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Gem Energy Storage Center (21-AFC-02) Data Adequacy Response #2 (Cultural Resources)

Submitted to:

California Energy Commission

Submitted by:

Gem A-CAES LLC (a subsidiary of Hydrostor, Inc.)

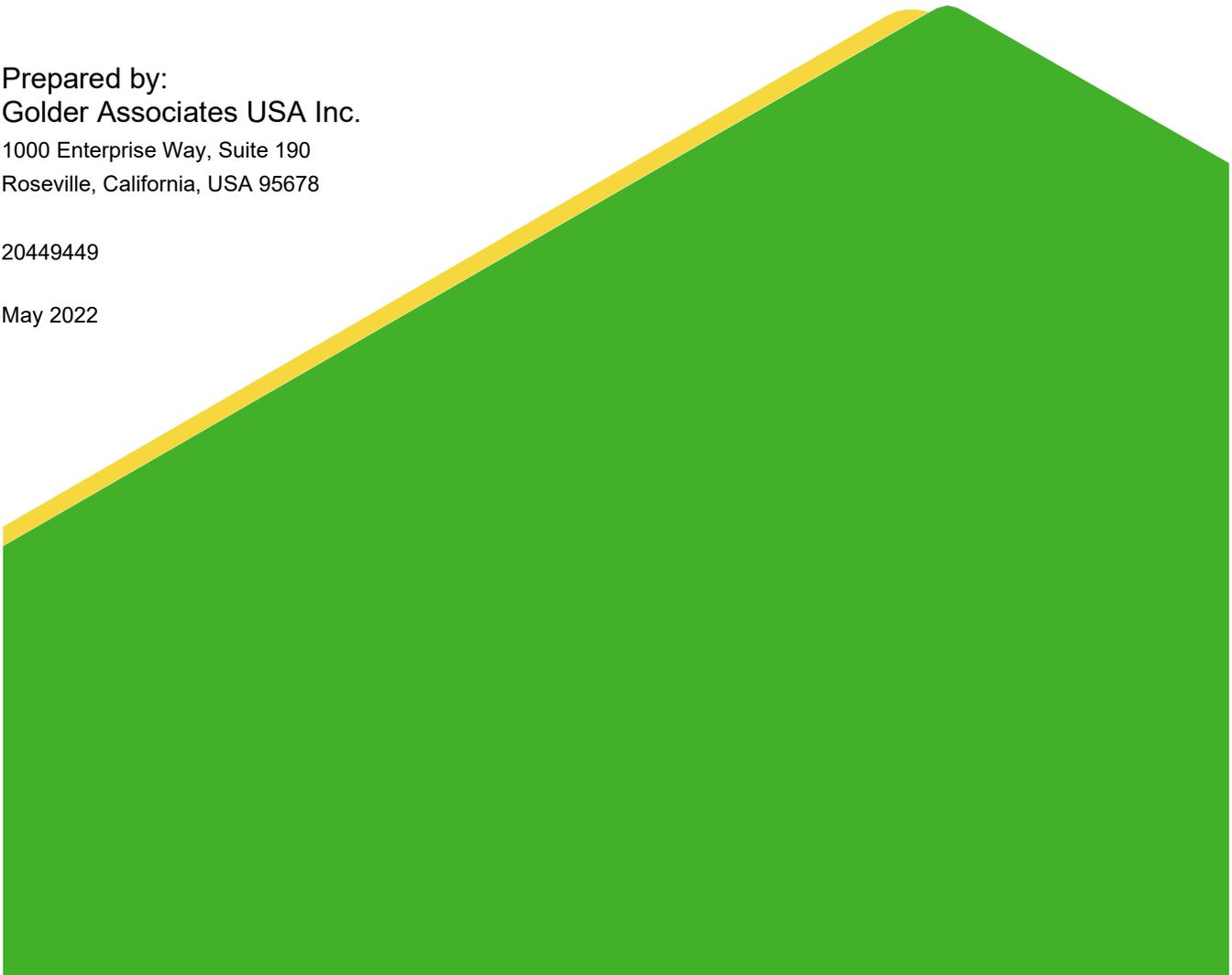
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List of Acronyms

