

ORIGINAL NEW APPLICATION

Dominion Energy Utah  
Docket No. 18-057-03  
DEU Exhibit 2.14  
Page 1 of 19



**SOUTHWEST GAS CORPORATION**

AZ CORP. COM. 1  
DOCKET CONTROL

2014 JAN 27 PM 2 33

January 27, 2014

DocketControl Office  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, AZ 85007-2996  
G-01551A-14-0024

**Re: Application of Southwest Gas Corporation for Determination of Prudence and Pre-Approval of Ratemaking Treatment Relating to Construction of Liquefied Natural Gas Storage Facility in Southern Arizona**

Southwest Gas Corporation herewith submits for filing an original and thirteen (13) copies of its application to the Arizona Corporation Commission seeking pre-approval of the cost recovery associated with the construction, operation, and maintenance of Liquefied Natural Gas storage facility in Southern Arizona.

If you have any questions, please contact me at (702) 876-7163.

Respectfully submitted,

*Debra S. Gallo* *very sorry*

Debra S. Gallo, Director  
Government & State Regulatory Affairs

Arizona Corporation Commission

**DOCKETED**

**JAN 27 2014**



1                                   **BEFORE THE ARIZONA CORPORATION COMMISSION**

2  
3   COMMISSIONERS

4   Bob Stump, Chairman  
5   Gary Pierce  
6   Brenda Burns  
7   Bob Burns  
8   Susan Bitter Smith

9   In the Matter of the Application of Southwest  
10   Gas Corporation for Determination of  
11   Prudence and Approval of Cost Recovery  
12   Relating to the Construction of a Liquefied  
13   Natural Gas Storage Facility.

DOCKET NO. G-01551A-14-\_\_\_\_\_

**APPLICATION**

11                                   **APPLICATION**

12                   **Introduction.**

13           1. Pursuant to the Arizona Corporation Commission ("Commission") Policy  
14   Statement Regarding New Natural Gas Pipeline and Storage Costs ("Policy  
15   Statement"), Southwest Gas Corporation ("Southwest Gas" or "Company") hereby  
16   submits its application seeking approval of the cost recovery associated with the  
17   construction, operation, and maintenance of a liquefied natural gas ("LNG") storage  
18   facility in Tucson, Arizona. The diversity in natural gas supply that the LNG storage  
19   facility will provide for the applicable service area will afford greater supply reliability  
20   and flexibility in natural gas deliveries to the Company's customers. For the reasons  
21   set forth herein, Southwest Gas respectfully requests that the Commission approve  
22   the construction of the proposed LNG storage facility as being prudent, including  
23   approval of the associated costs incurred or to be incurred in carrying out this project.

24           2. Southwest Gas is a corporation in good standing under the laws of the  
25   state of Arizona, is a corporation duly organized, validly existing, and is qualified to  
26   transact intrastate business.

1           3.     Southwest Gas' corporate offices are located at 5241 Spring Mountain  
2 Road, P.O. Box 98510, Las Vegas, Nevada 89193-8510. Communications regarding  
3 this application should be addressed to:

4                   Jason S. Wilcock, Esq.  
5                   Associate General Counsel  
6                   Southwest Gas Corporation  
7                   P.O. Box 98510  
8                   Las Vegas, Nevada 89193-8510  
9                   Telephone: (702) 364-3227  
10                  Email: [jason.wilcock@swgas.com](mailto:jason.wilcock@swgas.com)

                  Debra S. Gallo  
                  Director/Government and  
                  State Regulatory Affairs  
                  Southwest Gas Corporation  
                  P.O. Box 98510  
                  Las Vegas, Nevada 89193-8510  
                  Telephone: (702) 876-7163  
                  Email: [debra.gallo@swgas.com](mailto:debra.gallo@swgas.com)

11           4.     Southwest Gas is a public utility subject to the jurisdiction of the  
12 Commission pursuant to Article XV of the Arizona Constitution and the applicable  
13 provisions of Title 40 of the Arizona Revised Statutes. Southwest Gas is engaged in  
14 the retail distribution, transportation, and sale of natural gas for domestic, commercial,  
15 agricultural, and industrial uses. Southwest Gas currently serves approximately 1.9  
16 million customers in the states of Arizona, California, and Nevada. Approximately 54  
17 percent of the Company's customers are located in the state of Arizona, including  
18 portions of Cochise, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Pima, Pinal,  
19 and Yuma counties. For operational purposes, Southwest Gas' Central Arizona  
20 division is headquartered in Phoenix and its Southern Arizona division is  
21 headquartered in Tucson.

