North-South Project

Written comments received during the initial public comment period from October 8, 2015 to November 23, 2015

Individuals

Mike Cohen
Larry Conley
Michael Craft
Jack and Carolyn Dales
Linda L. Daniels
Scott and Sharon Hay
Sandra Ibarra
Page Miller and Dr. Joyce Miller
Dr. Pamela J. Miller
Timothy P. Prince, Esq.
Gayle Shrader
Ellen Timmreck

Organizations

California Department of Fish and Wildlife
City of Moreno Valley
City of San Bernardino
Department of Water Resources
Greater Riverside Chambers of Commerce
Highland Fairview
Lahontan Regional Water Quality Control Board
Metropolitan Water District
Old Spanish Trail Association
Riverside County Flood Control and Water Conservation District
San Bernardino County, Department of Public Works
San Bernardino Planning Commission
Sierra Club
South Coast Air Quality Management District
Southern California Generation Coalition
United States Army Corps of Engineers
United States Environmental Protection Agency

Freeman, Emma

From: CPUC North-South
Sent: Tuesday, November 24, 2015 10:26 AM
To: 'nvmike@gmail.com'
Subject: RE: North-South Project

Mr. Cohen,

Thank you for your comment. Additional information regarding the California Public Utilities Commission and US Forest Service environmental review process can be found on the following website: http://www.cpuc.ca.gov/Environment/info/ene/n-s/northsouth.html.

Best,

Emma

Emma Freeman, Environmental Planner
505 Sansome Street, Suite 300, San Francisco, CA 94111
Phone: 415-398-5326 ext. 4721
efreeman@ene.com • www.ene.com

-----Original Message-----
From: Mike Cohen [mailto:nvmike@gmail.com]
Sent: Friday, November 20, 2015 12:02 PM
To: Chiang, Eric
Subject: North-South Project

Dear Eric Chang;

I wish to express my concerns over your current routing plans for the north-south project. The current route is unacceptable and will provide undue hardships and long term safety risks to the residents of San Bernardino. I urge you to reevaluate your plan to use flood control right of way to bypass the heavily traveled corridor of Palm, Kendall and 40th Ave. The current plan will disrupt the primary bus corridor between San Bernardino and Loma Linda and will make for extremely hazardous driving and pedestrian traffic for local citizens and the 18,000 students attending Cal State San Bernardino.

Since you will be crossing over the San Andreas fault it is critical that you engineer shut off valves close to either side of the fault line, because your primary line will rupture when we experience the 15' shift of ground when the right lateral San Andreas Fault slips.

As San Bruno demonstrated, a major gas line running through heavily populated areas is a recipe for disaster.

You are running this line between the San Andreas and San Jacinto faults, and your lines will fail not only in the Cajon Pass, but all along the northwestern section of San Bernardino. Please reengineer your line to bypass the heavily populated and heavily traveled corridor you are currently proposing.

I know the City of San Bernardino has submitted an alternative corridor plan to you, I urge you to review and adopt this plan.

Sincerely;

Mike Cohen
Resident of North Verdemont

Sent from my iPhone

Freeman, Emma

From: DeVost, Erec
Sent: Wednesday, November 04, 2015 6:42 AM
To: Larry Conley
Subject: Re: North-South Project Comment

Mr. Conley,
Thank you for your comment. Additional information regarding the California Public Utilities Commission and US Forest Service environmental review process can be found on the following website: http://www.cpuc.ca.gov/Environment/info/ene/n-s/northsouth.html

Best,
Erec

Erec DeVost
Ecology and Environment, Inc.

On Nov 3, 2015, at 9:39 AM, Larry Conley <conleylarry@yahoo.com> wrote:

> I am very disappointed in the way this project is being handled. I attended a gas co meeting about a year ago, where they took the names and addresses of all who attended. We were assured that we would be notified of future meetings. I have not rs any notice of the meetings that just occurred. My concern is that the pipe line under 1100 psi is being buried under Reche Canyon road when it could have been routed through unpopulated areas and be much safer for the public. I get the feeling that the gas co does not want negative comments on this project. I fear that an earthquake will break the line, gas explodes and is equal to a giant bomb, hurting a lot of people.
>
> Have a great day, larry c.
>
>

Freeman, Emma

From: Chiang, Eric <eric.chiang@cpuc.ca.gov>
Sent: Friday, November 13, 2015 6:40 PM
To: Shillington, Luke; Hawkins, Robert - FS; DeVost, Erec
Cc: Freeman, Emma
Subject: FW: North-South Project Comment

For the files...

From: Craftno1@aol.com [Craftno1@aol.com]
Sent: Friday, November 13, 2015 5:52 PM
To: Chiang, Eric
Subject: North-South Project Comment

Hello Mr. Chiang,
I am protesting the route of the North South Project by Southern California Gas Company for the following reasons.

At present, San Bernardino is the most affected community, running 14 miles of 36" as pipe with 850 pounds of pressure down Kendall, on over near E St, then down and checker boarding through more residential areas of the city when the line could be placed behind foothills and a wash and should there be a tragic event, fewer residents would be affected.
Several have suggested concerns that it run across the San Andreas fault,instead fo crossing significantly smaller earthquake faults in the area, justifying it's path being moved behind the foothills and down the wash.
Perhaps existing Utility Trenches could be utilized so that we, the residents and customers would be less impacted by construction digging up our main route to shop, to travel, etc.
Several underground construction people I know tell me the project will take years, not months to install the line as So Ca. Gas is suggesting in their filing. So Ca Gas also says that this is the most convenient way to lay the pipe. How convenient was it for the route of pipe in San Bruno that destroyed an entire block in minutes?
I'm told by an individual who went to restore the lines in San Bruno that the construction methods utilized on the original pipeline were not up to any professional standard when those line originally installed.

Michael Craft
6495 Escena St.
San Bernardino, Ca.
92407
Craftno1@aol.com

California Public Utilities Commission
Comisión de Servicios Públicos de California

Public Scoping Meeting for the Proposed North-South Project
San Bernardino, CA, October 27, 2015
Reunión Pública del Proyecto Propuesto North-South, San Bernardino, CA, 27 de Octubre de 2015

Thank you for participating in tonight's public meeting. We would like to hear your comments.
Gracias por su participación en la reunión pública esta noche. Queremos oír sus comentarios.

Note: Before including your address, telephone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. All submissions from individuals identifying themselves as representatives or officials of organizations or businesses will be made available for public inspection in their entirety.

Nota: Antes de añadir su dirección de postal, número de teléfono, dirección del correo electrónico, u otra información personal en su comentario, usted debe tomar en cuenta que su comentario entero, incluyendo identificación personal, pudiera estar disponible al público en cualquier momento. Aun cuando usted puede solicitarnos en su comentario que se mantenga su información de identificación personal como confidencial para la revisión pública, no podemos garantizar que estaremos en capacidad de hacerlo. Todos los comentarios de individuos que se identifiquen como representantes o funcionarios de organizaciones o empresas estarán completamente disponibles para inspección del público.

Name/Nombre: Jack & Carolyn Dales

Affiliation/Organización: Tax Paying Home Owner

Phone/Teléfono: 909-887-6834 Email/Correo eléctronico: jhdales@aol.com

Address/Dirección: 5677 Autumn St. San Bernardino, CA 92407

COMMENTS/COMENTARIOS

Jack

Comments must be received by November 23, 2015
Los comentarios serán recibidos hasta el 23 de Noviembre de 2015

Send comments to/ Envíe sus comentarios a:
Public Scoping Comments
Re: North-South Project
505 Sansome Street, Suite 300, San Francisco, CA 94111
Project Voicemail/Línea de atención al usuario: (855) 520-6799
Email/ Correo electrónico: north-south@ene.com Fax: (415) 398-5326

COMMENTS/COMENTARIOS

To Who May Concerned:

My neighbors and I are greatly concerned about the planned construction of the gas line to be built along Kendall Ave. to 40th Street. We are not aware of any public hearing conducted in our area north of the 210 Freeway or East of the 215 Freeway. It appears that they did not think about the earthquake faults in this area, Note: we all felt the one Tuesday night just 4 miles up the Cajon Pass. The planners for this North/South Project should be aware of the heavy traffic along Kendall, Palm, and University streets. These are the streets used by the thousands of students, who daily attend California State University San Bernardino. Reported enrollment of over 22,000 students. This construction will add greater congestion for both the students and tax paying home owners using these streets daily. There will be increased levels of pollution and noise emanating from the many cars waiting in the increased congestion. Have the planners considered the air quality from the resulting congestion . This should not pass any environmental studies done for this project. Several engineers have stated this is not the least expensive route for this Project. Other routes could be better used for this North/South Project. Build it along the foothills, use the dirt roads along the creeks and washes, or even along the 215 Freeway. There are better choices which would appear to be cheaper for this North/South Project. You must consider the people who live in the area and must use these streets daily. The quality of life during the one or two years of construction must be considered for all the people effect by this Project.

Thank You,

Jack Dales, Carolyn S. Dales

Jack and Carolyn Dales

Freeman, Emma

From: HRDLLY <res04d5h@verizon.net>
Sent: Saturday, November 21, 2015 8:08 AM
To: CPUC North-South
Subject: Pipeline in SB

Follow Up Flag: Follow up
Flag Status: Completed

Ladies and Gentlemen,

Please make every effort to avoid using Valencia Ave. in San Bernardino as a portion of the route for this proposed gas line. Using 40th Street and Lynwood will also be major inconveniences to this section of our city.

In addition to the many residents with driveways actually on Valencia, residents on the streets of Bernard Way and Glendenning MUST use Valencia for daily access in and out. It is their ONLY way.

Other residents living between Valencia and the Flood Control Channel on Marshall Blvd., Val Mar, North Rd. and a portion of San Gabriel MUST use Valencia or Lynwood to leave their cluster of homes. There are over seventy (70) houses in this small neighborhood. Your route on Lynwood would further inconvenience this group of residents.

Valencia Ave. is wide but only 2 lanes and has a large amount of traffic. It is used as a north/south route to Cal State. Many people use it to avoid freeway intersections at Waterman and the 210 freeway. Local children walk or bicycle Valencia to Parkside Elementary School and Golden Valley Middle School.

This section of Valencia Ave. is attractive. It is shaded by large eucalyptus trees, cooled by lawns from lovely homes and the green of a golf course. It also has "Bike Lanes". These assets draw many resident and non-resident recreational walkers, joggers and cyclists.

Instead of Valencia Ave., you might consider the street of Harrison, only a couple of blocks east. It has no houses or driveways, carries very little traffic and is bounded by the Flood Control Channel on it's west.

IF the gas line must come through San Bernardino, please AVOID Valencia Ave.

Thank you,

Linda L. Daniels

800 E. Marshall Blvd.

San Bernardino, CA. 92404

909-883-0518

Freeman, Emma

From: Hay_Family <hay_family@roadrunner.com>
Sent: Sunday, November 22, 2015 10:59 PM
To: CPUC North-South; eric.chiang@cpuc.ca.gov
Subject: Fwd: Public Scoping Comments re: North-South Project

Follow Up Flag: Follow up
Flag Status: Completed

Good Evening,

Please add the following question as a sub-question of #2 below:

2A. Please provide a comprehensive list of all residential and business addresses that could be within the potential blast radius in the event of a explosion. Will you be notifying these residents and business owners of the potential danger posed by this new gas line? How and when will you be notifying them?

Sincerely,

Scott and Sharon Hay

-------- Forwarded Message --------
Subject: Fwd: Public Scoping Comments re: North-South Project

Date: Sun, 22 Nov 2015 01:20:33 -0800

From: Hay_Family <hay_family@roadrunner.com>

To: North-South@ene.com, eric.chiang@cpuc.ca.gov

Public Scoping Comments re: North-South Project
Attention: Eric Chiang
11/21/15

Please include these comments in the Public Scoping Comments re: North-South Project:

1. The recent explosion along the PG&E gas line in Bakersfield - http://abc7.com/news/video-gas-explosion-in-bakersfield-sends-flames-200-feet-in-air/1084460/ - was on a 30" gas line similar to the one Southern California Gas Company intends to install for the North-South project. In the event of a breach and ignition of the fuel in the gas line what will be the radius of the resulting blast?

2. Large portions of this project run within feet of residential neighborhoods and in some cases within a few feet of

people's front doors. In the event of an explosion on a 30" gas line in a residential area how many human fatalities and/or injuries are you predicting with your statistical models?

3. The recent Bakersfield explosion was caused by an individual digging with a tractor in an area where the gas line was 12 feet below the surface. The average depth along the North-South line is 4 feet. Does this not increase the risk of a similar incident?

4. We were informed at the October meeting that an electronic cable above the pipeline will relay real-time information to SoCal Gas in the event of ground movement caused by digging near the pipeline. How many minutes or hours would it take from the time that movement is detected until a representative from the gas company could arrive on scene to assess the situation and stop the threat to the pipeline?

5. There are alternate routes through the desert that would almost entirely eliminate the need to run the 30" line near residential neighborhoods, schools, electrical substations, hospitals, etcetera. Why is the proposed route being used instead of a route that reduces the risk to life and property?

6. The pipeline crosses several active fault lines that are capable of large magnitude earthquakes. According to an article from December of 2014 -http://www.sandiegouniontribune.com/news/2014/dec/14/earthquake-sanjacinto-sanandreas/ - the San Jacinto fault is capable of producing quakes as large as 7.5 – 8.0 depending on the circumstances. The San Andreas fault is capable of quakes in that same range and larger. At the October meeting we were told a series of valves could be used to shut off the flow of gas during or after a seismic event to prevent explosions and fires like the ones seen during the Northridge quakes. There are very few of these valves planned in these areas according to the maps you have provided (between mile 33 and 57 there are only 5 valves shown on the maps). What additional measures will you be putting in place to protect those people living adjacent to the pipeline in the event of a large seismic event? Also, in the event of a large earthquake, what plans do you have in place to communicate with the valves considering major power outages, breaks in lines, overwhelmed emergency systems, etc.?

7. The wild burros that roam Reche Canyon are federally protected. How will you prevent them from falling into the trenches and being injured or killed during the construction phase?

8. The proposed path of the pipeline will block the wild burros in Reche Canyon from their roaming and migration paths during the construction. How will you ensure that these protected animals are able to migrate, graze and seek shelter in their normal areas during the construction phase of this project?

9. Porter Ranch has an active major leak currently that apparently was first reported in October of this year, and the gas company's response is that "it will take several months to repair". What guarantees do we have along this new gas line that this response will not happen? Were these same promises made to Porter Ranch residents? Since it is already being done to another community, what will keep you from providing the same level of service to Moreno Valley? If you intend for your response to be different in Moreno Valley, what makes Moreno Valley a different priority?

10. What accommodations have been made for the Moreno Beach/Reche Canyon Road area of the pipeline which is only supposed to be four feet deep but runs through a several foot thick bed of silt (soft/constantly moving dirt) in an official floodplain that during a small rain the runoff from the hills can create trenches five to six feet deep?

11. If there is a problem that doesn't obliterate my neighborhood, what would the evacuation procedure be for the area? What compensation would be made by the gas company to affected residents, especially considering these are large animal keeping properties that would require a lot of time and money to evacuate?

12. What is the danger associated with already having what might be considered a high value target in March Air Force Base and then adding another target in the high pressure gas line? With a pipeline that is only four feet deep in soft dirt that could be dug out very quickly, what is the plan to avoid any vulnerability to terrorists?

13. Full disclosure laws when selling a house, or even a potential buyer just looking up the info as a matter of public record, makes the high pressure gas line an issue when selling our house because people buy properties like ours to

stay away from such things and all the explosions/potentially dangerous situations reported on the news create a public perception that lowers the value of our home. What compensation will be made for this?

14. For those of us who have a valid fear of this high pressure gas line (and for good reason – one of your panel members named “David” during the October 29, 2015 meeting even said you could mitigate some of the risk – thus admitting that there is risk!!!) what will you do to allay those fears and provide for those of us who will not be able to live with that risk?

We request that a copy of the initial and final EIR’s with answers to the question above included be mailed to us in its entirety to:

Scott and Sharon Hay
27780 Locust Avenue
Moreno Valley, CA 92555

Freeman, Emma

From: Sandra <uclasandra@gmail.com>
Sent: Monday, November 16, 2015 6:58 AM
To: eric.chiang@cpuc.ca.gov; public.advisor@cpuc.ca.gov; CPUC North-South; rhhawkins@fs.fed.us
Subject: North-South Pipeline Project

Follow Up Flag: Follow up
Flag Status: Completed

Good morning honorable gentlemen and everyone else involved in this project.

I am writing in response to this project. I was not able to attend the forum in October because I have to work to make ends meet; however, after reviewing the proposed project, did anyone consider the path of this project? It is going through major streets/roadways and I believe two faults. Was the safety of those who live nearby considered? Any other options? Why not avoid going through the faults? God forbid there is an earthquake or any other form of earth movement along San Andreas Fault and the gas pipeline cracks, causing a huge explosion. As is, the city of San Bernardino is currently undergoing a city-wide infrastructure project on our sewer. What precautionary solutions does this pipeline project come up with? Why going down major streets in San Bernardino and the Reche Canyon? How will traffic be managed during this project during peak traffic hours? This project is funded by mileage/distance right? Wouldn't it be less expensive and more logical to avoid the faults and going down a straight path?

These are just some questions that should be considered before starting the proposed pipeline project's route. There has to be another route. The current route is dangerous and affects many living in this area. Please reconsider the route, especially down San Bernardino streets and Reche Canyon. It will NOT be a good turnout and many will be affected.

Thank you for your time and hope my questions and suggestions don't fall on deaf ears.

Sincerely,
A concerned San Bernardino resident/homeowner and voter:
Sandra Ibarra

Thank you.

Freeman, Emma

From: Page Miller <pagemiller@att.net>
Sent: Sunday, November 22, 2015 3:04 PM
To: CPUC North-South
Cc: Evelyn Estrada- Mayor Exec. Asst.; Gary D. Saenz; Georgeann "Gigi" Hanna; Allen J Parker; San Bernardino City Council; Virginia Marquez; Benito J. Barrios; John Valdivia; Fred Shorett; Henry Nickel; Rikke Van Johnson; James Mulvihill; SupervisorRamos@sbcounty.gov; rhhawkins@fs.fed.us; eric.chiang@cpuc.ca.gov
Subject: Oppose North-South Project Gas Pipeline

Follow Up Flag: Follow up
Flag Status: Completed

We oppose the proposed route for the North-South Project Gas Pipeline.

Overseeing this project is the California Public Utilities Commission (CPUC) and the San Bernardino National Forest. We attended a meeting in Highland on May 13, 2015 at the Hampton Inn and Suites, a location far away from the proposed route. Only one person that we know of in our area received notification. Neighbors we asked had no clue about a proposed gas pipeline. One couple called to RSVP to the meeting and was told there was no room. They showed up anyway. A small group of very vocal community members attended. There were almost more paid facilitators than public. Questions re: alternative routes and safety issues have not been satisfactorily answered. Basically it was presented as a done deal with a start date. We specifically asked what political leadership were initially apprised and had signed off on this North-South Project. We were told the San Bernardino area political leadership knew and were on board. Suspicions have grown since that meeting. A project of this magnitude must have had someone in the know in San Bernardino.

We also attended the Oct 27, 2015 scoping meeting at San Gorgonio High.
Again, many neighbors affected by this did not receive notification of scoping meetings and found out from other sources. People from diverse areas stated so on the record.
One speaker noted that on CPUC's website the gas pipeline is schedule to go down Harrison. Someone on the panel mentioned that the website route was six months old and there had been changes and it would in fact go done Valencia Avenue, which has much resistance as Councilman Jim Mulvihill can attest. At the scoping meeting, residents and business owners from Reche Canyon, 40th Street business corridor, Valencia Avenue, one of the highest property value areas and community gathering areas for walking and biking, and Hospitality /Tippecanoe business hub showed up to voice their concerns. Several speakers noted that questions that have been e-mailed to those in charge of project have had unsatisfactory or no response.

Safety and transparency are key community concerns.

It certainly appears the CPUC and Gas Co. did not want to have attendance at these meetings. At the Highland meeting, we suggested you could have had a well attended meeting at the North End Neighbor Association (NENA) and in fact pointed out the Pres. for you to set up a meeting for all folks concerned in the 40th Street/ Valencia Avenue area. We pointed out Councilman Mulvihill who confirmed he could easily have found several venues for free in San Bernardino so all the various affected communities throughout San Bernardino could attend and be informed. He was not contacted. The red flag must go up.

San Bernardino is a city just coming out of bankruptcy. This gas pipeline is scheduled to literally zigzag throughout San Bernardino residential, school, business and several major earthquake fault lines including

the San Andreas. It is apparent no one who actually lives or is familiar with the area planned this route. A multi-million dollar project that will be paid for by ratepayers needs better answers. It is amazing that the Gas Co. rarely has a problem sending a bill for gas use at a property location, but they cannot seem to give proper legal notification to all affected addresses.

We support alternative route suggestions echoed by speakers and the City of San Bernardino's official letter sent to you: A more direct line from Needles to Blythe; a route more East of the central section of San Bernardino; or a route following the 215 Freeway corridor. One speaker asked you to put on the website what routes had been considered and why you chose not to use those routes. That seems like a good idea for transparency.

Respectfully,
Page Miller & Dr. Joyce Miller

Freeman, Emma

From: Dr. Pamela Miller <drpam@omnivision.com>
Sent: Thursday, November 19, 2015 1:48 PM
To: CPUC North-South
Subject: gas line - through San Bernardino, CA

Importance: High

Follow Up Flag: Follow up
Flag Status: Completed

I am writing to express very strong opposition to the current location of the Gas Pipeline through a high density residential and school area of San Bernardino, CA.

The proposed route information was not noticed to all the resident property owners, nor was the changed proposed route available at the meeting held at San Gorgonio High School October 27, 2015. In fact, only when asked directly about the route down Valencia Avenue and through Reche Canyon, was the changed route even acknowledged. Reche Canyon is a very narrow area with limited access to the residents as well.

In addition, the city of San Bernardino was not consulted regarding the proposed pipeline, in total contradiction to the information given to the attendees both at San Gorgonio as well as the previous meeting held in Highland (where none of the residents would be affected and with very little notice to residents).

Rather than directing the gas pipeline through densely populated residential areas, it would be far safer and make more sense to follow existing freeway rights of way. By either moving the proposed route slightly to the east or west, it would by-pass high residential and academic school areas, providing less disruption to the residents and decrease the potential hazard to the population.

A further and substantial concern to the residents is the location of existing known earthquake faults within the proposed pipeline location.

The individuals responsible for informing the public have been grossly deficient in their responsibilities and have in fact been very closed-mouthed about the project. They have taken great pains to deliberately hide information or make it very difficult to obtain. At the very least, they have not been open nor transparent on this issue.

It is appropriate that the CPUC/Gas Company reconsider relocating the proposed Gas Pipeline to a location where the residential and school population density is minimal, making this project less disruptive and substantially safer for all those affected.

Sincerely,

Pamela J. Miller, OD, FAAO, JD, FNAP

6836 Palm Ave
Highland, Ca 92346-2513
(909) 862-4053
(603) 816-9547 (fax)

Freeman, Emma

From: tprince711@gmail.com on behalf of T Prince <tprince@tprincelaw.com>
Sent: Thursday, November 19, 2015 2:41 PM
To: CPUC North-South; eric.chiang@cpuc.ca.gov
Cc: Mayor Carey Davis; supervisorramos@sbcounty.gov; Gigi Hanna; Gary Saenz
Subject: Fwd: North-South Pipeline Project Opposition - San Bernardino route

Follow Up Flag: Follow up
Flag Status: Completed

Eric Chiang
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: North-South Project - San Bernardino Alignment

Dear Mr. Chiang:

I am a lifelong resident at 3185 and 3140 Valencia Avenue in San Bernardino. I also own a third residence within feet of the proposed project at 616 Fairmount Drive (corner of Valencia) in San Bernardino. I am raising my family, including my two children within feet of the proposed project path.

I sent the emails below along with other efforts to contact So Cal Gas over several months, to seek information about the project and proposed alignment, provide input and discuss the alignment of the North-South project's 36-inch natural gas distribution line. I attended their meeting in Highland, CA, which was deliberately venued outside San Bernardino, the County Seat and host of the proposed project. I was assured a reply would be forthcoming and my input valued, but the reply never came. To this date, I have never received more than a blandly packaged pre-sort mailer from So Cal Gas which never even mentioned that the project was proposed to go right in front of my house on Valencia Avenue in San Bernardino.

Valencia Avenue is a vital street to a troubled City facing bankruptcy, social strife, high crime and other social and economic challenges. Valencia Avenue is the number one street in the City that all City residents are proud of. The peaceful nature and beauty of the neighborhood began in the early days of this historical City, when it served as a main thoroughfare housing stately residences and citrus groves.

With the demise of the local citrus industry, Valencia Avenue developed into the most beautiful and quiet neighborhood in San Bernardino, with stately, historic homes housing large business executives, small business owners, city officials and other community leaders. Many of San Bernardino's banks, stock brokerages, upper end stores and other businesses have left the City in the past two decades, heightened by the City's bankruptcy pending since 2012. San Bernardino is now the poorest City of its size in the Nation. With the exodus from San Bernardino of so many families with incomes at or above California's median, Valencia Avenue has become a rare neighborhood for the City which can attract those families and executives so vital to preserving and expanding San Bernardino's bankrupt, struggling economy.

The path of the proposed pipeline is the primary and most popular route in the entire City of San Bernardino (210,000 residents) for recreational walking, biking, peaceful quiet time and adjacent golfing. More than a thousand children traversed Valencia Avenue on Halloween night alone, along with their families, approximately 3,000 people, not including residents and normal traffic.

Parkside Elementary School and Golden Valley Middle School are located adjacent to the Arrowhead Country Club just to the West of the proposed path. Because of the large golf course, Valencia Avenue is the primary

transportation route for children attending the schools, many of whom walk to school. I walked to school as a child over the proposed pipeline and have sent my children, now 11 and 12, on the same path.

My family and I walk over the proposed pipeline on a daily basis, as do hundreds of other residents and families, for exercise, relaxation and peaceful enjoyment. I have personally walked over the proposed pipeline path tens of thousands of times, and my neighbors and I have collectively walked over it millions of times.

In a City with deteriorating infrastructure, Valencia Avenue's pavement condition is superior to most other City streets. It is smooth and has few patches and other cracks and bumps, which is part of why it is so popular for walking, bicycling and driving. The proposal would not even resurface the entire street, which would leave Valencia Avenue in inferior condition, a less favorable place to walk, exercise and drive.

San Bernardino is the largest City in Southern California which is traversed by the San Andreas Fault. When the massive 7.8 magnitude earthquake strikes, which is not just likely but certain, the pipeline proponents cannot guarantee the safety of the hundreds of residents who exercise, golf and use the street, nor the hundreds of residents who live adjacent to the pipeline.

The proponents cannot guarantee the safety of those thousands of citizens and families when heavy equipment uses Valencia Avenue, a main thoroughfare for heavy equipment and vehicles, such as the equipment used to maintain the flood control district to the East. The recent explosion near Bakersfield serves as a reminder of this danger and will always be on the minds of residents if this project were somehow allowed to be built as proposed.

Constructing and maintaining a huge gas pipeline on this street places our City's children and families at risk. The current proposal also includes other beautiful residential streets right through the heart of San Bernardino.

Please make So Cal Gas stay off SB residential streets where our children walk to school and our families live! We don't need another explosion decimating a residential neighborhood and killing our children. We don't need the noise, dust, traffic disruption, damage to pavement, driveway obstructions, large trucks and heavy equipment in our most beautiful residential neighborhoods.

Rather than demonstrating disregard for San Bernardino families, economy and culture, So Cal Gas should locate any needed pipeline through the desert, avoiding San Bernardino, or on the I-215 or other industrial corridor like other pipelines. The impacts would be far less if San Bernardino residential neighborhoods are avoided. Please revise the proposal to stay off Valencia Avenue or drop the project in entirety!

Thank you for your consideration.

Timothy P. Prince, Esq.
Tomlinson & Prince, L.L.P.
255 North D Street, Suite 401
Mailing Address: P.O. Box 66
San Bernardino, CA 92402
(909) 888-1000
www.tprincelaw.com

---------- Forwarded message ----------
From: **T Prince** <tprince@tprincelaw.com>
Date: Wed, Sep 23, 2015 at 12:17 PM
Subject: Re: North-South Pipeline Project Opposition - San Bernardino route
To: talk@reliablenaturalgas.com
Cc: Ryan Hagen <ryan.hagen@langnews.com>, "editor@highlandnews.net" <editor@highlandnews.net>,

Cassie MacDuff <cmacduff@pe.com>, Gigi Hanna <ghanna69@gmail.com>, Gail Fry <civicusanews@yahoo.com>, SB Chamber of Commerce <sba.chamber@verizon.net>, Leticia Garcia <lchavezgarcia@gmail.com>

Mr. Buczkowski:

It has been over a month, and I have not received any acknowledgement, reply nor any response to the request for information.

As requested more than 45 days ago, please immediately email a link for the route map or email the route map for the North-South Project proposal showing the route through the City of San Bernardino.

Thank you.

Timothy P. Prince, Esq.
Tomlinson & Prince, L.L.P.
255 North D Street, Suite 401
Mailing Address: P.O. Box 66
San Bernardino, CA 92402
(909) 888-1000
www.tprincelaw.com

On Tue, Aug 4, 2015 at 5:21 PM, T Prince <tprince@tprincelaw.com> wrote:

> David Buczkowski
> Senior Director, Major Projects
> So Cal Gas
>
> Dear Mr. Buczkowski:
>
> I am a homeowner and lifelong resident at 3185 and 3140 Valencia Avenue in San Bernardino. I received your letter today to justify building a huge gas pipeline on some of the most beautiful residential streets right through the heart of San Bernardino. The color booklet and letter includes a comment card asking what I think: Please stay off SB residential streets where our children walk to school and our families live!
>
> We don't need another explosion decimating a residential neighborhood and killing our children. We don't need the noise, dust, traffic disruption, damage to pavement, driveway obstructions, large trucks and heavy equipment in our most beautiful residential neighborhoods. Rather than demonstrating disregard for San Bernardino families, you should locate any needed pipeline through the I-215 or other industrial corridor like other pipelines. Please revise your proposal to stay off Valencia Avenue or drop the project in entirety!
>
> Thank you for your consideration.
>
> Timothy P. Prince, Esq.
> Tomlinson & Prince, L.L.P.
> 255 North D Street, Suite 401
> Mailing Address: P.O. Box 66
> San Bernardino, CA 92402
> (909) 888-1000
> www.tprincelaw.com

Freeman, Emma

From: faveaunt@juno.com
Sent: Wednesday, November 18, 2015 10:26 AM
To: CPUC North-South
Subject: Public scoping comments

Follow Up Flag: Follow up
Flag Status: Completed

I would like to give my support for the North-south project. I fully understand the logic behind the proposed pipeline, and agree that it is very much needed. I only had a few questions, and they were answered at the information meeting. My biggest concern was about traffic, and those were addressed. This project would be no worse than any other construction project, causing no more traffic than any other project. Please add the Shrader Family to your list of supporters.

Gayle Shrader
Moreno Valley, CA
951-402-6657

_____

Freeman, Emma

From: Hawkins, Robert - FS <rhhawkins@fs.fed.us>
Sent: Monday, November 23, 2015 12:56 PM
To: CPUC North-South
Subject: FW: proposed gas pipeline

Bob Hawkins
Natural Resource Planner
Forest Service Contractor
Adaptive Management Services Enterprise Team (AMSET)
p: 916-849-8037
rhhawkins@fs.fed.us
154 Sherwood Ct.
Vacaville, CA 95687
www.fs.fed.us
Caring for the land and serving people

From: Ellen Timmreck [mailto:e.timmreck@verizon.net]
Sent: Monday, November 23, 2015 12:32 PM
To: Hawkins, Robert - FS
Subject: proposed gas pipeline

To whom it may concern:

I am very much against the proposed gas pipeline route which will go through San Bernardino.

