

DOCKETED

Docket Number:	21-AFC-02
Project Title:	Gem Energy Storage Center
TN #:	243839
Document Title:	Letter from Los Angeles Department of Water and Power Comments
Description:	Comment Letter
Filer:	Marichka Haws
Organization:	LADWP
Submitter Role:	Public Agency
Submission Date:	7/5/2022 1:39:04 PM
Docketed Date:	7/5/2022

July 5, 2022

Leonidas Payne
California Energy Commission
Docket Unit, MS-4
Docket No. 21-AFC-02
715 P Street
Sacramento, CA 95814-5512

Dear Leonidas Payne:

Subject: Gem Energy Storage Center (21-AFC-02)

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments on the Gem Energy Storage Center (Project). The mission of LADWP is to provide clean, reliable water and power to the City of Los Angeles. Based on our review of the Project, we respectfully submit the below comments.

Comments:

- 1) California Energy Commission, herein referred to as CEC, shall pertain to its employees, agents, consultants, contractors, officers, patrons or invitees of CEC or by any other CEC's affiliated entities.
- 2) CEC shall note that the information provided, to date, is inadequate for properly reviewing any potential impacts to LADWP Transmission Line Right of Ways (TLRW). We therefore reserve the right to comment until more detailed information is provided regarding the CEC's proposed facility. This includes, but not limited to, engineering plans, construction laydown exhibits, and technical documents pertaining to impacts on LADWP facilities.
- 3) The following pertains to future submittals for the Gem Energy Storage Center:
 - Provide grading plans (if applicable) and utility plans, including any other plans illustrating the impacts to the LADWP TLRW, including cross sections of the proposed improvements. The plans shall include Assessor Parcel Numbers, state plane coordinates or use the Public Land Survey System to locate the improvements impacting LADWP TLRW.

- LADWP is requesting additional data in the form of a conductor survey, and Power Line Systems - Computer Aided Design and Draft model to assess compliance with California Public Utilities Commission (CPUC) General Order No. 95, Rules for Overhead Electric Line Construction. This file shall cover all the improvements, and elevation changes within LADWP TLRW. The survey and model shall be based on the following datums:
 - Northing (NAD83 CA Zone 5)
 - Easting (NAD83 CA Zone 5)
 - Elevation (NAVD88)
- 4) Potential interconnections with the LADWP Rosamond Substation should be coordinated through the LADWP Transmission Planning Group. Please feel free to contact Sunaja Lakshman at Sunaja.Lakshman@ladwp.com.

Be advised the following conditions shall also apply:

- 1) The CEC and GEM A-CAES LLC shall acknowledge that the LADWP TLRW are integral components of the transmission line system, which provides electric power to the City of Los Angeles and other local communities. Their use is under the jurisdiction of the North American Electric Reliability Corporation, an organization of the Federal Energy Regulatory Commission. Safety and protection of critical facilities are the primary factors used to evaluate secondary land use proposals. The TLRW serves as a platform for access, construction, facility expansion, and emergency operations. Therefore, the proposed use may, from time to time, be subject to temporary disruption caused by such operations.
- 2) No grading, improvements, or construction activities of any kind whatsoever will be allowed within the LADWP TLRW without the written approval of LADWP.
- 3) No equipment over 14-feet high shall be used under the LADWP TLRW without the written permission of LADWP. Equipment higher than 14-feet will require submittal of a Conductor Survey to the LADWP Overhead Transmission Engineering Group to ensure clearances meet the CPUC, General Order No. 95. Conductor clearances will be subject to review and approval by LADWP's Overhead Transmission Engineering Group. See enclosed LADWP Conductor Survey Instructions.
- 4) California Code of Regulations, Title 8, Section 2700 defines "qualified electrical workers" as "a qualified person who by reason of a minimum of two years of training and experience with high-voltage circuits and equipment, and who has demonstrated by performances familiarity with the work to be performed and the hazards involved". At all times during installation and/or maintenance of any improvement authorized within LADWP TLRW, CEC or GEM A-CAES LLC shall have at least one qualified electrical worker on site to observe and ensure the said work complies with Occupational Safety and Health Administration safety protocols.

- 5) All ground elevations are to remain unchanged from existing conditions after construction associated with CEC or GEM A-CAES LLC proposed improvements are completed. Cut and fill slopes inside the LADWP TLRW steeper than two horizontals to one vertical require retaining structures or geotechnical report approval.