22           **ACC Policy Statement.**

23           5.     The Commission issued its Notice of Inquiry on the Issue of Arizona  
24 Corporation Commission Policy and Action on Natural Gas Infrastructure Matters in  
25 Arizona ("NOI") April 15, 2003, wherein it sought comments and suggestions on future  
26 natural gas infrastructure issues, including natural gas storage facilities. After  
27 considering the input of interested parties, the Commission issued the Policy  
28 Statement December 18, 2003.

1           6. In its Policy Statement, the Commission recognized the need for a  
2 reliable and secure natural gas infrastructure in Arizona to support adequate service  
3 to the growing energy requirements in the state. Specifically, the Policy Statement  
4 included the following declarations:

- 5           • Diversity in Arizona's natural gas infrastructure, including interstate pipeline  
6 facilities, natural gas storage facilities, and related aspects of natural gas  
7 service, is beneficial and should be actively pursued by Arizona utilities as a  
8 way of providing greater supply reliability and flexibility and possible lower  
9 costs.
- 10          • Arizona utilities should consider natural gas storage as an integral component  
11 of their efforts to develop a diverse natural gas supply portfolio, recognizing the  
12 variety of potential benefits of natural gas storage, including enhanced  
13 reliability, operational flexibility, more efficient use of pipeline capacity assets,  
14 and reduced natural gas price volatility.
- 15          • The Commission endorses voluntary efforts to analyze and plan for the present  
16 and future natural gas supply needs of Arizona and encourages Arizona utilities  
17 and others to actively participate in such activities.

18           7. In addressing the need for the development of new natural gas  
19 infrastructure in Arizona, the Commission further recognized that cost recovery for  
20 these projects was a "significant issue" that needed to be considered. The  
21 Commission stated the following:

- 22           • In recognition of the current need for natural gas infrastructure in Arizona, the  
23 Commission has also been considering alternate approaches to encourage the  
24 development of infrastructure in Arizona. Pre-approval of cost recovery would  
25 be one possible mechanism. The alternative recovery mechanism should incite  
26 utilities to invest in the infrastructure they need to provide the best service to  
27 their customers.
- 28           • At this time the Commission believes that the best method for the Commission  
to address natural gas infrastructure matters is to encourage utilities to file  
applications, including requests for alternate cost treatment, in order that the  
Commission can consider specific requests for cost recovery proposals  
appropriate to the circumstances for each individual applicant.

1           8.     In light of the Commission's Policy Statement, Southwest Gas files this  
2 application for approval to construct, operate, and maintain the proposed LNG storage  
3 facility and to recover the actual costs associated therewith, including the  
4 establishment of a regulatory asset. The Company believes that the facts and  
5 circumstances set forth in this application support the requested relief by  
6 demonstrating that the construction of the LNG storage facility will accomplish many of  
7 the objectives specified in the Policy Statement.

8           9.     As discussed in greater detail below, Southwest Gas has identified a  
9 preferred site location in Southeast Tucson for its proposed LNG storage facility. The  
10 proposed LNG storage facility will be designed and constructed in accordance with all  
11 applicable safety regulations and standards. The land requirement for the proposed  
12 LNG storage facility is approximately 30 acres and will be equipped with a security  
13 system, hazard detection system, emergency shutdown system, and will include  
14 appropriate spill containment areas. The storage tank is estimated to measure  
15 approximately 60 feet in height and 108 feet in diameter and will have a design  
16 storage capacity of approximately 233,000 Dth or 2,815,000 gallons, which is  
17 sufficient to allow for the withdrawal of approximately 65,000 Dth/day. To fill the  
18 storage tank, the Company has considered: (1) transferring LNG from tanker trucks;  
19 or (2) liquefying natural gas onsite, as further addressed below. Construction of the  
20 proposed LNG storage facility is expected to take between 24 and 30 months.

21           **Benefits of a Local LNG Storage Facility.**

22           10.    The primary purpose of the proposed LNG storage facility is to have  
23 readily available local gas supply to dispatch into Southwest Gas' distribution system  
24 during severe supply disruption events. In order to deliver gas supplies purchased  
25 from the Permian and San Juan Basins to customers in its Tucson service area,  
26 Southwest Gas relies exclusively on El Paso Natural Gas' ("El Paso") interstate  
27 transportation services. As a result of this dependency on El Paso and its ability to  
28 provide reliable transportation service, to the extent El Paso experiences any



1 operational issues – including supply disruptions – Southwest Gas' distribution system  
2 may also be impacted.

