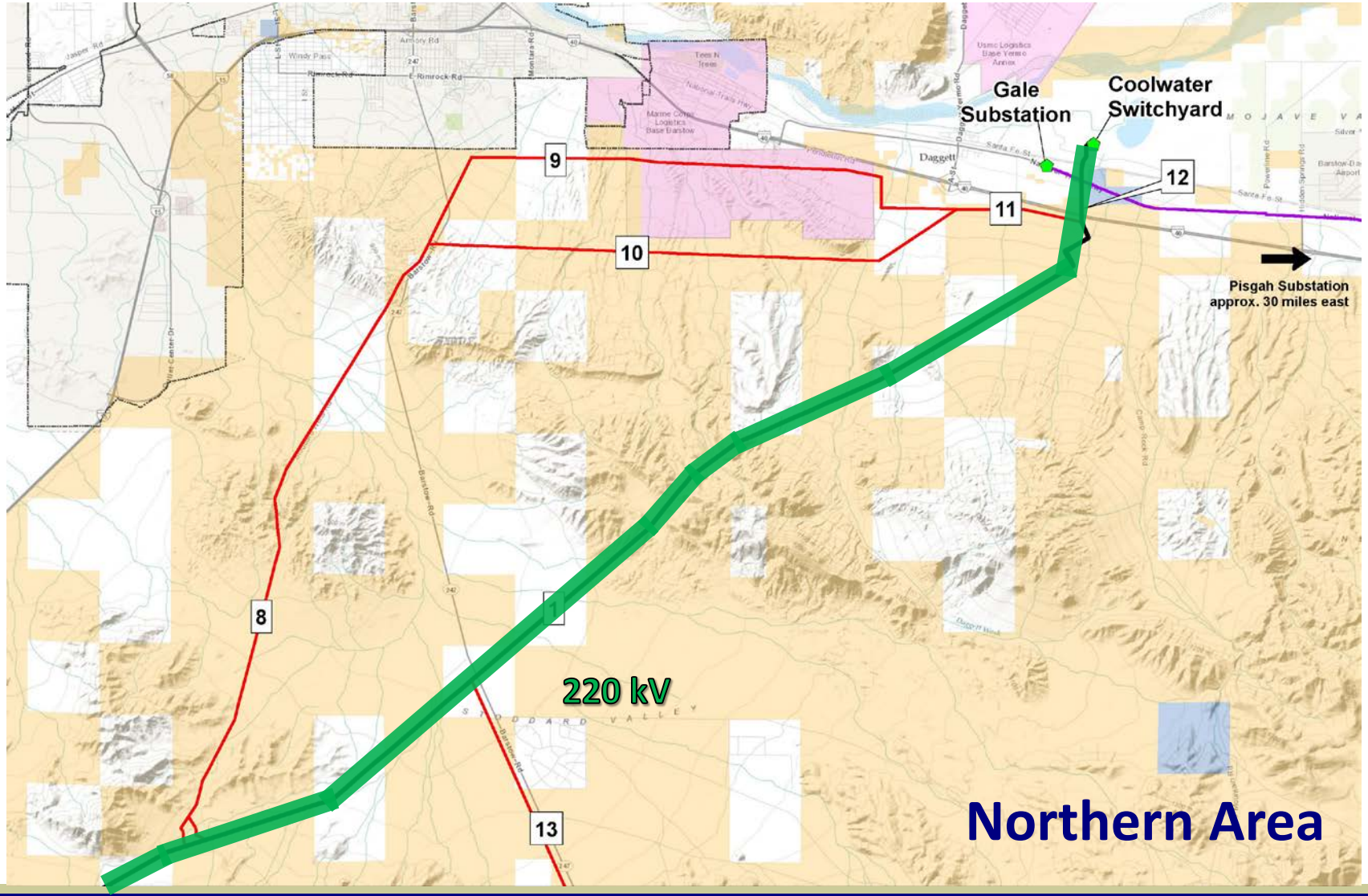
- The northern 48 miles (approx.) would consist of a 220-kV circuit primarily on double-circuit lattice steel towers (LSTs).
- The southern 16.5 miles (approx.) would consist of a 500-kV circuit on single-circuit lattice steel towers.

