

DOCKETED

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Appendix 2E
Will Serve Letters



Long Beach Water Department
The Standard in Water Conservation &
Environmental Stewardship

KEVIN L. WATTIER, General Manager

September 4, 2013

Mr. Stephen O'Kane
AES Southland
690 N. Studebaker Rd.
Long Beach, CA 90803

Dear Mr. O'Kane:

Subject: **"Will Serve" Letter for the Proposed AES Facility Development at 690 North Studebaker Road**

The Long Beach Water Department is transmitting this "Will Serve" letter in response to your request for the proposed AES Facility located at 690 N. Studebaker Road in the City of Long Beach.

According to our current records, there is a potable water service connection to the existing AES Facility to a 12-inch asbestos cement (AC) potable water line on Studebaker Road. There is also an existing 8-inch vitrified clay pipe (VCP) sewer line on Vista Street.

All of these public facilities are available to serve the proposed site. Potable water and sewer services will be made available for the proposed development in accordance with our Rules and Regulations for Potable Water, Reclaimed Water, and Sewer Service.

If you have any questions, please call Ms. Jinny Huang at (562) 570-2346 or Mr. Dennis Santos at (562) 570-2381.

Sincerely,

Robert J. Verceles, P.E.
Division Engineer

cc: Jinny Huang, Senior Civil Engineer 
Dennis Santos, Civil Engineering Associate

RJV:JH:rc
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Douglas D. Spahr, P.E.
Sr. Account Manager



Confidential

December 2, 2013

Mr. John Kistle
Project Manager
AES Alamos, LLC
690 N. Studebaker Road
Long Beach, CA 90803

Southern California
Gas Company

www.socalgas.com

Subject: SoCalGas Transportation Service Request Response for Alamos Development

555 W. Fifth Street
Los Angeles, CA
90013-1040
M.L. GT20C3

Dear Mr. Kistle:

Thank you for your request concerning gas transportation service to the existing Alamos Generating Station location based on the AES development plan.

tel 213-244-3791
fax 213-226-4129
cell 310-869-7115
email: dspahr@semprautilities.com

Summary

Subject to the execution of appropriate contracts and the applicable rules and regulations, including California Public Utilities Commission (CPUC) approved rules and tariffs, and the AES development plan outlined below including the fast start and ramp profiles¹, SoCalGas can provide natural gas transportation service to the proposed site using the existing SoCalGas transmission lines located on the Alamos property.

- The fast start and fast ramp profiles are as described in the AES development plan.
- The AES development plans will allow SoCalGas to use its existing eastern Transmission line L-1021 to serve power blocks B1, B2 and B3.
- The AES plan can accommodate SoCalGas serving power block B4 from its existing western Transmission line L-1022.

¹ The fast start profile calls for two of three turbines per power block starting at time zero, ramping to full output 11 minutes later at which time the third turbine of the power block starts and ramps to full power between minutes 11 and 22 of the starting cycle. SoCalGas evaluated and confirmed that all four power blocks could be served under this operating scenario at the same time in the projected year 2025.

SoCalGas evaluated and confirmed that all twelve turbines could be served during a fast ramp profile of 70% power to 100% power within one minute. Likewise, SoCalGas evaluated and confirmed the ability to serve during a fast ramp down profile of 100% power to 70% power within one minute.

SoCalGas Service Assessment Based on
AES Alamitos Development Schedule

	2017	2018	2019	2020	2021	2022	2025
Quarter & New Block Added		Q2 / B1	Q1 / B2			Q2 / B3	Q4 / B4
Quarter & Units Retired		Q2 / 5 & 6			Q4 / 3 & 4		Q3 / 1 & 2
L-1021 ² Service, (MMcf/hr) ³	10.7	3.8	7.6	7.6	7.6	11.4	11.4
L-1022 ⁴ Service (MMcf/hr)	9.7	9.7	9.7	9.7	3	3	3.8
Total MMcf/hr	20.4	13.5	17.3	17.3	11.4	14.4	15.2
Nominal MWs	1,997	1,550	2,080	2,080	1,412	1,942	2,122

The estimated service lateral pipeline and on-site compressor costs shown in the summary table below are based on historic SoCalGas costs, the current SoCalGas minimum operating pressure of 160 psig of the two existing transmission pipelines (MinOP), the AES stated turbine inlet pressure of 550 psig and include direct costs, indirect costs and the Income Tax Component of Contributions and Advances (ITCCA)⁵ at 22%, which is scheduled to increase to 35% effective January 1, 2014⁶.

Service Laterals

SoCalGas has determined that the existing transmission service lines are sufficient to meet the Alamitos service request outlined above.