AFC	Application for Certification
CCR	California Code of Regulations
DPR	California Department of Parks and Recreation
GEM / GESC	Gem Energy Storage Center

Data Adequacy Supplement Introduction

This Data Adequacy Supplement #2 to the GEM A-CAES LLC (Gem) Application for Certification (AFC) for the Gem Energy Storage Facility (21-AFC-02), provides additional information in response to the California Energy Commission (CEC) Staff's data adequacy review of the AFC in the technical area of Cultural Resources corresponding to AFC Section 5.13. A Data Adequacy Supplement #1 addressing all other technical areas except Cultural Resources was filed on April 25, 2022. With the additional information contained in this supplement and the prior supplement, Staff should recommend that the AFC contains adequate data to begin a power plant site certification proceeding under Title 20, California Code of Regulations (CCR), and the Warren- Alquist Energy Resources Conservation and Development Act.

In order to facilitate review, Siting Regulation text citations and Information Requested by CEC Staff were taken verbatim from the CEC Staff's data adequacy recommendation and are placed with quotation marks (" ") and indented in *italics formatted text*.

In order to help orient and facilitate the review of the supplemental Cultural Resources information, the following additional information is provided regarding the scope of work for the two cultural resources contractors who performed cultural resource and built environment studies for Gem:

- Cultural Studies for Project Site and Original Two Transmission Interconnection Routes – Rincon Consultants, Inc. (Rincon)
- Cultural Studies for All Transmission Interconnection Route Alternatives – Paleowest, LLC. (PaleoWest)
- Architectural History Survey - Paleowest

ATTACHMENTS

Attachment	Name	Consultant	Details	Study Area
Attachment DA5.3-1a ^a	Additional Cultural Resources Record Search	Rincon	Includes additional California Historic Resources Information Center (CHRIS) cultural resources record search for site and original transmission routes.	Gem Site with 1 mile buffer
Attachment DA5.3-2a ^a	Revised Records Search Results Maps	Rincon	Includes maps of all reports and resources records identified.	Transmission Line with 0.5 mile buffer
Attachment DA5.3-2b ^a	Revision of Appendix A - Records Search Results Map	Paleowest	An update of Appendix A within Appendix 5.3B Cultural Resources Report that includes maps of record search results.	Transmission line with 0.5 mile buffer
Attachment DA5.3-3 ^a	Identified Cultural Resources Within Survey Area	Paleowest	Identified recorded cultural resources within survey area.	Transmission Line
Attachment DA5.3-4 ^a	Missing Cultural Resource DPR Forms	Rincon	Includes copies of California Department of Parks and Recreation (DPR) 523 forms for all cultural resources identified in the literature search as being 45 years or older or of exceptional importance as defined in the National Register Bulletin Guidelines (36CFR60.4(g)).	Gem site with 0.5 mile buffer
Attachment DA5.3-5a ^a	Missing Cultrural Resource Reports	Rincon	Includes copies of technical reports wholly or partially within 0.25 mile of the surveyed area and copies of all technical reports which report on any archaeological excavations or architectural surveys within the 1.0-mile literature search area.	0.25 miles and 1.0 mile
Attachment DA5.3-5b ^a	Revised Appendix E	Paleowest	An update of Appendix E within Appendix 5.3B Cultural Resources Report that included previous studies conducted within 0.25 miles of the project area.	Gem Site with 0.25 mile buffer
Attachment DA5.3-6	Historic Resources Evaluation Report: An Addendum to Cultural Resources	Paleowest	Includes the Historic Resources Evaluation Report (HRER) evaluates the potential for the proposed action to affect buildings, objects, structures, and other built environment resources listed or eligible for listing in the California Register of Historical Resources (CRHR). A records search and field study was conducted.	Transmission line with 0.5 mile buffer and GEM Site with 1 mile radius