Note: Grading activity resulting in a vertical clearance between the ground and the transmission line conductor elevation less than 35 feet or as noted in the CPUC General Order 95 within the LADWP TLRW is unacceptable.

- 6) Ground cover for all below ground utilities shall not be less than four feet.
- 7) All aboveground metal structures including, but not limited to, pipes, drainage devices, fences, and bridge structures located within or adjoining the LADWP TRLW shall be properly grounded, and shall be insulated from any fencing or other conductive materials located outside of the LADWP TLRW. For safety of personnel and equipment, all equipment and structures shall be grounded in accordance with State of California Code of Regulations, Title 8, Section 2941, and National Electric Code, Article 250.
- 8) The LADWP TLRW contains high-voltage electric lines; therefore, CEC or GEM A-CAES LLC shall utilize only such equipment, material, and construction techniques that are permitted under applicable safety ordinances, and statutes, including the following: California Code of Regulations, Title 8, Industrial Relations Chapter 4, Division of Industrial Safety, Subchapter 5, Electrical Safety Orders, CPUC General Order No. 95, Rules for Overhead Electric Line Construction.
- 9) Additional conditions may be required following review of detailed site plans, grading/drainage, etc.
- 10) This response shall not be construed as an approval to begin construction activities, project improvements, nor approval of this facility or interconnection.

For any questions regarding the above comments, please contact Marshall Styers of my staff at (213) 367-3541 or Marshall.Styers@ladwp.com.

Sincerely,

Charles C. Holloway
Manager of Environmental Planning and Assessment

MS:ml
Enclosures
c/enc: Marshall Styers
Sunaja Lakshman

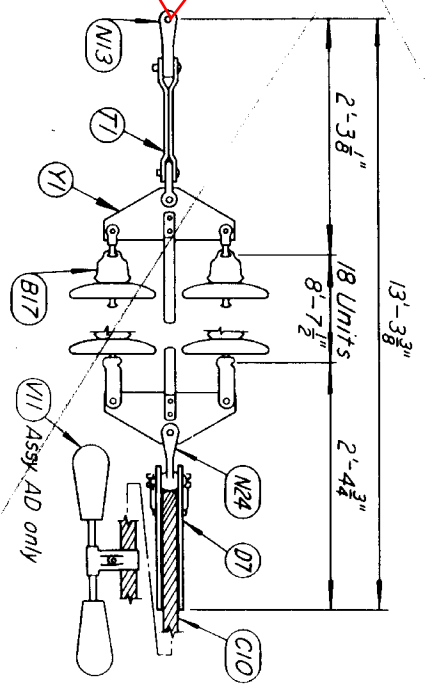
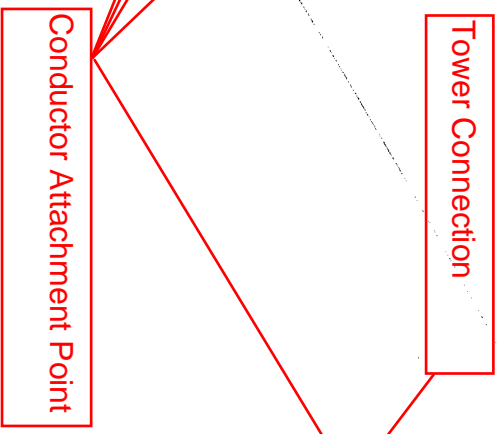
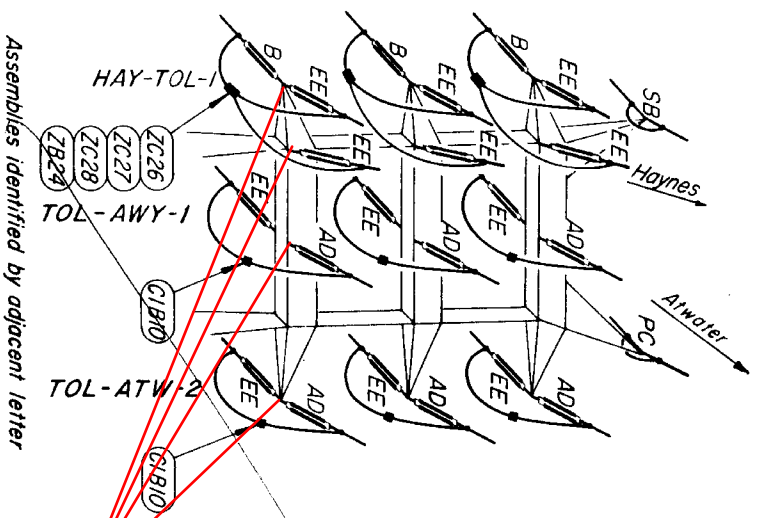
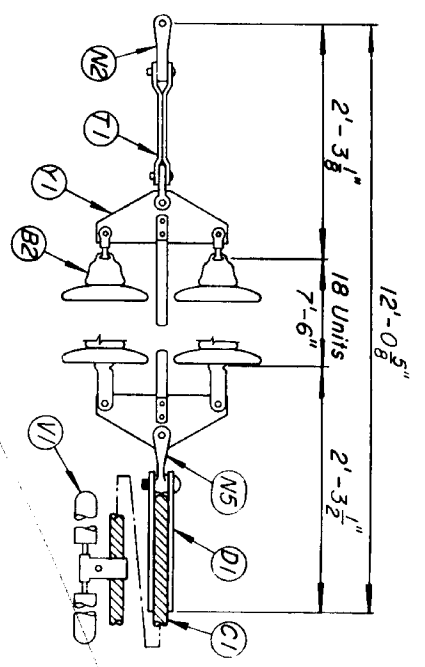
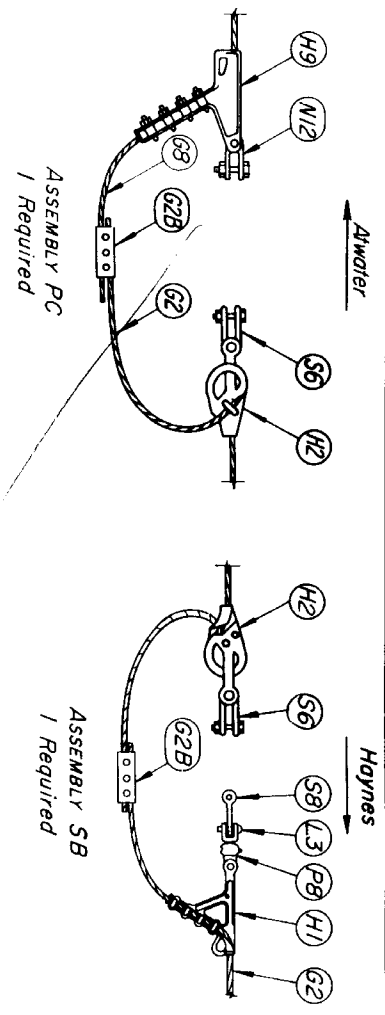
**CONDUCTOR SURVEY
DEPARTMENT OF WATER AND POWER
OVERHEAD TRANSMISSION ENGINEERING**

