

Related Facilities and Systems

3.1 Transmission System Interconnect

3.1.1 Existing and Proposed Transmission System

Power generated by the Project will interconnect with the substation at NV Energy's Higgins Power Plant via a new 1,320-foot-long, 230-kV transmission line from the project site south.

Figure 1-2 shows the proposed transmission route for the generation tie line. Figure 3-1 shows a typical transmission tower.

3.1.2 Ancillary Facilities and Switchyard

The Project will connect with the Nevada Power transmission grid at the Higgins Power Plant. Three-phase conductors will terminate on steel angle pull-off structures and will be insulated from the structure by porcelain insulators. Line disconnects are included for disconnect of any of the incoming lines for maintenance or repair without complete disruption of power flow. All bus, cable, hardware, and electrical equipment ratings will be determined during detailed design. The switchyard will include a control building to house protective relay equipment, communication, and, potentially, utility metering.

Switchyard site and construction power will be supplied from an NV Energy distribution line near the switchyard and a distribution transformer within the switchyard. Yard and control room lighting, convenience power, and protection and communication hardware power will be supplied via a 480-208Y/120V lighting and distribution panel. The grounding system will be designed in accordance with all applicable codes and standards to protect equipment and personnel from available fault currents. As part of this system, metal-oxide lightning arrestors may be included at line terminations near the steel angle pull-off structures to protect the equipment and personnel from surges caused by lightning strikes.

3.1.3 Status of Power Purchase Agreements

NextLight has submitted a proposal to NV Energy in response to their Request for Offers for renewable power. NextLight is awaiting notification from NV Energy regarding its proposal.

3.1.4 Status of Interconnect Agreement

NextLight has filed an interconnection application with NV Energy for the project. NV Energy has completed a feasibility study and is about to begin a system impact study. The feasibility study supports interconnecting a project at the proposed location.

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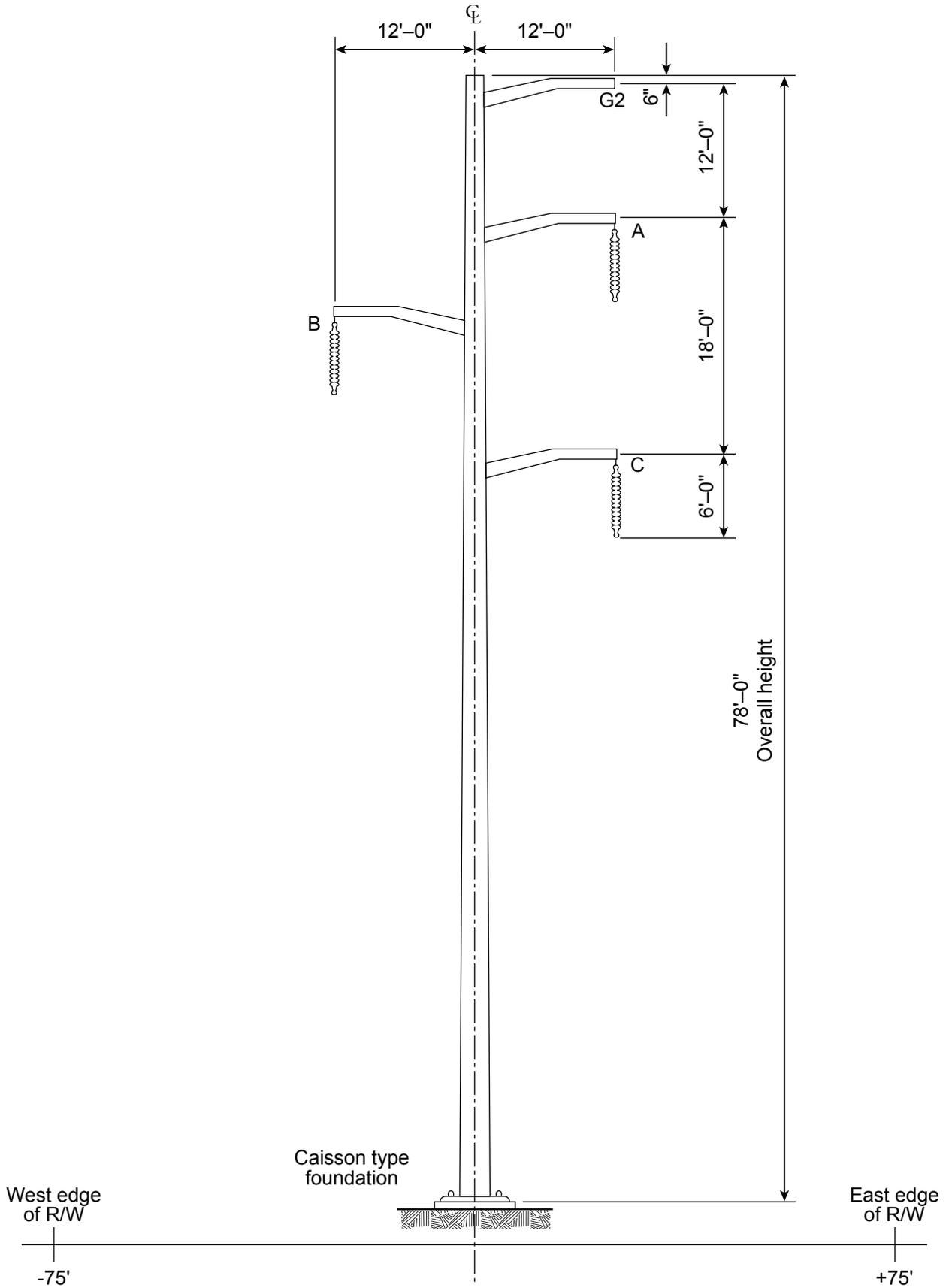