(a) Confidential attachment

5.3 Cultural Resources

1) Siting Regulation: Appendix B (g) (2) (B) – Technical Area: Cultural Resources

- *“The results of a literature search to identify cultural resources within an area not less than a 1-mile radius around the project site and not less than one-quarter (0.25) mile on each side of the linear facilities. Identify any cultural resources listed pursuant to ordinance by a city or county, or recognized by any local historical or archaeological society or museum.”*
- *“Literature searches to identify the above cultural resources must be completed by, or under the direction of, individuals who meet the Secretary of the Interior’s Professional Standards for the technical area addressed.”*
- *“Copies of California Department of Parks and Recreation (DPR) 523 forms (Title 14 CCR §4853) shall be provided for all cultural resources (ethnographic, architectural, historical, and archaeological) identified in the literature search as being 45 years or older or of exceptional importance as defined in the National Register Bulletin Guidelines, (36CFR60.4(g)). A copy of the USGS 7.5' quadrangle map of the literature search area delineating the areas of all past surveys and noting the California Historical Resources Information System (CHRIS) identifying number shall be provided. Copies also shall be provided of all technical reports whose survey coverage is wholly or partly within .25 mile of the area surveyed for the project under Section (g)(2)(C), or which report on any archaeological excavations or architectural surveys within the literature search area.”*

Information Requested by CEC Staff

- *“Applicant’s records search only covered 0.5 mile surrounding the project and no buffer at all directly east of the project site; please submit records search results extending to 1.0 mile for the area surrounding the project site. The project site is not identified on maps provided. Revise the maps to include the project site and the 1.0 mile buffer.”*
- *“Please provide USGS 7.5' quadrangle map of the literature search area that includes the following reports currently missing from the literature search maps: KE-00355, KE-00519, KE-00634, KE-00802, KE-00803, KE-00869, KE-01181, KE-01182, KE-01183, KE-01196, KE-01341, KE-01628, KE-01630, KE-01867, KE-01960, KE-02002, KE-02232, KE-02244, KE-02825, KE-02826, KE-02827, KE-02953, KE-02954, KE-03493, KE-03781, KE-03787, KE-03874, KE-03889, KE-04023, KE-04057, KE-04080, KE-04099, KE-04224, KE-04226, KE-04234, KE-04435, KE-04435A, KE-04749, KE-04833, KE-05013, KE-05043, KE-05163.”*
- *“The confidential CR technical report states that 68 previous investigations have been conducted and documented within one-half-mile of the Project area since 1961 of which forty-seven of these studies encompass portions of the Project area. However, only copies of forty-five previous cultural studies were provided, of which two were not listed among the sixty-eight listed in the cultural resources technical report. Please provide copies of the remaining cultural studies within 0.25 mile of the area surveyed for the project.”*

Response:

- Refer to **Attachment DA5.3-1a** for additional cultural resources and records search extending to 1.0 mile for the area surrounding the project site.

- Refer to **Attachment DA5.3-2a** for the revised records search results maps that includes the missing literature search maps requested. **Table DA-1** presents the page numbers where the missing report locations are illustrated on the maps provided as **Attachment DA5.3-2a**.

Table DA-1: Attachment DA5.3-2a Missing Report Locations on Maps

Report	Page Location on Attachment DA5.3-2a ^a
KE-00355	3
KE-00519	3
KE-00634	5
KE-00802	4
KE-00803	3
KE-00869	4
KE- 01181	4
KE-01182	3, 4, 5
KE-01183	3, 4, 5
KE-01196	4, 5
KE-01341	5
KE-01628	3, 4, 5
KE-01630	3, 4, 5
KE-01867	3, 4, 5
KE-01960	3, 4, 5
KE-02002	3, 4, 5
KE-02232	3, 4, 5
KE-02244	3, 4, 5
KE-02825	3, 4, 5
KE-02826	3, 4, 5
KE-02827	3, 4, 5
KE-02953	-- ^(b)
KE-02954	5
KE-03493	5
KE-03781	4
KE-03787	5
KE-03874	1
KE-03889	4