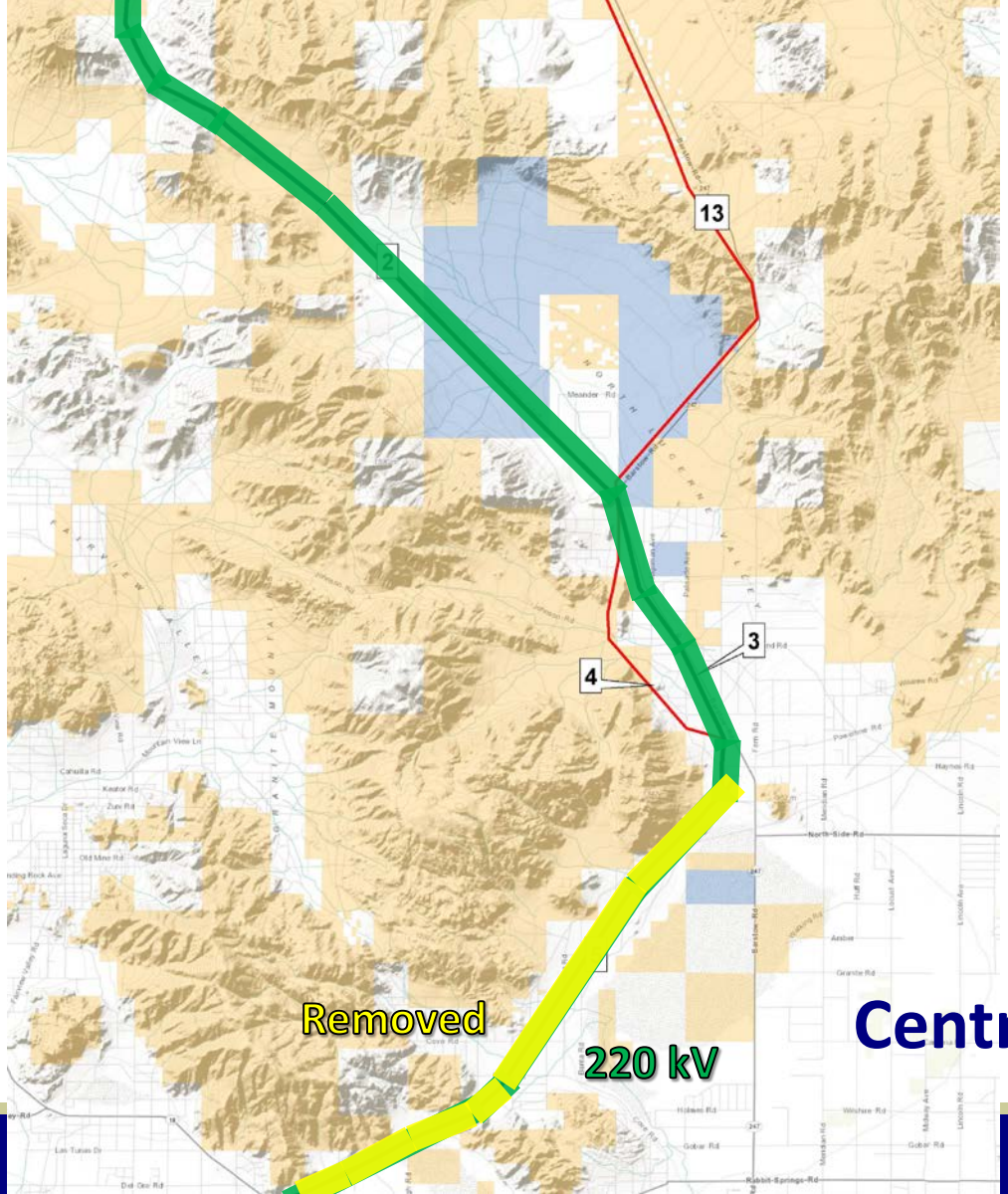


Transmission Structures

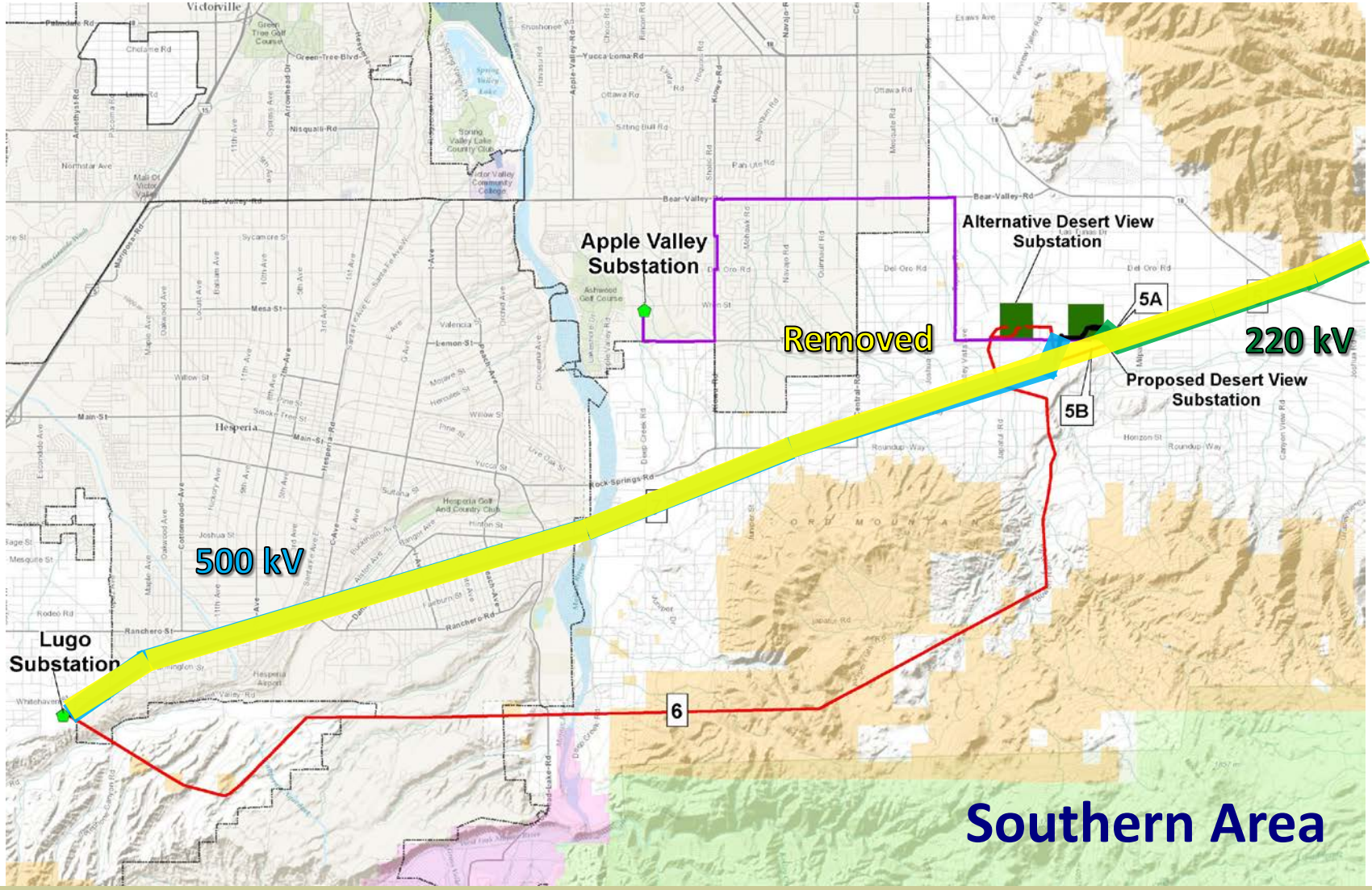
- About 29 miles of an existing 220-kV transmission line would be removed between Highway 247 and Lugo Substation.
- About 16.5 miles of another existing 220-kV transmission line would be removed between the Desert View (new) and Lugo substations.
- New telecommunication lines would be placed largely on existing wood poles.