First of all, if anything should go wrong, and there was to be an explosion, this would be a horrible disaster! Remember San Bruno? I live about 2 blocks from Kendall, where the pipeline would go, and I certainly don't want it that close to my home. There are homes and apartments and businesses all along Kendall and the resulting damage would be enormous.

Also, the proposed route goes through the city of San Bernardino, all on major streets which also are bordered by businesses and housing. Not only that, but how do you propose to re-route traffic from these extremely busy streets while this pipeline is installed? It would cause major traffic problems for months on end.
Kendall Avenue is near a major university (Cal State San Bernardino) and is one of only a couple of ways to access the campus. Installing a pipeline on Kendall would seriously impact traffic and make it almost impossible to get around in this part of town for weeks and months on end. This will cause undue hardship for the many commuter students as well as residents in the neighborhood.

Also, as I'm sure you're aware, the proposed route goes right between two major earthquake faults, which are both overdue for "the big one." What on earth are you thinking???
You say this will be good for the city and bring jobs, but I feel that would be negated by the number of residents who might move from the city when they find out the details of this project.

All in all, this is a bad idea. Please find an alternate route which will cause less trouble and disruption during installation and minimize damage should there be an accident.

Sincerely,

Ellen Timmreck
2214 Lake Forest Ct.
San Bernardino, CA 92407

State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764
(909) 484-0459
www.wildlife.ca.gov

EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director

November 23, 2015

Mr. Eric Chiang
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298

Subject: Notice of Preparation of a Draft Environmental Impact Report
North-South Project
State Clearinghouse No. 2015101022

Dear Mr. Chiang:

The Department of Fish and Wildlife (Department) appreciates the opportunity to comment on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the North-South Project (project) [State Clearinghouse No. 2015101022]. Pursuant to The Guidelines for the Implementation of CEQA (Cal. Code Regs., tit. 14, § 15000 *et seq.*; hereafter CEQA Guidelines), the Department has reviewed the NOP and offers comments and recommendations on those activities involved in the project that are within the Department's area of expertise and germane to its statutory responsibilities, and/or which are required to be approved by the Department (CEQA Guidelines, §§ 15086, 15096 & 15204).

The project, proposed by the California Public Utilities Commission (CPUC) on behalf of Southern California Gas Company and San Diego Gas and Electric, includes the construction, operation, and maintenance of a 65-mile long 36-inch diameter natural gas transmission pipeline from the Adelanto Compressor Station in the City of Adelanto, proceeding south through the Cajon Pass and the San Bernardino National Forest, and ending at the Moreno Pressure Limiting Station in the City of Moreno Valley. Additional project components include rebuilding the existing Adelanto Compressor Station; upgrades at the existing Moreno Pressure Limiting Station, Whitewater Pressure Limiting Station, and Desert Center Compressor Limiting Station; and construction of the proposed new Shaver Summit Pressure Limiting Station. The proposed project is located in San Bernardino and Riverside Counties including the Cities of Adelanto, Victorville, Highland, San Bernardino, Colton, Loma Linda, and Moreno Valley. As proposed, the project will also traverse a portion of the San Bernardino National Forest.

COMMENTS AND RECOMMENDATIONS

The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable

populations of those species (i.e., biological resources); and administers the Natural Community Conservation Planning Program (NCCP Program). The Department offers the comments and recommendations presented below to assist the CPUC (the CEQA lead agency) in adequately identifying and/or mitigating the project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable the Department to adequately review and comment on the proposed project with respect to impacts on biological resources and the project's consistency with adopted and/or approved Habitat Conservation Plans (HCPs), NCCPs, and/or other local, regional, or state habitat conservation plans.

To enable the Department to adequately review and comment on the proposed project, the Department encourages the CPUC to include as much detail as possible in the DEIR regarding proposed project elements, and detailed and specific mitigation measures.

The Department recommends that the forthcoming DEIR address the following:

Assessment of Biological Resources

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable Department staff to adequately review and comment on the project, the CEQA document should include a complete assessment of the flora and fauna within and adjacent to the project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. The Department recommends that the DEIR specifically include:

1. An assessment of the various habitat types located within the project footprint, and a map that identifies the location of each habitat type. The Department recommends that floristic, alliance- and/or association based mapping and assessment be completed following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the project. The Department's California Natural Diversity Database (CNDDB) in Sacramento should be contacted at (916) 322-2493 or bdb@dfg.ca.gov to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed project. The Department recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can

be obtained and submitted at:
http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp

Please note that the Department's CNDDB is not exhaustive in terms of the data it houses, nor is it an absence database. The Department recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the project site.

3. A complete, *recent* inventory of rare, threatened, endangered, and other sensitive species located within the project footprint and within offsite areas with the potential to be effected, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the project area and should not be limited to resident species. Focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service, where necessary. Note that the Department generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed project may warrant periodic updated surveys for certain sensitive taxa, particularly if the project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.

   Based on the Department's review of the NOP, the following sensitive wildlife species, at a minimum, have the potential to occur within the project footprint: Arroyo toad (*Anaxyrus californicus*), burrowing owl (*Athene cunicularia*), Coachella Valley fringe-toed lizard (*Uma inornata*), coast horned lizard (*Phrynosoma coronatum*), coastal California gnatcatcher (*Polioptila californica*), desert bighorn sheep (*Ovis canadensis nelsoni*), desert kit fox (*Vulpes macrotis arsipus*), desert tortoise (*Gopherus agassizii*), flat-tailed horned lizard (*Phrynosoma mcallii*), golden eagle (*Aquila chrysaetos*), least Bell's vireo (*Vireo bellii pusillus*), Mojave ground squirrel (*Spermophilus mohavensis*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), southwestern willow flycatcher (*Empidonax traillii extimus*), Santa Ana speckled dace (*Rhinichthys osculus* ssp.), Stephens' kangaroo rat (*Dipodomys stephensi*), Townsend's big-eared bat (*Corynorhinus townsendii*), and two-striped gartersnake (*Thamnophis hammondii*).

4. A thorough, recent, floristic-based assessment of special status plants and natural communities, following the Department's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see https://www.wildlife.ca.gov/Conservation/Plants). Based on the Department's review of the NOP, the following sensitive plant species, at a minimum, have the potential to occur within the project footprint: Parry's spineflower (*Chorizanthe parryi var. parryi*),

Plummer's mariposa lily (*Calochortus plummerae*), Santa Ana River woolly-star (*Eriastrum densifolium sanctorum*), short-joint beavertail (*Opuntia basilaris*), slender horned spineflower (*Dodecahema leptoceras*), and smooth tarplant (*Centromadia pungens ssp. laevis*).

5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The Department recommends that the DEIR provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the project. To ensure that project impacts to biological resources are fully analyzed, the following information should be included in the DEIR:

1. A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address project-related changes on drainage patterns and water quality within, upstream, and downstream of the project site, including: volume, velocity, and frequency of existing and post-project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-project fate of runoff from the project site.

2. A discussion of potential indirect project impacts on biological resources, including resources in areas adjacent to the project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a NCCP, or other conserved lands).

   Please note that the project area encompasses a large geographic area and supports significant biological resources and contains habitat connections, providing for wildlife movement across the broader landscape, sustaining both transitory and permanent wildlife populations. The Department encourages project design that avoids and preserves onsite features that contribute to habitat connectivity. The DEIR should include a discussion of both direct and indirect impacts to wildlife movement and connectivity, including maintenance of wildlife corridor/movement areas to adjacent undisturbed habitats.

3. An evaluation of impacts to adjacent open space lands from both the construction of the project and any long-term operational and maintenance needs.

4. A cumulative effects analysis developed as described under CEQA Guidelines § 15130. Please include all potential direct and indirect project related impacts to

riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

Mitigation Measures for Project Impacts to Biological Resources

The DEIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the project. When proposing measures to avoid, minimize, or mitigate impacts, the Department recommends consideration of the following:

1. *Sensitive Plant Communities*: The Department considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from project-related direct and indirect impacts.

2. *Mitigation*: The Department considers adverse project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include mitigation measures for adverse project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

   The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, including, but not limited to measures to ensure domestic animals (e.g., cats and dogs) cannot access mitigation areas, and removal procedures to implement if they do; proposed land dedications; long-term monitoring and management programs; control of illegal dumping; water pollution; and increased human intrusion, etc.

3. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and

native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

The Department recommends that local onsite propagules from the project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in the near future in order to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various project components as appropriate.

Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the project; examples could include retention of woody material, logs, snags, rocks, and brush piles.

4. *Nesting Birds and Migratory Bird Treaty Act:* Please note that it is the project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code (FGC) also afford protective measures as follows: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by FGC or any regulation made pursuant thereto; Section 3503.5 states that is it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by FGC or any regulation adopted pursuant thereto; and Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

   The Department recommends that the DEIR include the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to

nesting birds do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: project phasing and timing, monitoring of project-related noise (where applicable), sound walls, and buffers, where appropriate. The DEIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the project site. If pre-construction surveys are proposed, the Department recommends that they be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

5. *Translocation of Species*: The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species as studies have shown that these efforts are experimental in nature and largely unsuccessful.

California Endangered Species Act

The Department is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the California Endangered Species Act (CESA). The Department recommends that a CESA ITP be obtained if the project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction or over the life of the project. CESA ITPs are issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats.

The Department encourages early consultation, as significant modification to the proposed project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP. Please note that the proposed avoidance, minimization, and mitigation measures must be sufficient for the Department to conclude that the project's impacts are fully mitigated and the measures, when taken in aggregate, must meet the full mitigation standard. Revisions to the California Fish and Game Code, effective January 1998, require that the Department issue a separate CEQA document for the issuance of a CESA ITP unless the project CEQA document addresses all project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of a CESA permit.

Habitat Conservation Plans and Natural Community Conservation Plans

The proposed project will traverse the following conservation plan areas: Western Riverside County Multiple Species Habitat Conservation Plan (WRC MSHCP), Coachella Valley Multiple Species Habitat Conservation Plan (CV MSHCP), and Stephens' Kangaroo Rat HCP. Compliance with approved habitat conservation plans is discussed in CEQA. Specifically, Section 15125(d) of the CEQA Guidelines requires that the CEQA document discuss any inconsistencies between a proposed Project and

applicable general plans and regional plans, including habitat conservation plans and natural community conservation plans. An assessment of the impacts to the conservation plans listed above as a result of this project is necessary to address CEQA requirements.

The proposed project occurs within the WRC MSHCP and the CV MSHCP (collectively referred to hereafter as "Plan"), and as such, is subject to the provisions and policies of each Plan. In order to be considered a covered activity, Permittees must demonstrate that proposed project actions are consistent with each Plan and its associated Implementing Agreement. The CPUC is the lead agency but is not signatory to either Plan. In order to participate in each Plan (and obtain take coverage for covered species) the CPUC would need to act as a Participating Special Entity (PSE).

If the CPUC elects to not participate as a PSE, the project may be subject to the Federal Endangered Species Act (FESA) and/or CESA for threatened, endangered, and/or candidate species. The Department recommends that a CESA Incidental Take Permit (ITP) be obtained if the project has the potential to result in take (Fish and Game Code Section 86). The Department's CESA ITP states that a project fully minimize and mitigate impacts to State-listed resources.

Regardless of whether take of threatened and/or endangered species is obtained through the conservation plans listed above or through a CESA ITP, the DEIR needs to address how the proposed project will affect the policies and procedures of each conservation plan.

Lake and Streambed Alteration Program

Based on the description of the proposed project, Southern California Gas Company and/or San Diego Gas and Electric will likely need to notify the Department per Fish and Game Code section 1602. Fish and Game Code section 1602 requires an entity to notify the Department prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

The Department anticipates that project construction may require the use of jack and bore techniques. Although jack and bore techniques may avoid riparian and riverine resources, use of this technology has the potential to result in a frac-out, and as such the Department recommends that the DEIR identify and analyze potential impacts that may occur as a result of a frac-out. The Department also recommends that the DEIR include a mitigation measure that requires the submission of a notification of Lake or

Streambed Alteration where jack and bore techniques may been needed in areas pursuant to Section 1600 *et seq*. of the California Fish and Game Code. The measure should also require the submission of a frac-out contingency plan along with the Notification of Lake or Streambed Alteration. The Department recommends that the frac-out contingency plan include, at a minimum: an estimate of the maximum potential area that may be impacted should a frac-out occur, preventative measures, contingency response plan, implementation plans for both terrestrial and aquatic frac-outs, restoration plans, and reporting procedures.

Upon receipt of a complete notification, the Department determines if the proposed project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify your project that would eliminate or reduce harmful impacts to fish and wildlife resources.

The Department's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with the Department is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to https://www.wildlife.ca.gov/Conservation/LSA/Forms.

Further Coordination

The Department appreciates the opportunity to comment on the NOP of a DEIR for the North-South Project (SCH No. 2015101022) and recommends that CPUC address the Department's comments and concerns in the forthcoming DEIR. The Department also recommends further coordination on this project and is available for meetings and site visits. If you should have any questions pertaining to the comments provided in this letter, or would like to arrange a meeting or site visit prior to completion of the DEIR, please contact Joanna Gibson at (909) 987-7449 or at joanna.gibson@wildlife.ca.gov.

Sincerely,

for Leslie MacNair
Regional Manager
Inland Deserts Region

Literature Cited

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A manual of California Vegetation, 2nd ed. California Native Plant Society Press, Sacramento, California. http://vegetation.cnps.org/

Community Development Department
Planning Division
14177 Frederick Street
P. O. Box 88005
Moreno Valley CA 92552-0805
Telephone: 951.413-3206
FAX: 951.413-3210

November 23, 2015

Public Scoping Comments
Re: North-South Project
505 Sansome Street, Suite 300
San Francisco, CA 94111

Subject: Comments on Notice of Preparation for a Joint Environmental Impact Report/Environmental Impact Statement for the North-South Project (Southern California Gas Company and San Diego Gas and Electric)

Dear Sir/Madam:

The City of Moreno Valley has the following comments on the Notice of Preparation for the proposed project. As described, the installation of the 36" natural gas pipeline will impact approximately seven miles of roadways and properties in Moreno Valley extending from the northerly City limits southerly to the San Diego Gas and Electric facility. A project of this size and scope will have the potential for significant environmental impacts within the City of Moreno Valley.

Hazards

The Joint Environmental Impact Report/Environmental Impact Statement (EIR/EIS) must fully address the risk of an accident involving the pipeline through the City of Moreno Valley. The Notice of Preparation states that there will be "Possible impacts related to pipeline failure during operations..." The Joint EIR/EIS must assess the potential hazards associated with proximity of the proposed physical work and placed infrastructure to both existing and potential future residential projects identified in the City's General Plan Land Use Map. Further, the City requests that the EIR/EIS identify and assess alternative routes within and/or in the vicinity of Moreno Valley that would result in reduced impacts.

Land Use and Planning

The potential for conflicts with the City's adopted General Plan shall be considered with respect to land use and planning. Of particular importance to the City is the protection of life and property due to a pipeline accident or failure. Towards this end, the EIR/EIS

must assess the risks in consideration of the goals policies, and programs of the General Plan Land Use Element and Safety Element. This analysis will include, but not

be limited to, an evaluation of impacts on both existing and future land uses along the route as identified in the General Plan Land Use Element. In addition, the EIR/EIS will fully assess project risks for consistency with Objective 6.10 of the Safety Element, and shall consider other applicable provisions of the City's adopted Hazardous Waste Management Plan.

Noise

The Notice of Preparation identifies that short-term noise related to the maintenance of the proposed Main Line Block Valves will be discussed in the EIR/EIS. Of particular concern in this regard is the location of MLV15 which is adjacent to property currently zoned for rural residential and in close proximity to other existing rural properties to the south.

Consistency with the Multi-species Habitat Conservation Plan

The City is a participant in the Western Riverside County - Multi-species Habitat Conservation Plan (WRC-MSHCP). In adopting the approving documents for the WRC-MSHCP, the City is responsible for implementation of the WRC-MSHCP within the City's limits.

The Notice of Preparation states that the EIR/EIS will discuss potential conflicts with the MSHCP and the County of Riverside Reche Canyon/Badlands Area Plan. The City is concerned with the indirect impacts of this project on MHSCP policies as it could potentially impact Linkage 4 and the policies of the Reche Canyon/Badlands Area Plan. Therefore, the City requests that the Joint EIR/EIS fully address all potential indirect impacts on the City of Moreno Valley that result from the conflicts with the MSHCP.

Project Alternatives

Alternative routes must be examined through the City of Moreno Valley that will avoid or reduce conflicts and hazard to uses in close proximity to the route. A considerable portion of the adjacent lands along the proposed route through the City limits is developed, or already approved for development.

The Joint EIR/EIS shall also address impacts on sensitive receptors, such as schools, residential uses, and other infrastructure projects. There is at least one existing private school (Calvary Chapel Christian School) and a proposed public high school (Moreno Valley Unified School District - High School No. 5 on Ironwood Avenue between Quincy and Redlands) along the currently proposed route on Ironwood Avenue. In addition, along the route, there is a proposed Eastern Municipal Water District booster station facility at Redland Boulevard and Hemlock Avenue which may be in conflict with the proposed alignment. This impact consideration shall be included with each alternative route.

Public Works Department Comments

The following must be considered in the project development and environmental analysis:

Streets

1) Many of the City streets in the area of the project are rural in nature with narrow roadways. Maintenance and efficient public access is a paramount interest of the City. All traffic detour routes will need to be established with prior approval of the City Engineer. These detour routes will require the project proponents to perform specific street improvements and pavement rehabilitation to ensure safe travel of the re-directed added traffic. Adequate detour signs, changeable message signs and public notification/outreach will be very important and must be reviewed and approved by the City.

2) The streets that are actually affected by the construction work must be restored to the City's satisfaction. Due to the narrow rural roadways, the restoration work will likely require the entire existing rural roadway to be improved after the construction work due to the trench corridor impacts as well as the heavy construction equipment that will occupy and be working adjacent to the trench corridor essentially impacting almost the entire width of the roadway. The project proponent will have to address accessibility issues of the residences that front the immediate construction zone and the extended impacts and inconvenience to their daily lives.

3) Many of the streets in the general project vicinity do not have underground storm drain conveyance systems and therefore handling of surface storm runoff must be carefully considered as part of this pipeline project. The analysis must address extended length of this project and the nature of the work that could significant impact the general direction of surface flow or un-intended consequences of redirected flows that may cause significant flooding and damage to public and private property.

4) As the project moves forward closer to construction, scheduling construction with consideration of imminent or existing City projects must be coordinated with the City, affected utility agencies, property owners, and other stakeholders.

   The City has initiated a Project Study Report (PSR) with Caltrans for a new interchange at SR-60 and Redlands Boulevard. The pipeline project will need to be coordinated with the interchange project.

5) City staff will dedicate time to review the final design route, coordination with affected entities and monitoring of the work to ensure compliance of City requirements by the pipeline contractor. The project proponent will be required to provide a financial deposit to the City to pay for all City staff involvement for the entire project duration (i.e. plan review, right-of-way, construction, etc.).

The City requests the opportunity to review and comment on the EIR/EIS. Please include the City on your mailing list with regard to any notifications and direct future correspondence to Chris Ormsby, Senior Planner. Thanks for the opportunity to comment on the project.

Sincerely,

Chris Ormsby
Senior Planner

for Richard J. Sandzimier
Planning Official

cc: Prem Kumar, Deputy Public Works Director, Assistant City Engineer

COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING • CODE ENFORCEMENT • LAND DEVELOPMENT • PLANNING

300 North "D" Street
San Bernardino, CA 92418-0001
909.384.5071 Fax 909.384.5155
www.sbcity.org

November 18, 2015

Public Scoping Comments
RE: North-South Project
505 Sansome Street, Suite 300
San Francisco, CA 94111

Ladies and Gentlemen:

The following comments are submitted on behalf of the City of San Bernardino (City). These comments identify the issues of concern that the proposed North-South Project poses from both its construction and future operation within the City. As should be evident from the attendance and comments at the October 27, 2015 scoping meeting, most of the proposed preferred alignment for this 36-inch pressurized natural gas pipeline through the City is very controversial to local residents and poses some potentially significant impacts that are of concern to the City Council and Staff. Based on the City's review, the proposed North-South "reliability" pipeline will have more impact on the City of San Bernardino than any other incorporated city along the proposed 65-mile preferred alignment. The City's comments and concerns follow.

North-South Project

1. Until the recent scoping session, neither project proponents (Southern California Gas Company and San Diego Gas and Electric) have maintained effective contact with the City Council or Staff. Oddly, the California Public Utilities Commission (CPUC) and proponents held public meetings in the City of Highland which is not even affected by this project. This failure to involve City professional staff and political representatives prior to selecting a preferred alignment is an egregious oversight by all parties and must not continue into the future. The City supports the resident comments regarding "transparency" in the future and offers City professional staff to coordinate future efforts by the project proponents and the California Environmental Quality Act (CEQA) lead agency, the CPUC. We believe the CPUC needs to do a better job in holding future meetings in all areas of the City to ensure that residents from all economic segments of the community can participate in the process.

2. Although the preferred alignment may be the shortest route for this pipeline, the City believes that it is also the route with the greatest impact on the human environment. Therefore, the City recommends that two alternative alignments with minimal effects on the human environment be considered. The first alternative route would begin in Needles at the northern gas pipeline; follow the alignment of U.S. Highway 95 south through Vidal Junction; and continue along Highway 95 to connect with the southern gas pipeline in

Blythe. This would follow an existing, previously disturbed area and would impact only about five miles of occupied human environment near the City of Blythe. The second alternative route would begin in Desert Center at the southern pipeline and travel north on State Highway 177 to State Highway 62; follow State Highway 62 to Granite Pass and then follow the existing graded dirt road to the Iron Mtn. Pumping Plant; from there it would follow either of the two major graded dirt roads (just west of Danby Dry Lake) until they converge just north of the Little Piute Mountains into a single graded dirt road that will intersect Interstate 40 and the existing north pipeline alignment, east of Mountain Springs Summit. This route has no or minimal effect on the human environment. Additionally, because these are established routes the overall impact on desert environment would be minimal. Yes, these routes are longer, but they minimize risks for and impacts to humans (both during construction and over the long-term during operations) and they meet the fundamental reliability test being sought by the gas companies.

3. Within the City, residential alignments for the proposed pipeline should be the lowest priority. An alternative that follows the I-215 alignment (possibly Cajon Boulevard for a portion of this alignment) and the BNSF track alignment to State Highway 60 and then east to Moreno Valley should be considered.

4. For the alternatives section, the City expects a comprehensive, objective, comparison of all impact categories for all feasible alternatives. For all alternatives available for this project, the City expects a clear explanation of the screening criteria used to evaluate the alternatives; the City expects to see transparent application of the criteria for selecting or rejecting alternatives; and if alternatives are deemed infeasible, a clear, substantive, explanation of why.

5. CEQA/NEPA Issues: Based on a review of the issues identified and discussed in the Notice of Preparation (NOP), there are a few issues of concern for the preferred alignment that need to be elaborated. Please consider the following:

   - Many jurisdictions, including the City, require visual screening of staging areas and construction yards where feasible to minimize aesthetic impacts during construction. Please include measures, including submittal of a plan to the City, for screening of staging areas and construction yards.
   - Fire and public safety issues in case of fire or explosion should be thoroughly discussed along with appropriate evacuation plans.
   - Social justice issues regarding the preferred alignment must be considered and addressed.
   - Under air quality, the focus during construction must be on fugitive dust generation during ground disturbing activities. Also, if there will be any blow-off valves within the City these should be identified. Any short term impacts from operation and maintenance activities should be characterized, particularly odors, human health hazards and GHG emissions.
   - The City's General Plan/General Plan EIR identify sensitive biological resource and cultural resource locations. Please address the sensitive areas for these resource issues. In addition, many of the homes in the City are older than 50 years and some may qualify as historic resources. Please address the potential for construction vibration effects to adversely impact such properties.
   - Citizen comments at the scoping meeting raised the issue of seismic hazards related to this project. High quality risk analyses are often difficult to understand. The risk

analysis must characterize post construction and maintenance of the 36" pipeline. Even where the pipeline does not cross an active fault, what risk exists from ground shaking impacts or other geotechnical hazards within the preferred alignment?

- What is the potential threat for terrorist activity related to the pipeline?
- Please ensure that where the pipeline crosses any streams, the depth of potential scour is compared to the depth of the pipeline.
- Many of the residents at the scoping meeting were concerned about the impacts to their community during both construction and future operations. As a whole, the City of San Bernardino has a high number of residents below the poverty line. Even in higher income areas of the City the social issues of construction and change in character of the neighborhoods deserves to be fully evaluated in order to inform decision-makers about the human environmental impacts of the proposed project.
- Noise issues need to be fully addressed in the context of the City's Development Code; General Plan; and State noise guidelines. Detailed mitigation, even including relocation of noise sensitive receptors during construction for noise levels exceed thresholds, must be considered.
- The effects on recreational walking and biking along Valencia Avenue must be given consideration within the EIR.
- Several major traffic issues: management of traffic on all City roadways during construction; commitment to obtain encroachment permits from the City; and return of the roadways within the City to comparable or better condition than current conditions.
- Cumulative impacts: Seek and obtain from the City a list of projects to include in the cumulative impact evaluation, including such projects as the City's Water Factory proposal.
- Focus on indirect or secondary impacts of all construction activities, and long-term effects, such as risk.

To close, the City strongly encourages the project proponents to initiate ongoing coordination with the City Staff. We intend to maintain outreach to the affected areas of the City over the life of this project. As previously stated, we generally oppose imposition of a major infrastructure system such as the North-South Project within residential areas. We also believe that alternatives exist that could eliminate many of the proposed project's impacts on the human environment between Adelanto and Moreno Valley. We look forward to reviewing the scoping report as soon as it is available.

Please feel free to contact me at (909) 384-5357 or persico_ma@sbcity.org if you have any additional questions.

Respectfully,

Mark H. Persico,
Community Development Director

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY
EDMUND G. BROWN JR., *Governor*

DEPARTMENT OF WATER RESOURCES
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

November 4, 2015

Eric Chiang
North-South Project
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102-3298

Notice of Preparation for a Joint Environmental Impact Report/Environmental Impact Statement, North-South Project, Multiple Cities in San Bernardino and Riverside Counties, Between Mileposts 395.0 and 414.7, Southern Field Division, SCH2015101022

Dear Mr. Chiang:

Thank you for the opportunity to review and comment on the Notice of Preparation (NOP) for a joint Environmental Impact Report/Environmental Impact Statement for the proposed North-South Project (Project) in San Bernardino County and Riverside County. The Project includes the construction, operation, and maintenance of a 36-inch diameter natural gas transmission pipeline between the cities of Adelanto and Moreno Valley. The Project also involves the rebuilding of a compressor station in Adelanto, and the installation of additional pressure limiting and communications equipment at various sites in the two counties. The construction of the 65-mile long pipeline is divided into four segments from north to south.

Two segments of the proposed cross the East Branch of the State Water Project (SWP) crosses Segment 1 of the Project south of Adelanto, and Segment 3 north of the city of San Bernardino. Construction activities within the SWP right of way may require an encroachment permit issued by California Department of Water Resources (DWR). Information regarding regulations and forms for submitting an application for an encroachment permit to DWR can be found at:

http://www.water.ca.gov/engineering/Services/Real_Estate/Encroach_Rel/

Please provide DWR with a copy of any subsequent environmental documentation when it becomes available for public review. Any future correspondence relating to this proposed project shall be sent to:

Leroy Ellinghouse, Chief
SWP Encroachments Section
Division of Operations and Maintenance
Department of Water Resources
1416 Ninth Street, Room 641-2
Sacramento, California 95814

If you have any questions, please contact Leroy Ellinghouse, Chief of the SWP Encroachments Section, at (916) 659-7168 or Jonathan Canuela at (916) 653-5095.

Sincerely,

David M. Samson, Chief
State Water Project Operations Support Office
Division of Operations and Maintenance

cc: State Clearinghouse
Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, California 95814

Public Scoping Comments
RE: North-South Project
505 Sansome Street, Suite 300
San Francisco, California 94111

Mr. Douglas Headrick
General Manager
San Bernardino Valley Municipal Water District
380 East Vanderbilt Way
San Bernardino, California 92408-3593

Date: 10/2/2015

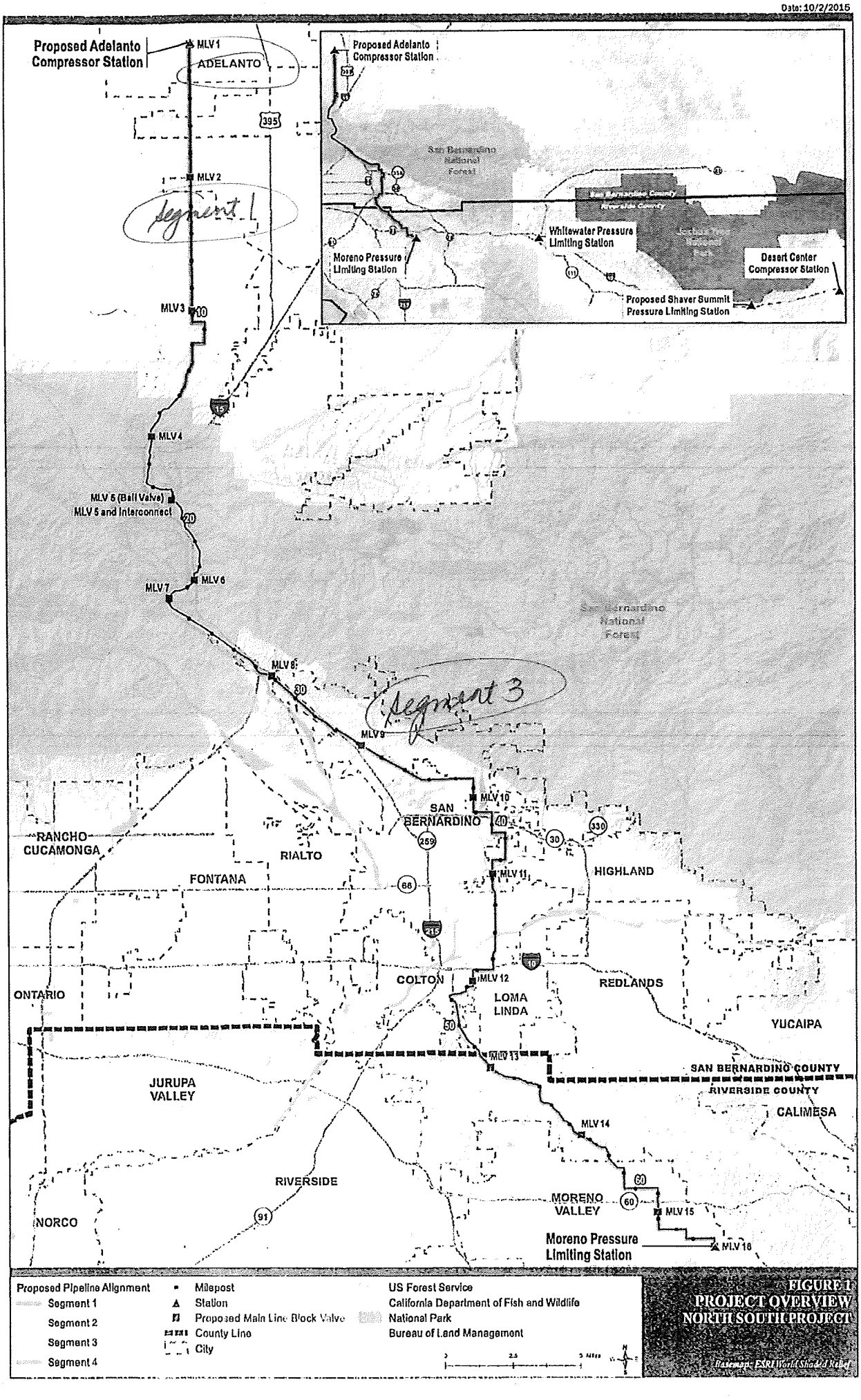


FIGURE 1
PROJECT OVERVIEW
NORTH SOUTH PROJECT

Data source: ESRI World Shaded Relief

Highland Fairview

14225 Corporate Way
Moreno Valley, California 92553
Tel: 714.824.8039 Fax: 714.824.8040

November 20, 2015

Public Scoping Comments
Re: North-South Project
505 Sansome Street, Suite 300
San Francisco, California 94111

Subject: North-South Project Notice of Preparation Comments

Dear Sir or Madam:

Thank you for the opportunity to comment on the Notice of Preparation (NOP) for the North-South Project proposed by Southern California Gas Company and San Diego Gas and Electric. The proposed project will cross property owned by Highland Fairview, which will be developed as part of the World Logistics Center (WLC), a next-generation, high-cube logistics development that will employ an estimated 20,000 people. The WLC will be located south of State Route 60, between Redlands Boulevard and Gilman Springs Road. The southern boundary is the San Jacinto Wildlife Area (the paper street Gato del Sol). Since the North-South Project proposes to cross the WLC development area, adequate care must be undertaken to ensure that the design of both projects complement each other. Highland Fairview requests that the following points be considered in the design of the project and addressed in the Environmental Impact Report/Environmental Impact Statement (EIR/EIS).