Report	Page Location on Attachment DA5.3-2a ^a
KE-04023	5
KE-04057	3, 4
KE-04080	3, 4
KE-04099	3
KE-04224	3
KE-04226	3
KE-04234	3
KE-04435	3, 4, 5
KE-04435A	-- ^(c)
KE-04749	4
KE-04833	3
KE-05013	3
KE-05043	3
KE-05163	3

- (a) May be illustrated on Attachment 5.3-2b
- (b) "KE-02953" is a typo and should be "KE-02954". The SSJVIC records search results do not include a report labeled "KE-02953" but they do include a report labeled "KE-02954". KE-02954 is shown on Page 3 of the revised records search map.
- (c) There is no report in the Southern San Joaquin Valley Information Center (SSJVIC) records search results labeled "KE-04435A". There is a report labeled "KE-04435" (without the "A"); that report does have two volumes but the SSJVIC does not differentiate the two volumes with an "A" or "B". KE-04435 is shown on Page 1 of the revised records search map.

- Refer to **Attachment 5.3-5a** and **Attachment 5.3-5b** for a Revised Appendix E within the Appendix 5.3B Cultural Resources report that includes remaining cultural studies within 0.25 mile of the area surveyed for the project.

2) Siting Regulation: Appendix B (g) (2) (C) – Technical Area: Cultural Resources

- *"The results of new surveys or surveys less than 5 years old shall be provided if survey records of the area potentially affected by the project are more than five (5) years old. Surveys to identify new cultural resources must be completed by (or under the direction of) individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed."*
- *"New pedestrian archaeological surveys shall be conducted inclusive of the project site and project linear facility routes, extending to no less than 200' around the project site, substations and staging areas, and to no less than 50' to either side of the right-of-way of project linear facility routes. New historic architecture field surveys in rural areas shall be conducted inclusive of the project site and the project linear facility routes, extending no less than .5 mile out from the proposed plant site and from the routes of all above-ground linear facilities. New historic architecture field surveys in urban and*

suburban areas shall be conducted inclusive of the project site, extending no less than one parcel's distance from all proposed plant site boundaries. New historic architecture field reconnaissance ("windshield survey") in urban and suburban areas shall be conducted along the routes of all linear facilities to identify, inventory, and characterize structures and districts that appear to be older than 45 years or that are exceptionally significant, whatever their age."

- *"A technical report of the results of the new surveys, conforming to the Archaeological Resource Management Report format (CA Office of Historic Preservation Feb 1990), which is incorporated by reference in its entirety, shall be separately provided and submitted (under confidential cover if archaeological site locations are included)."*

Information Requested by CEC Staff

- *"Confidential Appendix 5.3C does not show survey coverage for the project site; please provide scaled topographic quadrangle maps depicting the survey coverage, including buffer areas, for all project components surveyed. Compare to Confidential Appendix 5.3A, as additional resources might be in the survey area."*
- *"No new historic architecture field survey was provided. Provide a historic architecture field survey inclusive of the project site and the project linear facility routes, extending no less than 0.5 mile from the proposed plant site and from the routes of all above-ground linear facilities. The 0.5 mile buffer must extend from and include the linears' right of way."*

Response:

- Refer to **Attachment DA5.3-2a** and **Attachment DA5.3-2b** for survey coverage maps of the project site.
- Refer to **Attachment DA5.3-6** in Figure 3-1 for built environmental survey area. Refer to **Attachment DA5.3-6** in Figure 3-1 for built environmental survey area. **Attachment DA5.3-6** presents the historic architecture field survey that includes a 0.5 mil buffer of the project site.