Gale Substation
Coolwater Switchyard
9
10
11
12
8
13
Pisgah Substation approx. 30 miles east
220 kV
Northern Area



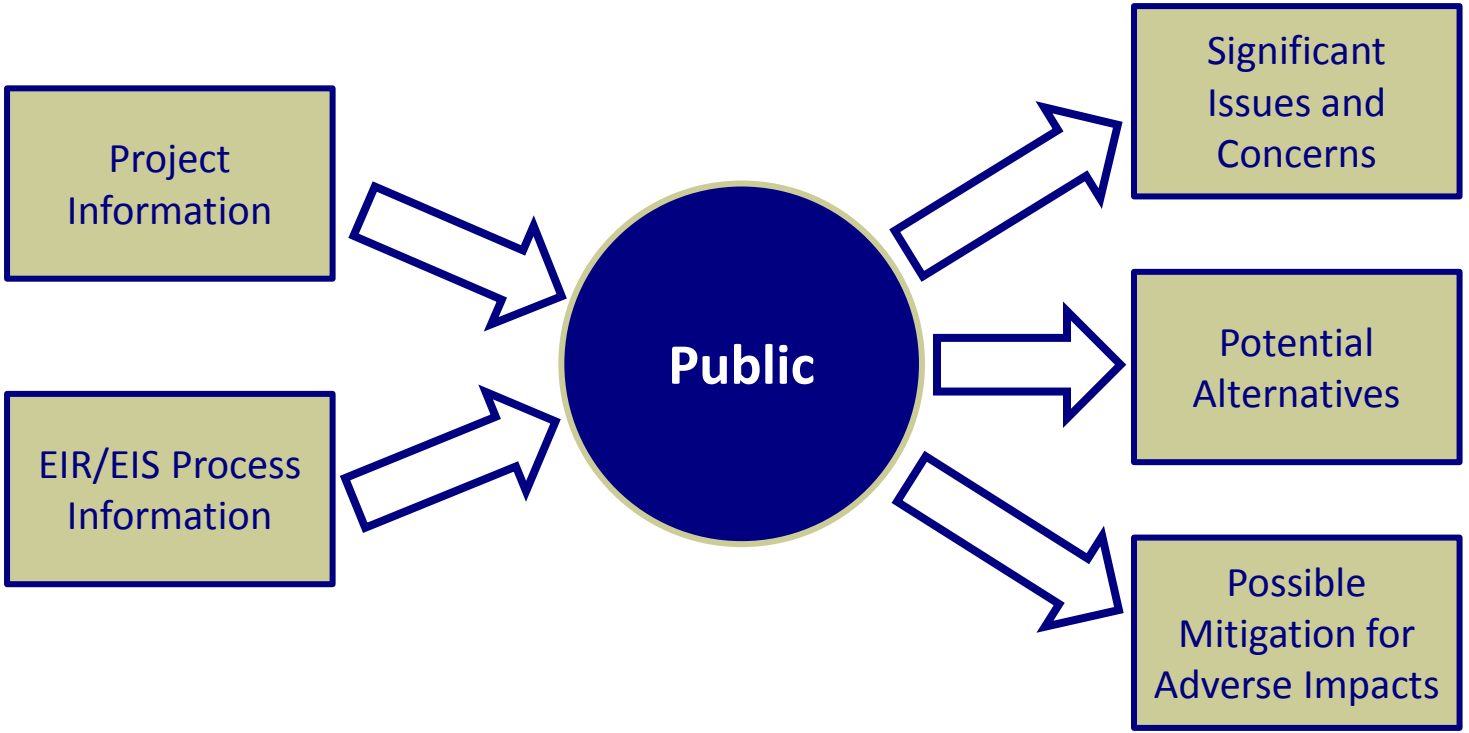
Central Area


Apple Valley Substation
Alternative Desert View Substation
Removed
5A
220 kV
Proposed Desert View Substation
5B
500 kV
Lugo Substation
6
Southern Area