Land Use

With the recent approval of the WLC, the City of Moreno Valley's General Plan, including the Circulation Element, has been amended. These amendments resulted in significant modification of planned roadways within the WLC Specific Plan area. For instance, Cottonwood Avenue, east of Redlands Boulevard, has been removed from the Circulation Element and several new road alignments have been added. The proposed route for the North-South Project does not appear to reflect the current status. The proponents should review the proposed route of the pipeline in light of the current alignments in the area and the EIR/EIS should address potential conflicts between the proposed project and the City of Moreno Valley's current General Plan.

Alternative Routes

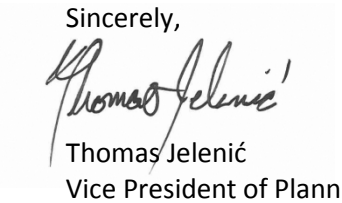
The EIR/EIS should consider alternate routes for the project that could have less impact on the WLC and therefore less impacts. For example, a route that follows existing right-of-way, such as along Alessandro Boulevard, without bisecting developable parcels, may have fewer impacts

than the proposed route. Highland Fairview would welcome continued discussion of possible routes that would successfully accommodate both the North-South Project and the WLC.

Thank you for including us on your distribution and please continue to include Highland Fairview on all notifications regarding the North-South Project, including the release of the Draft EIR/EIS.

If you have any questions, please call me at (714) 824-8039.

Sincerely,



Thomas Jelenić
Vice President of Planning and Program Management

HIGHLAND FAIRVIEW
14225 Corporate Way
Moreno Valley, CA 92553
Tel: 951.867.5300 Fax: 951.242.9165

November 20, 2015

Via Electronic Mail

Eric Chiang
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Email: eric.chiang@cpuc.ca.gov

Dear Mr. Chiang:

We at Highland Fairview understand Southern California's families, businesses and industries depend on a reliable supply of clean, safe energy to grow and prosper. That is why we stand firmly in support of SoCalGas®' proposed infrastructure improvement plan, also called the North-South Project, and urge you do the same.

In order to enhance the reliability of natural gas supplies for San Bernardino, Riverside, Imperial and San Diego Counties, SoCalGas is proposing to upgrade an existing compressor station and build a new 65-mile north-south pipeline to connect existing east-west delivery systems that run through Adelanto and Moreno Valley. The pipeline will follow existing roadways wherever possible and incorporate state-of-the-art technologies, and rigorous monitoring and maintenance protocols in every element to ensure that risks and potential environmental impacts are minimized.

A significant portion of the proposed alignment will run through our property in Moreno Valley, but we understand its importance to the region and are partnering with SoCalGas to ensure an equitable and safe alignment through our property.

Natural gas is the ideal energy source to complement existing renewable energy generation from wind and solar as we transition to wider use of renewables following our state's ambitious clean energy goals. When the wind is not blowing and the sun is not shining, natural gas provides a clean, safe supply to fill the gap.

This project is expected to deliver significant economic benefits to Southern California by way of $423 million in local spending and the creation of an estimated 3,000 local construction jobs.

The North-South Project is a well-researched and planned means of diversifying Southern California's energy supply, while facilitating our transition to renewable energy sources and benefitting local economies.

I hope that you'll agree with me that this plan deserves our support. If I can be of assistance, please give me a call at (714) 824-8023.

Sincerely,

Brian R. Hixson, P.E.
V.P. Land Development
Highland Fairview

November 20, 2015

File: Environmental Doc Review
San Bernardino County

Public Scoping Comments
North-South Project
505 Sansome Street, Suite 300
San Francisco, CA 94111
Email: north-south@ene.com

COMMENTS ON THE NOTICE OF PREPARATION FOR A JOINT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT FOR THE NORTH-SOUTH PROJECT, SAN BERNARDINO AND RIVERSIDE COUNTY

The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received a Notice of Preparation (NOP) for the above-referenced project (Project) on October 13, 2015. The NOP was circulated by the California State Public Utilities Commission (CPUC), in order to solicit input on the potential impacts on the environment and ways in which the significant effects on the project area are proposed to be avoided or mitigated. Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations, title 14, section 15096. Based on our review of the limited information provided, we recommend that several issues be considered in the preparation of the Project, particularly: 1) drainage and stream channels be **avoided** to the extent practicable to **minimize** impacts; 2) erosion control construction best management practices (BMPs) be included to effectively treat storm water runoff during the life of the Project; 3) water quality and hydrology analyses should be included and discuss the beneficial uses of the waters and potential Project impacts with respect to those beneficial uses; and 4) established numerical and narrative water quality objectives and standards be used when evaluating thresholds of significance for Project impacts. Our comments are outlined below.

PROJECT DESCRIPTION

Generally, the Project includes the construction, operation, and maintenance of a 36-inch diameter natural gas transmission pipeline; the rebuilding of the Adelanto Compressor Station by adding 30,000 horsepower of compression to the system; installation of additional pressure limiting and communications equipment at the Moreno Pressure Limiting Station, Whitewater Pressure Limiting Station, and Desert Center Compressor Station; and installation of pressure limiting and communications equipment at the proposed Shaver Summit Pressure Limiting Station.

WATER BOARD'S AUTHORITY

All groundwater and surface waters are considered waters of the State. Surface waters include streams, lakes, ponds, and wetlands, and may be ephemeral, intermittent, or perennial. All waters of the State are protected under California law. State law assigns responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the U.S. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the U.S.

The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards for surface water and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's web site at http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml

SPECIFIC ISSUES TO BE CONSIDERED

We recommend that the following issues be considered in preparation of the Project.

1. Several drainages cross the Project area. It is anticipated that access roads may need to be constructed or expanded during Project construction, increasing the amount of impervious surfaces in the area and, thus, potentially increasing runoff rates and impacting beneficial uses associated with the drainages. The Water Board requires that impacts to water resources be **avoided** where feasible and **minimized** to the extent practical. Compensatory mitigation will be required for all unavoidable permanent impacts to surface water resources. Water Board staff coordinate all mitigation requirements with staff from other federal and state regulatory agencies, including the U.S. Army Corps of Engineers (USACE) and California Department of Fish and Wildlife. In determining appropriate mitigation ratios for impacts to waters of the State, Water Board staff considers Basin Plan requirements, which include, at minimum, a 1.5 to 1 mitigation ratio for impacts to wetlands. Water Board staff uses *12501-SPD Regulatory Program Standard Operating Procedure for Determination of Mitigation Ratios*, published December 2012 by the USACE, South Pacific Division, to enable us to determine a mitigation ratio for projects that impact waters in our region.

2. Post-construction storm water management must be considered a significant Project component, and BMPs that effectively treat post-construction storm water runoff should be included as part of the Project. The environmental document must specifically identify features to control storm water on-site or prevent pollutants from non-point sources from entering and degrading surface or groundwaters. The foremost method of reducing impacts to watersheds from urban development is "Low Impact Development" (LID), the goals of which are to maintain a landscape functionally equivalent to predevelopment hydrologic conditions and to minimize generation of non-point source pollutants. LID results in less surface runoff and potentially less impacts to receiving waters, the principles of which include: maintaining natural drainage paths and landscape features to slow and filter runoff

and maximize groundwater recharge; managing runoff as close to the source as possible; and maintaining vegetated areas for storm water management and onsite filtration.

3. The beneficial uses of water resources in the Lahontan Region are listed either by watershed (for surface waters) or by groundwater basin (for groundwater) in Chapter 2 of the Basin Plan. The environmental document should identify and list the beneficial uses of the water resources within the Project area and include an analysis of the potential impacts to water quality and hydrology with respect to those beneficial uses.

4. Water quality objectives and standards, both numerical and narrative, for **all** waters of the State within the Lahontan Region, including surface waters and groundwater, are outlined in Chapter 3 of the Basin Plan. Water quality objectives and standards are intended to protect the public health and welfare, and to maintain or enhance water quality in relation to the existing and/or potential beneficial uses of the water. It is these objectives and standards that should be used when evaluating thresholds of significance for Project impacts.

5. To ensure that no net loss of function and value will occur as a result of Project implementation, we request that site facilities, equipment staging areas, and excavated soil stockpiles be microsited outside stream channels and floodplain areas. Buffer areas should be identified and exclusion fencing used to protect the water resource and prevent unauthorized vehicles or equipment from entering or otherwise disturbing the surface waters. Equipment should use existing roadways to the extent feasible.

6. Vegetation clearing should be kept to a minimum. Where feasible, existing vegetation should be mowed so that after construction the vegetation could reestablish and help mitigate for potential storm water impacts.

7. We request that the upper six inches of topsoil be retained and used as a final cover over temporary impact areas. This topsoil contains the native seed bank and soil microbes necessary to help re-establish vegetation post-construction.

8. Should a worker education program be implemented, the education program should include an element of environmental awareness with respect to water quality, especially as the proposed Project crosses several drainage features; Water Board staff request this training also address waters of the State, waters of the U.S., and storm water.

PERMITTING REQUIREMENTS

A number of activities associated with the proposed Project have the potential to impact waters of the State and, therefore, may require permits issued by either the State Water Resources Control Board (State Water Board) or Lahontan Water Board. The required permits may include the following.

9. Streambed alteration and/or discharge of fill material to a surface water may require a CWA, section 401 water quality certification for impacts to federal waters (waters

of the U.S.), or dredge and fill waste discharge requirements for impacts to non-federal waters, both issued by the Lahontan Water Board or State Water Board. Early consultation with Water Board staff regarding this permit is highly encouraged.

10. Land disturbance of more than 1 acre may require a CWA, section 402(p) storm water permit, including a National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit, Water Quality Order (WQO) 2009-0009-DWQ, obtained from the State Water Board, or individual storm water permit obtained from the Lahontan Water Board.

11. Water diversion and/or dewatering activities may be subject to discharge and monitoring requirements under either NPDES General Permit, Limited Threat Discharges to Surface Waters, Board Order R6T-2014-0049, or General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality, WQO-2003-0003, both issued by the Lahontan Water Board.

Please be advised of the permits that may be required for the proposed Project, as outlined above. The specific Project activities that may trigger these permitting actions should be identified in the appropriate sections of the environmental document. Should Project implementation result in activities that trigger these permitting actions, the Project proponent must consult with Water Board staff. Information regarding these permits, including application forms, can be downloaded from our web site at http://www.waterboards.ca.gov/lahontan/.

Thank you for the opportunity to comment on the NOP. If you have any questions regarding this letter, please contact me at (760) 241-7305 (Brianna.St.Pierre@waterboards.ca.gov) or Patrice Copeland, Senior Engineering Geologist, at (760) 241-7404 (Patrice.Copeland@waterboards.ca.gov).

Brianna St P-

Brianna St. Pierre, PG
Engineering Geologist

cc: USEPA Region 9, Wetlands Regulatory Office
(R9-WTR8-Mailbox@epa.gov)
Daniel Swenson, US Army Corps of Engineers
(Daniel.P.Swenson@usace.army.mil)
California Department of Fish and Wildlife
(askRegion6@wildlife.ca.gov)
Clifford Harvey, SWRCB
(Clifford.harvey@waterboards.ca.gov)
Jay Mirpour, Colorado River Water Quality Control Board
(jay.mirpour@waterboards.ca.gov)
Glenn Robertson, Santa Ana Water Quality Control Board
(glenn.robertson@waterboards.ca.gov)

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

November 23, 2015

VIA U.S. Mail and Email
North-South@ene.com

Eric Chiang, California Public Utilities Commissione
Judy Noiron, Forest Supervisor, San Bernardino National Forest
Public Scoping Comments
RE: North-South Project
505 Sansome Street, Suite 300
San Francisco CA 94111

Dear Mr. Chiang and Ms. Noiron:

Notice of Intent to Prepare a Joint Environmental Impact Report and Environmental Impact Statement (EIR/EIS) for the Southern California Gas Company (SoCalGas) and San Diego Gas and Electric (SDG&E) proposed North-South Project

The Metropolitan Water District of Southern California (Metropolitan) has received a copy of the Notice of Intent to prepare a joint EIR/EIS for the proposed North-South gas pipeline project. The federal lead agency is the U.S. Forest Service and the state lead agency is the California Public Utilities Commission (CPUC). According to SoCalGas and SDG&E, the proposed project is needed to establish a physical connection between their Northern and Southern gas transmission systems. Major components of the North-South Project include the following:

- Adelanto to Moreno Pipeline (63 miles): The 63-mile Adelanto to Moreno Pipeline begins at the Adelanto Compressor Station in Adelanto and proceeds south through dispersed rural residential, industrial, and agricultural lands along Baldy Mesa Road in the high desert of San Bernardino County. The route then continues through the Cajon Pass, roughly paralleling Kinder Morgan's CalNev Pipeline system. This segment also traverses San Bernardino National Forest and crosses the Pacific Crest Trail. The project enters the densely populated San Bernardino Valley through Cajon Wash and generally follows existing roadways. The route then exits the San Bernardino area and enters Reiche Canyon before it terminates at the Moreno Pressure Limiting Station in the City of Moreno Valley.
- Adelanto Compressor Station Rebuild: In addition to the new pipeline segments, the Applicants are proposing to rebuild the Adelanto Compressor Station by adding 30,000

horsepower (HP) of compression to the system. Additional compression equipment would be natural gas-fired.

- Pressure Limiting Equipment Installation and Upgrades: Additional pressure limiting equipment would be installed at both the Moreno Pressure Limiting Station, as well as upgrades to the existing equipment at the Whitewater Pressure Limiting Station near the Whitewater River, the Shaver Summit Pressure Limiting Station near the City of Indio and at the Desert Center Compressor Station near the community of Desert Center.

Construction of the North-South Project is anticipated to begin in September 2018 and would take approximately one year.

Background

Metropolitan is a public agency and regional water wholesaler. It is comprised of 26 member public agencies serving more than 19 million people in six counties in Southern California. Metropolitan owns and operates several water conveyance pipelines in the vicinity of the alignment of the proposed Adelanto to Moreno 36-inch gas pipeline. The alignment of the proposed North-South gas pipeline appears to cross the Rialto pipeline at station 4046+10. The proposed alignment of the gas pipeline also appears to run parallel and adjacent to the alignment of Metropolitan's Inland Feeder pipeline between stations 1591+00.00 and 1609+00.00.

Metropolitan also owns and operates the Colorado River Aqueduct (CRA), portions of which are located near the proposed North-South gas project facilities at the Shaver Summit Pressure Limiting Station and the Desert Center Compressor Station near Desert Center CA. Finally, the existing gas pipeline between the Desert Center Compressor Station and the Moreno Pressure Limiting Station in the City of Moreno Valley crosses the Colorado River Aqueduct at station 10017+80.00. Please see the enclosed map depicting Metropolitan's facilities in relation to the proposed North-South gas pipeline and the existing gas pipelines and facilities associated with this proposed project.

This letter contains Metropolitan's response to the Notice of Intent as a potentially affected agency.

POTENTIAL IMPACTS ON METROPOLITAN'S WATER CONVEYANCE FACILITIES AND RIGHTS-OF-WAY

As described above, Metropolitan currently has a significant number of facilities, real estate interests, and fee-owned rights-of-way, easements, and other properties (Facilities) that are part of our water distribution system and are located on or near the proposed alignment of the North-South gas pipeline and the ancillary compressor and pressure limiting stations. Metropolitan is concerned with potential direct or indirect impacts that may result from the construction and operation of the proposed North-South project on or near our Facilities. In order to avoid potential impacts, Metropolitan requests that the Draft EIR/EIS include an assessment of potential impacts to Metropolitan's Facilities with proposed measures to avoid or mitigate significant adverse effects.

In order to avoid potential conflicts with Metropolitan's facilities and rights-of-way, we require that any design plans for any activity in the area of Metropolitan's pipelines or facilities be submitted for our review and written approval. Approval of the project should be contingent on Metropolitan's approval of design plans for the proposed alignment that could impact its facilities.

The applicant may obtain detailed prints of drawings of Metropolitan's pipelines and rights-of-way by calling Metropolitan's Substructures Information Line at (213) 217-6564. To assist the applicant in preparing plans that are compatible with Metropolitan's facilities and easements, we have enclosed a copy of the "Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of The Metropolitan Water District of Southern California." Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way.

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future environmental documentation on this project. If we can be of further assistance, please contact Tom Napoli of the Environmental Planning Team at (213) 217-6720.

Very truly yours,

Deirdre West
Manager, Environmental Planning Team
By Deborah Drezner, Principle Environmental Specialist

TN
Environmental Planning & Compliance\COMPLETED JOBS\November 2015\Job No. 20151116EXT

Enclosure: Map Depicting North-South Gas Pipeline Project Facilities and Metropolitan Interests
Planning Guidelines

Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of The Metropolitan Water District of Southern California

1. Introduction

a. The following general guidelines should be followed for the design of proposed facilities and developments in the area of Metropolitan's facilities, fee properties, and/or easements.

b. We require that 3 copies of your tentative and final record maps, grading, paving, street improvement, landscape, storm drain, and utility plans be submitted for our review and written approval as they pertain to Metropolitan's facilities, fee properties and/or easements, prior to the commencement of any construction work.

2. Plans, Parcel and Tract Maps

The following are Metropolitan's requirements for the identification of its facilities, fee properties, and/or easements on your plans, parcel maps and tract maps:

a. Metropolitan's fee properties and/or easements and its pipelines and other facilities must be fully shown and identified as Metropolitan's on all applicable plans.

b. Metropolitan's fee properties and/or easements must be shown and identified as Metropolitan's with the official recording data on all applicable parcel and tract maps.

c. Metropolitan's fee properties and/or easements and existing survey monuments must be dimensionally tied to the parcel or tract boundaries.

d. Metropolitan's records of surveys must be referenced on the parcel and tract maps.

3. Maintenance of Access Along Metropolitan's Rights-of-Way

a. Proposed cut or fill slopes exceeding 10 percent are normally not allowed within Metropolitan's fee properties or easements. This is required to facilitate the use of construction and maintenance equipment, and provide access to its aboveground and belowground facilities.

b. We require that 16-foot-wide commercial-type driveway approaches be constructed on both sides of all streets crossing Metropolitan's rights-of-way. Openings are required in any median island. Access ramps, if necessary, must be at least 16-feet-wide. Grades of ramps are normally not allowed to exceed 10 percent. If the slope of an access ramp must exceed 10 percent due to the topography, the ramp must be paved. We require a 40-foot-long level area on the driveway approach to access ramps where the ramp meets the street. At Metropolitan's fee properties, we may require fences and gates.

c. The terms of Metropolitan's permanent easement deeds normally preclude the building or maintenance of structures of any nature or kind within its easements, to ensure safety and avoid interference with operation and maintenance of Metropolitan's pipelines or other facilities. Metropolitan must have vehicular access along the easements at all times for inspection, patrolling, and for maintenance of the pipelines and other facilities on a routine basis. We require a 20-foot-wide clear zone around all above-ground facilities for this routine access. This clear zone should slope away from our facility on a grade not to exceed 2 percent. We must also have access along the easements with construction equipment. An example of this is shown on Figure 1.

d. The footings of any proposed buildings adjacent to Metropolitan's fee properties and/or easements must not encroach into the fee property or easement or impose additional loading on Metropolitan's pipelines or other facilities therein. A typical situation is shown on Figure 2. Prints of the detail plans of the footings for any building or structure adjacent to the fee property or easement must be submitted for our review and written approval as they pertain to the pipeline or other facilities therein. Also, roof eaves of buildings adjacent to the easement or fee property must not overhang into the fee property or easement area.

e. Metropolitan's pipelines and other facilities, e.g. structures, manholes, equipment, survey monuments, etc. within its fee properties and/or easements must be protected from damage by the easement holder on Metropolitan's property or the property owner where Metropolitan has an easement, at no expense to Metropolitan. If the facility is a cathodic protection station it shall be located prior to any grading or excavation. The exact location, description and way of protection shall be shown on the related plans for the easement area.

4. Easements on Metropolitan's Property

a. We encourage the use of Metropolitan's fee rights-of-way by governmental agencies for public street and utility purposes, provided that such use does not interfere with Metropolitan's use of the property, the entire width of the property is accepted into the agency's public street system and fair market value is paid for such use of the right-of-way.

b. Please contact the Director of Metropolitan's Right of Way and Land Division, telephone (213) 250-6302, concerning easements for landscaping, street, storm drain, sewer, water or other public facilities proposed within Metropolitan's fee properties. A map and legal description of the requested easements must be submitted. Also, written evidence must be submitted that shows the city or county will accept the easement for the specific purposes into its public system. The grant of the easement will be subject to Metropolitan's rights to use its land for water pipelines and related purposes to the same extent as if such grant had not been made. There will be a charge for the easement. Please note that, if entry is required on the property prior to issuance of the easement, an entry permit must be obtained. There will also be a charge for the entry permit.

5. Landscaping

Metropolitan's landscape guidelines for its fee properties and/or easements are as follows:

a. A green belt may be allowed within Metropolitan's fee property or easement.

b. All landscape plans shall show the location and size of Metropolitan's fee property and/or easement and the location and size of Metropolitan's pipeline or other facilities therein.

c. Absolutely no trees will be allowed within 15 feet of the centerline of Metropolitan's existing or future pipelines and facilities.

d. Deep-rooted trees are prohibited within Metropolitan's fee properties and/or easements. Shallow-rooted trees are the only trees allowed. The shallow-rooted trees will not be permitted any closer than 15 feet from the centerline of the pipeline, and such trees shall not be taller than 25 feet with a root spread no greater than 20 feet in diameter at maturity. Shrubs, bushes, vines, and ground cover are permitted, but larger shrubs and bushes should not be planted directly over our pipeline. Turf is acceptable. We require submittal of landscape plans for Metropolitan's prior review and written approval. (See Figure 3).

e. The landscape plans must contain provisions for Metropolitan's vehicular access at all times along its rights-of-way to its pipelines or facilities therein. Gates capable of accepting Metropolitan's locks are required in any fences across its rights-of-way. Also, any walks or drainage facilities across its access route must be constructed to AASHTO H-20 loading standards.

f. Rights to landscape any of Metropolitan's fee properties must be acquired from its Right of Way and Land Division. Appropriate entry permits must be obtained prior to any entry on its property. There will be a charge for any entry permit or easements required.

6. Fencing

Metropolitan requires that perimeter fencing of its fee properties and facilities be constructed of universal chain link, 6 feet in height and topped with 3 strands of barbed wire angled upward and outward at a 45 degree angle or an approved equal for a total fence height of 7 feet. Suitable substitute fencing may be considered by Metropolitan. (Please see Figure 5 for details).

7. Utilities in Metropolitan's Fee Properties and/or Easements or Adjacent to Its Pipeline in Public Streets

Metropolitan's policy for the alinement of utilities permitted within its fee properties and/or easements and street rights-of-way is as follows:

a. Permanent structures, including catch basins, manholes, power poles, telephone riser boxes, etc., shall not be located within its fee properties and/or easements.

b. We request that permanent utility structures within public streets, in which Metropolitan's facilities are constructed under the Metropolitan Water District Act, be placed as far from our pipeline as possible, but not closer than 5 feet from the outside of our pipeline.

c. The installation of utilities over or under Metropolitan's pipeline(s) must be in accordance with the requirements shown on the enclosed prints of Drawings Nos. C-11632 and C-9547. Whenever possible we request a minimum of one foot clearance between Metropolitan's pipe and your facility. Temporary support of Metropolitan's pipe may also be required at undercrossings of its pipe in an open trench. The temporary support plans must be reviewed and approved by Metropolitan.

d. Lateral utility crossings of Metropolitan's pipelines must be as perpendicular to its pipeline alinement as practical. Prior to any excavation our pipeline shall be located manually and any excavation within two feet of our pipeline must be done by hand. This shall be noted on the appropriate drawings.

e. Utilities constructed longitudinally within Metropolitan's rights-of-way must be located outside the theoretical trench prism for uncovering its pipeline and must be located parallel to and as close to its rights-of-way lines as practical.

f. When piping is jacked or installed in jacked casing or tunnel under Metropolitan's pipe, there must be at least two feet of vertical clearance between the bottom of Metropolitan's pipe and the top of the jacked pipe, jacked casing or tunnel. We also require that detail drawings of the shoring for the jacking or tunneling pits be submitted for our review and approval. Provisions must be made to grout any voids around the exterior of the jacked pipe, jacked casing or tunnel. If the piping is installed in a jacked casing or tunnel the annular space between the piping and the jacked casing or tunnel must be filled with grout.

g. Overhead electrical and telephone line requirements:

1) Conductor clearances are to conform to the California State Public Utilities Commission, General Order 95, for Overhead Electrical Line Construction or at a greater clearance if required by Metropolitan. Under no circumstances shall clearance be less than 35 feet.

2) A marker must be attached to the power pole showing the ground clearance and line voltage, to help prevent damage to your facilities during maintenance or other work being done in the area.

3) Line clearance over Metropolitan's fee properties and/or easements shall be shown on the drawing to indicate the lowest point of the line under the most adverse conditions including consideration of sag, wind load, temperature change, and support type. We require that overhead lines be located at least 30 feet laterally away from all above-ground structures on the pipelines.

4) When underground electrical conduits, 120 volts or greater, are installed within Metropolitan's fee property and/or easement, the conduits must be incased in a minimum of three inches of red concrete. Where possible, above ground warning signs must also be placed at the right-of-way lines where the conduits enter and exit the right-of-way.

h. The construction of sewerlines in Metropolitan's fee properties and/or easements must conform to the California Department of Health Services Criteria for the Separation of Water Mains and Sanitary Services and the local City or County Health Code Ordinance as it relates to installation of sewers in the vicinity of pressure waterlines. The construction of sewerlines should also conform to these standards in street rights-of- way.

i. Cross sections shall be provided for all pipeline crossings showing Metropolitan's fee property and/or easement limits and the location of our pipeline(s). The exact locations of the crossing pipelines and their elevations shall be marked on as-built drawings for our information.

j. Potholing of Metropolitan's pipeline is required if the vertical clearance between a utility and Metropolitan's pipeline is indicated on the plan to be one foot or less. If the indicated clearance is between one and two feet, potholing is suggested. Metropolitan will provide a representative to assists others in locating and identifying its pipeline. Two-working days notice is requested.

k. Adequate shoring and bracing is required for the full depth of the trench when the excavation encroaches within the zone shown on Figure 4.

l. The location of utilities within Metropolitan's fee property and/or easement shall be plainly marked to help prevent damage during maintenance or other work done in the area. Detectable tape over buried utilities should be placed a minimum of 12 inches above the utility and shall conform to the following requirements:

1) Water pipeline: A two-inch blue warning tape shall be imprinted with:

"CAUTION BURIED WATER PIPELINE"

2) Gas, oil, or chemical pipeline: A two-inch yellow warning tape shall be imprinted with:

"CAUTION BURIED _____ PIPELINE"

3) Sewer or storm drain pipeline: A two-inch green warning tape shall be imprinted with:

"CAUTION BURIED _____ PIPELINE"

4) Electric, street lighting, or traffic signals conduit: A two-inch red warning tape shall be imprinted with:

"CAUTION BURIED _____ CONDUIT"

5) Telephone, or television conduit: A two-inch orange warning tape shall be imprinted with:

"CAUTION BURIED _____ CONDUIT"

m. Cathodic Protection requirements:

1) If there is a cathodic protection station for Metropolitan's pipeline in the area of the proposed work, it shall be located prior to any grading or excavation. The exact location, description and manner of protection shall be shown on all applicable plans. Please contact Metropolitan's Corrosion Engineering Section, located at Metropolitan's F. E. Weymouth Softening and Filtration Plant, 700 North Moreno Avenue, La Verne, California 91750, telephone (714) 593-7474, for the locations of Metropolitan's cathodic protection stations.

2) If an induced-current cathodic protection system is to be installed on any pipeline crossing Metropolitan's pipeline, please contact Mr. Wayne E. Risner at (714) 593-7474 or (213) 250-5085. He will review the proposed system and determine if any conflicts will arise with the existing cathodic protection systems installed by Metropolitan.

3) Within Metropolitan's rights-of-way, pipelines and carrier pipes (casings) shall be coated with an approved protective coating to conform to Metropolitan's requirements, and shall be maintained in a neat and orderly condition as directed by Metropolitan. The application and monitoring of cathodic protection on the pipeline and casing shall conform to Title 49 of the Code of Federal Regulations, Part 195.

4) If a steel carrier pipe (casing) is used:

(a) Cathodic protection shall be provided by use of a sacrificial magnesium anode (a sketch showing the cathodic protection details can be provided for the designers information).

(b) The steel carrier pipe shall be protected with a coal tar enamel coating inside and out in accordance with AWWA C203 specification.

n. All trenches shall be excavated to comply with the CAL/OSHA Construction Safety Orders, Article 6, beginning with Sections 1539 through 1547. Trench backfill shall be placed in 8-inch lifts and shall be compacted to 95 percent relative compaction (ASTM D698) across roadways and through protective dikes. Trench backfill elsewhere will be compacted to 90 percent relative compaction (ASTM D698).

o. Control cables connected with the operation of Metropolitan's system are buried within streets, its fee properties and/or easements. The locations and elevations of these cables shall be shown on the drawings. The drawings shall note that prior to any excavation in the area, the control cables shall be located and measures shall be taken by the contractor to protect the cables in place.

p. Metropolitan is a member of Underground Service Alert (USA). The contractor (excavator) shall contact USA at 1-800-422-4133 (Southern California) at least 48 hours prior to starting any excavation work. The contractor will be liable for any damage to Metropolitan's facilities as a result of the construction.

