

CENTRAL VALLEY NATURAL GAS STORAGE PROJECT	VARIANCE REQUEST FORM	
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Date Required:	July 9, 2012	Variance Request No.:	No. 17 – Installation of anode ground bed wells in the remote well pad buffer area
Date Submitted:	June 18, 2012	Location:	Upland buffer around the remote well pad
Property Owner(s):	Southam	Parcel No.:	012-110-017
Current Land Use:	Undeveloped upland buffer around remote well pad	Sensitive Resources:	Designated as upland buffer habitat for giant garter snake

Variance from: This variance requests the CPUC’s approval to allow CVGS to install two anode ground bed wells for cathodic protection of the well pad facilities that are located within the buffer of the remote well pad. These anode wells were not previously described in the MND.

Description and Justification for Variance: The remote well pad consists of a 3.14 acre area surrounded by a 5-acre buffer on three sides, as shown on Figure 1. This buffer was created to eliminate rice production directly against the remote well pad which could have undermined the stability and/or integrity of the pad. Construction of the two anode ground bed wells will result in permanent impacts totaling only 39.25 square feet, and temporary construction impacts totaling 1.19 acres, as shown on Figure 2.

Construction will begin as soon as possible in June 2012. It will take approximately two weeks to complete all proposed work. All work will be done when the ground is dry, as the equipment needed to drill the wells must be used on a dry, firm surface. The proposed well locations and temporary work areas for drilling the wells, including temporary access to the northwest well location, are shown on Figure 2. The wells consist of a 10-inch diameter casing with two feet of concrete surrounding the casing, as shown on Figure 3. There is also a junction box mounted on a post adjacent to each proposed well (Figure 3). The temporary work consists of staging and construction areas adjacent to the proposed wells (Figure 2) and trenching and working area to bury cable connecting the proposed wells to the cathodic protection system in the well pad area. (Figure 2).

Annual monitoring of the wells will be conducted on foot by a technician, once a year or more frequently, to take readings at the junction box. The equipment within the wells and or junction boxes would require maintenance and or overhaul every 20 years.

CVGS, with support from ICF International, reviewed the list of responsible and trustee agencies that were involved in the project and determine that there were three agencies (California Department of Fish and Game [DFG], U.S. Fish and Wildlife Service [USFWS]), and U.S. Army

Corps of Engineers (USACE)(as the federal lead agency responsible for consulting with the USFWS) that would have regulatory or approval authority over installation of the anode bed wells. The approvals have been obtained from these agencies are provided with this variance request form.

In addition, CVGS also discussed the proposed wells with Mr. Steve Hackney from Colusa County and B.G. Tackett from DOGGR. During telephone conversations with these agencies, Mr. Tackett indicated that DOGGR is not going to exert any regulatory authority over the anode wells and Mr. Hackney indicated that there were no additional permits or approvals required by the County for the installation of the anode bed wells.

Environmental Analysis: A brief description of the potential environmental effects associated with the installation of the anode bed wells is described below.

Aesthetics. The visual impacts would be the same as those described in the IS/MND. No mitigation is required.

Agricultural and Forestry Resources. No impacts on agricultural or forestry resources are anticipated. No new mitigation has been identified.

Air Quality and GHG Emissions. The installation of the wells would not result in any new or greater impacts than were previously described in the MND. No new mitigation has been identified.

Biological Resources. The only biological resource issue associated with the upland buffer area around the remote well pad is the giant garter snake. The wells will be installed within upland habitat for the species. As stated previously, USFWS and DFG have approved of the proposed new wells within the upland buffer area. The USFWS amended the BO on May 18, 2012 and DFG approved of the installation of the wells in an email to ICF (Sue Bushnell) on April 18, 2012. A copy of the USFWS amended BO and the email from DFG is provided with this variance.

The monitoring biologist will be on-site during installation of the wells to ensure no impacts occur. No new mitigation has been identified.

Cultural Resources. No impacts on cultural resources are anticipated and no mitigation has been identified.

Geology and Soils. The installation of the wells would not result in any new or greater impacts than were previously described in the MND for geologic, soil, and seismic site conditions. No mitigation is required.

Hazards and Hazardous Materials. The installation of the wells would not result in any new or greater impacts than were previously described in the MND. No new mitigation has been identified.

Hydrology and Water Quality. The installation of the wells would not result in any new or greater impacts than were previously described in the MND for hydrology and water quality. BMPs described in the project SWPPP will be implemented prior to installation of the wells. No mitigation is required.

Land Use and Planning. No potentially significant impacts related to land use have been identified. No mitigation is required.

Mineral Resources. The installation of the wells would not have a significant effect on mineral and energy resources and would not result in the loss of the availability of the resources because none occur in the project area. No mitigation is required.

Noise. The installation of the wells will not result in any greater noise impacts than those described in the MND. No new mitigation has been identified.

Population and Housing. The installation of the new wells would not result in any new or greater impacts than were previously described in the MND. No mitigation is required.

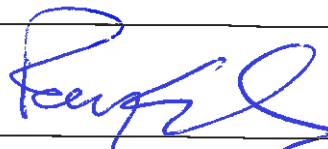
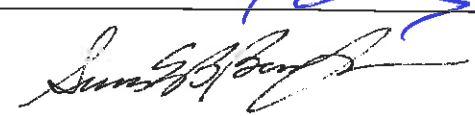
Public Services. The installation of the wells would not result in any new or greater impacts on public services than were discussed in the MND. No mitigation is required.

Recreation. The installation of the wells would not result in recreation impacts. No mitigation is required.

Transportation/Traffic. The installation of the wells would not result in any new or greater impacts than were previously described in the MND for local transportation and traffic. No new mitigation has been identified.

Utilities and Service Systems. The new wells would not require an expansion or improvement in utilities or service systems, including wastewater and water supply treatment or delivery. No mitigation is required.

Site Conditions/Comments: The area is a mix of non-native grass and herbaceous species and has been substantially degraded from current construction and previous agricultural activities.

Approvals	Date	Name (print)	Signature	Comments
CPUC Compliance Mgr				
Central Valley Construction Manager	6/19/12	RAY SCHNEGELSBERGL		none
Central Valley Environmental Manager	6/18/12	Susan Bushnell Bergfalk		None

**Prepared by: Susan Bushnell Bergfalk, Environmental
Manager, ICF International**

Date: June 18, 2012