Environmental Review Process

CEQA AND NEPA

Purpose of Scoping



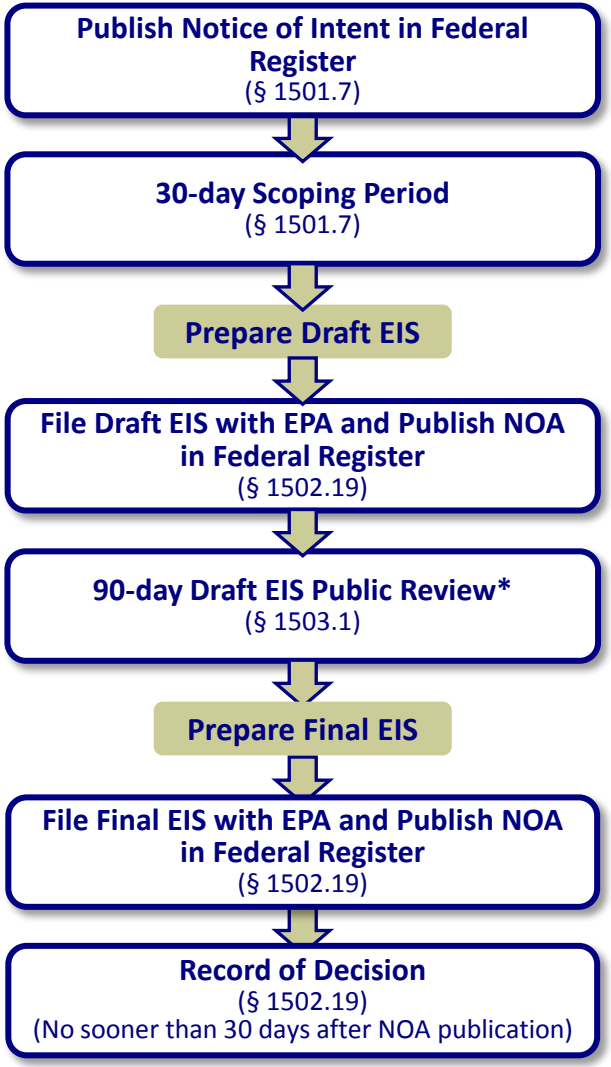
Objectives of Environmental Review

- Identify significant issues
- Assess potential impacts of the proposed project
- Identify ways to avoid or reduce impacts
- Disclose information about environmental impacts to the public
- Provide environmental information to decision makers at the CPUC and BLM
  - Decision makers will consider a range of factors in rendering their decisions, not just environmental factors
  - The EIR/EIS does not make any recommendations for approving or denying the proposed project

Decision to Prepare an EIR/EIS

- The CPUC and BLM reviewed the applications and environmental information submitted by SCE.
- Based on this information, the CPUC and BLM each determined that an EIR and an EIS need to be prepared.
  - An EIR/EIS is required when there are significant issues or environmental effects associated with a proposed project.
- The two agencies entered into a Memorandum of Understanding to prepare a joint EIR/EIS document.