8. Paramount Right

Facilities constructed within Metropolitan's fee properties and/or easements shall be subject to the paramount right of Metropolitan to use its fee properties and/or easements for the purpose for which they were acquired. If at any time Metropolitan or its assigns should, in the exercise of their rights, find it necessary to remove any of the facilities from the fee properties and/or easements, such removal and replacement shall be at the expense of the owner of the facility.

9. Modification of Metropolitan's Facilities

When a manhole or other of Metropolitan's facilities must be modified to accommodate your construction or reconstruction, Metropolitan will modify the facilities with its forces. This should be noted on the construction plans. The estimated cost to perform this modification will be given to you and we will require a deposit for this amount before the work is performed. Once the deposit is received, we will schedule the work. Our forces will coordinate the work with your contractor. Our final billing will be based on actual cost incurred, and will include materials, construction, engineering plan review, inspection, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice will be forwarded for payment of the additional amount.

10. Drainage

a. Residential or commercial development typically increases and concentrates the peak storm water runoff as well as the total yearly storm runoff from an area, thereby increasing the requirements for storm drain facilities downstream of the development. Also, throughout the year water from landscape irrigation, car washing, and other outdoor domestic water uses flows into the storm drainage system resulting in weed abatement, insect infestation, obstructed access and other problems. Therefore, it is Metropolitan's usual practice not to approve plans that show discharge of drainage from developments onto its fee properties and/or easements.

b. If water must be carried across or discharged onto Metropolitan's fee properties and/or easements, Metropolitan will insist that plans for development provide that it be carried by closed conduit or lined open channel approved in writing by Metropolitan. Also the drainage facilities must be maintained by others, e.g., city, county, homeowners association, etc. If the development proposes changes to existing drainage features, then the developer shall make provisions to provide for replacement and these changes must be approved by Metropolitan in writing.

11. Construction Coordination

During construction, Metropolitan's field representative will make periodic inspections. We request that a stipulation be added to the plans or specifications for notification of Mr. _____ of Metropolitan's Operations Services Branch, telephone (213) 250-____, at least two working days prior to any work in the vicinity of our facilities.

12. Pipeline Loading Restrictions

a. Metropolitan's pipelines and conduits vary in structural strength, and some are not adequate for AASHTO H-20 loading. Therefore, specific loads over the specific sections of pipe or conduit must be reviewed and approved by Metropolitan. However, Metropolitan's pipelines are typically adequate for AASHTO H-20 loading provided that the cover over the pipeline is not less than four feet or the cover is not substantially increased. If the temporary cover over the pipeline during construction is between three and four feet, equipment must restricted to that which

imposes loads no greater than AASHTO H-10. If the cover is between two and three feet, equipment must be restricted to that of a Caterpillar D-4 tract-type tractor. If the cover is less than two feet, only hand equipment may be used. Also, if the contractor plans to use any equipment over Metropolitan's pipeline which will impose loads greater than AASHTO H-20, it will be necessary to submit the specifications of such equipment for our review and approval at least one week prior to its use. More restrictive requirements may apply to the loading guideline over the San Diego Pipelines 1 and 2, portions of the Orange County Feeder, and the Colorado River Aqueduct. Please contact us for loading restrictions on all of Metropolitan's pipelines and conduits.

b. The existing cover over the pipeline shall be maintained unless Metropolitan determines that proposed changes do not pose a hazard to the integrity of the pipeline or an impediment to its maintenance.

13. Blasting

a. At least 20 days prior to the start of any drilling for rock excavation blasting, or any blasting, in the vicinity of Metropolitan's facilities, a two-part preliminary conceptual plan shall be submitted to Metropolitan as follows:

b. Part 1 of the conceptual plan shall include a complete summary of proposed transportation, handling, storage, and use of explosions.

c. Part 2 shall include the proposed general concept for blasting, including controlled blasting techniques and controls of noise, fly rock, airblast, and ground vibration.

14. CEQA Requirements

a. When Environmental Documents Have Not Been Prepared

1) Regulations implementing the California Environmental Quality Act (CEQA) require that Metropolitan have an opportunity to consult with the agency or consultants preparing any environmental documentation. We are required to review and consider the environmental effects of the project as shown in the Negative Declaration or Environmental Impact Report (EIR) prepared for your project before committing Metropolitan to approve your request.

2) In order to ensure compliance with the regulations implementing CEQA where Metropolitan is not the Lead Agency, the following minimum procedures to ensure compliance with the Act have been established:

a) Metropolitan shall be timely advised of any determination that a Categorical Exemption applies to the project. The Lead Agency is to advise Metropolitan that it and other agencies participating in the project have complied with the requirements of CEQA prior to Metropolitan's participation.

b) Metropolitan is to be consulted during the preparation of the Negative Declaration or EIR.

c) Metropolitan is to review and submit any necessary comments on the Negative Declaration or draft EIR.

d) Metropolitan is to be indemnified for any costs or liability arising out of any violation of any laws or regulations including but not limited to the California Environmental Quality Act and its implementing regulations.

b. When Environmental Documents Have Been Prepared

If environmental documents have been prepared for your project, please furnish us a copy for our review and files in a timely manner so that we may have sufficient time to review and comment. The following steps must also be accomplished:

1) The Lead Agency is to advise Metropolitan that it and other agencies participating in the project have complied with the requirements of CEQA prior to Metropolitan's participation.

2) You must agree to indemnify Metropolitan, its officers, engineers, and agents for any costs or liability arising out of any violation of any laws or regulations including but not limited to the California Environmental Quality Act and its implementing regulations.

15. Metropolitan's Plan-Review Cost

a. An engineering review of your proposed facilities and developments and the preparation of a letter response

giving Metropolitan's comments, requirements and/or approval that will require 8 man-hours or less of effort is typically performed at no cost to the developer, unless a facility must be modified where Metropolitan has superior rights. If an engineering review and letter response requires more than 8 man-hours of effort by Metropolitan to determine if the proposed facility or development is compatible with its facilities, or if modifications to Metropolitan's manhole(s) or other facilities will be required, then all of Metropolitan's costs associated with the project must be paid by the developer, unless the developer has superior rights.

b. A deposit of funds will be required from the developer before Metropolitan can begin its detailed engineering plan review that will exceed 8 hours. The amount of the required deposit will be determined after a cursory review of the plans for the proposed development.

c. Metropolitan's final billing will be based on actual cost incurred, and will include engineering plan review, inspection, materials, construction, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice will be forwarded for payment of the additional amount. Additional deposits may be required if the cost of Metropolitan's review exceeds the amount of the initial deposit.

16. Caution

We advise you that Metropolitan's plan reviews and responses are based upon information available to Metropolitan which was prepared by or on behalf of Metropolitan for general record purposes only. Such information may not be sufficiently detailed or accurate for your purposes. No warranty of any kind, either express or implied, is attached to the information therein conveyed as to its accuracy, and no inference should be drawn from Metropolitan's failure to comment on any aspect of your project. You are therefore cautioned to make such surveys and other field investigations as you may deem prudent to assure yourself that any plans for your project are correct.

17. Additional Information

Should you require additional information, please contact:

Civil Engineering Substructures Section
Metropolitan Water District
of Southern California
P.O. Box 54153
Los Angeles, California 90054-0153
(213) 217-6000

JEH/MRW/lk

Rev. January 22, 1989

Encl.

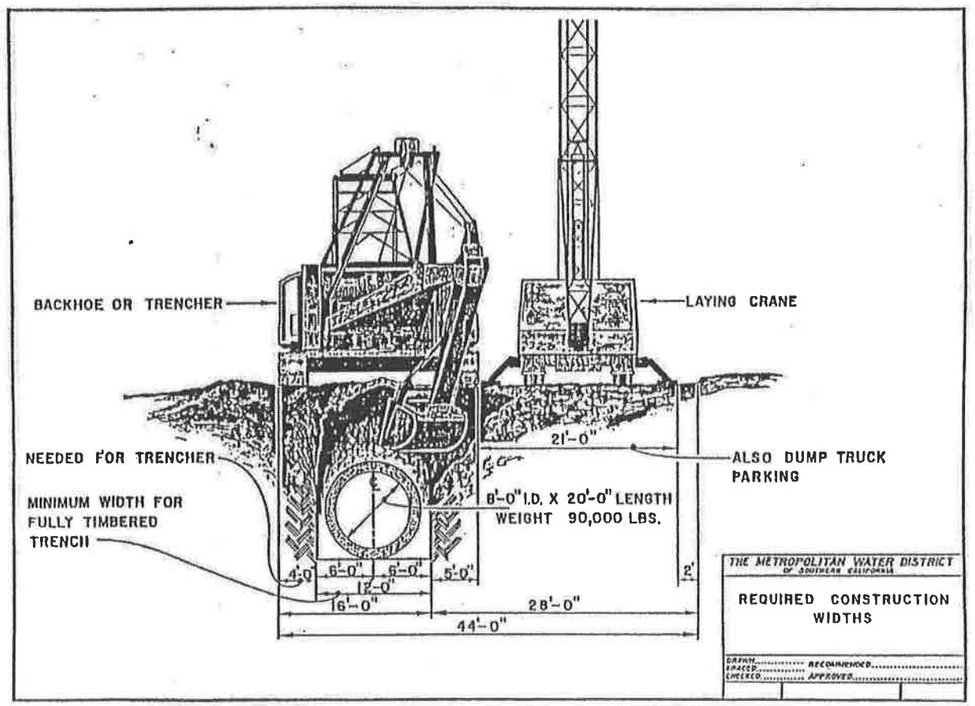
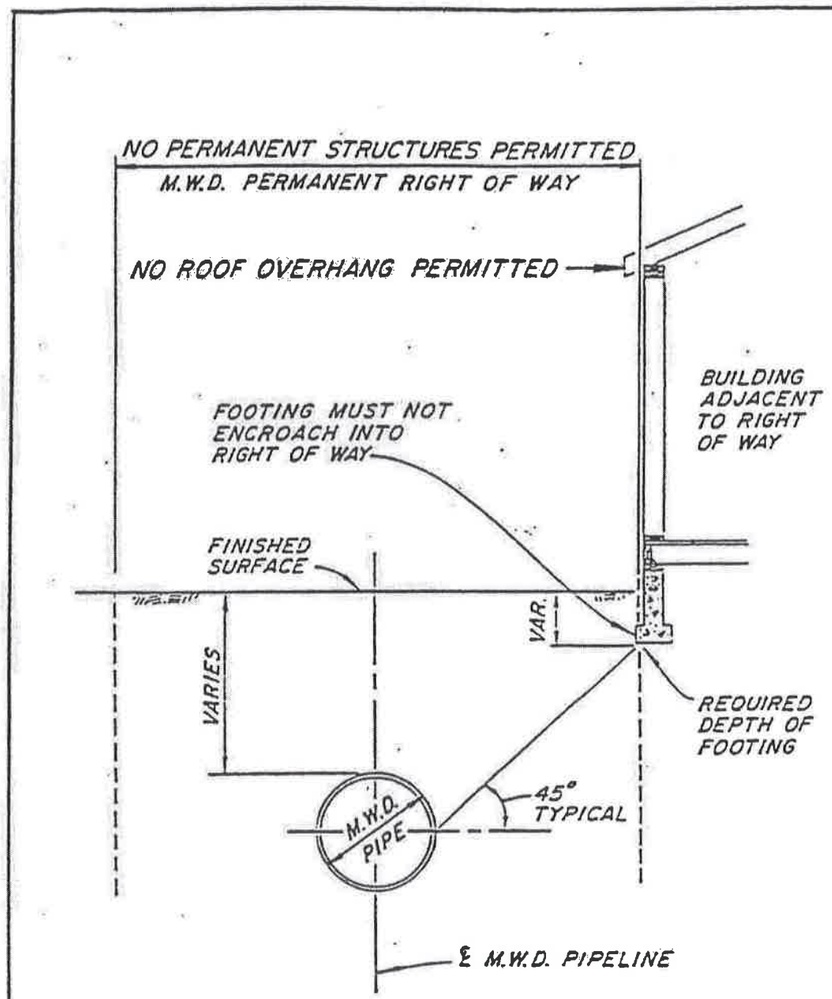

BACKHOE OR TRENCHER
LAYING CRANE
NEEDED FOR TRENCHER
MINIMUM WIDTH FOR FULLY TIMBERED TRENCH
21'-0"
ALSO DUMP TRUCK PARKING
8'-0" I.D. X 20'-0" LENGTH WEIGHT 90,000 LBS.
4'-0"
6'-0"
6'-0"
5'-0"
12'-0"
16'-0"
28'-0"
44'-0"
2'
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
REQUIRED CONSTRUCTION WIDTHS
DRAWN
TRACED
CHECKED
RECOMMENDED
APPROVED

FIGURE 1



NOTE: M.W.D. PIPELINE SIZE, DEPTH, LOCATION AND WIDTH OF PERMANENT RIGHT OF WAY VARIES.

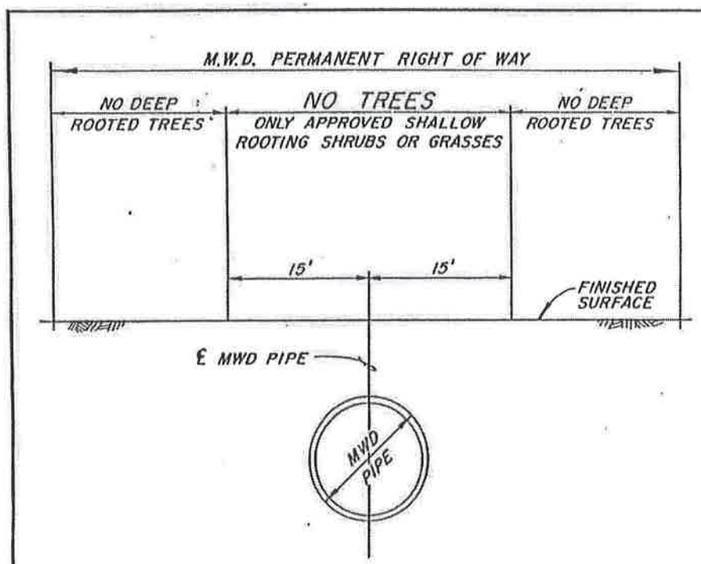
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

REQUIREMENTS FOR BUILDINGS AND FOOTINGS ADJACENT TO M.W.D. RIGHT OF WAY

DRAWN _____ RECOMMENDED _____
TRACED _____
CHECKED _____ APPROVED _____

FIGURE 2

11-47 DIETZGEN-POST CLEARPRINT 1063



THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

LANDSCAPE GUIDELINES FOR M.W.D. RIGHT OF WAY

DRAWN..... RECOMMENDED.....
TRACED..... .....
CHECKED..... APPROVED.....

FIGURE 3

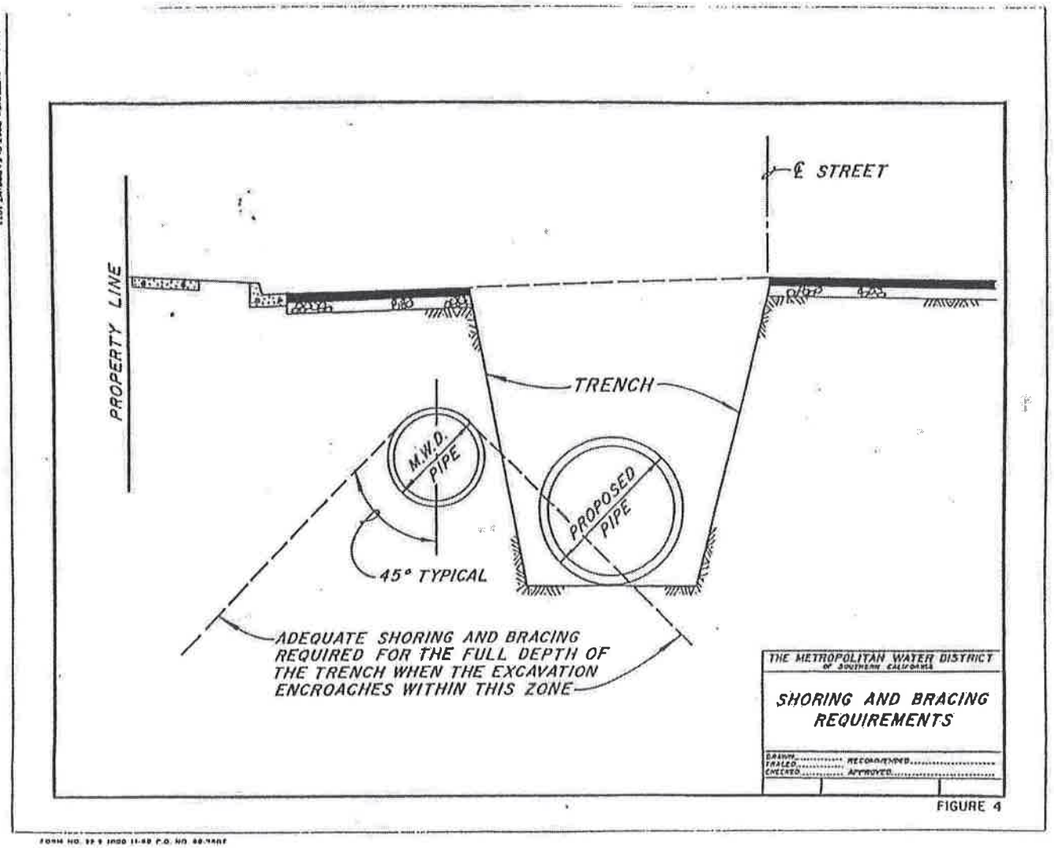
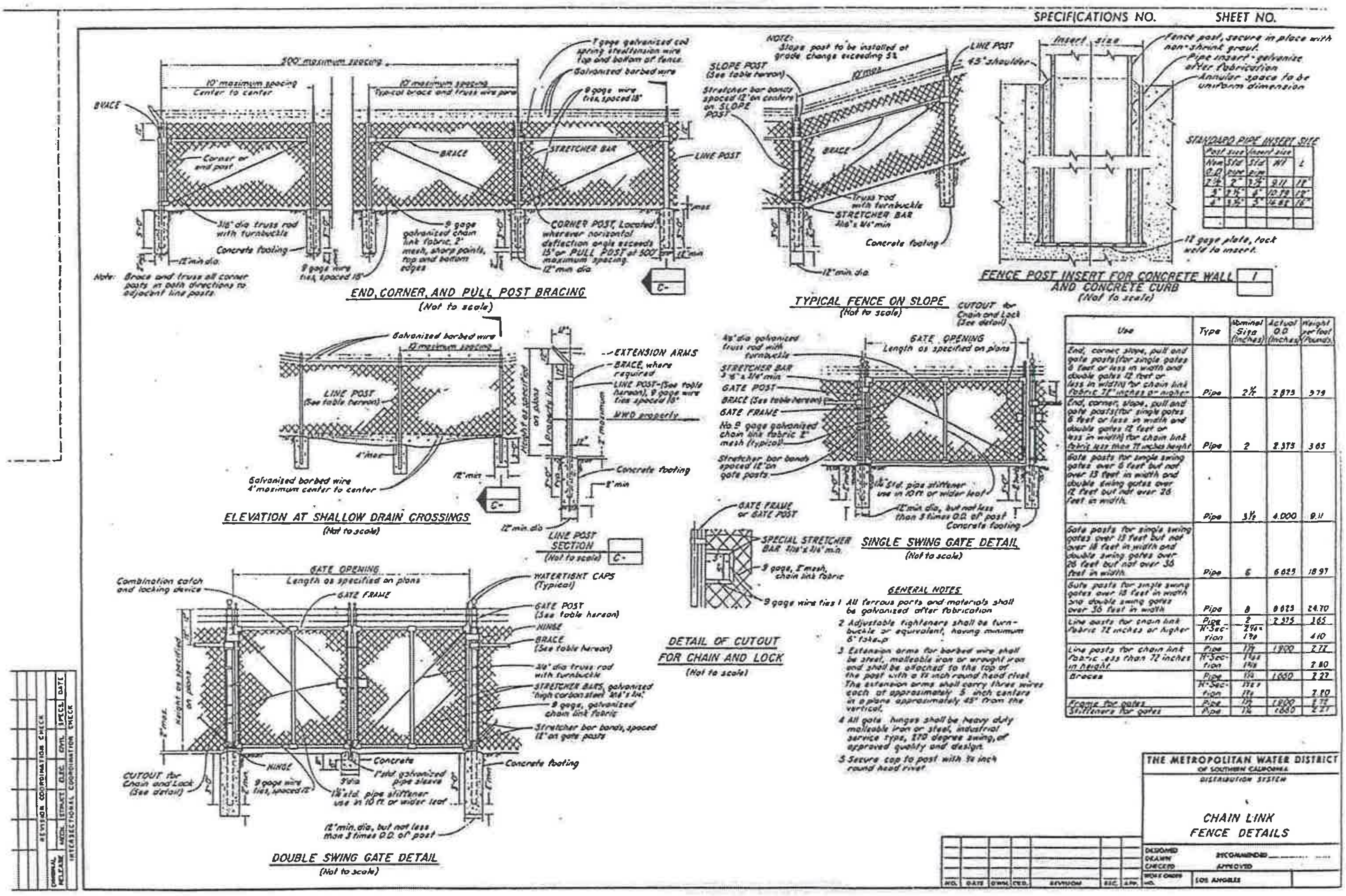
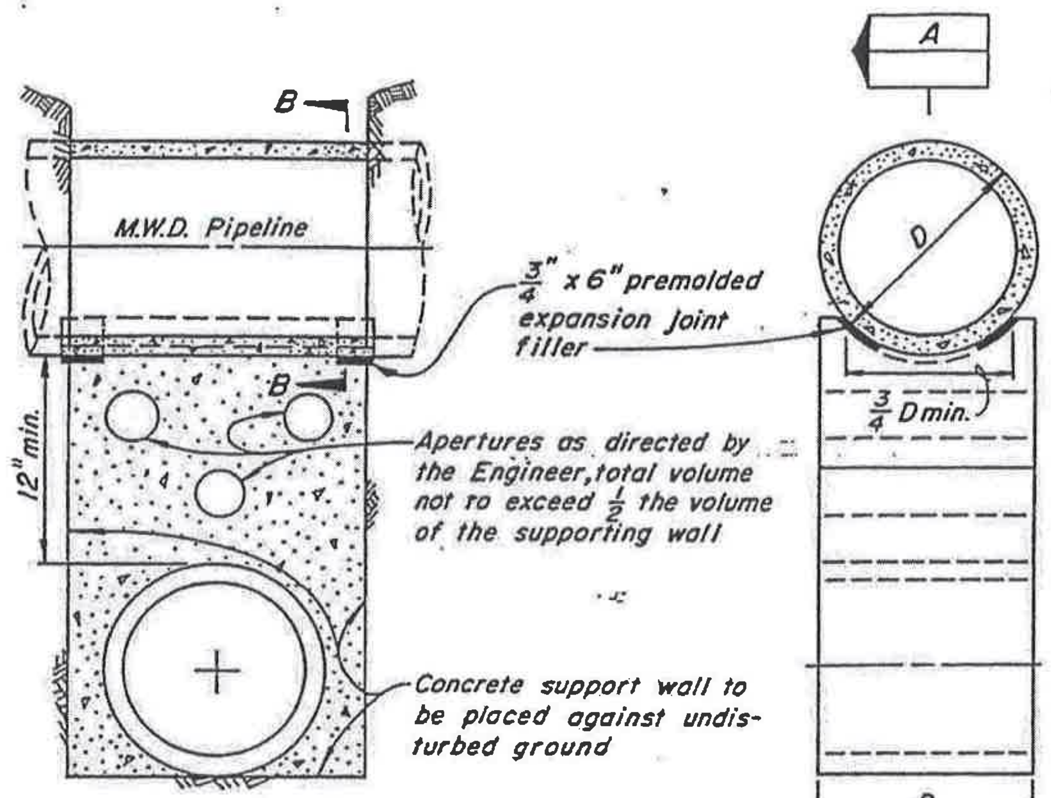

℄ STREET
PROPERTY LINE
TRENCH
M.W.D. PIPE
PROPOSED PIPE
45° TYPICAL
ADEQUATE SHORING AND BRACING REQUIRED FOR THE FULL DEPTH OF THE TRENCH WHEN THE EXCAVATION ENCROACHES WITHIN THIS ZONE
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
SHORING AND BRACING REQUIREMENTS
DRAWN
TRACED
CHECKED
RECOMMENDED
APPROVED

FIGURE 4



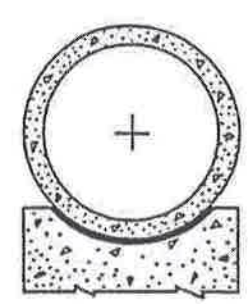
Use	Type	Nominal Size (Inches)	Actual O.D (Inches)	Weight per foot (Pounds)
End, corner, slope, pull and gate posts (for single gates 6 feet or less in width and double gates 12 feet or less in width) for chain link fabric 72" inches or higher	Pipe	2½	2.875	5.79
End, corner, slope, pull and gate posts (for single gates 6 feet or less in width and double gates 12 feet or less in width) for chain link fabric less than 72 inches height	Pipe	2	2.375	3.65
Gate posts for single swing gates over 6 feet but not over 13 feet in width and double swing gates over 12 feet but not over 26 feet in width.	Pipe	3½	4.000	9.11
Gate posts for single swing gates over 13 feet but not over 18 feet in width and double swing gates over 26 feet but not over 36 feet in width	Pipe	6	6.625	18.97
Gate posts for single swing gates over 18 feet in width and double swing gates over 36 feet in width	Pipe	8	8.625	24.70
Line posts for chain link fabric 72 inches or higher	Pipe	2	2.375	3.65
	H-Section	2¼ x 1⅞		4.10
Line posts for chain link fabric less than 72 inches in height	Pipe	1½	1.900	2.72
	H-Section	1⅞ x 1⅝		2.80
Braces	Pipe	1¼	1.660	2.27
	H-Section	1⅝ x 1⅞		2.80
Frame for gates	Pipe	1½	1.900	2.72
Stiffeners for gates	Pipe	1¼	1.660	2.27

FIGURE 5



SECTION "A-A"

CROSS SECTION



1. Supporting wall shall have a firm bearing on the subgrade and against the side of the excavation.
2. Premolded expansion joint filler per ASTM D-1751-73 to be used in support for steel pipe only.
3. If trench width is 4 feet or greater, measured along centerline of M.W.D. pipe, concrete support must be constructed.
4. If trench width is less than 4 feet, clean sand backfill, compacted to 90% density in accordance with the provisions of ASTM Standard D-1557-70 may be used in lieu of the concrete support wall.

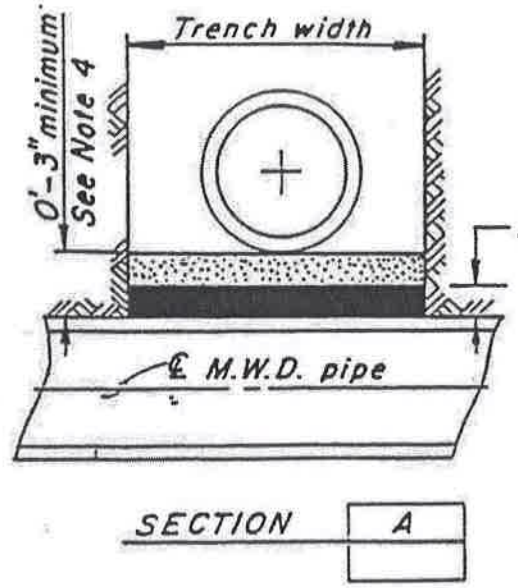
SECTION "B-B"

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

TYPICAL SUPPORT FOR M.W.D. PIPELINE

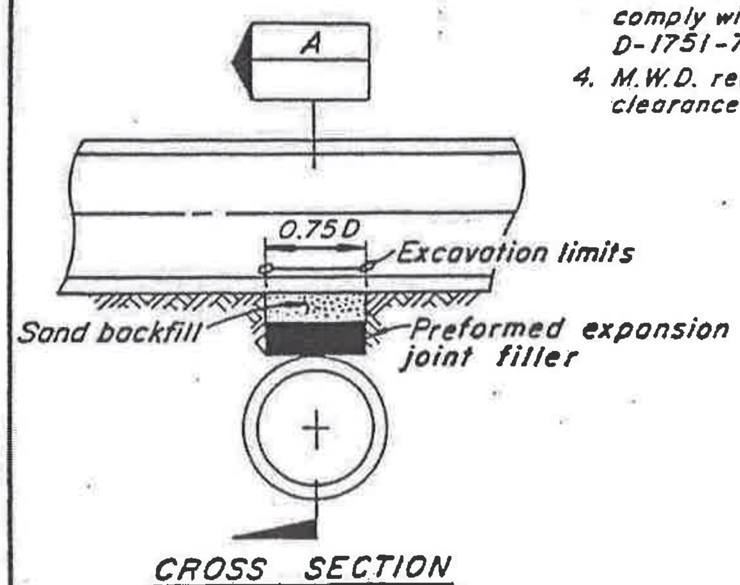
DRAWN ____ RECOMMENDED ____
TRACED ____ APPROVED ____
CHECKED ____

C-9547



NOTES

1. This method to be used where the utility line is 24" or greater in diameter and the clearance between the utility line and M.W.D. pipe is 12" or less.
2. Special protection may be required if the utility line diameter is greater than M.W.D. pipe or if the cover over the utility line to the street surface is minimal and there is 12" or less clearance between M.W.D. pipe and the utility line.
3. Preformed expansion joint filler to comply with ASTM designation D-1751-73.
4. M.W.D. requests 12" minimum clearance whenever possible.