FIGURE 3-1
Typical Transmission Tower
 Silver State North Photovoltaic Power Project
 Clark County, Nevada

Note: Not to scale, all dimensions and phasing are estimates

3.1.5 General Design and Construction Standards

The project will be designed in accordance with federal and industrial standards including American Society of Mechanical Engineers (ASME), National Electric Code (NEC 2005), International Energy Conservation Code (IECC 2006), International Building Code (IBC 2006), Uniform Plumbing Code (UPC 2006), Uniform Mechanical Code (UMC 2006), National Fire Protection Association (NFPA) and Occupational Safety and Health Administration (OSHA).

Construction will be in accordance with the federal codes listed above and all applicable state and local codes. Local Clark County codes will include Title 13 – Fire and Fire Prevention, Title 22 – Buildings and Construction, Title 24 – Water, Sewage and Other Utilities and Title 25 – Plumbing and Electrical Regulations.

3.2 Gas Supply Systems

The Project will not require natural gas supply.

3.3 Other Related Systems

3.3.1 Communication System Requirements During Construction and Operation

Multiple communication systems will be used for construction and operation. During construction, cellular or satellite communication technology will be used to the greatest extent, for both internet and telephone systems. Hard-wired (land-line) systems required for operation communications will be installed as part of the electrical construction activities. These items will include telephone, fiber optics, and T1 internet. All operation communication cables will be installed on poles and routed adjacent to the proposed access road. Communications will interconnect near the Higgins Power Plant using existing lines to the greatest extent possible. Where this is not feasible, new lines will be run from Primm Resort to the project site using existing poles where possible.

3.3.2 Access Road

The Project will require vehicular access for construction, operation, and maintenance. A 1.45-mile-long paved access road will be constructed that connects the Project site from the existing frontage road to Interstate 15 north of the Primm Resort. The access road will consist of two 12-foot-wide lanes, with adjacent 2-foot-wide shoulders and 3-foot-wide drainage swales on either side. The road will be constructed in accordance with Clark County's Uniform Standard Specifications and would be owned and maintained by NextLight.

Alternatively, access to the site will be from Primm Boulevard and will use the existing Union Pacific Railroad overpass that provides access to the NV Energy Higgins Power Plant. A new 0.3-mile-long access road would be constructed to connect with the Project site.

The plant access road will be designed to accommodate equipment deliveries, the construction workforce, and, ultimately, the operational needs of the Project. The Project access road is located on public lands administered by BLM. Figure 1-2 shows the location of the proposed plant access road.

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