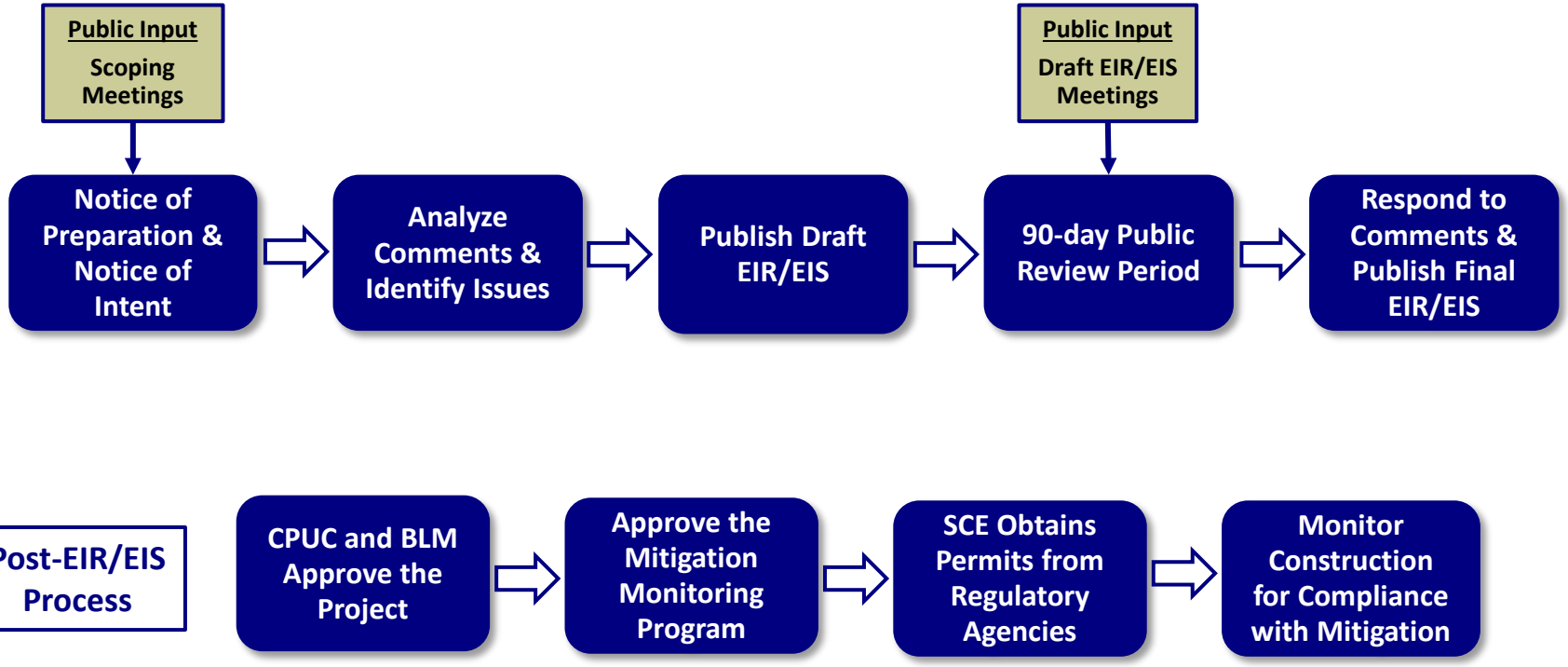
EIS Process (NEPA)



EIR Process (CEQA)

* Because the project involves a plan amendment, BLM's procedures require a 90-day review period for the Draft EIS.

EIR/EIS Process



Environmental Resources and Issues

- Air Resources
- Biological Resources
- Climate Change
- Cultural Resources
- Environmental Justice
- Geology and Soil Resources
- Hazards and Hazardous Materials
- Lands and Realty
- Mineral Resources
- Noise
- Paleontological Resources
- Recreation
- Transportation and Travel Management
- Utilities and Public Services
- Visual Resources
- Water Resources

Next Steps

- Analyze scoping comments and identify issues
- Formulate alternatives
- Conduct impact analysis
- Formulate mitigation measures
- Prepare Draft EIR/EIS

Written and Oral Public Comments

COOLWATER-LUGO TRANSMISSION PROJECT EIR/EIS

How to Submit Written Comments

- Please focus your comments on environmental concerns
- Submit comments in any of the following ways:

Fill out a comment form and submit it at this meeting (or fill mail it in after the meeting).	**Mail comments to:** **Coolwater-Lugo Scoping** **c/o Aspen Environmental Group** **5020 Chesebro Rd., Suite 200** **Agoura Hills, CA 91301**	**E-mail comments to:** **CLTP-EIR-EIS@aspeneg.com**

- Comments must be received or postmarked by September 3, 2014
- <u>All comments will become public information</u>

Oral Comments

(Please fill out a speaker registration card)

Thank you for coming.