3 11. Indeed, Southwest Gas, as well as the rest of the southwest United  
4 States, experienced such an event in early February 2011. During this event, the  
5 Tucson and Sierra Vista areas experienced extreme cold temperatures. These  
6 conditions, combined with an unanticipated decrease in the available gas supply from  
7 El Paso's system, caused pressures in El Paso's pipeline serving this area to drop  
8 below design parameters. As a result of these circumstances and reported customer  
9 outages on the Company's distribution system, Southwest Gas determined that it was  
10 necessary to temporarily interrupt natural gas service in certain areas in this region to  
11 avoid a possible complete failure of its distribution system. This event impacted  
12 approximately 19,000 Southwest Gas customers.

13 12. Following the February 2011 event, the Federal Energy Regulatory  
14 Commission and the North American Electric Reliability Corporation conducted an  
15 investigation. In a report entitled "Outages and Curtailments During the Southwest  
16 Cold Weather Event of February 1-5, 2011" ("FERC Report"), it was determined that  
17 additional "local" natural gas storage in Arizona could have prevented many of the  
18 outages that occurred. The FERC Report explained that "[n]atural gas storage is a  
19 key component of the natural gas grid that helps maintain the reliability of gas supplies  
20 during periods of high demand" and that "[s]torage can help [local distribution  
21 companies] maintain adequate supply during periods of heavy demand by  
22 supplementing pipeline capacity, and can serve as a backup supply in case of  
23 interruptions in wellhead production." (FERC Report, p. 213.)

24 13. By having readily available local natural gas supply that can be timely  
25 dispatched into sections of its distribution system upon demand, an LNG storage  
26 facility will support Southwest Gas' ongoing efforts to enhance the reliability of  
27 segments of its distribution system and mitigate against future service interruptions  
28 resulting from supply shortage events.

1           14. Other advantages of having a storage facility connected to part of  
2 Southwest Gas' distribution system include: (i) ability to mitigate localized curtailments  
3 that could come about due to third-party damage caused by construction or other  
4 activities; (ii) mitigating localized interruptions that may result from the performance of  
5 required maintenance; and (iii) sustaining local system requirements during times of  
6 high system demand.

7           15. To address the Commission's recognized need for additional  
8 infrastructure and meet the needs of its customers for an alternate secure and reliable  
9 gas supply, Southwest Gas has considered other alternatives. However, none of  
10 these alternatives proved to be as reliable and cost effective as the proposed local  
11 LNG storage facility. The Company spent a significant amount of time considering  
12 possible underground storage solutions during its participation in the Arizona Storage  
13 Coalition. The coalition was ultimately unsuccessful in identifying a viable  
14 underground project. Barriers such as unquantifiable development costs and potential  
15 environmental issues proved too difficult to overcome.

16           16. In addition, the proposed LNG storage facility offers superior service and  
17 reliability compared to existing third-party storage providers. Located in and around  
18 Texas are providers that offer storage services to shippers on El Paso. In fact, the  
19 Company currently has a contract with Enstor to provide such services for the benefit  
20 of its customers. While these storage arrangements can provide an alternate supply  
21 source to gas typically sourced from the gas production areas, injection of gas  
22 supplies from Texas-based storage into El Paso – some 700 miles upstream of the  
23 Company's distribution system – offers no support for the immediate pressure needs  
24 on the distribution system during peak demand or supply shortage events. Further,  
25 during extreme supply shortage periods on the interstate pipeline system, there is no  
26 assurance that gas withdrawn from storage in Texas would in fact be timely delivered  
27 to the customer's market area. For example, potential problems with upstream facility  
28 performance or other shippers upstream of Southwest Gas taking the gas prior to it

1 reaching the desired destination could both impact deliveries to Southwest Gas  
2 customers.

3 17. Moreover, if required to rely on the transportation services of interstate  
4 pipelines for delivery from storage, Southwest Gas would be compelled to adhere to  
5 the applicable interstate pipeline gas scheduling tariff provisions in order to schedule  
6 gas from the storage facility. By instead relying on a local storage option, Southwest  
7 Gas will have greater flexibility to take gas from storage when it is needed, which  
8 could be critical during supply shortage events. The proposed LNG storage facility  
9 would be operated by Southwest Gas and connected directly to its distribution system,  
10 making it accessible for customer demands 24 hours a day without the need to  
11 schedule gas on El Paso or with a third-party storage provider.