² Line 1021 is the 30 inch diameter transmission pipeline located on the eastern side of the Alamitos property.

³ MMcf/hr = million standard cubic feet per hour.

⁴ Line 1022 is the 20 inch diameter transmission pipeline located on the western edge of the Alamitos property.

⁵ <http://www.socalgas.com/regulatory/tariffs/tm2/pdf/PS-IV.pdf>

⁶ <http://www.socalgas.com/regulatory/tariffs/tm2/pdf/4446.pdf>

Peak Load per pipeline (MMcf/d)	Estimated Service Lateral Diameter ⁷ (Inches)	Estimated Service Lateral (Miles)	Estimated Service Lateral Cost (Millions)	Estimated Onsite Compression Required (HP)	Estimated Compression Cost ⁸ (Millions)
91	Existing L-1022, 20	Existing	N/A	8,000	\$36.7
273	Existing L-1021, 30	Existing	N/A	24,000	\$110

On-Site Compression

The estimated on-site booster compression cost is based on the AES specified inlet pressure requirement and the SoCalGas interconnecting pipeline’s current Minimum Operating Pressure (MinOP) of 160 psig for both of the existing L-1021 and L-1022 transmission lines.

Each new power block requires approximately 8,000 hp of gas compression split between the two SoCalGas transmission lines as shown in the table above. With all four power blocks constructed, SoCalGas estimates Alamitos will need a total of 32,000 hp of on-site booster compression.

The L-1021(eastern) served power blocks will need: 8,000 hp of compression in the second quarter of 2018 for B1, 8,000 hp of compression in the first quarter of 2019 for B2 and 8,000 hp of compression for in the second quarter of 2022 for B3.

The L-1022 (western) served power block B4 will need an additional 8,000 hp of compression to be installed in the fourth quarter of 2025.

Service Pressure

Based on current operating characteristics of the SoCalgas system, it is estimated that the service pressure to the Alamitos meter set assemblies will vary between the minimum operating pressure of 160 psig and the Maximum Allowable Operating Pressure of 190 psig.

Service pressure is provided on an as available basis, with no pressure level guarantees or warranties of any kind.

Additional Assumptions and Conditions

The availability of natural gas service, as set forth in this letter, is based on current conditions of supply, demand, pressures and regulatory policies, is subject to change, and is not a guarantee of future operations.

⁷ It is estimated that the existing pipeline diameters will incur a pressure drop of 5 psig resulting from the quick-start and fast ramp profiles.

⁸ Compression costs are based on gas fired primer movers and estimated per horsepower installed, including units, valves and basic controls, but not advance controls for multiple modes of operation. The costs listed include direct costs, indirect costs and the ITCCA tax.

This service offering has a sunset date of the earlier of six (6) months from the date of this letter or a change in the assumptions.

As described above and further below, this preliminary cost estimate does not include, among other things, the cost of a tap and an appropriate meter set. The costs of modifying or building new meter sets for large electricity generating facilities can be significant. Recently completed meter sets for similar large electricity generation facilities have cost in the range of \$2 million for each meter set, which includes direct costs, indirect costs and ITCCA taxes.

This preliminary cost estimate is for the construction cost of the facilities and is provided at your request. SoCalGas/SDG&E have not performed a detailed specific site or route evaluation for your project in the development of this estimate. Additionally, costs associated with permitting, paving, right-of-way, environmental, gas quality, measurement, regulatory, and land acquisition/development issues; and any unusual construction costs or facility requirements (e.g. freeway, river, or channel crossings) are explicitly excluded from this preliminary cost estimate. These costs are the developer's responsibility and can be significant.

SoCalGas/SDG&E's construction costs also continue to rise with increasing costs of labor and materials. Since this preliminary cost estimate is developed using average historical project cost data, it is highly likely that the actual construction costs for your particular project could vary significantly from this preliminary estimate based on the actual design, permitting and construction variables associated with this specific project. SoCalGas/SDG&E urge you to retain the services of a third-party engineering construction firm, or enter into a design and engineering contract with SoCalGas/SDG&E to develop a more accurate construction cost estimate for your specific project. SoCalGas/SDG&E do not recommend any use of this preliminary cost estimate. Any use by you is at your own risk and should factor in the above risks and limitations.

Assuming normal planning and construction schedules for the interconnection facilities needed to establish service, SoCalGas would require approximately eighteen (18) to twenty-four (24) months from the completion of contracts and the receipt of the requested deposit in order to complete the planning, design and construction of the service facilities needed for your project.

For an additional fee, SoCalGas can prepare a more detailed engineering construction estimate that will include costs that have been omitted from this preliminary estimate.

Thank you for your consideration.

Sincerely,