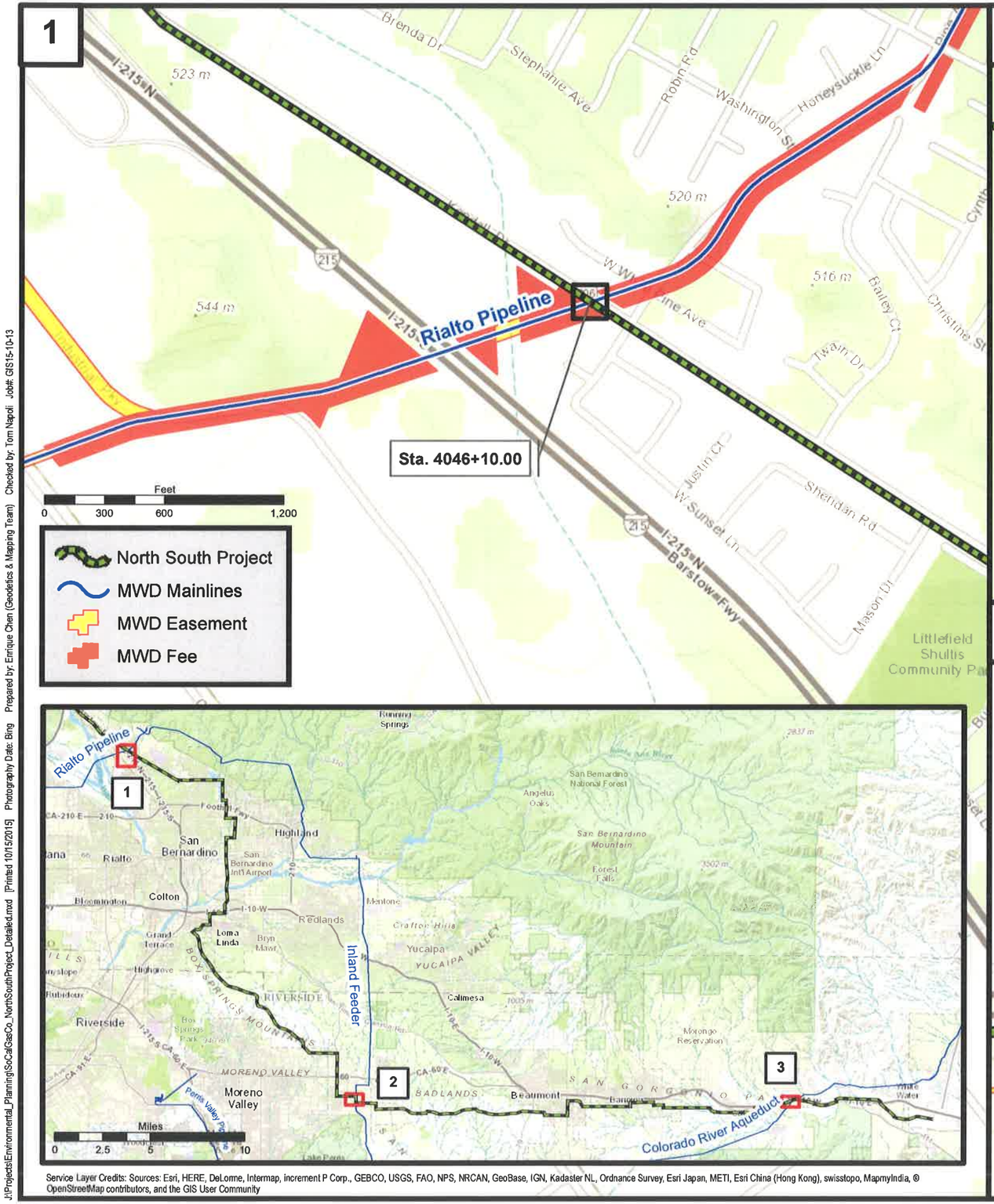


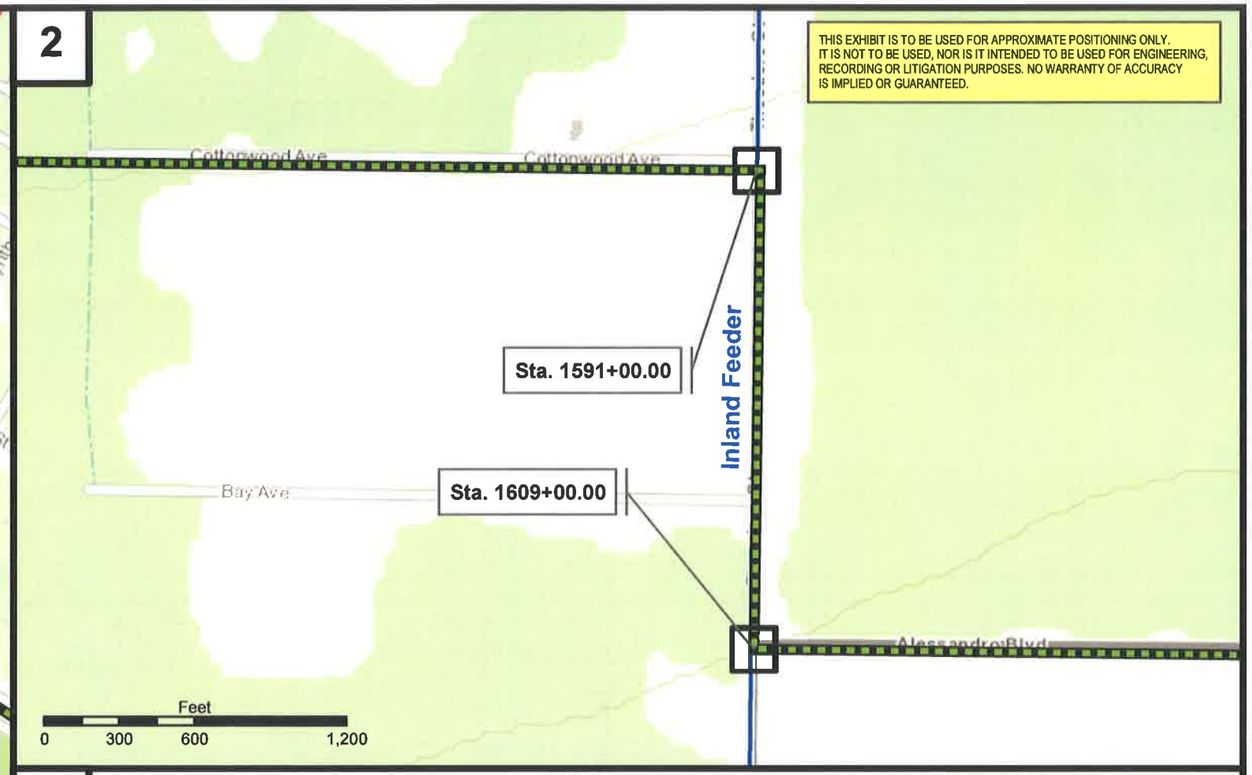
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

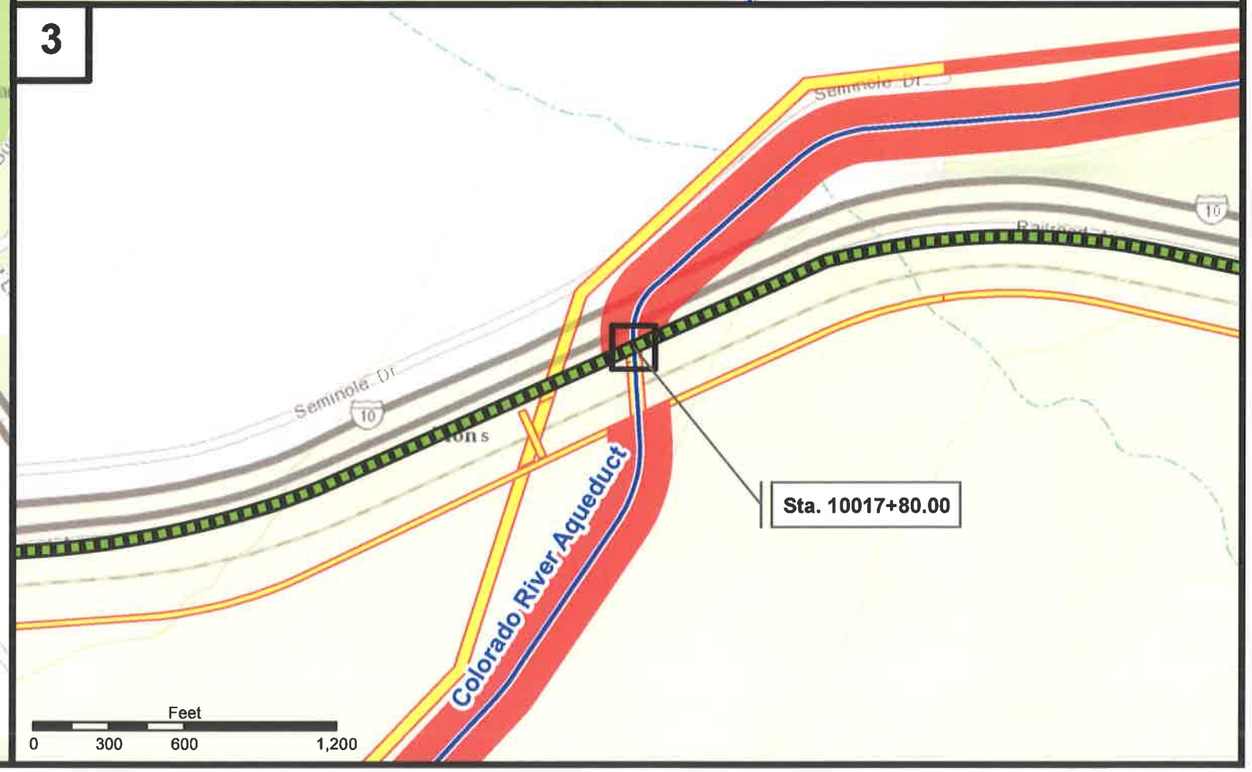
TYPICAL EXPANSION JOINT FILLER PROTECTION FOR OVERCROSSING OF M.W.D. PIPELINE

DRAWN ______ RECOMMENDED ______
TRACED ______
CHECKED ______ APPROVED ______

C-11632







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J:\Projects\Environmental_Planning\SoCalGasCo_NorthSouthProject_Detailed.mxd [Printed 10/15/2015] Photography Date: Bing Prepared by: Enrique Chen (Geodetics & Mapping Team) Checked by: Tom Napoli Job# GIS15-10-13

The Metropolitan Water District of Southern California
Engineering Services Group

SoCal Gas Company - North South Project

MWD Interests

OLD SPANISH TRAIL ASSOCIATION

**** E-mail Transmission Only****

November 23, 2015

Public Scoping Comments
RE: North-South Project
505 Sansome Street, Suite 300
San Francisco, CA 94111

north-south@ene.com

To whom it may concern:

The following comments are hereby submitted on behalf of the Old Spanish Trail Association, a non-profit 26 USC §501 (c)(3) organization with the stated mission "To study, preserve, protect, interpret, educate, and promote respectful use of the Old Spanish National Historic Trail and closely related historic routes." The Old Spanish National Historic Trail was federally established as a national historic trail subject to the provisions of the National Trails System Act in 2002 (see - Public Law 107–325 107th Congress; and 16 U.S.C. § 1241, et. seq.).

As depicted in the North-South Project documents made available at this time, it appears that the project footprint is on, adjacent to, or crosses the National Historic Trail. Both the main route of the Old Spanish National Historic Trail and the Armijo Branch of said Trail (included in the National Historic Trail designation) traverse the Cajon Pass area, and the lands north and south of the Pass. The Trail is designated as "generally depicted on the maps numbered 1 through 9 as contained in the report entitled 'Old Spanish Trail National Historic Trail Feasibility Study,' dated July 2001, including the Armijo Route . . . ." See 16 U.S.C. §23(a).

The National Trails System Act calls for "the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment." See 16 U.S.C. §1242(a)(3). Any historic "remnants" or "artifacts" related with the Trail, and the historic "route" of the Trail are all protected by the NTSA and must be considered as a part of the subject federal undertaking. Even in the absence of "remnants" or "artifacts" on the ground, the historic routes of the Trail, its cultural landscape, and viewscapes, must be considered and any adverse impacts avoided or mitigated.

The Association and its officers and representatives request continued information and notification of opportunities to comment on the noted project. Please deliver additional information as the project progresses to:

John W. Hiscock, Association Manager P.O Box 324 Kanab, UT 84741
Phone: 435-689-1620 E-Mail: ostamgr@gmail.com

John W. Hiscock
Association Manager
Old Spanish Trail Assoc.
P.O. Box 324
Kanab, UT 84741

ostamgr@gmail.com

Paul McClure
California Director
Old Spanish Trail Assoc.
1601 Calle De Armonia
San Dimas, CA 91773

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Mark Henderson
Chair
Stewardship Committee
Old Spanish Trail Assoc.

markscotthenderson@gmail.com

Paul Ostapuk
Vice President / Liaison
Stewardship Committee
Old Spanish Trail Association
P.O. Box 3532
Page, AZ 86040

postapuk@cableone.net

Nelson Miller
President
Mojave River Chapter
13043 Quapaw Road
Apple Valley, CA 92308

nemiller47@yahoo.com

Sincerely,

Paul McClure
California State Director
Old Spanish Trail Association

GREATER RIVERSIDE CHAMBERS OF COMMERCE

The Chamber…building a stronger local economy

November 23, 2015

Mr. Michael Picker, President
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Dear Mr. Picker,

On behalf of the Greater Riverside Chambers of Commerce and our approximately 1,300 members representing more than 101,000 employees in the inland Southern California region, I am writing to indicate the Chamber's support in concept for Southern California Gas Company's (SoCal Gas) efforts to construct a North-South transmission pipeline to improve reliability and service delivery in the region's natural gas infrastructure.

SoCal Gas is proposing to upgrade an existing compressor station and build a 65-mile pipeline to connect existing east-west delivery systems that run through Adelanto and Moreno Valley. While this project will likely require further review of the specific necessary environmental review and mitigations, the Chamber can support SoCal Gas' efforts at this juncture over other competing entities based on their track record of strong service and delivery to Southern California businesses and residents.

Moreover, this project is expected to deliver significant economic benefits to Southern California by way of $423 million in local spending and the creation of an estimated 3,000 local construction jobs. In the longer term, infrastructure development goes a long way towards sustaining economic development by ensuring that future development and business growth will have the existing foundation of reliable utility service.

Natural gas is well-positioned to complement existing renewable energy generation from wind and solar as the state transitions to wider use of renewables following California's ambitious clean energy goals. Natural gas provides a clean, safe supply of energy to fill the gap as needed from renewable sources. In addition, natural gas can help further reduce air pollution and greenhouse gas emissions through the use of "near zero" natural gas engines for heavy-duty truck transportation.

For these reasons and more, the Chamber urges your positive consideration of SoCal Gas' efforts to improve the region's natural gas infrastructure.

If I can be of assistance, please do not hesitate to contact me.

Respectfully,

Cindy Roth
President/CEO

CR/na

3985 University Avenue, Riverside, CA 92501 • Phone: (951) 683-7100 • Fax: (951) 683-2670
www.riverside-chamber.com

WARREN D. WILLIAMS
General Manager-Chief Engineer

1995 MARKET STREET
RIVERSIDE, CA 92501
951.955.1200
FAX 951.788.9965
www.rcflood.org

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

November 17, 2015

Emailed this date to: north-south@ene.com

Mr. Eric Chiang
California Public Utilities Commission
Public Scoping Comments
505 Van Ness Avenue
San Francisco, CA 94102

Dear Mr. Chiang:

Re: Notice of Preparation/Scoping Notice for a Joint Environmental Impact Report/ Environmental Impact Statement for the North-South Project

This letter is written in response to the Notice of Preparation (NOP) of a Joint Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the North-South Project. Southern California Gas Company (SoCalGas) and San Diego Gas and Electric (SDG&E) have submitted an application to the California Public Utilities Commission (CPUC) for the North-South Project, which includes construction, operation and maintenance of the following improvements:

- Replacement of existing infrastructure and installation of new infrastructure at the Adelanto Compressor Station
- Installation of approximately 30,000 horsepower of natural gas compression, new emission control equipment and in line inspection tool launcher at the Adelanto compressor Station
- 36-inch diameter natural gas transmission pipeline from Adelanto to Moreno Valley
- Multiple station piping modifications
- Installation of 16 main line block valves
- Modifications to existing roads, including those used by SoCalGas and other utilities in the San Bernardino National Forest
- Establishment of temporary staging areas adjacent to the proposed project alignment

As described in the NOP, the project is needed to establish a physical connection between the SoCalGas/SDG&E northern and southern gas transmission systems. Without the project, customers on the Southern System may face supply-based restrictions.

The District has the following comments/concerns that should be addressed in the PEIR:

1. Based on the Google Earth™ file provided to the District on November 16, 2015, portions of the project may require access within several of the District's existing right of way. Any work that involves District rights of way, easement, or facilities will require an encroachment permit from the District. Therefore, the District will likely be a CEQA responsible agency and any potential impacts to District facilities should be considered in the EIR/EIS. Please be sure to list the District as a public agency whose approval is required in the EIR/EIS as this will help streamline the environmental review process when the proponent requests an encroachment permit. To obtain further information on encroachment permits or existing facilities, contact Amy McNeill of the Operations Engineering Section at 951.955.1266.

2. Portions of the project are within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) to which the District is a permittee. For purposes of procuring an encroachment permit or other District approval, the project proponent will need to demonstrate that all project related activities within the District right of way/easement is consistent with the MSHCP or that appropriate mitigation to offset the impacts of the project has been provided to the Riverside Conservation Authority. To accomplish this, the EIR/EIS should include a MSHCP consistency analysis with all of its supporting documents and provide mitigation, as needed, in accordance with all applicable MSHCP requirements. The MSHCP consistency report should address, at a minimum, Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.3.7, 7.5.3 and Appendix C of the MSHCP for parcels located within the District's right of way.

3. The project may impact federal and state jurisdictional features (e.g., waters of the United States, waters of the State, streambeds, wetlands, etc.) within the District's right of way. As part of the encroachment permit process, the applicant will also be required to submit proof of applicable permits (404, 401, 1602) or documentation that permits are not required to the District prior to the issuance of the encroachment permit. Any regulatory permitting requirements pertaining to the construction and subsequent operation and maintenance of the project within the District's right of way should be reviewed and approved by the District prior to executing the activity.

Thank you for the opportunity to review the NOP. Please forward any subsequent environmental documents regarding the project to my attention at this office. Please refer any questions regarding this letter to Kevin Cunningham at 951.955.1526 or me at 951.955.8581.

Very truly yours,

KRIS FLANIGAN
Engineering Project Manager

KCC:mcv
P8\200869

825 East Third Street, San Bernardino, CA 92415-0835 | Phone: 909.387.8109 Fax: 909.387.7876
www.SBCounty.gov

SAN BERNARDINO COUNTY

Department of Public Works
Environmental & Construction • Flood Control
Operations • Solid Waste Management
Surveyor • Transportation

Gerry Newcombe
Director

November 18, 2015

Public Scoping Comments
RE: North-South Project
505 Sansome Street, Suite 300
San Francisco, CA. 94111
North-south@ene.com

File: 10(ENV)-4.01

RE: CEQA/NEPA – NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT FOR THE NORTH-SOUTH PROJECT FOR THE SOUTHERN CALIFORNIA GAS COMPANY

To whom it may concern:

Thank you for giving the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. **We received this request on October 14, 2015** and pursuant to our review, the following comments are provided:

Water Resources Division (Mary Lou Mermilliod, PWE III, 909-387-8213):

1. Prior to any construction that occurs within Flood Control District Right-of-Way, a permit will be required from the District's Permits/Operations Support Division, Permit Section.

Traffic Division (Eloy Ruvalcaba, PWE III, 909-387-1869):

1. It appears that the construction activities of this project may impact roads within the County of San Bernardino Maintained Road System. A permit from the County of San Bernardino Department of Public Works – Road Permit Section may be required during construction for temporarily road or traffic lane closure.

Environmental Management Division (Brandy Wood, Ecological Resource Specialist, 909-387-7971):

1. The Notice of Preparation should identify the project as having potential impacts on either Santa Ana River woollystar (*Eriastrum densifolium sanctorum*) or slender-horned spineflower (*Dodecahema leptoceras*), both of which are listed endangered by the State of California and United States of America. Formal consultation for listed plants is required when a project that may adversely affect listed plants or their habitat (1) occurs on Federal land or (2) is a private action with a Federal "nexus" (e.g., a Federal permit is required or Federal funding is involved). A California Department of Fish and Wildlife Incidental Take Permit may be required if the proposed project were to impact either of these species. The environmental document should address impacts to these species, as well as those listed within the Notice of Preparation.

Environmental Management Division (Erma Hurse, Senior Planner, 909-387-1864):

1. Adequate provisions for intercepting and conducting accumulated drainage flows around or through the construction sites in a manner that will not adversely affect adjacent or downstream properties shall be established prior to any construction activities.

2. The proposed project Notice of Preparation did not identify any potential utilities and service systems impacts. Please provide this analysis as well as recyclable and non-recyclable demolition material impacts.

Flood Control Planning Division (David Lovell, PWE III, 909-387-7964):

1. The project route as shown in Figure 1 of the draft report would subject potential impacts to the crossing of approximately 16 District Facilities within Zones 2,3 and 4 during the construction phase.

If you have any questions, please contact the individuals who provided the specific comment, as listed above.

Sincerely,

NIDHAM ARAM ALRAYES, MSCE, PE, QSD/P
Public Works Engineer III
Environmental Management

NAA/EA/sr: CEQAComment_SoCalGas_NOP_NorthSouthProject_2015-11-18.docx

California Public Utilities Commission
Comisión de Servicios Públicos de California

Public Scoping Meeting for the Proposed North-South Project
San Bernardino, CA, October 27, 2015
Reunión Pública del Proyecto Propuesto North-South, San Bernardino, CA, 27 de Octubre de 2015

Thank you for participating in tonight's public meeting. We would like to hear your comments.
Gracias por su participación en la reunión pública esta noche. Queremos oír sus comentarios.

Note: Before including your address, telephone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. All submissions from individuals identifying themselves as representatives or officials of organizations or businesses will be made available for public inspection in their entirety.

Nota: Antes de añadir su dirección de postal, número de teléfono, dirección del correo electrónico, u otra información personal en su comentario, usted debe tomar en cuenta que su comentario entero, incluyendo identificación personal, pudiera estar disponible al público en cualquier momento. Aun cuando usted puede solicitarnos en su comentario que se mantenga su información de identificación personal como confidencial para la revisión pública, no podemos garantizar que estaremos en capacidad de hacerlo. Todos los comentarios de individuos que se identifiquen como representantes o funcionarios de organizaciones o empresas estarán completamente disponibles para inspección del público.

Name/Nombre: Larry A. Heasley

Affiliation/Organización: San Bernardino Planning Commission

Phone/Teléfono: 909 725-4501

Email/Correo eléctronico: Larry.Heasley@verizon.net

Address/Dirección: 5477 Jasmine St. San Bernardino, CA 92407-2449

COMMENTS/COMENTARIOS

An alternate alignment of the pipeline using the levese and access roads along Lytle Creek to Santa Ana River to San Timoteo Creek to Redland Blvd to Moreno Valley would lessen the impact to the local streets and the ensuing traffic, commerce, & quality of life for citizens.

Comments must be received by November 23, 2015
Los comentarios serán recibidos hasta el 23 de Noviembre de 2015

Send comments to/ Envíe sus comentarios a:
Public Scoping Comments
Re: North-South Project
505 Sansome Street, Suite 300, San Francisco, CA 94111
Project Voicemail/Línea de atención al usuario: (855) 520-6799
Email/ Correo electrónico: north-south@ene.com Fax: (415) 398-5326

COMMENTS/COMENTARIOS

The proposed alignment has major impact on the city of San Bernardino and Rialto Canyon. The County Flood control, US Army Corp of Engineers may have reasons for not exploring this option. The potential for mitigating any potential erosion would not be expensive because of proven survival of the existing structure.
This routing would also reduce the number of times that the crossing of state highways would be involved.

Larry Headley

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

October 28, 2015

Public Scoping Comments
Re: North-South Project
505 Sansome Street, Suite 300
San Francisco, CA 94111

Notice of Preparation of a CEQA Document for the North-South Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft CEQA document. Please send the SCAQMD a copy of the CEQA document upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to the SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address in our letterhead. **In addition, please send with the draft EIR all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files). Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on SCAQMD's website here: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). SCAQMD staff also recommends that the lead agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD staff requests that the lead agency quantify criteria pollutant emissions and compare the results to the recommended regional significance thresholds found here: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. In addition to analyzing regional air quality impacts, the SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is

recommended that the lead agency perform a localized analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Perspective*, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the project, including:

- Chapter 11 of the SCAQMD *CEQA Air Quality Handbook*
- SCAQMD's CEQA web pages at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies.
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.
- SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions
- Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's webpage (http://www.aqmd.gov).

The SCAQMD staff is available to work with the Lead Agency to ensure that project emissions are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at Jwong1@aqmd.gov or call me at (909) 396-3176.

Sincerely,

Jillian Wong

Jillian Wong, Ph.D.
Program Supervisor
Planning, Rule Development & Area Sources

SBCRVC151014-01
Control Number

California Public Utilities Commission
Comisión de Servicios Públicos de California

Public Scoping Meeting for the Proposed North-South Project
San Bernardino, CA, October 27, 2015
Reunión Pública del Proyecto Propuesto North-South, San Bernardino, CA, 27 de Octubre de 2015

Thank you for participating in tonight's public meeting. We would like to hear your comments.
Gracias por su participación en la reunión pública esta noche. Queremos oír sus comentarios.

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Nota: Antes de añadir su dirección de postal, número de teléfono, dirección del correo electrónico, u otra información personal en su comentario, usted debe tomar en cuenta que su comentario entero, incluyendo identificación personal, pudiera estar disponible al público en cualquier momento. Aun cuando usted puede solicitarnos en su comentario que se mantenga su información de identificación personal como confidencial para la revisión pública, no podemos garantizar que estaremos en capacidad de hacerlo. Todos los comentarios de individuos que se identifiquen como representantes o funcionarios de organizaciones o empresas estarán completamente disponibles para inspección del público.

Name/Nombre: Norman A. Pedersen - Hanna and Morton LLP

Affiliation/Organización: Southern California Generation Coalition

Phone/Teléfono: (213) 430-2510

Email/Correo eléctronico: npedersen@hanmor.com

Address/Dirección: 444 South Flower Street, Suite 1500, Los Angeles, CA 90071

COMMENTS/COMENTARIOS

SEE ATTACHED.

Comments must be received by November 23, 2015
Los comentarios serán recibidos hasta el 23 de Noviembre de 2015

Send comments to/ Envíe sus comentarios a:
Public Scoping Comments
Re: North-South Project
505 Sansome Street, Suite 300, San Francisco, CA 94111
Project Voicemail/Línea de atención al usuario: (855) 520-6799
Email/ Correo electrónico: north-south@ene.com Fax: (415) 398-5326

SOUTHERN CALIFORNIA GENERATION COALITION
COMMENT ON
NOTICE OF PREPARATION
AND SCOPING NOTICE
for a Joint
Environmental Impact Report /
Environmental Impact Statement
for the
North-South Project
Proposed By Southern California Gas Company and
San Diego Gas And Electric Company

CPUC Application No. 13-12-013
Forest Service Application No. FCD102314

In accordance with the Notice of Preparation ("NOP") and Scoping Notice regarding the Southern California Gas Company ("SoCalGas") and San Diego Gas and Electric Company ("SDG&E") (jointly, "Applicants") the Southern California Generation Coalition ("SCGC") respectfully submits this comment on the NOP/Scoping Notice.

SCGC's comments are contained in the attached SCGC Opening Brief to the California Public Utilities Commission ("CPUC") in Application ("A.") 13-12-013 and the attached SCGC Reply Brief in A.13-12-013. SCGC hereby incorporates by reference pages 1 through 47 of the Opening Brief, and pages 1 through 21 of the Reply Brief.

SCGC's comments strongly support non-physical alternatives to the construction of the Applicants' proposed North-South Project. Thus, a No Project/No Action Alternative determination would be appropriate. If, however, contrary to SCGC's recommendation, the Commission and the Forest Service were to determine that a physical alternative was preferable, physical alternatives as discussed in the attached portions of the briefs are preferable to the Applicants' proposed North-South Project.

SCGC appreciates the opportunity to submit this Comment.

Respectfully submitted,

/s/ Norman A. Pedersen

Norman A. Pedersen, Esq.
HANNA AND MORTON LLP
444 South Flower Street, Suite 1500
Los Angeles, California 90071-2916

Attorneys for the **SOUTHERN CALIFORNIA GENERATION COALITION**

Dated: November 17, 2015

ATTACHMENT A

SCGC OPENING BRIEF

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Southern California Gas Company (U 904 G) and San Diego Gas & Electric Company (U 902 G) For Authority To Recover North-South Project Revenue Requirement In Customer Rates And For Approval Of Related Cost Allocation And Rate Design Proposals	A.13-12-013

SOUTHERN CALIFORNIA GENERATION COALITION OPENING BRIEF

Norman A. Pedersen, Esq.
HANNA AND MORTON LLP
444 South Flower Street, Suite 1500
Los Angeles, California 90071-2916
Telephone: (213) 430-2510
Facsimile: (213) 623-3379
E-mail: *npedersen@hanmor.com*

Attorneys for the **SOUTHERN CALIFORNIA GENERATION COALITION**

Dated: September 25, 2015

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page

Decisions

Rules

SUMMARY OF RECOMMENDATIONS

The Southern California Generation Coalition ("SCGC") respectfully submits the following recommendations:

- The Commission should reject the proposal by the Southern California Gas Company ("SoCalGas") and San Diego Gas and Electric Company ("SDG&E") (jointly, "Applicants") to construct the North-South Project insofar as the Project is unnecessary to address the threats that the Applicants allege could prevent the Applicants from meeting the minimum flow requirement on the Applicants' Southern System and would be vastly more costly for ratepayers than, particularly, non-physical alternatives.
- If, contrary to SCGC's recommendation, if the Commission were to prefer a physical solution for the Southern System minimum flow problem, the Commission should direct the Applicants to reconsider their design criteria to determine the amount of capacity needed to meet the Southern System minimum flow requirement.
- If, contrary to SCGC's recommendation, if the Commission were to decide that a physical solution rather than a suite of non-physical alternatives is preferable to address the Southern System minimum flow requirement, the Commission should direct the Applicants to consider the physical solutions that are offered by several interstate pipeline and direct the Applicants to either conduct an open season or to negotiate with the interested interstate pipeline that offers safe and reliable service at the lowest reasonable cost because the physical alternatives proposed by interstate pipelines would provide greater flexibility to adjust to accommodate

future circumstances than the North-South Project and would avoid burdening ratepayers with stranded costs.

- If, contrary to SCGC's recommendation, the Commission were to desire a physical solution to the Southern System minimum flow requirement that would be on the SoCalGas system rather than on a interstate pipeline system, there is a on-system alternative to the North-South Project that the Applicants fail to mention but which should be considered.
- Insofar as the North-South Project is unnecessary, if the Applicants are nevertheless permitted to proceed with the Project, the cost of the Project should not be recovered on a rolled-in basis from the general body of ratepayers but, instead, should be recovered on a "let-the-market-decide" basis with incremental rates being charged to customers that contract for capacity, most likely in conjunction with capacity on Line 3602 and other pipeline segments that would provide a 36-inch pipeline path from Adelanto to Otay Mesa at the U.S.-Mexico international border for export to Mexico.
- If the Commission were to permit the Applicants to pursue the North-South Project and to recover the costs on a rolled-in basis contrary to SCGC's recommendation, the Applicants should be required to wait to recover any North-South Project costs until after a reasonableness review in the Applicants' General Rate Case ("GRC") following completion of the Project.
- If, contrary to SCGC's recommendation, the Commission permits SoCalGas to proceed with the North-South Project and to recover the cost in rates prior to the GRC following Project completion, the Commission should reject the Applicants' proposal to recover the "full cost" of the Project through the interim rates by

limiting the Applicants' rate recovery to the amount of savings that ratepayers would realize from placing the North-South Project in operation.

- The Commission should deny the Applicants' request to record and recover incremental pre-startup operation and maintenance ("O&M") costs and incremental post-startup O&M costs through the proposed North-South Project Infrastructure Memorandum Account.
- If the Commission were to approve the North-South Project with recovery of costs on a rolled-in basis, the costs of the project should be capped.

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Southern California Gas Company (U 904 G) and San Diego Gas & Electric Company (U 902 G) For Authority To Recover North-South Project Revenue Requirement In Customer Rates And For Approval Of Related Cost Allocation And Rate Design Proposals	A.13-12-013

SOUTHERN CALIFORNIA GENERATION COALITION OPENING BRIEF

In accordance with Rule 13.11 of the Rules and Procedure of the California Public Utilities Commission ("Commission") and the Order of Administrative Law Judge Karl J. Bemesderfer,[1] the Southern California Generation Coalition ("SCGC") respectfully submits this opening brief on issues raised by the Southern California Gas Company ("SoCalGas") and San Diego Gas and Electric Company ("SDG&E") (jointly, "Applicants") in their Application ("A.") 13-12-13 proposing the North-South Project. The North-South Project would involve installing a new pipeline, the North-South Pipeline, extending from the SoCalGas Adelanto Compressor Station to the SoCalGas Moreno Pressure Limiting Station ("Moreno"), and it would involve rebuilding the Adelanto Compressor Station.