12 **Safety Features of Proposed LNG Storage Facility.**

13 18. Southwest Gas' proposed LNG storage facility will be designed and  
14 constructed in accordance with all applicable safety regulations and standards. The  
15 proposed LNG tank consists of a cryogenic inner tank and a non-cryogenic outer tank.  
16 The tank is classified as a single containment tank. The inner tank is insulated with  
17 load bearing insulation between the outer and inner floors, granular insulation in the  
18 annular space between the tank walls, and closed by an insulated suspended deck  
19 (i.e. ceiling). The foundation for the tank is expected to be a ring wall, and will be  
20 configured with electric foundation heat to prevent soil freezing underneath the  
21 foundation.

22 19. The proposed LNG storage tank will be located within an impoundment  
23 area that is configured according to the applicable regulations to contain the entire  
24 liquid contents of the tank in the event of an uncontrolled leak.

25 20. The proposed LNG storage facility will be equipped with a security  
26 system, including barbed wire fencing surrounding the perimeter of the facility and  
27 monitoring of the area with closed circuit television systems. Access to the site will be  
28 limited by security controlled gates. In addition, the facility is expected to have a



1 hazard detection system consisting of the following: fire detectors; flammable gas  
2 detectors; smoke and heat detectors; and a seismic event recorder. The proposed  
3 LNG storage facility will also have an emergency shutdown system to prevent the flow  
4 of natural gas in the event of a gas leak or fire. The security and related control  
5 systems will be capable of manual, automatic, or remote operation.

6 21. In addition to the aforementioned safety features, Southwest Gas has  
7 considerable experience owning and operating an LNG storage facility. Paiute  
8 Pipeline Company ("Paiute"), a Southwest Gas affiliate, has been safely maintaining  
9 and operating an LNG storage facility in Lovelock, Nevada for more than 30 years  
10 without incident. A significantly larger facility than the proposed LNG storage facility, it  
11 has a storage capacity of 1 Bcf, with a firm withdrawal capacity capability of 71,959  
12 Dth. Paiute's LNG storage facility is also outfitted with liquefaction equipment. As a  
13 result, Southwest Gas has gained and will continue to gain the requisite knowledge  
14 and experience pertaining to safe operation and maintenance of an LNG storage  
15 facility.

16 22. LNG storage facilities have maintained a consistent safety record for  
17 nearly 70 years. As the LNG itself is not ignitable, LNG has likewise proven to be safe  
18 when used properly. While under specific limited circumstances LNG vapors are  
19 considered flammable, these conditions are not likely to exist at the proposed LNG  
20 facility as the storage tank and related facilities are specially designed to prevent the  
21 potential for a combustible mixture of air and gas within an enclosed space. Further,  
22 LNG has been deemed a non-toxic substance. For example, if LNG were mixed with  
23 water, the water would be safe to drink after complete vaporization of the LNG. Unlike  
24 gasoline or other liquid fuels, once LNG vaporizes no toxic residue remains.

25 ...  
26 ...  
27 ...  
28 ...

1           **General Project Description.**

2           23. Southwest Gas has considered several sites in the Tucson area for the  
3 facility, and it has identified a preferred site located in Southeast Tucson and is  
4 currently working with the land owner to secure the site, subject to Commission  
5 approval of this project. In reviewing these sites, several key factors have been  
6 analyzed, including: safety considerations, pipeline maximum allowable operation  
7 pressure, system take away capacity, site access, and proximity to Southwest Gas'  
8 existing distribution system. The land requirement for the proposed LNG storage  
9 facility is not expected to exceed 30 acres.<sup>1</sup>

10          24. The proposed LNG storage facility is anticipated to consist of a flat  
11 bottom API 620 tank with a cryogenic inner tank and a non-cryogenic outer tank, and  
12 related pumps, a boil-off system, vaporization equipment, and equipment to facilitate  
13 the filling of the storage tank. The storage tank is estimated to measure  
14 approximately 60 feet in height, with a diameter of 108 feet. In addition, the LNG  
15 storage facility will include spill containment areas, a control building, and security  
16 fencing surrounding the entire facility. Attachment 1 includes a typical site plan  
17 drawing prepared by CHI Engineering.