3) Siting Regulation: Appendix B (g) (2) (C) (i) – Technical Area: Cultural Resources

- *"The summary from Appendix B (g)(2)(A) and the literature search results from Appendix B (g)(2)(B)*

Information Requested by CEC Staff

- *"Please revise the records search summary and tables to reflect additional previous studies and recorded resources from the updated records search."*

Response:

- Refer to Table 1 and 2 in **Attachment DA5.3-1a** for revised records search summary tables. **Attachment DA5.3-1a** contains material that is confidential and is submitted under separate cover.

4) Siting Regulation: Appendix B (g) (2) (C) (ii) – Technical Area: Cultural Resources

- *“The survey procedures and methodology used to identify cultural resources and a discussion of the cultural resources identified by the survey”*

Information Requested by CEC Staff

- *“The AFC section does not discuss the resources identified by the survey, nor does it clearly route the reader to Appendix 5.3B for the discussion. No architectural field survey was performed. A built environment inventory was compiled, but there was no discussion of the methodology for creating this inventory in the survey methods section 6.1 of Appendix 5.3 B and no discussion of these resources was provided in the Architectural History Survey Results section of Appendix 5.3 B. Add a discussion of the background research methodology for compiling the Historic Built Environment Resources inventory in the study area to the Methods Section 6.1 in Appendix 5.3 B. Conduct and include results of an architectural field survey in Section 6.1 of Appendix 5.3B and summarize the methods and results in Section 5.3. Include a summary of the results of the archaeological survey in Section 5.3.”*

Response:

- Refer to **Attachment DA5.3-6** for historic architecture field survey that includes a 0.5 mil buffer of the project site. Methodology for creating environment inventory is discussed in Section 3 and historic architectural field survey results are summarized in Section 5 of **Attachment DA5.3-6**.

5) Siting Regulation: Appendix B (g) (2) (C) (iii) – Technical Area: Cultural Resources

- *“Copies of all new and updated DPR 523(A) forms. If a cultural resource may be impacted by the project, also include the appropriate DPR 523 detail form for each such resource”*

Information Requested by CEC Staff

- *“Please provide DPR 523 forms for historic built environment resources recorded in the architectural study area.”*

Response:

- Refer to **Attachment DA5.3-6** for Historic Resources Evaluation Report that includes DPR forms for the historic built environment resources in the study area. Additional DPR 523 forms of the historic built environment are included in **Attachment DA5.3-4**.

6) Siting Regulation: Appendix B (g) (2) (C) (iv) – Technical Area: Cultural Resources

- *“A map at a scale of 1:24,000 U.S. Geological Survey quadrangle depicting the locations of all previously known and newly identified cultural resources compiled through the research required by Appendix B (g)(2)(B) and Appendix B (g)(2)(C) (ii); and”*

Information Requested by CEC Staff

- *“Please map and label the locations of archaeological sites 21-0546-GG-012H and 21- 0546-GG-020H. Please map the locations of newly identified historic built environment resources. The following*

resources listed in Appendix 5.3 B Technical Report Table 4-2 are not mapped or are mislabeled. Please map and label the resources: P-15-014602, P-15-014893, P-15-017852, P-15-018364 (possible typo, labeled as 048364 on Sheet 2?), P-15-018681, P-15-019543, P-15-019584, P-15-019848, P-15-19849 Appendix A, RS Results-Resources Sheet 3: An unknown resource label is obscured by the label for P-15-019551. Appendix A, RS Result- Resources Sheet 2: A resource is mapped and labeled as P-15-018246 but is not listed in Table 4-2. Please add to Table 2 and provide the associated DPR form.”

Response:

- Refer to **Attachment DA5.3-3** (page 3) for the labelled locations of archeological sites 21-0546-GG-012H and 21 0546-GG-020H. Additionally, **Attachment DA5.3-2b** illustrates the locations of all resources listed in the Gem Application for Site Certification, Appendix 5.3B Technical Report Table 4-2.



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