The Applicants claim that the North-South Project is needed to maintain reliable service to customers that are served through the Applicants' Southern Transmission System ("Southern System").[2] In fact, as discussed below, there is no need for what the Applicants call a "physical

[1] Transcript ("Tr.") 990.

[2] Exhibit ("Ex.") SCG-2, Marelli Updated Direct Testimony, pp. 20-21.

solution" to address the reliability requirements of the Southern System. The reliability issues that the Applicants claim demonstrate a need for the North-South Project could more easily and much more economically be addressed with alternatives that would avoid the $621.3 million capital expenditure for the North-South Project.

Furthermore, the minimum flow problem on the Southern System is diminishing. Customer deliveries of gas into the Southern System have been increasing ever since the Applicants filed the application in this proceeding, the Southern System minimum flow requirement has been decreasing, and the cost of meeting the minimum flow requirement has been decreasing dramatically. California policies to reduce fossil fuel consumption are likely to drive the Southern System minimum flow requirement down dramatically in the future.

The North-South Project only makes sense only if it is understood to be part of a larger project that includes a 36-inch pipeline, Line 3602, that would be built through the SDG&E service territory to create a 36-inch pipeline path from the Adelanto Compressor Station to Otay Mesa at the international border with Mexico. If the North-South Project is going to be justified as part of a path to transport gas to Mexico, however, the Project should be constructed on a "let the market decide" basis with potential transporters contracting for pipeline capacity and paying incremental rates.

If the Commission disagrees with SCGC's view that there are ample "non-physical" solutions to maintain Southern System reliability, several interstate pipelines have made proposals to install capacity on their systems which would enable SoCalGas to transport gas from its Northern System to the Southern System to meet the reliability needs of the Southern System. The proposals of the interstate pipelines are uniformly superior to the Applicants' proposal to construct the North-South Project insofar as a contract with an interstate pipeline could be adjusted when the contract comes up for renewal so that the Applicants could take less

capacity as Southern System demand declines and the need for gas to meet the Southern System minimum flow requirement declines with it.

If the Commission is inclined to favor a physical alternative for addressing Southern System reliability and would prefer to have the Applicants rather than an interstate pipeline install capacity to meet the Southern System minimum flow requirement, there is a clearly viable alternative to the North-South Project that would involve more modest looping of an existing pipeline path from the Honor Rancho storage field on the Applicants' Northern System to Moreno but would have all the benefits that the Applicants allege for the North-South Project..

If, contrary to SCGC's recommendation, the Commission were to approve rather than reject the proposed North-South Project, there are a number of rate-related issues that would need to be addressed. However none of these issues would need to be addressed if the Commission would take the appropriate action and reject the North-South Project.

II. BACKGROUND.

On December 20, 2013, the Applicants filed A.13-12-013 to propose the North-South Project which, at that time, would consist of constructing a new 36-inch pipeline from the Adelanto Compressor Station to Moreno, rebuilding the Adelanto Compressor Station to provide 30,000 horsepower of compression, and installing 31 miles of transmission pipeline east of Moreno.[3] On November 12, 2014, the Applicants filed Updated Testimony that eliminated the installation of 31 miles of transmission pipeline east of Moreno.[4] Additionally, the Applicants adjusted the estimated direct costs for the remaining two components of the North-South Project. The estimated direct cost for the North-South Pipeline increased from $331.8 million in 2013 to

[3] A.13-12-013, p. 13.

[4] Ex. SCG-6, Bisi Updated Direct Testimony, p. 10.

$484.5 million in 2014.[5] The estimated direct cost for the Adelanto Compressor Station upgrade increased from $110.7 million to $136.8 million.[6]

The Applicants allege that the North-South Project is needed to meet the minimum flow requirements on the Southern System. Minimum supplies of flowing gas are required when the supplies of flowing gas delivered to the receipt points on the Southern System, Ehrenburg (alternatively called "Blythe"), North Baja, and Otay Mesa, are insufficient to meet the total demand on the Southern System less the flowing supplies that are available through connections with the SoCalGas Northern System.

The Applicants currently have the ability to transport on average 280 MMcf/d of gas supplies from their Northern System to the Southern System to help meet Southern System demand. On average, 200 MMcf/d can be transported through the Chino and Prado valve stations from the Northern System to the Southern System.[7] However, the amount of gas that is available through Chino and Prado on a daily basis varies due to the system conditions.[8] An additional 80 MMcf/d can be transported across SoCalGas Line 6916 from the Northern System to Southern System.[9]

The proposed North-South Project would be sized to permit the delivery of 800 MMcf/d from the Northern System to the Southern System, 344 MMcf/d more than would be the design capacity of the pipeline if a 1-in-10 year cold day demand forecast were used to design the Project.[10]

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[5] Ex. SCG-3, Buczkowski Updated Direct Testimony, p. 2.

[6] *Ibid,* p. 3.

[7] Ex. SCG-6, Bisi Updated Direct Testimony, p. 6; Ex. SCGC-1, Yap Updated Direct Testimony, p. 6.

[8] *Ibid*.

[9] Ex. SCG-6, Bisi Updated Direct Testimony, p. 7.

[10] *Ibid*, p. 10, footnote 5.

The North-South Project would enhance the ability of the Applicants to deliver the gas from the Northern System to Mexico through the Otay Mesa interconnection point at the international border if the Commission approved the construction of the a 36-inch pipeline that the Applicants call "Line 3602."[11] The Applicants originally proposed to build the 36-inch Line 3602 as part of their Pipeline Safety Enhancement Plan ("PSEP") that was considered in A.11-11-002 and addressed by the Commission in D.14-06-007 (June 12, 2014). The following figure shows were the two proposed pipelines would be located:[12]

If both the North-South Project and Line 3602 were approved and constructed, the Applicants would have a major 36-inch transmission pathway available to export significant quantities of natural gas from their Northern System through the Southern System to Mexico.[13]

[11] Ex. SCGC-1, Yap Updated Direct Testimony, p. 5.

[12] SoCalGas Advice Letter 4666 ("Advice 4666"), Post-Forum Report in Compliance with D.09-11-006, Appendix A, Attachment 2, p. 36 (July 7, 2014).

[13] Ex. SCGC-1, Yap Updated Direct Testimony, p. 5.

III. THE APPLICANTS ADVOCATE THE NORTH-SOUTH PROJECT AS A SOLUTION TO FOUR DISTINCT THREATS TO MAINTAING SOUTHERN SYSTEM RELIABILITY, BUT THE PROJECT IS UNNECESSARY TO ADDRESS ANY OF THE THREATS.

The Applicants allege a number of threats to reliable deliveries from the El Paso Natural Gas Company ("El Paso") South Mainline to the SoCalGas' Southern System at Ehrenberg in attempting to justify the North-South Project. First, the Applicants claim there is a threat that flowing supplies will not be available for delivery to Ehrenberg over the long term as El Paso increases deliveries to Mexico.[14] Second, the Applicants claim there is a threat that gas supplies may not be available at Ehrenberg under adverse market conditions resulting from adverse weather conditions.[15] Third, the Applicants claim there is a threat that force majeure events may limit El Paso's ability to deliver gas supplies to SoCalGas at Ehrenberg.[16] Fourth, the Applicants claim there is a threat that system limitations on the Southern System itself may limit deliveries of gas to customers.[17] A balanced analysis of these alleged threats reveals that the North-South Project would either be an unnecessarily expensive solution to the extent to which there is any substance to the alleged threats or in some instances would not address the alleged threat at all.

A. Problem 1: The Threat that Flowing Supplies May Not be Available for Delivery into the SoCalGas System at Ehrenberg over the Long Term.

The Applicants argue that upstream demand for delivering flowing supply through the El Paso South Mainline into Mexico threatens the availability of flowing supply for delivery into the SoCalGas Southern System at Ehrenberg. The Applicants' witness Chaudhury stated that in 2012 the daily gas flows from the United States to Mexico through the El Paso South Mainline

[14] Ex. SCG-1, Cho Updated Direct Testimony, p. 4; Ex. SCG-5 Chaudhury Direct Testimony, p. 6.

[15] Ex. SCG-2, Marelli Updated Direct Testimony, p. 10.

[16] *Ibid*, p. 8.

[17] *Ibid*, p. 9.

averaged approximately 637 MMcf/d.[18] In his direct testimony, the Applicants' witness Chaudhury projected that gas flows from the El Paso South Mainline could increase by approximately 1.0 Bcf by the end of 2025.[19] In his rebuttal testimony, witness Chaudhury said that Kinder Morgan projects incremental Mexican gas demand of up to 2.2 Bcf/d by 2025 that could be served through the El Paso system.[20] Mr. Chaudhury concluded that the additional exports from the El Paso South Mainline into Mexico will "compete directly with available supplies into Ehrenberg," resulting in "substantially lower flowing supplies available to reach Ehrenberg."[21]

Witness Chaudhury's concerns about insufficient gas supplies are unwarranted. To date, increased deliveries into Mexico off of the El Paso South Mainline have not resulted in decreased deliveries in SoCalGas at Ehrenberg. In the future, gas production in the Permian Basin which is delivered into the El Paso system is projected to increase dramatically. Additionally, the reversal of flow on interstate pipelines to bring gas from northern states to Texas for redelivery into Mexico will result in additional supplies to support deliveries to Mexico. Lastly, developments in Mexico are likely to lead to increasing Mexican supplies to serve Mexican demand in competition with gas imported from the United States.

1. Increased Deliveries from the El Paso South Mainline Into Mexico Have Not Correlated With any Decrease in Deliveries Through the El Paso South Mainline to Ehrenberg.

So far, increased deliveries into Mexico have not resulted in a decrease of deliveries into the SoCalGas system at Ehrenberg. Witness Chaudhury said that during 2012, the daily gas flows from the United States to Mexico through the El Paso South Mainline averaged

[18] Ex. SCG-5, Chaudhury Direct Testimony, p. 5.

[19] *Ibid.*

[20] Ex. SCG-14, Chaudhury Rebuttal on Alternatives, p. 5.

[21] Ex. SCG-5, Chaudhury Direct Testimony, p. 6.

approximately 637 MMcf/d.[22] He testified that 2014 deliveries through the El Paso South Mainline into Mexico increased to approximately 900 MMcf/d.[23] However, SCGC witness Yap produced graphs showing that deliveries from El Paso into the SoCalGas system at Ehrenberg increased in 2014 in comparison to both 2012 and 2013, and witness Chaudhury agreed.[24] Thus, so far, increased deliveries to Mexico have not correlated with decreased deliveries to Ehrenberg.

2. The Projected Increase in Permian Basin Gas Supply Will Meet Increased Mexican Demand.

The projected increase in gas production in the Permian Basin, which is connected directly to the El Paso South Mainline, will be sufficient to meet the increasing demand for gas off of the El Paso South Mainline for delivery to Mexico.[25] The Permian Basin has produced oil and natural gas for over 90 years.[26] However, according to the Texas Railroad Commission, due to the use of enhanced recovery practices, experts project that the Permian Basin contains recoverable oil and natural gas resources that exceed what has been produced over the last ninety years.[27]

SCGC witness Yap presented supply forecasts for the Permian Basin which show three levels of projected increases in gas production between 2013 and 2023. The baseline projection shows an increase of 2.2 Bcf/d by 2023 above the 2013 projection level.[28] That increase in production would be double the increase in Mexican demand that witness Chaudhury projected in his direct testimony and about equal to the increase that witness Chaudhury said in rebuttal

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[22] Ex. SCG-3, Chaudhury Direct Testimony, p. 5.

[23] Tr. 853 (Applicants/Chaudhury).

[24] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 10 (Figure 3, Maintaining Southern System Deliveries); Tr. 855 (Applicants/Chaudhury).

[25] Ex. SCGC-1, Yap Updated Direct Testimony, p. 8.

[26] *Ibid.*

[27] *Ibid.*

[28] *Ibid*, p. 10.

testimony was being projected by Kinder Morgan by 2025. The high projection showed an increase of 3.0 Bcf/d in gas production in the Permian Basin in 2023.[29]

3. The Reversal of Flow on Interstate Pipelines to Bring Northern Shale Gas to Texas Will Make Additional Supplies Available to Meet Mexican Demand.

Witness Chaudhury referred to a presentation at a January, 2015, analyst conference by the President of Kinder Morgan's Natural Gas Pipeline Group.[30] The Kinder Morgan presentation projected a dramatic development.

Tennessee Gas Pipeline is major pipeline system that historically transported gas from Louisiana, the Gulf of Mexico, and south Texas to the northeast of the United States.[31] The pipeline passes through the Marcellus shale formation, which is now regarded as the largest source of domestic gas yet discovered in the United States.[32] The Kinder Morgan presentation showed two projects that would reverse the flow on various legs of Tennessee Gas Pipeline so that shale gas could be transported from the northeast to Texas and Louisiana.[33] The commercial benefit of the $187.3 million "South System Flexibility Project" was explained as follows: "Provides more than 900 miles of north-to-south transportation capacity on the TGP system from Tennessee to south Texas and expand transportation service to Mexico."[34]

When questioned about the reversal of flow on the Tennessee Gas Pipeline to bring shale gas from the north to Texas, witness Chaudhury agreed that the shale gas would be available to Mexican markets and also, would tend to push Permian Basin gas west to El Paso's traditional Arizona and California customers as well as to Mexico:

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[29] *Ibid.*

[30] Ex. SCG-14, Chaudhury Rebuttal on Alternatives, p. 5.

[31] Tr. 857 (Applicants/Chaudhury).

[32] Tr. 858 (Applicants/Chaudhury).

[33] Ex. SCGC-11, Kinder Morgan 1/28/15 Analysist Conference, Slides 11, 14.

Q Would you agree that projects that will bring gas supply from the north to the traditional supply regions in Texas and Louisiana will tend to increase gas supply available to Mexican markets?

A Potentially, yes.

Q And would you agree that projects such as these will tend to push Permian Basin gas in Texas west to El Paso's traditional Arizona and California customers as well as to Mexico?

A Possibly, yes.[35]

4. Constitutional Reforms in Mexico May Lead to Increased Natural Gas Production in Mexico which Would Compete with Imports from the United States.

There is now a possibility that, in addition to abundant U.S. supplies to meet Mexican demand for gas, Mexico may develop its own gas reserves. Witness Chaudhury said: "In December 2013, Mexico passed a constitutional reform that will allow foreign companies to share profits with PEMEX and explore and drill for oil and natural gas in Mexico. This reform could provide PEMEX with some of the expertise and equipment to properly extract its natural gas resources instead of having to rely on imports from the United States."[36]

Mr. Chaudhury attempted to downplay the potential impact of the constitutional reform in Mexico. He said that "gas production is not a priority for PEMEX as PEMEX remains focused on higher-value oil expiration and oil production activities," and he claimed there is a "consensus of the natural gas market that in fact, natural gas exports to Mexico will continue to increase beyond 2019."[37]

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[34] *Ibid,* Slide 14.

[35] Tr. 860 (Applicants/Chaudhury).

[36] Ex. SCG-14, Chaudhury Rebuttal on Alternatives, p. 7.

[37] *Ibid*, p. 8.

However, there is certainly not a complete consensus that gas exports to Mexico will continue to increase. The California Energy Commission ("CEC") staff projects flat or declining demand for US exports to Mexico for the period 2019 to 2025.[38] SCGC witness Yap explained that Mexico has "considerable natural gas reserves available for development," and Mexico's pipeline network that currently imports gas supplies from the United States could be modified to access a number of the Mexican supply basins that are located along the border near southern and southwestern Texas.[39] Ms. Yap observed that, ironically, the North-South Project is projected to be completed precisely when the CEC staff projects a flattening of Mexican demand for U.S. gas:

> The Applicants project a late 2019 completion date for the North-South Project. Thus, ironically, the Project would become available when, according to the CEC staff presentation, deliveries into Mexico flatten and head into a period of decline. Meanwhile, Permian gas production would continue to grow, resulting in even more gas supplies from the Permian Basin being available for delivery at Ehrenberg.[40]

5. Given that There Will Be Adequate Supplies to Satisfy Mexican Demand and Also to Continue to Provide Gas to El Paso's Traditional Customers Including California, There Are a Number of Alternatives to Assure that El Paso South Mainline Capacity Will be Available to Transport the Supplies to Ehrenberg.

Having established that there will be adequate flowing supplies to meet the demand of the new Mexican market for natural gas and to simultaneously supply El Paso's traditional markets including California, witness Yap observed that firm transportation rights on the El Paso South Mainline to Ehrenberg are needed to assure delivery of supplies to Ehrenberg.[41] Ms. Yap said that as of the date of her testimony, March 23, 2015, transportation customers held 805 Mdth/d

[38] Ex. SCGC-1, Yap Updated Direct Testimony, p. 11 (Figure 4).

[39] *Ibid*, p. 11.

[40] *Ibid.*

[41] Ex. SCGC-1, Yap Updated Direct Testimony, p. 12.

of firm capacity rights on the El Paso South Mainline for delivery to Ehrenberg.[42] The 805 Mdth/d is more than sufficient to meet the minimum flow requirements for the Southern System,[43] which averaged 503 MDth/d in 2014.[44]

If firm transportation rights are maintained to Ehrenberg, El Paso could not divert South Mainline capacity that is required to support firm deliveries to Ehrenberg.[45] To the extent the firm capacity is reserved to Ehrenberg on the South Mainline, if El Paso were to expand its deliveries to either the east-of-California customers or Mexican markets, El Paso would have to increase its upstream delivery capability so it could simultaneously support its firm deliveries to California and its firm deliveries to the east-of-California or Mexican markets.[46]

Witness Yap identified a number of alternatives to assure that capacity would be available on the El Paso South Mainline to transport gas to Ehrenberg. An obvious solution to assure that adequate firm capacity is maintained on the El Paso South Mainline to serve the core's portion of the Southern System minimum flow requirement is to extend the Memorandum in Lieu of Contract ("MILC") between the Applicants' System Operator and the Applicants' Gas Acquisition Department over a longer term than the current one year.[47]

The MILC makes Gas Acquisition responsible on a daily basis for maintaining sufficient flows of gas into the Southern System to meet core requirements.[48] In exchange, System Reliability Memorandum Account ("SRMA") balances are not recovered from the core.[49]

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[42] *Ibid.*

[43] *Ibid.*

[44] Ex. SCGC-9, Yap Direct Testimony on Ratesetting, p. 9 (Figure 1).

[45] Ex. SCGC-1, Yap Updated Direct Testimony, p. 13, *citing* 108 FERC ¶ 61, 024, slip op. at 7, 8 (July 8, 2004).

[46] *Ibid.*

[47] *Ibid.*

[48] *Ibid, citing* Resolution G-3485, p. 1.

[49] *Ibid.*

Currently, the one year MILC between the System Operator and Gas Acquisition is renewed on an "evergreen" basis each year until October 31, 2016.[50] Gas Acquisition holds firm capacity rights for deliveries to Ehrenberg to assure that Gas Acquisition can meet its delivery obligations under the MILC.[51]

However, while the MILCs can be used to assure, through Gas Acquisition, that adequate firm rights will be held to maintain deliveries to meet the core's share of the minimum flow requirement, it would still be necessary to assure that firm capacity rights are maintained on the El Paso South Mainline to satisfy the noncore share of the Southern System minimum flow requirement. There are a number of alternatives to assure adequate capacity is retained to meet the Southern System minimum flow requirement for noncore customers.

a. **Continue Using Baseload Contracts to Assure Adequate Firm Capacity Rights Are Held to Ehrenberg to Meet the Noncore Share of the Southern System Minimum Flow Requirements.**

One option to assure that adequate capacity is held on the El Paso South Mainline to meet the Southern System minimum flow requirement for noncore customers would be to continue using annual baseload contracts similar to the contracts proposed by SoCalGas in its Advice Letter No. 4516 and approved by the Commission in Resolution Number G-3487.[52] Under the baseload contracts, the System Operator relies upon the contracted suppliers to maintain capacity rights on the El Paso South Mainline to Ehrenberg to assure deliveries into the Southern System during the contract period.[53] SoCalGas is currently authorized to obtain 255 Mdth/d in baseload

[50] *Ibid.*

[51] *Ibid,* p. 12.

[52] *Ibid,* p. 14.

[53] *Ibid,* p. 14.

contracts for the winter season.[54] The net cost of 255 Mdth/d of purchases under the baseload contracts was $3.9 million for the winter, December, 2013, through March, 2014.[55]

SCGC witness Yap suggested that the use of spot purchases instead of baseload contracts to maintain the Southern System reliability for noncore customers during the summer months should be monitored to determine whether, at some point, it may be appropriate to enter into baseload contracts for the summer months as well as the winter months.[56] In their Advice Letter No. 4666, the Applicants demonstrated that baseload contracts would have been a cost-effective substitute for purchases of spot gas supplies during the summer of 2013.[57] Also, having the baseload contracts for the summer as well as the winter may further incentivize market participants to maintain firm capacity on the El Paso South Mainline to Ehrenberg because more months out of the year would be covered by baseload contracts.[58]

Additionally, SCGC witness Yap suggested considering baseload contracts that cover more than one year at a time.[59] Longer term contracts for summer and winter may yet further incentivize market participants to hold frim capacity rights on the El Paso South Mainline to Ehrenberg.[60]

Given the experience to date with the reliability and relatively low net cost of baseload contracts, $3.9 million for the winter 2013-2014, the net cost of baseload contracts even if

[54] SoCalGas Rule 41.18 (Sheet 6).

[55] Ex. SCGC-1, Yap Updated Direct Testimony, p. 14.

[56] *Ibid.*

[57] *Ibid.*

[58] *Ibid,* pp. 14-15.

[59] *Ibid,* p. 15.

[60] *Ibid.*

expanded to cover the summer as well as the winter seasons would be vastly lower than the projected $133 million first year revenue requirement for the North-South Project.[61]

b. **Alternative: Have the Applicants' System Operator Hold Firm Capacity Rights on the El Paso South Mainline to Ehrenberg to Meet the Southern System Minimum Flow Requirement for Noncore Customers.**

An alternative to using baseload contracts to indirectly assure retention of firm capacity rights to Ehrenberg would be to have the Applicants' System Operator contract directly for firm capacity rights to Ehrenberg. Several years ago, the Commission addressed the problem of preserving firm capacity rights on the El Paso system to California by directing utilities to contract for firm El Paso capacity. In Decision ("D.") 02-07-037, the Commission directed "natural gas and large electric utilities to sign up for proportionate amounts of El Paso turned back capacity at specified delivery points to the extent that California replacement shippers do not sign up for the turned back capacity."[62]

If the Applicants' System Operator were to obtain capacity up to the level that is required to meet the noncore's share of the minimum flow requirement, the System Operator could reasonably expect to hold contracts with relatively short terms such as three to five years with Rights of First Refusal ("ROFR").[63] Under the regulations of the Federal Energy Regulatory Commission ("FERC"), a ROFR must be included in the contract of a customer who contracts for capacity at the maximum rate for at least a one-year term.[64] A ROFR may also be included in negotiated contracts for less than the maximum rate.[65]

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[61] *Ibid.*

[62] D.02-07-037, p. 1 (July 17, 2002).

[63] Ex. SCGC-1, Yap Updated Direct Testimony, p. 16.

[64] Tr. 977 (El Paso/Sanabria).

[65] Tr. 979 (El Paso/Sanabria).

Shorter term contracts with ROFRs would ensure that the System Operator would be able to respond to changes in noncore load levels and market circumstances periodically while assuring that the System Operator would be able to maintain capacity on the El Paso South Mainline upon termination of a contract through the exercise of a ROFR.[66] Witness Yap observed that relatively short contract terms of three to five years are fairly common for the reservation of existing pipeline capacity.[67]

If the System Operator itself held firm capacity rights on the El Paso South Mainline to Ehrenberg to meet the Southern System minimum flow requirements for noncore customers, the System Operator would have a variety of options for using the capacity. The System Operator could directly purchase gas from, for example, Permian Basin producers and then resell those gas supplies at the SoCalGas Citygate.[68] Alternatively, the System Operator could retain one or more asset managers to perform the buy-sell activities using the System Operator's capacity, with the asset manager or managers being compensated with a percentage of the profit generated by the buy-sell activities.[69] The System Operator could obtain bids for asset manager services for annual periods or for longer terms, depending on which would be most economical for ratepayers.[70]

SCGC witness Yap calculated that buying gas in the Permian Basin and then reselling the gas at the SoCalGas Citygate would generate nearly $51 million per year.[71] After taking into account the cost associated with holding 255 Mdth/d of capacity rights to Ehrenberg and the

[66] Ex. SCGC-1, Yap Updated Direct Testimony, p. 14.

[67] *Ibid.*

[68] *Ibid,* p. 17.

[69] *Ibid,* pp. 16-17.

[70] *Ibid,* p. 17.

[71] *Ibid.*

costs of an asset manager, the total annual net cost would be $17.5 million.[72] Thus, the total annual net cost of maintaining capacity rights to Ehrenberg and of retaining an asset manager to perform buy-sell activities would be far less than the projected $133 million first year revenue requirement associated with the North-South Project.[73]

B. Problem 2: The Threat that Gas Supplies May Not be Delivered to Ehrenberg under Adverse Market Conditions Caused by Adverse Weather Conditions.

The Applicants argue that deliveries to Ehrenberg may be limited when severe winter weather causes large pricing disparities between the SoCalGas Citygate and points east of California, resulting in the SoCalGas Citygate market being outbid in daily gas markets for several days during each event.[74] The Applicants point to an event that occurred in December, 2013, in which gas flowed east because the SoCalGas Citygate market was outbid by eastern markets.[75] December 5-10, 2013, was a period of extremely cold weather in the central United States.[76] The cold weather east of California drove the daily spot prices in those markets to levels that were in excess of the prices at the SoCalGas Citygate, attracting gas supplies east from California.[77]

However, supplies of natural gas to SoCalGas' Southern System remained high while volumes of gas delivered to the SoCalGas Northern System plummeted, particularly on December 6 and 7, 2013.[78] The Applicants already had available to them tools that were adequate to maintain reliable gas supplies to the Southern System. The System Operator relied

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[72] *Ibid.*

[73] *Ibid.*

[74] Ex. SCG-2, Marelli Updated Direct Testimony, p. 10.

[75] *Ibid.*

[76] Ex. SCG-2, Marelli Updated Direct Testimony, p. 10.

[77] Ex. SCGC-1, Yap Updated Direct Testimony, p. 19.

[78] *Ibid.*

upon the MILC to ensure deliveries of gas to meet the core's portion of the Southern System minimum flow requirement, and the System Operator relied upon baseload contracts to meet the noncore's portion of the Southern System minimum flow requirement.[79] Baseload contracts use bid-week indices for pricing gas supplies to maintain the noncore's share of the Southern System flow requirement,[80] and bid-week purchases are for a month's supply of gas.[81] Thus, bid-week purchases avoid the risks inherent in relying upon the daily spot market.[82] The System Operator supplemented the flows of gas under the MILC and the baseload contracts with some spot purchases, but the spot purchases were limited.[83]

Even though the MILC in combination with SoCalGas' baseload contracts and some spot purchases provided sufficient flowing supplies to the Southern System during the adverse event that occurred in December, 2013, a "curtailment watch" was called for the Southern System during the December, 2013 event.[84] The Applicants claim that "the inability to get storage gas was largely responsible for the curtailment watch for this area."[85] However, after questioning, the Applicants admitted that even if the North-South Project had been in existence in December, 2013, it would not have eliminated the curtailment watch:

> With respect to the testimony on page 10, lines 9-16, SoCalGas and SDG&E do not believe that either the North-South Project Pipeline nor deliveries from Honor Rancho would have been able to support the Southern System on December 9, 2013. SoCalGas and SDG&E were short of supply across their entire system during that event, and there were no supplies available on its Northern

[79] Ex. SCGC-1, Yap Updated Direct Testimony, p. 18.

[80] *Ibid.*

[81] *Ibid.*

[82] *Ibid.*

[83] *Ibid.*

[84] Ex. SCG-2, Marelli Updated Direct Testimony, p. 10.

[85] *Ibid.*

System to transport to the Southern System.[86]

Thus, the North-South Project would not have prevented the curtailment watch that was declared for the Southern System in the December 5-10, 2013 adverse weather event.

The successful use of the MILC and the baseload contracts to maintain service to the Southern System under the difficult conditions in December, 2013, demonstrate that there are clear alternatives to the North-South Project to address the threat of supply short falls into the Southern System under adverse market conditions caused by adverse market weather conditions. The alternatives to the North-South Project are the same as the alternatives that can ensure that gas will be available to assure that flowing supplies will reach Ehrenberg as discussed above. The Applicants' System Operator can continue to use the current measures for meeting the Southern System reliability requirement, the MILC for the core and the baseload contracts for the noncore, supplemented with spot purchases as necessary.[87]

As suggested by witness Yap, the baseload contracts could be extended to the summer season and, additionally, could be executed for terms longer than one year, potentially encouraging the holders of the baseload contracts to take additional steps to assure that capacity would be held on the El Paso South Mainline to maintain deliveries at SoCalGas at Ehrenberg.

An alternative to baseload contracts to meeting the Southern System minimum flow requirement for noncore customers would be for the System Operator to contract directly for interstate pipeline capacity to permit gas purchases in supply basins for resale into the SoCalGas Citygate market. As discussed above, purchasing gas in supply basins and reselling the gas at the Citygate would produce net revenues to offset the cost of holding capacity rights and offset the cost of hiring an asset manager to handle the buy-sell arrangements.

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[86] Ex. SCGC-1, Yap Updated Direct Testimony, Attachment D, SoCalGas/SDG&E Response to SCGC-04, Q.4.16.

[87] *Ibid.*

C. Problem 3: The Threat that Force Majeure Events on the El Paso System Might Limit Deliveries to Ehrenberg.

El Paso provides highly reliable gas transmission service. El Paso analyzed its daily nomination data and determined its reliability levels for the years 2011 through 2013 for deliveries to both Ehrenberg on the El Paso South Mainline and to Topock on the El Paso North Mainline.[88] The average of the reliability numbers yields an overall percentage of approximately 99.85 percent, with which the Applicants' witness Chaudhury agreed.[89]

Nevertheless, the Applicants attempt to claim that there are problems with El Paso's operational reliability. They point to a singular supply basin freeze-up event that occurred during February, 2011, that resulted in a curtailment on the Southern System. They characterize the February 1-5, 2011 event as a prime example of the need the Southern System to be linked to SoCalGas' storage fields through the North-South Project:

> During the Southwest Cold Weather Event of February 1-5, 2011, extreme cold weather caused well freeze offs upstream of the SoCalGas system. Gas deliveries into the SoCalGas system were at a historic low *throughout* the SoCalGas territory, yet the ensuing curtailment was confined to the Southern System because the demand in the remainder of the system was met by storage withdrawals.[90]

The February, 2011, freeze-up was an exceptionally severe weather event. Given the extent of weather-related events east of California, the System Operator was unable to obtain sufficient gas supplies to meet Southern System minimum flow requirements, causing the System Operator to curtail 200 MMcf/d of noncore usage on the Southern System on February 3,

[88] Ex. EP-1, Sanabria Direct Testimony, p. 9.

[89] Tr. 882 (Applicants/Chaudhury).

[90] Ex. SCG-2, Marelli Updated Direct Testimony, p. 8 (emphasis in original).