18          25. The design storage capacity of the proposed LNG facility is  
19 approximately 233,000 Dth or 2,815,000 gallons. This capacity is sufficient to allow a  
20 minimum of 168,000 Dth of supply to be readily available after boil-off and  
21 vaporization fuel loss.<sup>2</sup> Once the LNG vaporizes, it will be dispatched into Southwest  
22 Gas' distribution system and taken as part of the day-to-day supply requirement.  
23 Therefore, no gas is lost during the boil-off process. The proposed design of the  
24 vaporization equipment will allow for the withdrawal of approximately 65,000 Dth/day.

25           <sup>1</sup> In order to obtain preliminary design requirements and the associated cost estimates for this  
26 project, Southwest Gas retained the services of CHI Engineering Services, Inc. ("CHI  
27 Engineering").

28           <sup>2</sup> Boil-off occurs during a heat transfer process that causes the LNG stored in the tank to  
vaporize after the LNG reaches a temperature greater than minus 260 degrees Fahrenheit.

1 Natural gas vaporized out of the LNG storage facility will be delivered into Southwest  
2 Gas' high pressure system downstream of either the Company's existing Valencia  
3 Road or Houghton Road taps.

4 26. Following the initial fill of the storage tank, it is estimated that a minimum  
5 of 11,000 Dth or 134,000 gallons of LNG inventory is required to remain in the tank at  
6 any given point in time. This LNG inventory, known as heel gas or cushion gas, is  
7 necessary to keep the tank cool when it is not full. After the initial fill, the total volume  
8 of LNG required to fill the storage tank each year will be offset by the heel gas and  
9 unused working inventory remaining in the tank.

10 27. Depending on the site location, Southwest Gas will need to install up to  
11 seven miles of Southwest Gas mainline facilities to connect the LNG storage facility to  
12 its existing high pressure system. Other utilities, such as water, electric, telecom, and  
13 sewer/septic, will also need to be installed at the site. In addition, to permit access to  
14 the facility Southwest Gas may be required to construct paved roadways depending  
15 on the site location.

16 28. The Company has considered two alternatives for filling the storage  
17 tank: (1) transferring LNG from tanker trucks; or (2) liquefying natural gas onsite using  
18 liquefaction equipment to convert the natural gas into a liquid form for ease of storage.

19 29. The first alternative would be to fill the tank by transferring LNG from  
20 tanker trucks into the LNG storage tank. Southwest Gas intends on purchasing the  
21 LNG from a vendor who produces LNG and provides the necessary transportation  
22 services to deliver the LNG to the proposed facility. Although Southwest Gas has yet  
23 to enter into any supply agreements with such vendors, the Company has currently  
24 identified and had preliminary discussions with a vendor located near Topock,  
25 Arizona. The approximate distance from this vendor's facility to the Southeast Tucson  
26 area is 365 miles. The total maximum amount of LNG that would need to be  
27 purchased and delivered to the storage facility for the initial fill under this alternative is  
28 approximately 268,000 Dth or nearly 3,238,000 gallons. This amount takes into

1 account the anticipated LNG flash or vapor lost in the process of refilling the tank,  
2 which is why the estimated total maximum amount for the initial fill is more than the  
3 proposed design storage capacity. Southwest Gas estimates that the LNG storage  
4 facility will be filled at a rate of 10,000 gallons per hour, which would result in the tank  
5 being filled in approximately 41 days.

6 30. The second alternative would include installing liquefaction equipment  
7 during the construction of the LNG storage facility. Liquefying natural gas is  
8 accomplished by condensing it through a cooling process. The proposed liquefaction  
9 equipment would be capable of liquefying approximately 2,000 Dth or 24,000 gallons  
10 of LNG per day. Under this alternative, Southwest Gas would need to purchase  
11 approximately 335,000 Dth or 4,054,000 gallons of natural gas for the initial fill of the  
12 storage tank. This amount is necessary to cover the LNG flash or vapor losses  
13 mentioned above, in addition to an estimated 5% gas loss associated with the  
14 liquefaction equipment. Southwest Gas estimates that it will take approximately 137  
15 days to fill the tank using liquefaction equipment.

16 31. Southwest Gas anticipates that it will take between 24 and 30 months to  
17 complete construction of the proposed LNG storage facility. If the facility were to  
18 include the construction of onsite liquefaction equipment it is estimated that an  
19 additional 6 months would need to be included in the projected construction schedule.