Please perform a survey of each Department transmission line affected by the project. For each span (the section of wire between two (2) towers) provide the following information:

1. The tower numbers of the Department transmission lines related to the span. The tower number is located near ground level on at least one (1) leg of each tower.
2. Survey the top-of-concrete of each footing of each tower related to this survey. For example, a survey involving one (1) span would involve two (2) towers, each with four (4) footings, for a total of eight (8) top-of-concrete shots.
3. Survey at least eight (8) points along the span – the two (2) points where the insulator attaches to the tower, the two (2) points where the wire attaches to the insulator, and four (4) additional points along the wire (preferred spacing of 200 – 300 feet). See attached Conductor Attachments Points for additional information. Include additional points where special features of the proposed improvements cross the transmission line (such as high points, street lights, signs, etc.). For each point provide the following information:
 - a. The northing and easting coordinates and elevations of conductor and ground points
 - b. The elevation of the wire
 - c. The existing ground coordinates and elevation
 - d. The proposed ground elevation
 - e. Date and Time
 - f. Temperature
 - g. Sunlight (sunny, partly cloudy, or cloudy)
 - h. Approximate wind speed

Important: All eight (8) wire shots on each individual span shall be completed within one (1) hour after the first wire shot is made. Failure to comply with this requirement will render data useless.

* See attached Data Sheet for sample of submittal document.