2011.[91] However, the Applicants admit that the North-South Project would not have of prevented the February 3, 2011 curtailment on the Southern System:

> With respect to the testimony on Page 8 lines 11-21 and page 9, lines 1-4, SoCalGas and SDG&E do not believe that either the North-South pipeline or deliveries from Honor Rancho would have been able to support the Southern System on February 2 and 3, 2011. SoCalGas and SDG&E were short of supply across their entire system during that event, and there were no supplies available on its Northern System to transport to the Southern System.[92]

The MILC for core customers and baseload contracts for noncore customers were not in place for the winter, 2013-2014, but they would probably not have eliminated the curtailment on the Southern System, either.[93] The severe cold that caused the February, 2011, freeze-up had an impact on all its supply basins serving California, although the Permian Basin was hit particularly hard, with production declines that exceeded 50 percent on February 5, 2011.[94]

SCGC witness Yap examined historical data on freeze-up events and concluded that the likelihood of an event that would have as great an impact as the February, 2011 freeze-up is no more than 1-in-30 years.[95] Given the infrequency of events such as the February, 2011 event, Ms. Yap questioned whether any ameliorative action is warranted. She recognized that in the absence of action, a curtailment might take place, but if it did occur, it would be an "extremely rare event" and, furthermore, would affect only noncore customers.[96] The North-South Project is a very expensive solution, particularly in light of the fact that the Applicants admit that if the

[91] Ex. SCGC-1, Yap Updated Direct Testimony, p. 25.

[92] Ex. SCGC-1, Yap Updated Direct Testimony, Attachment E, SoCalGas/SDG&E Response to Data Request SCGC-10, Q.10.1.

[93] *Ibid*, p. 26.

[94] *Ibid.*

[95] *Ibid.*

[96] *Ibid*, p. 28.

North-South Project had been in place in 2011, it would not have prevented the 200 MMcf/d curtailment on the Southern System.[97]

If the Commission were to decide, contrary to witness Yap's implicit recommendation, that some action should be taken to address highly infrequent occurrences such as the February, 2011 freeze up, witness Yap pointed out that there were solutions, none of which involve the North-South Project. One would be to authorize the Applicants to buy gas from liquefied natural gas ("LNG") importers who deliver gas from the Costa Azul LNG regasification facility near Ensenada in Baja California.[98] Costa Azul can gasify up to 1 Bcf of imported LNG per day.[99] The gas could be delivered into the Southern System through an interconnection with SDG&E at Otay Mesa at the U.S.-Mexico international border.

The instant cost of the imported LNG would be rather high. LNG was recently selling for $15.65/dth.[100] At that price it would cost about $1.2 million to buy enough gas to offset the 200 MMcf/d curtailment that occurred on the Southern System on February 3, 2011.[101] However, since purchases of Costa Azul gas to address potential curtailments such as the one that occurred on February 3, 2011, would be extremely rare, making the purchases would be vastly more economic than the North-South Project.[102]

Witness Yap explained that the Commission could also consider the addition of plant in response to the risk of freeze-ups if the Commission were concerned that a Southern System curtailment might reach core loads.[103] She estimated that the curtailment level would have to

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[97] *Ibid.*

[98] *Ibid.*

[99] *Ibid.*

[100] *Ibid,* p. 29.

[101] *Ibid.*

[102] *Ibid.*

[103] *Ibid.*

exceed 300 MMcf/d in order to threaten the Southern System core loads.[104] The curtailment on February 3, 2011, reached only 200 MMcf/d of noncore usage.[105]

If the Commission were concerned about a potential failure to meet future core requirements due to freeze-ups, there are alternatives for reinforcing the Southern System, none of which witness Yap recommended, but all of which would be less costly than the North-South Project. One alternative would be to add LNG storage in San Diego County. SDG&E previously had an LNG storage facility attached to its system, although the facility was apparently dismantled during the 1990s.[106] Witness Yap estimated that the cost associated with installing an LNG storage facility would be $259 million for a facility with a 2.0 Bcf storage inventory and a 200 MMcf/d withdrawal rate.[107] Thus, installing an LNG storage facility system would be very expensive, but still much less expensive than the North-South Project.

D. Problem 4: The Threat that a Limitation on the Southern System May Reduce Deliveries to Southern System Customers.

The Applicants contend there could be operational problems on the Southern System itself. First, the Applicants point to an event on January 14-15, 2013, which they describe as a "near miss" because it resulted in curtailment watch but not an actual curtailment:

> On January 14 and 15, 2013, extreme cold weather brought a record high gas usage for SDG&E and a near record high for SoCalGas. The combined high core loads and high EG load put the Southern System under extreme stress, especially in the morning and early evening. SoCalGas and SDG&E called for a curtailment watch. We were able to narrowly avoid noncore curtailment by working closely with CAISO, putting out conservation messages and bringing gas in through Otay Mesa.[108]

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[104] *Ibid.*

[105] *Ibid,* p. 25.

[106] *Ibid,* p. 30.

[107] *Ibid.*

[108] Ex. SCG-2, Marelli Updated Direct Testimony, p. 9.

This event does not provide any support for building the North-South Project. First, as admitted by Ms. Marelli, the problem was resolved by deliveries of gas into San Diego through the Otay Mesa interconnection on the US-Mexico international border. Second, the problem in San Diego was caused because extremely high levels of demand on SDG&E's system exceeded the capacity of the Rainbow Corridor pipelines between Moreno and Rainbow to deliver gas from SoCalGas to SDG&E. The Applicants admitted that the North-South Project would have done nothing to reduce the risk of curtailment in San Diego if the Project had been in operation at the time of the January 14-15, 2013 event:

> SoCalGas and SDG&E do not believe that either the North-South pipeline nor [sic] deliveries from Honor Rancho would have been sufficient to eliminate the curtailment watch or to avoid purchases at Otay Mesa receipt point. During this event, the level of demand on the Southern System, particularly in the Rainbow Corridor and in San Diego, was very high. In fact, the San Diego demand on January 14 and 15 was 659 and 639 MMcfd, respectively, which exceed the 630 MMcfd capacity of SDG&E system. While SoCalGas had ample supply available on its Northern System, additional supply delivered at Moreno via the North-South pipeline could not be redelivered through the Rainbow Corridor to the SDG&E system – the SDG&E system was simply out of capacity.[109]

The Applicants also contend that there is a possibility that one or more of the three transmission lines, Line 2000, Line 2001, and Line 5000, which run from the El Paso/SoCalGas interconnection at Ehrenberg to Moreno, the northern point on the Rainbow Corridor, could be taken out of service. The Applicants point to a September, 2013 event: "In September of 2013 anomalies were found on Line 2001, causing SoCalGas to reduce Blythe receipt point capacity to 750 MMcfd."[110] A Southern System curtailment might have occurred if the Southern System minimum flow requirement exceeded 750 MMcf/d. The Applicants contend that the North-

[109] Ex. SCGC-1 Yap Updated Direct Testimony, Attachment E; SoCalGas/SDG&E Response to SCGC-10, Q.10.2.

[110] Ex. SCG-2, Marelli Updated Direct Testimony, p. 11.

South Project would ensure that no curtailments would occur if receipt point capacity were similarly reduced in the future.[111]

The Applicants already have a solution in place for a situation such as the one that occurred in September, 2013, when "anomalies were found on Line 2001." The solution is precisely the same as the solution that the Applicants utilized to address the January 14-15, 2013 event when demand in San Diego outstripped the capacity of the Rainbow Corridor: deliver gas into SDG&E through the Otay Mesa interconnection at the international border. SoCalGas' Rule 41 provides explicitly for deliveries at Otay Mesa as necessary to meet minimum flow requirements.[112] Rule 41 provides that the minimum flow requirements may be met by deliveries to Otay Mesa either through "spot purchases at Otay Mesa or through the movement of supply to Blythe through Otay Mesa."[113]

The pipelines that would transport gas from Blythe (Ehrenberg) to Otay Mesa are North Baja, Gasoducto Rosarito, and TGN.[114] These pipelines have ample available capacity. For example, between July 1, 2013, and August 12, 2014, North Baja had had on average 41 percent of its capacity available to receive gas at Ehrenberg for transportation to Otay Mesa.[115] During the winter months of December, 2013, through February, 2014, North Baja's available capacity fluctuated between 33 and 65 percent.[116] North Baja's available capacity in September, 2013, the month in which "anomalies were found on Line 2001," averaged 42 percent.[117] Thus, if the

[111] *Ibid,* p. 12.

[112] SoCalGas Rule No. 41.15 (Sheet 6).

[113] *Ibid.*

[114] Ex. SCGC-1, Yap Updated Direct Testimony, p. 32.

[115] *Ibid.*

[116] *Ibid.*

[117] *Ibid.*

System Operator required deliveries to Otay Mesa during the September, 2013, event, deliveries would have been possible just as they were during the January, 2013 event.

Thus, there is already a solution to address operational problems that occur on the Southern System, negating any need for the North-South Project. If, in spite of the fact that the SoCalGas tariff already provides a solution to operational problems on the Southern System, the Commission were concerned enough that Southern System interruptions of one sort or another might jeopardize service to the Southern System core, the Commission could opt for the construction of an LNG storage facility on the Southern System which, as noted above, would be very expensive but would still be far less expensive than the North-South Project.

E. Conclusion: The Proposal to Construct the North-South Project Should Be Rejected as Unnecessary.

In summary, the alleged threats to reliable deliveries to meet the Southern System minimum flow requirement do not justify the North-South Project. Flowing supplies will, contrary to the Applicants, be available for delivery into SoCalGas at Ehrenberg over the long term, and there are multiple solutions to assuring that firm capacity will be retained on El Paso for delivery of the flowing supply into SoCalGas. The Applicants already have the tools they need to provide reliable gas supplies to the Southern System under adverse weather events that may lead to adverse market conditions, and those tools can be augmented. The threat of force majeure events such as the February, 2011, freeze-up on the El Paso system can be addressed through alternatives that are much less expensive than the North-South Project, although the 1-in-30 years frequency of such events probably obviates taking any action. Lastly, measures already exist to address operational problems that may occur on the Southern System itself.

Given that none of the concerns expressed by the Applicants justify construction of the North-South Project are convincing, the Applicants proposal to construct the Project should be rejected.

IV. CONTRARY TO THE APPLICANTS' CLAIMS, DELIVERIES INTO THE SOUTHERN SYSTEM AT EHRENBERG ARE INCREASING, THE SOUTHERN SYSTEM MINIMUM FLOW REQUIREMENT IS DECLINING, AND THE COST OF MEETING THE SOUTHERN SYSTEM MINIMUM FLOW REQUIREMENT IS DECLINING.

The Applicants painted a dire picture of the Southern System. The Applicants' witness Marelli presented a Figure 1 based upon data for the years 2007 to 2013 to show declining customer deliveries into the Southern System at Ehrenberg and a simultaneous increase in the Southern System minimum flow requirement.[118] Likewise she presented a Table 1 for the period September, 2009, through August, 2013, that she claims to show that the cost of meeting the minimum flow requirement has "approximately been doubling every year."[119]

If the data presented by the Applicants is updated, a quite different picture emerges. Flows of gas into the Southern System at Ehrenberg are increasing, and the Southern System minimum flow requirement is decreasing, consistent with a decrease in Electric Generation ("EG") loads on the Southern System. Lastly, the cost of meeting the minimum flow requirement, taking into account both balances accumulated in the SRMA and the cost of BTS discounts, is declining dramatically.

A. Deliveries of Natural Gas Into the Southern System at Ehrenberg Are Increasing.

In a data request, SCGC requested the Applicants to update witness Marelli's Figure 1, which witness Marelli claimed to show a reduction in customer deliveries into the Southern System. When the Figure 1 was updated, it showed that there was a clear reversal of trends in 2014:[120]

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[118] Ex. SCG-2, Marelli Updated Direct Testimony, p. 5.

[119] *Ibid*, p. 3.

[120] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, Attachment B: SoCalGas/SDG&E Response to SCGC-16, Q.16.5.

Figure 1

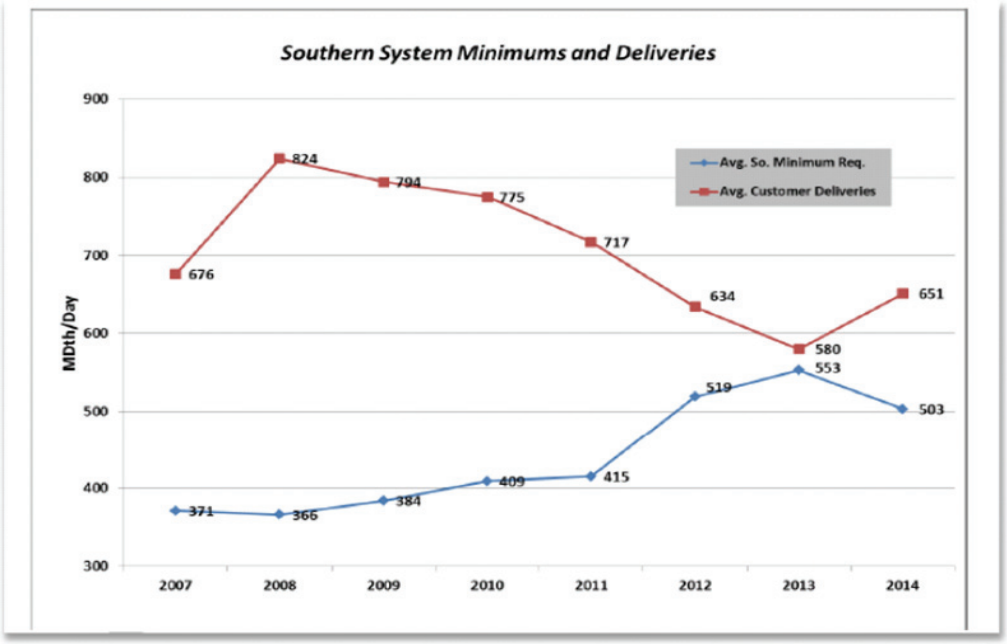


Figure 1 shows that while there was a decline in customer deliveries into the Southern System in the years 2008 through 2013, customer deliveries into the Southern System increased 71 Mdth/d, more than 12 percent, in calendar year 2014 in comparison to calendar year 2013.

B. Southern System Minimum Flow Requirements Are Decreasing.

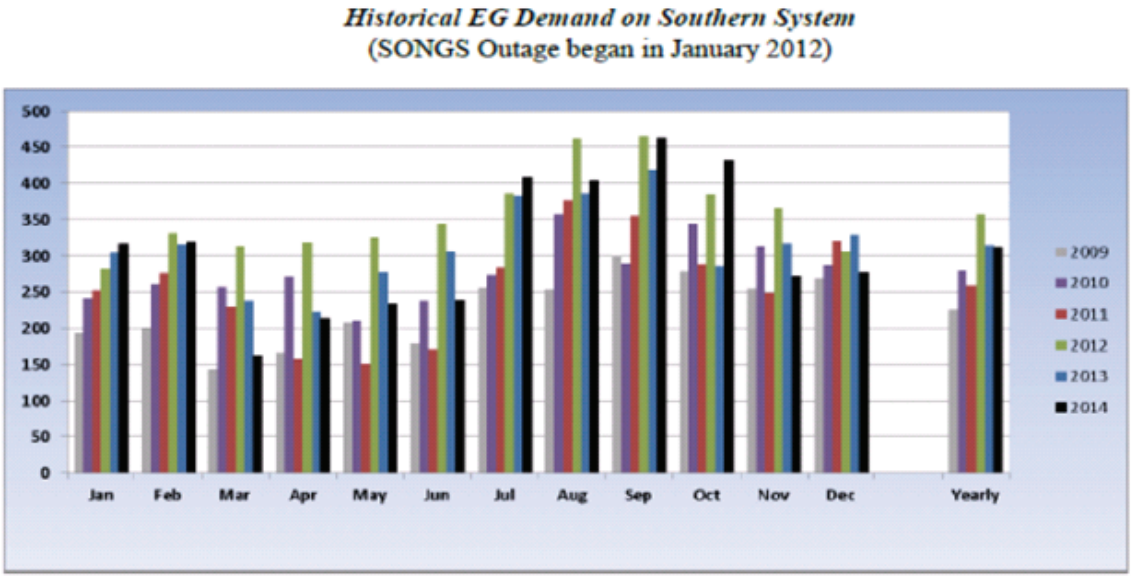
While deliveries into the Southern System increased in 2014 as shown in Figure 1 above, the average Southern System minimum flow requirement decreased, as also shown in Figure 1. The Southern System minimum flow requirement dropped by 50 Mdth/d, about 9 percent, in 2014 in comparison to 2013.

The decrease in the minimum flow requirement reflects a change in EG demand on the Southern System. EG demands increased sharply in 2012 due to the outage of the San Onofre Nuclear Generating Station ("SONGS"). Witness Marelli presented a Figure 2 showing the increased in EG demand in 2012.[121] As with her Figure 1, SCGC requested an update of witness

[121] Ex. SCG-2, Marelli Updated Direct Testimony, p. 7.

Marelli's Figure 2 to include two more years, 2013 and 2014. The updated Figure 2 is shown below:[122]

Figure 2



The updated Figure 2 shows the average level of EG demand in 2014 was well below the levels shown for 2012, roughly correlating with the decline in the Southern System minimum flow requirement shown in the updated Figure 1. The Office of Ratepayer Advocates ("ORA") witness Sabino projects that the decline in EG demand will continue, first, because a substantial portion of the procurement to replace SONGS must be from "preferred resources" that do not generate with gas[123] and, second, because SDG&E must meet California's 33 percent Renewable Portfolio Standard ("RPS") by 2020.[124] Witness Sabino pointed out that "SDG&E has the most percentage RPS under contract for 2020 of the 3 large utilities," 38.8 percent.[125]

[122] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 10.

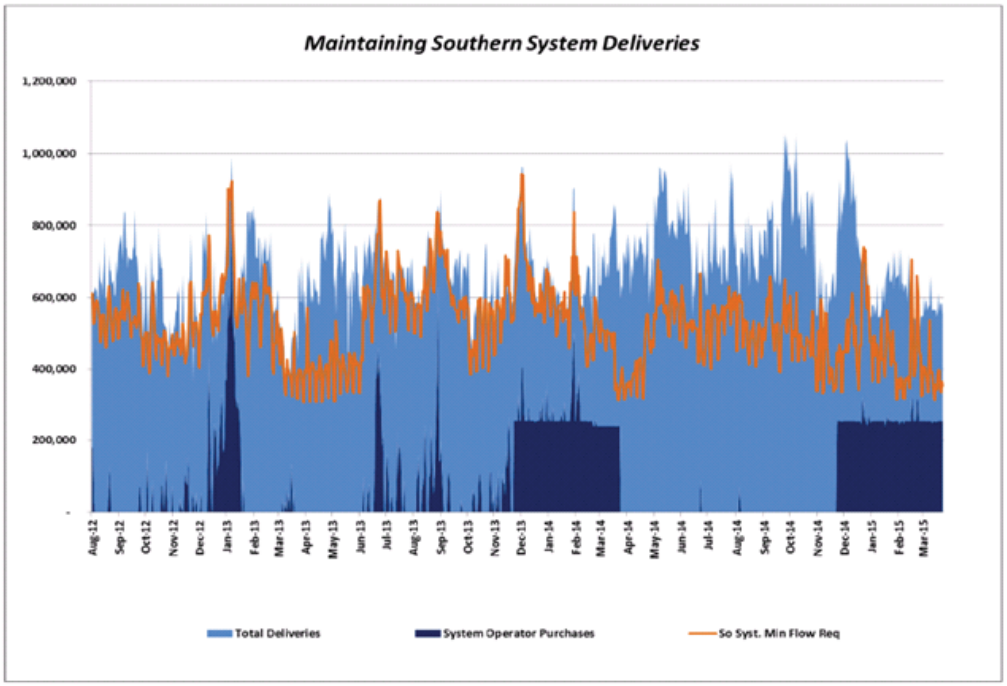
[123] Ex. ORA-2, Sabino Direct Testimony, pp. 38-39.

[124] *Ibid*, pp. 39-40.

[125] *Ibid*, p. 40.

As a result of the coincidental decrease in the Southern System minimum flow requirement and increase in deliveries into the Southern System at Ehrenberg, flows into the Southern System in 2014 consistently exceeded, often by a dramatic margin, the Southern System minimum flow requirement, as shown by the following update of the Figure 3 that Ms. Marelli presented in her testimony:[126]

Figure 3



The level of customer deliveries significantly exceeded minimum flow requirements nearly every day during the period, April 1 through November 30, 2014. The data for the 2014-2015 winter months showed lower levels of customer deliveries. However, despite the lower customer deliveries, deliveries through the MILC and baseload contracts in combination with customer deliveries exceed the minimum flow requirements a great majority of the time.

[126] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 10, Attachment A: SoCalGas/SDG&E Response to SCGC-19, Q.19.5.

C. The Cost of Meeting the Southern System Minimum Flow Requirement Is Declining Dramatically.

As might be expected, given the increase in deliveries into the Southern System combined with the decrease in the Southern System minimum flow requirement, the cost of meeting the Southern System minimum flow requirement is decreasing. The Applicants' witness Marelli claimed that the "total costs (SRMA net cost plus BTS discounts) have been approximately doubling every year," relying upon a Table 1 that she presented in her testimony.[127] However, witness Marelli's Table 1 only included data from September, 2009 through August, 2013.

As with witness Marelli's Figures 1, 2, and 3, SCGC requested that the Applicants update witness Marelli's Table 1 to include data through March, 2015. The updated table is shown below:[128]

Table 1

Costs of Southern System Support Post Transfer to Operator ($MM)

	Purchases Mdth	SRMA Costs	IT BTS Ehrenberg Discounts	Total Costs
Sept 2009-Aug 2010	11,166*	$2.2	$0	$2.2*
Sept 2010-Aug 2011	1,045	$3.8	$0	$3.8
Sept 2011-Aug 2012	6,858	$2.2	$6.9	$9.1
Sept 2012- Aug 2013	19,320	$7.9	$12.1	$20.0
Sept 2013- Aug 2014	36,946**	$12.9	$3.0	$15.9**
Sept 2014- Mar 2015	**31,010****	**$4.0**	**$0**	**$4.0****

*96% of these supplies were baseload winter supplies approved in G-3435.
** Includes baseload winter supplies approved in G-3487.

[127] Ex. SCG-2, Marelli Updated Direct Testimony, pp. 3-4.

[128] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 6, Attachment A: SoCalGas/SDG&E Response to SCGC-19, Q.19.4.

The updated Table 1 demonstrates quite clearly that while total costs increased during the SRMA periods 2009-2010 through 2012-2013, the trend started to reverse during the SRMA period 2013-2014. The reverse continued during the partial SRMA period 2014-2015.

Despite the fact that the twelve month SRMA period 2013-2014 included the very cold winter of 2013-2014 and featured some extraordinarily high gas prices, the overall cost of meeting the Southern System minimum flow requirement dropped by more than $4 million, over 20 percent, from the previous twelve-month SRMA period, 2012-2013. Furthermore, the final row in Table 1 showing data for the seven months September, 2014, through March, 2015, shows a total cost, SRMA costs and the costs of BTS discounts combined, of only $4 million. Although the data for 2014-2015 covers only seven months, the data includes the entire winter of 2014-2015.

A key difference in System Operator practices between the 2012-2013 SRMA period and the lower cost 2013-2014 and 2014-2015 SRMA periods was a substitution of baseload contracts and the MILC for spot purchase during the winter months. Thus, the updated Table 1 demonstrates that the strategy of using MILCs to meet core requirements and baseload contracts to meet the noncore minimum flow requirement is effective in managing Southern System reliability costs.

D. The Applicants Fail to Take Into Account Factors that May Result in a Further Decline in the Minimum Flow Requirement for the Southern System.

Policies have been adopted in California that are intended to depress consumption of fossil fuels including natural gas. The Applicants fail to take the policies into account in considering whether there would be an increase or decline in the minimum flow requirement on the Southern System.

The Applicants' Chaudhury was aware that the Renewal Portfolio Standard target for 2020 was 33 percent, but he was unfamiliar with what was, at the time, pending legislation to establish a Renewable Portfolio Standard ("RPS") of 50 percent by 2030.[129] The legislation, Senate Bill ("SB") 350 (De Leon) was passed by both the California Senate and California Assembly on September 11, 2015, and is awaiting an expected signature by Governor Brown. The witness testified that he had not performed any studies of the effect of either the 33 percent RPS target or the 50 percent 2030 RPS target.[130]

By contrast, SCGC witness Yap did a study of the impact of a 50 percent reliance on RPS resources and doubling of energy efficiency savings, both of which are required by SB 350, and she found that by 2030 "potentially more than half of the Southern System requirements would be eliminated."[131] Given an assumed useful life of 60 years for the North-South Project and a 2019 in-service date, only 11/60, 18 percent, of the investment in the Project would be depreciated by the time that more than half of Southern System requirements had been eliminated.[132]

Witness Chaudhury was "generally familiar" with the fact that some existing electric generation is being taken out of service to be replaced by highly efficient fast-start combined-cycle generation units.[133] He was also familiar with the fact that there is a focus on installing electric generation units that have fast-start capability because "to the extent that renewable resources do not materialize…gas-fired plants need to fire up and provide electricity."[134]

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[129] Tr. 605 (Applicants/Chaudhury).

[130] Tr. 606 (Applicants/Chaudhury).

[131] Ex. SCGC-3, Yap Rebuttal Testimony on Rate Setting, p. 9.

[132] *Ibid.*

[133] Tr. 607-607 (Applicants/Chaudhury).

[134] Tr. 608-609 (Applicants/Chaudhury).

However, the witness testified that he had not done any study the effect that installing highly efficient fast-start combined cycle facilities would have on EG demand for natural gas.[135]

California's policy to reduce California greenhouse gas ("GHG") emissions is another factor that may affect consumption of natural gas and, hence, the minimum flow requirement on the Southern System. Witness Chaudhury was only vaguely familiar with the California Global Warming Solutions Act of 2006, Assembly Bill ("AB") 32.[136] He was unfamiliar with the AB 32 requirement to reduce California GHG emission to 1990 levels by 2020.[137] He was somewhat familiar with the fact that the Governor of California has suggested 40 percent reduction in California GHG emissions in 2030 from the 2020 level.[138] However, the witness could only say that such a target would "have an impact."[139] He clearly had not performed any study of the impact either on the Applicants' system general or a Southern System minimum flow requirement in particular.

The Applicants ignore California policies that aim to reduce the use of fossil fuels including natural gas in California, and the Applicants, specifically, do not take into account the potential for those policies to dramatically affect the minimum flow requirement on the Southern System. Thus, they ignore the potential for the North-South Project to become a very costly stranded investment.

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[135] Tr. 611 (Applicants/Chaudhury).

[136] Chapter ("Ch.") 488, Statutes of 2006.

[137] *Ibid;* Tr. 615 (Applicants/Chaudhury).

[138] Tr. 613 (Applicants/Chaudhury). SB 32 (Papley) is pending in California State Legislature to mandate that California GHG emissions be reduced 40 percent below the 1990 level by 2030.

[139] Tr. 614 (Applicants/Chaudhury).

V. IF, CONTRARY TO SCGC'S RECOMMENDATION, THE COMMISSION WERE TO OPT FOR A PHYSICAL SOLUTION FOR THE SOUTHERN SYSTEM MINIMUM FLOW PROBLEM, THE COMMISSION SHOULD DIRECT THE APPLICANTS TO RECONSIDER THEIR DESIGN CRITERIA TO DETERMINE THE AMOUNT OF CAPACITY NEEDED TO MEET THE SOUTHERN SYSTEM MINIMUM FLOW REQUIREMENT.

The Applicants should reconsider their design standard for capacity to transport gas from the SoCalGas Northern System to the Southern System. The Applicants have designed the North-South Project to meet a forecast that exceeds the Commission's mandated design standards.

The North-South Project, if constructed, would be functionalized as backbone transmission capacity with the associated revenue requirement being recovered through BTS rates.[140] The Commission requires SoCalGas to design its backbone transmission system to serve "all system demand on an average day in a 1-in-10 cold and dry-hydro electric year."[141] The planning standard for local transmission and storage facilities, which the North-South Project is not, "is 1-in-35 five cold year core and 1-in-10 cold year core plus noncore firm service."[142]

Instead of designing the North-South Project to meet either the Commission-approved design standard for the backbone transmission system or the design standard for local transmission and storage facilities, the Applicants propose to use a higher standard of "a 1-in-10 cold day demand forecast for core customers along with the connected capacity for existing large noncore customers" with the assumption that there is "no gas supply delivered at Blythe or Otay Mesa."[143]

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[140] Ex. SCG-9, Bonnett Updated Direct Testimony, p. 1.

[141] D.06-09-039, p. 184 (September 21, 2006).

[142] D.02-11-073, p. 31 (November 1, 2002).

[143] Ex. SCG-6, Bisi Updated Direct Testimony, p. 8.

The Applicants admit that the design standard that they have elected to adopt for the North-South Project exceeds the "CPUC mandated design standard for firm noncore service," which the Applicants claim is "1-in-10 year cold day demand."[144] The Applicants' witness Bisi states: "The forecasted noncore demand is less than the connected capacities for noncore customers since noncore customers either have redundant equipment or are not typically all at their connected capacity at the same time."[145] The Applicants, further, admit that their design standard represents an extreme condition: "[The] demand used for this assessment represented an extreme condition, and as such, gives us more confidence that the evaluated pipeline improvements can meet the design criteria to maintain service to all noncore customers without supply delivered on the Southern System."[146]

The Applicants quantified the amount by which the North-South Project at 800 MMcf/d would be oversized in comparison to a pipeline that was designed to meet a 1-in-10 year cold day demand forecast for both core and noncore customers. The Applicants found that the North-South Project capacity exceeded the 1-in-10 design standard by 344 MMcf/d.[147] Thus, if the North-South Project were designed to meet a 1-in-10 year cold day demand forecast for both core and noncore customers, the pipeline would be designed to have a maximum capacity of 456 MMcf/d, not 800 MMcf/d.

The Applicants did not identify what the amount of excess capacity would be if the 800 MMcf/d proposed capacity of the North-South Project were compared to the design standard authorized for the backbone transmission system, "demand on average day in a 1-in-10 cold and

[144] *Ibid.*

[145] *Ibid,* p. 8.

[146] *Ibid.*

[147] Ex. SCG-6, Bisi Updated Direct Testimony, p. 10 (footnote 5).

dry-hydroelectric year."[148] Nor do the Applicants identify what the amount of excess capacity would be if the 800 MMcf/d proposed capacity were compared to the 1-in-10 cold year core plus noncore firm service planning standard for local transmission and storage facilities.[149]

A more reasonable design standard than "connected capacity" for noncore customers should be used for the North-South Project as well as for any other physical solution to the Southern System reliability problem. First, it is unrealistic to suppose that noncore customers would ever use their full connected capacity simultaneously.

Second, it is unrealistic to assume that absolutely no supply would be delivered from upstream pipelines through the Ehrenberg, North Baja, and Otay Mesa interconnections with the Southern System.[150] For one thing, the Applicants' Gas Acquisition Department has signaled a preference to hold El Paso capacity both to meet the core's share of the Southern System minimum flow requirement and to meet core demand on the Southern System. The Applicants provide no explanation for their assumption that the core would fail to continue that practice.

VI. IF THE COMMISSION WERE TO DECIDE THAT A PHYSICAL SOLUTION RATHER THAN A SUITE OF NON-PHYSICAL ALTERNATIVES IS PREFERABLE TO ADDRESS THE SOUTHERN SYSTEM MINIMUM FLOW REQUIREMENT, THE COMMISSION SHOULD CONSIDER A PHYSICAL SOLUTION THAT OFFERS MUCH MORE FLEXIBILITY FOR THE BENEFIT OF RATEPAYRES THAN THE NORTH-SOUTH PROJECT.

If the Commission, contrary to SCGC's recommendation, were to decide that it is preferable to install new gas transmission facilities to address the Southern System minimum flow requirement, it would be preferable to select a physical solution that would offer more flexibility than would be offered by the North-South Project. If the Applicants were permitted to construct the North-South Project with the projected direct capital cost of $621.3 million and a

[148] D.06-09-039, p. 184.