20 **Benefits of Liquefaction Equipment.**

21 32. A storage facility outfitted with liquefaction equipment provides  
22 operational and service flexibility benefits. For instance, having liquefaction  
23 equipment onsite at an LNG storage facility provides the flexibility of replenishing  
24 withdrawn inventory throughout the year without dependency on a vendor that  
25 produces and transports LNG to the storage facility.

26 33. An LNG storage facility with liquefaction equipment can also provide  
27 Southwest Gas with the operational flexibility of using readily available LNG to  
28 temporarily serve parts of Southwest Gas' distribution system that may not be able to

1 adequately support sudden customer growth. Further, in the event of a service  
2 interruption or outage resulting from required maintenance or repairs of certain  
3 sections of the Company's system, Southwest Gas may be able to utilize available  
4 LNG to mitigate the effects of any such work.

5 34. The liquefaction equipment could further benefit Southwest Gas and its  
6 customers relative to the future maintenance and operation costs associated with the  
7 LNG storage facility. With this equipment, Southwest Gas may have opportunities to  
8 provide Commission approved LNG tariff services upon making the necessary  
9 regulatory filings. For example, Southwest Gas could provide LNG service to vendors  
10 who have LNG fueling stations for transportation use. Southwest Gas could also  
11 provide LNG service to other utilities for peak shaving or temporary supply purposes.  
12 The revenues received from any such services could be used to offset the customer  
13 impacts associated with future maintenance and operation costs.

14 35. It is anticipated that installing liquefaction equipment would add  
15 approximately \$24,000,000 to the project cost. As a result, notwithstanding the  
16 potential benefits of installing liquefaction equipment, Southwest Gas recommends  
17 filling the tank by transferring LNG from tanker trucks to minimize the overall project  
18 cost and the resulting bill impact to customers.

19 **Estimated Costs and Deferred Accounting Treatment.**

20 36. The current estimated total capital cost of the proposed LNG storage  
21 facility, including those facilities necessary to connect the proposed storage tank to  
22 Southwest Gas' existing distribution system, is approximately \$46,363,000.

23 37. Since Southwest Gas is in the preliminary stages of this project and has  
24 yet to secure a specific site location or conduct a detailed engineering analysis and  
25 cost estimate, Southwest Gas respectfully requests approval of the actual cost of the  
26 facility, not to exceed \$55,000,000. The \$55,000,000 consists of the estimated cost of  
27 \$46,363,000, plus 20 percent, which is a reasonable contingency commonly used in  
28 the industry.



1           38. Utilizing the requested not-to-exceed amount of \$55,000,000 as a proxy,  
2 the annualized revenue requirement associated with the proposed LNG storage  
3 facility equates to a monthly bill impact of \$0.54 or 1.34 percent for an average  
4 residential customer using 25 therms per month.

5           39. Based on a \$4.00/Dth Southern California border market price for  
6 natural gas, plus the associated cost for a third-party vendor to produce and transport  
7 the LNG to the proposed storage facility, Southwest Gas estimates that the annual  
8 gas cost associated with this boil-off will be approximately \$1,678,000. The total cost  
9 per unit is approximately \$13.42/Dth. This amount would increase the average gas  
10 cost rate for residential customers by approximately \$0.00319 per therm, which  
11 equates to a monthly bill impact of approximately \$0.08.

12           40. As a result, the estimated combined average monthly bill impact on  
13 residential customers of the incremental costs associated with the proposed LNG  
14 storage facility would be \$0.62.

15           41. In light of the costs Southwest Gas anticipates incurring to complete,  
16 operate, and maintain the proposed LNG storage facility, the Company is requesting  
17 approval to establish a regulatory asset to defer the ongoing revenue requirement  
18 associated with the proposed LNG storage facility, including the depreciation  
19 expense,<sup>3</sup> property taxes,<sup>4</sup> operation and maintenance expenses,<sup>5</sup> and carrying  
20 charges consistent with the Company's currently authorized pre-tax rate of return, until  
21 the Company's next general rate case.

22 \_\_\_\_\_  
23 <sup>3</sup> Southwest Gas' preliminary ratemaking proposal contemplates that depreciation expense on  
24 distribution plant would be calculated using the currently authorized depreciation rates. Since  
25 Southwest Gas does not currently have an authorized depreciation rate for storage plant, the  
depreciation rate of 4.75% (as currently authorized for Palute's storage plant) was used as a  
proxy.

26 <sup>4</sup>Property taxes would be calculated using the Company's current property tax rate.