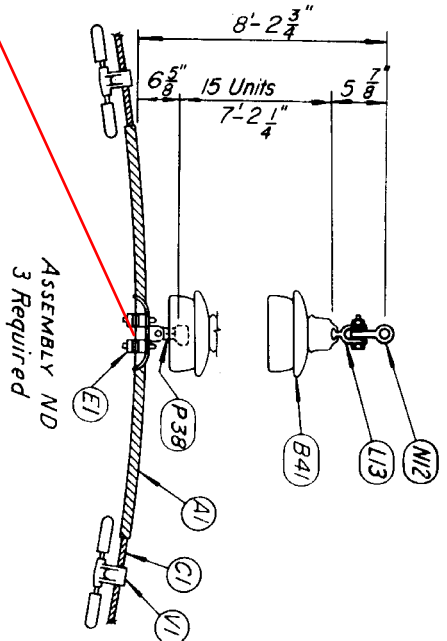
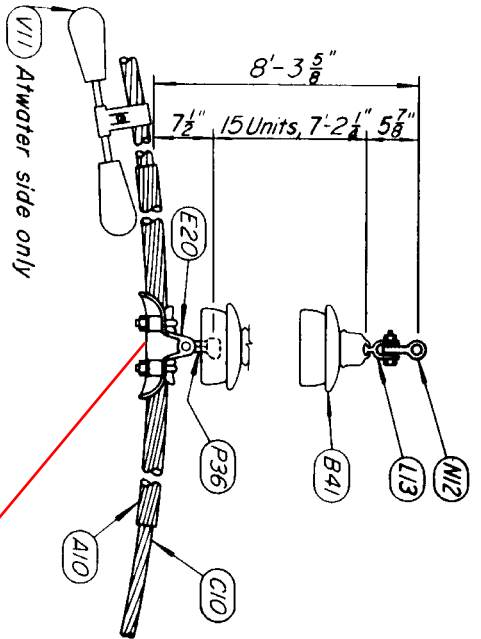
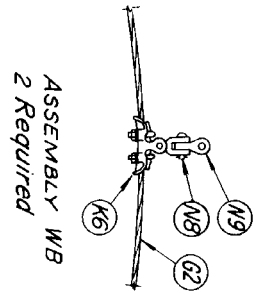


Note:
U-Bolts of D1, D7 and messenger cable of V1 and V11 coated with Alcoa No-Ox-D-A Special compound

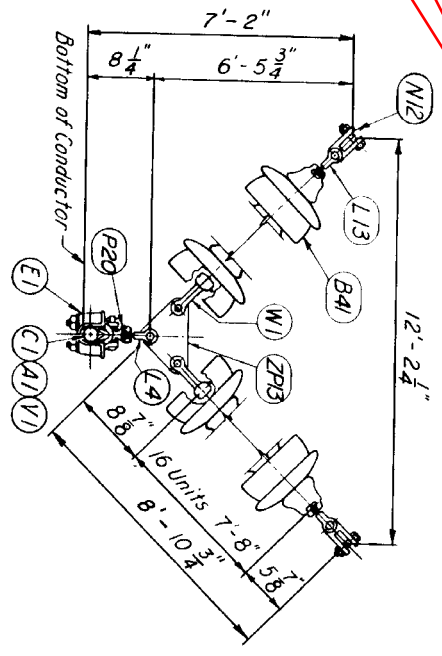
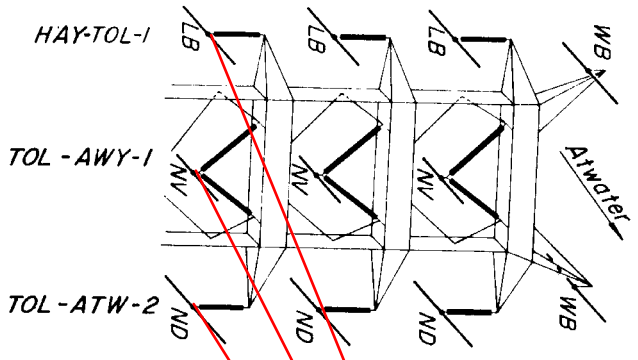
Date 3 - 15 - 84
DRAWING NUMBER
TM 18-6-13H

INSULATORS AND HARDWARE See TD-901
DEAD END TOWER
TOLUCA - ATWATER LINE 2
Tower H 469
SHEET 1 OF 2

Date 3 - 15 - 84
DRAWING NUMBER
TM 18-6-13H



Conductor Attachment Point



Assemblies identified by adjacent letter

Note: U-Bolts of E1, E20 and messenger cable of V1 and V11 coated with Alcoa No-Ox-10-A Special compound

Date 3 - 15 - 84

DRAWING NUMBER

TM18-6-15H

INSULATORS AND HARDWARE

SUSPENSION TOWER

TOLUCA - ATWATER LINE 2

SHEET 1 OF 2

Date 3 - 15 - 84

DRAWING NUMBER

TM18-6-15H