27 <sup>5</sup> Southwest Gas estimates that the first year annual cost to operate the LNG storage facility will  
28 be approximately \$237,000. These costs are primarily associated with property insurance,  
manpower, utilities, and maintenance for the facility.

1           42. Furthermore, since the Company is in the preliminary stages of this  
2 project and has yet to secure a site for the facility or retain an engineering consultant  
3 to conduct a detailed analysis and cost estimate for the proposed LNG storage facility,  
4 it is possible that an unforeseen circumstance may arise resulting in Southwest Gas  
5 recommending not to construct the project. As this decision may occur sometime  
6 after the Company has incurred significant costs, Southwest Gas seeks approval to  
7 recover any and all non-refundable project-related costs prudently incurred by the  
8 Company, regardless of whether the project is constructed.

9           **Cost Recovery.**

10           43. In the event the proposed LNG storage facility is included in the  
11 Company's next general rate case, the depreciated capital costs associated with the  
12 LNG storage facility (net of deferred taxes) and LNG inventory will be incorporated  
13 into the development of the test year rate base, and the ongoing expenses related to  
14 the facility will also be included in the test year revenue requirement. However, if the  
15 LNG storage facility is not included in rate base in the Company's next general rate  
16 case, the Company plans to request approval of a cost recovery mechanism that  
17 would facilitate recovery of the LNG storage facility costs that have been deferred into  
18 the regulatory asset.

19           44. With respect to gas cost recovery, Southwest Gas requests that the gas  
20 costs associated with the LNG storage facility be recovered pursuant to the  
21 Purchased Gas Cost Adjustment Provision ("PGA") of the Southwest Gas Arizona  
22 Gas Tariff. Assuming there is no supply disruption which necessitates use of the LNG  
23 contained in the storage facility, it is anticipated that the proposed facility will yield  
24 approximately 125,000 Dth of boil-off annually, which will be dispatched into  
25 Southwest Gas' distribution system and taken as part of the day-to-day supply  
26 requirement.

27 ...

28 ...

1           **Conclusion.**

2           45. By having readily available local gas supply to dispatch into Southwest  
3 Gas' system, the proposed LNG storage facility will enhance the reliability and  
4 flexibility of Southwest Gas' distribution system and mitigate against future service  
5 interruptions arising from severe supply disruption events in the area. Thus,  
6 Southwest Gas believes that the LNG storage facility has long-term benefits for its  
7 customers. This proposal was a result of reasoned and thoughtful judgment that  
8 balanced the cost of the project with the benefits derived from it.

9           46. Based thereon, the construction of the LNG storage facility and the costs  
10 related thereto should be deemed reasonable and prudent. Pursuant to the  
11 Commission's Policy Statement, Southwest Gas respectfully requests that the  
12 Commission approve recovery of these costs as set forth herein.

13           WHEREFORE, Southwest Gas respectfully requests that the Commission  
14 issue a final order:

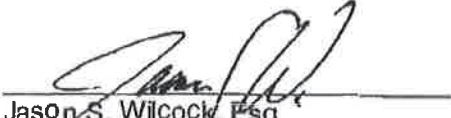
- 15           A. Granting Southwest Gas approval to construct, operate, and maintain the  
16 proposed LNG storage facility to serve its customers;
- 17           B. Approving Southwest Gas' actual project costs for the proposed LNG  
18 storage facility, not to exceed \$55,000,000 for an LNG storage facility  
19 without liquefaction;
- 20           C. Authorizing the Company to establish a regulatory asset to capture the  
21 ongoing revenue requirement associated with the proposed LNG storage  
22 facility and to recover those deferred costs in the Company's next general  
23 rate case or through a cost recovery mechanism established in its next  
24 general rate case, as set forth herein;
- 25           D. Authorizing Southwest Gas to recover the costs associated with any gas  
26 released from the LNG storage facility into the Company's distribution  
27 system and taken as part of the day-to-day supply requirement, including  
28 without limitation, the boil-off, pursuant to the PGA mechanism; and

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

E. For such other relief as this Commission deems appropriate.

Dated this 27<sup>th</sup> day of January 2014.

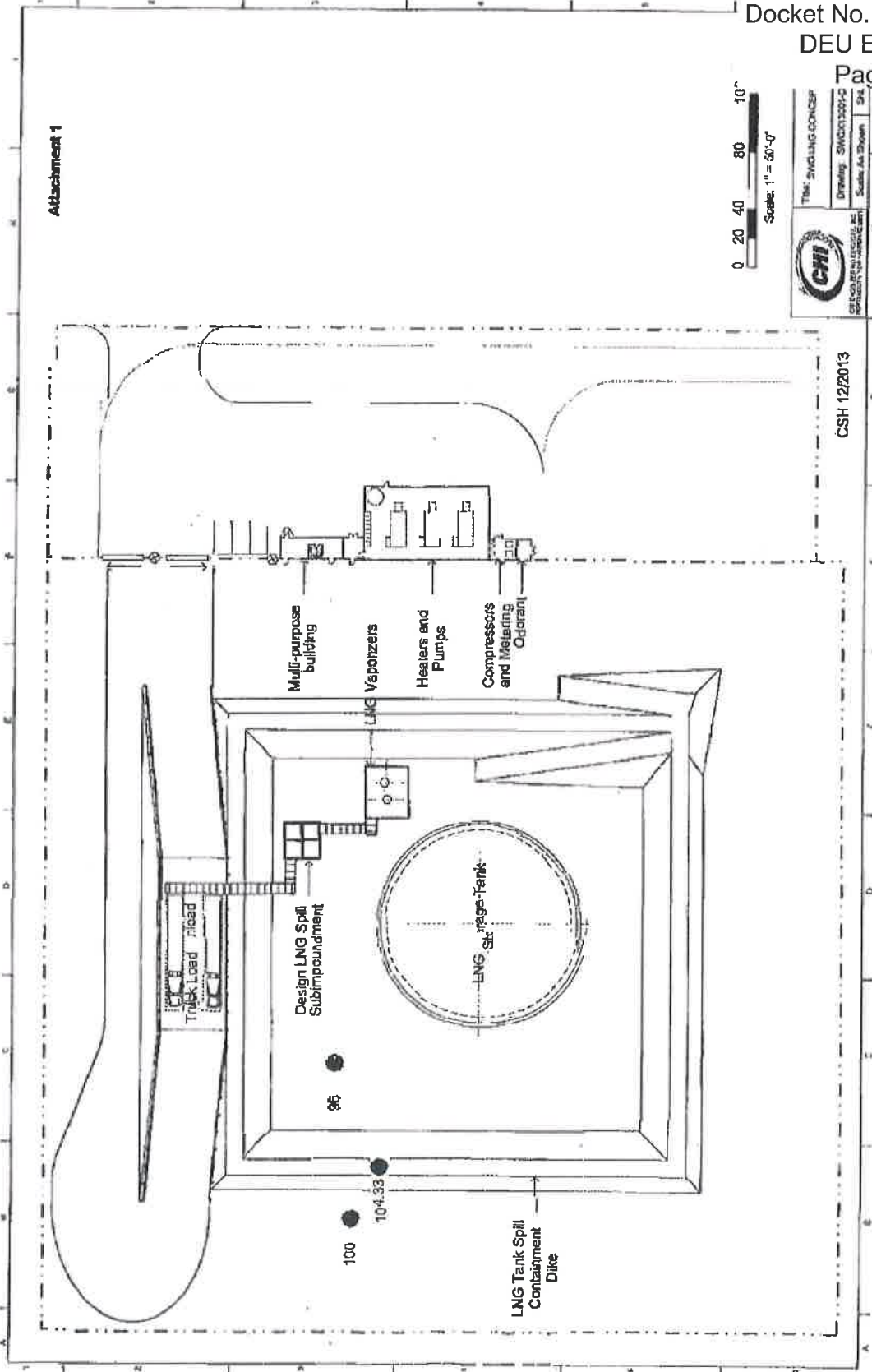
Respectfully submitted,  
SOUTHWEST GAS CORPORATION

  
\_\_\_\_\_  
Jason S. Wilcock, Esq.  
Arizona Bar No. 028856  
5241 Spring Mountain Road  
Las Vegas, Nevada 89150  
Telephone: (702) 364-3227  
Email: [jason.wilcock@swgas.com](mailto:jason.wilcock@swgas.com)

*Attorney for Southwest Gas Corporation*

# Attachment 1





Attachment 1

**CHI**  
CONSULTING INCORPORATED  
1000 N. UNIVERSITY AVENUE  
SALT LAKE CITY, UT 84103

Tank: SW/LNG CONDSEP  
Drawing: SW/0312013-2  
Scale: As Shown

CSH 12/2013