[149] D.02-11-073, p. 31.

[150] Ex. SCGC-1, Yap Updated Direct Testimony, p. 6.

fully loaded and escalated capital cost of $854.8 million, the total cost to ratepayers over the period 2014 to 2096, would be $2.782 billion.[151] Ratepayers would bear the burden of the North-South Project costs for nearly the rest of this century.[152]

Worse yet, if California were to attain its goals for reducing fossil fuel consumption and GHG emissions, including the goal of reducing GHG emissions to 20 percent of 1990 levels by 2050, the North-South Project costs would be exposed to becoming stranded costs which, most likely, the Applicants would seek to recover from ratepayers.[153] While the Applicants might attempt to dispute that deliveries from the El Paso South Mainline into the Southern System will continue and minimum flow requirements will decline, they cannot reasonably contest the fact that the data presented by SCGC witness Yap in her Figures 1, 2, and 3 shows, at a minimum, that deliveries into the Southern System as well as the minimum flow requirement can change over time.[154]

Accordingly, if the Commission were to find that a physical solution rather than a suite of non-physical solutions would be preferable to address the Southern System minimum flow requirement, the preferable approach would be to adopt a physical solution which would provide some flexibility to adjust the amount of transmission capacity that is dedicated to delivering gas from the SoCalGas Northern System to the Southern System. Furthermore, it would be highly preferable to select a physical solution which would allow the burden on ratepayers to be reduced or even terminated well before the end of the twenty first century if, due to reductions in fossil fuel consumption or otherwise, it came to pass that some or all of the capacity to transport gas from the SoCalGas Northern System to the Southern System was no longer needed. As the

[151] Ex. SCG-8, Yee Updated Direct Testimony, pp. 3-4 (Tables 3, 4, and 5).

[152] *Ibid,* p. 4.

[153] Ex. ORA-2, Sabino Direct Testimony, p. 87.

[154] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, pp. 9-10 (Figures 1, 2, and 3).

Office of Ratepayer Advocates ("ORA") witness Sabino observed, the North-South Project is "an expensive physical solution [that] could leave ratepayers with responsibility for cost recovery of stranded idle pipeline assets."[155]

A. Three Interstate Pipelines Presented Proposals to Provide Capacity to Transport SoCalGas Northern System Gas to the Southern System on a Basis that Would Provide More Flexibility for the Benefit of Ratepayers than the North-South Project.

Three interstate pipelines presented proposals to construct capacity or, alternatively, to construct capacity in connection with the use of existing capacity to transport SoCalGas Northern System gas to the Southern System to meet the minimum flow requirement at Ehrenberg: El Paso,[156] TransCanada Pipelines Limited and North Baja Pipeline, LLC ("North Baja"),[157] and Transwestern Pipeline Company, LLC ("Transwestern').[158] Transwestern witness Hearn explained that if SoCalGas contracted with Transwestern to transport Northern System gas to the Southern System at Ehrenberg, SoCalGas ratepayers would be obligated only for the duration of the contract term:

> SoCalGas/SDG&E' proposal would obligate ratepayers for a longer period than is the case for Transwestern's proposal: Transwestern's proposal is that ratepayers would be obligated only for the duration of a negotiated contract term. After the contract term has expired, SoCalGas would be able to terminate the agreement, if it believes the service is no longer needed, and there would be no further costs to ratepayers.[159]

That would be true for all three of the interstate pipeline proposals. The Applicants could nevertheless assure themselves of continued service, at their election, at the end of an interstate

[155] Ex. ORA-2, Sabino Direct Testimony, p. 87.

[156] Ex. EP-2, Sanabria Updated Direct Testimony.

[157] Ex. NP-1, Schoene Direct Testimony.

[158] Ex. TW-1, Hearn Direct Testimony.

[159] Ex. TW-2, Hearn Direct Testimony on Ratesetting, p. 3.

pipeline contract term by including a ROFR in their contract with the interstate pipeline.[160]

Additionally, while the Applicants propose to construct a facility that would have one size and one size only, 800 MMcf/d of capacity,[161] the interstate pipelines propose capacity that would be scalable depending upon the needs of the Applicants to meet a potentially changing Southern System minimum flow requirement. El Paso explained that its "proposal is scalable and can be adjusted to meet various levels of capacity increase up to the 800 Mdth/day design capacity associated with SoCalGas/SDG&E's project depending on the alternative design proposal that is selected."[162] Somewhat similarly, Transwestern explained that its "phased construction will provide greater flexibility to better meet actual capacity requirements as they develop, thereby minimizing the cost burden on SoCalGas and SDG&E ratepayers."[163]

B. If the Commission Were to Opt for a Physical Solution, the Commission Shout Direct the Applicants to Select an Interstate Pipeline Solution Rather than the North-South Project.

ORA proposed that if the Commission were to determine that a physical solution would be superior to a suite of non-physical solutions to meet the Southern System minimum flow problem, instead approving the North-South Project, the Commission should direct the Applicants to conduct an open season or to negotiate with the interstate pipeline that "offers the safest and most reliable service at the lowest reasonable cost."[164] ORA witness Sabino testified:

> ORA recommends the Commission order SoCalGas/SDG&E to first reassess the demand criteria used to determine the amount of capacity needed for the pipeline infrastructure, and then either conduct an open solicitation for the physical infrastructure for the capacity shown to be needed, or negotiate with the interested

[160] Tr. 977-979 (El Pase/Sanabria).

[161] Ex. SCG-6, Bisi Updated Direct Testimony, p. 7.

[162] Ex. EP-1, Sanabria Direct Testimony, p. 7.

[163] Ex. TW-1, Hearn Direct Testimony, p. 10.

[164] Ex. ORA-2, Sabino Direct Testimony, p. 89.

> interstate pipeline company who offers the safest and most reliable service at the lowest reasonable cost.[165]

As demonstrated above, there is no need for a physical solution to the Southern System minimum flow problem, but if the Commission were to opt for a physical solution, ratepayers would be far better off if the Commission opted for ORA witness Sabino's recommendation to select an interstate pipeline physical solution instead of approving the North-South Project.

VII. IF THE COMMISSION WERE TO DESIRE A PHYSICAL SOLUTION TO THE SOUTHERN SYSTEM MINIMUM FLOW PROBLEM THAT WOULD BE ON THE SOCALGAS SYSTEM RATHER THAN ON AN INTERSTATE PIPELINE, THERE IS A THIRD ON-SYSTEM ALTERNATIVE TO THE NORTH-SOUTH PROJECT THAT THE APPLICANTS FAIL TO MENTION BUT WHICH SHOULD BE CONSIDERED.

If the Commission, contrary to SCGC's recommendation, were to require a physical solution to the Southern System minimum flow problem and were to desire that the physical solution be accomplished through construction on the SoCalGas system rather than on an interstate pipeline system, there is a more reasonable alternative to the North-South Project beyond the two alternatives that were identified by the Applicants.

A. The Two Physical On-System Alternatives to the North-South Project that Were Identified by the Applicants.

According to the Applicants' witness Bisi, the Applicants considered two physical on-system alternatives to the North-South Project. One was the River Route Pipeline which would involve the installation of approximately 100 miles of a 36-inch diameter pipeline connecting North Needles and South Needles to the SoCalGas Northern System and continuing to the Blythe Compressor Station.[166] A second alternative was the Cross Desert Project which would involve constructing approximately 200 miles of 36-inch diameter pipeline from the Adelanto

[165] *Ibid.*

[166] Ex. SCG-6, Bisi Updated Direct Testimony, pp. 12-13.

Compressor Station to the Blythe Compressor Station and, like the North-South Project, rebuilding the Adelanto Compressor Station.[167]

In comparing the River Route Pipeline and the Cross Desert Project to the North-South Project, witness Bisi found that the "North-South Project is the best infrastructure alternative" for two reasons.[168] First, the North-South Project would provide a direct connection from the Northern System to Moreno, and the Rainbow Corridor. Witness Bisi explained: "The North-South Project provides a direct interconnect between the Northern System and the largest load center on the Southern System: the Rainbow Corridor and San Diego."[169] Second, the North-South Project provides a "level of redundancy of gas supplied to the Southern System" that would not be provided by either the River Route Pipeline or the Cross Desert Project. Witness Bisi explained:

> The North-South Project also provides a level of redundancy for supply delivered to the Southern System that the other two pipelines do not. Because the River Route Pipeline and Cross Desert Project interconnect upstream of the Blythe Compressor Station, an outage on the Southern System downstream of Blythe has the ability to impact supply to all points downstream. By providing an independent interconnect on the Southern System, the North-South Project can mitigate the customer impact from any supply disruption at Blythe. [170]

Additionally, the River Route Pipeline would be less preferable than the North-South Project because supplies transported on the River Route Pipeline would be limited to supplies delivered at SoCalGas' North Needles and South Needles receipt points.[171] Thus, as explained by witness Bisi: "This means that supplies delivered at Kramer Junction, Wheeler Ridge, and

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[167] Ex. SCG-6, Bisi Updated Direct Testimony, pp. 14-15.

[168] Ex. SCG-6, Bisi Updated Direct Testimony, p. 17.

[169] *Ibid.*

[170] *Ibid.*

[171] *Ibid,* p. 13.

Kern River Station cannot be redelivered to the Southern System via the River Route Pipeline, nor gas supply from the Honor Rancho Storage field."[172]

B. Another Physical, On-System Alternative to the North-South Project.

There is a clear alternative to the North-South Project other than the River Route Pipeline and the Cross Desert Project. This third alternative would have the same advantages over the River Route Pipeline and the Cross Desert Project as the North-South Project, but it would potentially be less costly than the North-South Project and could potentially take better advantage of capacity in existing SoCalGas backbone transmission pipelines. Like the North-South Project, the third alternative could deliver gas to Moreno from the Honor Rancho Storage field and, likewise, could deliver gas from all of the northern receipt points from which gas could be delivered to Moreno by the North-South Project.

When asked, "Please describe the path that gas withdrawn from Honor Rancho would have to take in order to reach the Chino and Prado crossovers and ultimately Moreno Station," the Applicants responded: "Gas withdrawn from Honor Rancho for delivery to Moreno Station via the Chino and Prado crossover stations would utilize Transmission Lines 2000, 225, 4000, 1185, 235, 4002, 335, and 2001."[173]

The pipelines identified in the Applicants' response were not in the correct geographic sequence. If they were put in the correct geographic sequence from the Honor Rancho storage field in the north to Chino to Moreno in the south, the sequence of pipelines would be:

- Line 225 from Honor Rancho to Quigley,
- Lines 335 and 235 from Quigley to Adelanto,

[172] *Ibid,* p. 14..

[173] Ex. SCGC-16, p. 6.

- Line 1185 south from Adelanto to an interconnection with Lines 4000 and 4002 at Cajon,
- Lines 4000 and 4002 from Cajon to interconnections with Lines 2001 and 2000 at the Chino and Prado valve stations respectively. Chino is a valve station where Lines 4000 and 4002 cross Line 2001. Prado is a valve station south of Chino where Lines 4000 and 4002 cross Line 2000.[174]
- Line 2001 from Chino to Moreno and Line 2000 from Prado to Moreno.[175]

The lines that would be utilized to transport gas from the Honor Rancho storage field to Adelanto, Line 225 from Honor Rancho to Quigley and Lines 335 and 235 from Quigley to Adelanto, are the same pipelines that would be used to move Honor Rancho gas to the Adelanto Compressor Station for injection to the North-South Project.

The Applicants already plan to loop two of the pipelines in the path that runs south from Adelanto to Moreno. The North-South Pipeline that is proposed along with the rebuilt Adelanto Compressor Station in this proceeding would loop Line 1185 that runs south from Adelanto to Cajon.[176] At the southern end of the path, the Applicants plan to complete the looping of Line 2001 which runs from Chino to Moreno.

1. Completing the Looping of Line 2001 Between Chino and Moreno.

About half of the roughly sixty mile stretch of Line 2001 from Chino to Moreno is already looped by approximately a thirty mile stretch of Line 5000.[177] SoCalGas plans to complete the looping of Line 2001 with Line 5000 between Chino and Moreno. In SoCalGas' most recent General Rate Case ("GRC"), SoCalGas witness Raymond K. Stanford testified that

[174] Ex. SCGC-17.

[175] Tr. 700-702 (Applicants/Bisi); Ex. SCGC-17, 6-02 Map of SoCalGas Facilities.

[176] Tr. 716 (Applicants/Bisi).

[177] Tr. 706-707 (Applicants/Bisi); Ex. SCGC-17.

SoCalGas planned a "Line 2001 looping-Chino to Moreno." Witness Stanford stated: "SoCalGas plans to acquire rights-of-way in anticipation of construction of approximately 30 miles of 36-inch Transmission line between Chino crossover and Moreno Station."[178] Witness Stanford explained, further: "This tie-in provides the missing loop segment for Line 2001."

Assuming an adequate amount of supply at Chino, the incremental throughput to Moreno that could result from looping Line 2001 by closing the roughly 30 mile gap in Line 5000 between Chino and Moreno would be 18.8 MMcf/h: "Assuming an unlimited source of supply at Chino and the current level of pressure loss between Chino and Moreno as identified in response to SCGC's 3rd data request in A.14-11-004, the incremental throughput to Moreno resulting from the proposed looping of Line 2001 is approximately 18.8 MMcfh."[179] According to witness Bisi, 18.8 MMcf/h is equivalent of 451 MMcf/d.[180] Incremental capacity of 451 MMcf/d would be 90 percent of the average 2014 minimum flow requirement on the Southern System, 503 MDth/d.[181]

Currently, up to 300 MMcf/d can be delivered from Chino and Prado to Moreno, depending on the pressure of the upstream pipelines that deliver gas to Chino and Prado.[182] Thus, assuming an adequate source of supply to Chino, completing the Line 5000 looping of Line 2001 between Chino and Mreno could result in up to 751 MMcf/d (451 MMcf/d plus 300 MMcf/d) being delivered from Chino and Prado to Moreno, close to the maximum 800 MMcf/d capacity of the North-South Project.

[178] Ex. SCGC-12, p. 53.

[179] Ex. SCGC-8, p. 11.

[180] Tr. 713 (Applicants/Bisi).

[181] Ex, SCGC-2, Yap Direct Testimony on Ratesetting, p. 9 (Figure 1).

[182] Tr. 814 (Applicants/Bisi).

2. Looping Lines 4000 and 4002 between Cajon and Chino/Prado.

The pipelines that deliver gas to interconnections with Lines 2001 and 2000 at Chino and Prado respectively are Lines 4000 and 4002 which extend south from the interconnection with Line 1185 at Cajon to Chino and Prado.[183] According to the Applicants, "The net capacity of these pipelines to supply the Chino crossover is only approximately 200-300 MMcf/d and at a times nothing."[184] Given that the Applicants are already planning to loop Line 1185 from Adelanto to Cajon as the first leg of the North-South Pipeline, and, given that the Applicants are apparently looking forward to completing the looping of Line 2001 between Chino and Moreno to close the gap in Line 5000 between Chino and Moreno, at all that remains to take advantage of the Adelanto-Cajon-Chino/Prado-Moreno path that could deliver up to 751 MMcf/d to Moreno is looping Lines 4000 and 4001 between Cajon and Chino.

Insofar as the Adelanto-Cajon-Chino/Prado-Moreno path is a clear alternative to the North-South Pipeline portion of the North-South Project, Witness Bisi was asked:

> Has SoCalGas informed the Energy Division staff that is working on the environmental report for the North-South [projected that] expanding Lines 4000 and 4002 in conjunction with looping Line 1185 and the looping of 2001 would be a potential alternative to the North-South Project?

Witness Bisi responded:

> A No, I don't know what they've laid out as alternatives. I sort of see though the North-South Project is that looping of Line 4000 and 4002 that you are asking about.
>
> Q It would deliver gas at Moreno, not deliver gas at Chino, correct?
>
> A That is true.[185]

[183] Ex. SCGC 17.

[184] Ex. SCGC-8, p. 12; Tr. 715 (Applicants/Bisi).

[185] Tr. p. 717.

3. Potential Advantages of the Adelanto-Cajon-Chino/Prado-Moreno Path.

The Adelanto-Cajon-Chino/Prado/Moreno route could be a superior path to transport both Honor Rancho gas and gas from northern receipt points on the SoCalGas system to Moreno in comparison to the North-South Pipeline. Utilizing the Adelanto-Cajon-Chino/Prado/Moreno path could take advantage of the up to 300 MMcf/d of capacity that already exists on Lines 4000 and 4001 to deliver gas from Cajon to Chino and could take advantage of the up to 300 MMcf/d of capacity that already exists to transport gas from Chino/Prado to Moreno. Thus, the Adelanto-Cajon-Chino/Prado-Moreno path may be less costly than the North-South Project. Additionally, it may require less compression, hence, less cost, at the Adelanto Compressor Station.

Yet, the Adelanto-Cajon-Chino/Prado-Moreno path has the same advantages as the North-South Project over the River Route Pipeline and the Cross-Desert Project. If the Commission were to, contrary to SCGC's recommendation, to determine that an on-system physical solution should be pursued to address the Southern System minimum flow problem, the Commission should require a full examination of the Adelanto-Cajon-Chino/Prado-Moreno alternative to the North-South Pipeline.

VIII. INSOFAR AS THE NORTH-SOUTH PROJECT IS NOT NEEDED, THE COST OF THE NORTH-SOUTH PROJECT SHOULD NOT BE RECOVERED ON A ROLLED-IN BASIS FROM THE GENERAL BODY OF RATEPAYERS.

SoCalGas proposes to functionalize the North-South Project as backbone transmission to roll the cost of the North-South Project into the cost of the backbone transmission system, and to recover the cost through BTS rates.[186] However, the Commission has a responsibility to establish "just and reasonable" rates consistent with the Public Utilities Code Section 451. The Commission has authority to disallow the recovery of costs that are unreasonably incurred. For

[186] Ex. SCG-7, Ahmed Updated Direct Testimony, p. 2.

example, in D.96-09-037, the Commission stated: "The Commission has the power to disallow expenditures it finds unreasonable and refuse to pass on those costs for materials or services to ratepayers.[187] The Commission explained: "The Commission has broad discretion in this regard: judicial review of Commission findings and conclusions on questions of fact are final, with limited exceptions."[188]

It would be unreasonable for the Applicants to impose the cost of a blatantly unnecessary project such as the North-South Project on ratepayers. Thus, the Commission should not grant the Applicants' request to recover the cost of the project on a rolled-in basis through BTS rates.

A. If the Applicants Are Permitted to Proceed with the North-South Project, They Should be Required to Recover the Cost on an Incremental, "Let-The-Market-Decide" Basis.

Given that the North-South Project is unnecessary and that recovery through BTS rates a proposed by the Applicants would be unreasonable, if the Applicants are permitted to proceed with the Project, they should be permitted to proceed only if the revenue requirement for the Project is kept separate from the Applicants' general revenue requirement and is billed separately through rates charged only to Project participants that contractually agree to bear North-South Project costs on a "let-the-market-decide" basis.

It is quite conceivable that the North-South Project would have potential to attract shippers who would contract for North-South transportation service on an incrementally priced basis. Completion of the North-South Project, combined with completion of Line 3602 in SDG&E's service territory, would create a north-to-south transmission path consisting of the new 36-inch North-South Pipeline from Adelanto to Moreno, the existing Rainbow Corridor capacity from Moreno to Rainbow, the new 36-inch Line 3602 from Rainbow to Santee, and the

[187] D.96-09-037, 1996 Cal. PUC LEXIS 904; 68 CPUC2d 7 at *15-16 (September 4, 1996).

[188] *Ibid.*

existing 36-inch pipeline from Santee to Otay Mesa at the U.S.-Mexico border.[189] Such a transmission corridor would enable natural gas to be delivered on a firm basis across the Applicants' backbone transmission systems and exported to Baja California through Otay Mesa for ultimate delivery to points in Mexico.

B. The North-South Project and Line 3602 Path Would Have Adequate Capacity to Serve Mexico.

Witness Bisi said: "SCGC's fear regarding the North-South Project's ability to transport supplies to Mexico are unwarranted."[190] Witness Bisi explained: "There is simply not enough capacity created by the North-South Project to meet the needs of the Southern System and also provide service to customers in Mexico."[191] However, witness Bisi admitted that if SoCalGas built the North-South Project and continued to use existing measures such as baseload contracts, MILCs and spot purchases to meet the Southern System minimum flow requirement, then capacity made available through construction of the North-South Project in conjunction with construction of Line 3602 would be available to serve Mexico.[192] The Applicants' witness Marelli testified that the Applicants intend to retain their existing authority to procure minimum flowing supplies for the Southern System.[193]

The ultimate delivery points for gas transported to Mexico could include an LNG export facility at the Sempra LNG Costa Azul terminal in Baja California.[194] The Applicants parent, Sempra Energy, is clearly contemplating installing a natural gas liquefaction facility at Costa Azul to permit exports of natural gas abroad. On February 19, 2015, Sempra Energy "announced

[189] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 13

[190] Ex. SCG-18, Bisi Rebuttal Testimony on Ratesetting, p. 8.

[191] *Ibid.*

[192] Tr. 737-738 (Applicants/Bisi).

[193] Ex. SCG-2, Marelli Updated Direct Testimony, p. 25.

[194] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 13.

that its IEnova and Sempra LNG units have signed a Memorandum of Understanding (MOU) with a subsidiary of PEMEX, Mexico's state-owned petroleum company, for the cooperation and coordination in developing of natural gas liquefaction project at the site of the Energia Costa Azul receipt terminal in Ensenada, Mexico."[195] The 36-inch pipeline corridor that would be created by the construction of the North-South Project in conjunction with the construction of Line 3602 could be used to export gas through Otay Mesa for redelivery to Costa Azul as well as to serve EG plants in Mexico.[196]

C. There Is Commission Precedent for Permitting a Utility to Build a Project on a Let-the-Market-Decide Basis With Incremental Rate Recovery.

There is Commission precedent for permitting a utility to build a project on a "let-the-market-decide" basis with incremental rate recovery. When Pacific Gas & Electric Company ("PG&E") proposed to build its Line 401 expansion project in the 1990's, the Commission declined to find that existing ratepayers had a need for the project, but the Commission permitted PG&E to proceed with the project with recovery of costs through incremental rates charged to customers that chose to contract for capacity on the expansion facilities.[197] The Commission also permitted SoCalGas to proceed with its Wheeler Ridge expansion project with recovery of the cost of Wheeler Ridge compressors through incremental rates charged to customers that contracted for capacity through the expansion facility.[198]

[195] http://sempra.mediaroom.com/index.php?s=19080&item=137010

[196] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 13.

[197] D.91-06-017, Findings of Fact 11, 12.

[198] D.93-02-055, Findings of Fact 2, 3.

IX. IF THE COMMISSION WERE TO PERMIT THE APPLICANTS TO PURSUE THE NORTH-SOUTH PROJECT AND TO RECOVER THE COSTS ON A ROLLED-IN BASIS, CONTRARY TO SCGC'S RECOMMENDATION, THE APPLICANTS SHOULD BE REQUIRED TO WAIT TO RECOVER ANY PROJECT COSTS UNTIL AFTER A REASONABLENESS REVIEW IN THE APPLICANTS' GENERAL RATE CASE FOLLOWING COMPLETION OF THE PROJECT.

If, contrary to SCGC's recommendation, the Applicants were permitted to proceed with the North-South Project and to recover the costs on a rolled-in rather than incremental ratemaking basis, the recovery of the costs of the completed project should be deferred until after being reviewed for reasonableness in the Applicants' GRC following the date that the North-South Project is placed in service. A GRC reasonableness review would provide the Commission with an opportunity to determine whether the Project is needed before burdening ratepayers with the cost of the Project and would ensure that the costs incurred by the Applicants in completing the Project were reasonable before the costs would be recovered in rates.[199]

The Applicants routinely construct pipeline additions or expansions between GRC test years, with the cost of the capital additions being included in the rate base adopted in the subsequent GRC.[200] For example, SoCalGas acquired what is now Line 6916 to transport gas from the Northern System to the Southern System, with the cost of acquiring and refurbishing Line 6916 being added to SoCalGas' Test Year 2012 rate base through a GRC.[201]

[199] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 14.

[200] *Ibid.*

[201] D.13-05-010, p. 438 (May 9, 2013).

X. IF, CONTRARY TO SCGC'S RECOMMENDATION, THE COMMISSION PERMITS SOCALGAS TO PROCEED WITH THE NORTH-SOUTH PROJECT AND TO RECOVER NORTH-SOUTH PROJECT COSTS IN INTERIM RATES PRIOR TO THE GENERAL RATE CASE FOLLOWING PROJECT COMPLETION, THE COMMISSION SHOULD REJECT THE APPLICANTS' PROPOSAL TO INCLUDE THE "FULL COST" OF THE PROJECT IN THE INTERIM RATES.

If, contrary to SCGC's recommendation, the Commission permits the Applicants to proceed with the North-South Project and to recover the cost of the project in BTS rates prior to the Applicants' GRC that follows project completion, the Commission should nevertheless reject the Applicants' proposal to include the "full cost" of the Project in rates after the assets are placed in service and an advice letter is approved as proposed by Applicants' witness Yee.[202] Instead, the Commission should follow precedent for the rate treatment of large capital additions and limit recovery of Project costs through interim rates to the amount of savings created by the Project.

The Commission allowed utilities to establish Major Additions Adjustment Clause ("MAAC") balancing accounts during the 1980s to record the revenue requirement of projects such as the San Onofre Nuclear Generating Station ("SONGS") between the date when the projects were placed in service and the date the cost of the projected were reflected in rates through a GRC.[203] The Commission permitted the utilities to recover costs recorded in a MAAC balancing account on an interim basis prior to a GRC and a reasonableness review, but the Commission limited interim rate recovery to the level of cost savings generated by the project.[204] For example, the Commission allowed both Southern California Edison Company ("SCE") and SDG&E to start recovering SONGS costs included in a MAAC balancing accounts, but the Commission limited rate recovery to an amount equal to the reduction in fuel costs that resulted

[202] Ex. SCG-8, Yee Updated Direct Testimony, p. 4.

[203] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 16.

from placing SONGS in service.[205] Thus, the utilities' rates remained relatively flat after SONGS was placed in service, although a limited amount of rate recovery for SONGS was allowed. A similar approach was used by PG&E for the Diablo Canyon Nuclear Plant.[206]

In the case of the North-South Project, the cost savings associated with placing the North-South Project being placed in service would be the incremental cost to the core associated with the MILC, the SRMA revenue requirement, and the cost of any discounting of BTS service from Ehrenberg.[207] The cost savings could be calculated on the basis of the cost of maintaining Southern System reliability using existing tools for the most recent twelve month period for which data is available prior to the date on which interim rates would become effective.[208]

XI. THE COMMISSION SHOULD DENY THE APPLICANTS' REQUEST TO RECORD AND RECOVER INCREMENTAL PRE-STARTUP O&M AND INCREMENTAL POST-STARTUP O&M THROUGH THE PROPOSED NSIMA.

The Applicants propose to establish a new SoCalGas North-South Infrastructure Memorandum Account ("NSIMA").[209] The NSIMA would serve to record operations and maintenance ("O&M") expenses incurred to complete the North-South Project and, also, post-startup "incremental O&M expenses to be incurred subsequent to completion of the project."[210] Neither pre-startup O&M nor post-startup O&M should be permitted to be recorded in the proposed NSIMA.

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[204] *Ibid,* p. 17.

[205] *Ibid.*

[206] *Ibid.*

[207] *Ibid,* p. 18.

[208] *Ibid.*

[209] Ex. SCG-7, Ahmed Updated Direct Testimony, p. 1.

[210] *Ibid,* p. 2.

The pre-startup O&M expenses are "primarily for office space and other office related cost."[211] The Applicants' witness Yee said that it would be contrary to "company policy" to capitalize the costs because the costs would be "incurred by North-South Project back office employees rather than by North-South Project construction crews or by employees who provide general support to SoCalGas operations (the distinction is the latter can add should be capitalized)."[212] In that case, however, the costs should be considered to be part of the Applicants' overhead.

The cost of overheads is included in the factors used to gross up the cost of labor and non-labor direct expenses used for the North-South Project, and the Applicants will recover their overheads through the loaders that are applied by witness Yee.[213] The Applicants should not be permitted to both fully load North-South Project costs as proposed by witness Yee and to simultaneously directly charge overhead office costs of by recording the costs in the NSIMA.

The Commission should also reject the Applicants' proposal to include incremental post-startup O&M in the NSIMA. The Applicants should be required to manage post-startup costs of the new North-South facilities just as they manage O&M for all of their other transmission activities.[214] The Commission denied recovery of post-startup O&M through the MAAC balancing accounts, and for good reason. The Commission did not allow balancing account treatment of O&M costs for either SONGS or Diablo Canyon because "an open-ended balancing account gives a utility no incentive to control costs within the limits of a fixed budget."[215]

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[211] Ex. SCG-3, Buczkowski Updated Direct Testimony, p. 16.

[212] Ex. SCG-19, Yee Rebuttal Testimony on Ratesetting, p. 4.

[213] Ex. SCG-8, Yee Updated Direct Testimony, p. 3.

[214] Ex. SCGC-Yap Direct Testimony on Ratesetting, p. 20.

[215] D.83-09-007, p. 40.

XII. IF THE COMMISSION WERE TO APPROVE THE NORTH-SOUTH PROJECT WITH RECOVERY OF COSTS ON A ROLLED-IN BASIS, THE COST OF THE PROJECT SHOULD BE CAPPED.

Both ORA and TURN recommend imposing the cost cap on the cost of the North-South Project.[216] SCGC concurs with the ORA/TURN recommendation. If the Applicants were only allowed to pursue the Project on an incremental, let-the-market-decide basis, a cost cap would not be necessary because the Applicants' need to compete for customers would place downward pressure on North-South Project costs.[217] Thus, the market would impose cost discipline on the Project.[218] However, if the Commission were, contrary to SCGC's recommendations, to authorize the Applicants' to pursue the Project on a rolled-in basis, a cap should be established on the basis of the Applicants forecasted costs, less any disallowances that might be required by the Commission.

XIII. CONCLUSION.

For the reasons set forth herein, SCGC respectfully request the Commission to adopt the recommendations herein and in the foregoing Summary of Recommendations.

Respectfully submitted,

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Dated: September 25, 2015

[216] Ex. ORA-2, Sabino Direct Testimony, p. 76; Ex. TURN-2, Emmrich Direct Testimony on Cost Allocation Rates, p. 2.

[217] Ex. SCGC-3, Yap Rebuttal Testimony on Ratesetting, p. 6.

[218] *Ibid.*

ATTACHMENT B

SCGC REPLY BRIEF

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Southern California Gas Company (U 904 G) and San Diego Gas & Electric Company (U 902 G) For Authority To Recover North-South Project Revenue Requirement In Customer Rates And For Approval Of Related Cost Allocation And Rate Design Proposals	A.13-12-013

SOUTHERN CALIFORNIA GENERATION COALITION REPLY BRIEF

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SUMMARY OF RECOMMENDATIONS

The Southern California Generation Coalition ("SCGC") respectfully submits the following recommendations:

- The Commission should reject the proposal by the Southern California Gas Company ("SoCalGas") and San Diego Gas and Electric Company ("SDG&E") (jointly, "Applicants") to construct the North-South Project insofar as the Project is unnecessary to address the threats that the Applicants allege could prevent the Applicants from meeting the minimum flow requirement on the Applicants' Southern System and would be vastly more costly for ratepayers than, particularly, non-physical alternatives.
- If, contrary to SCGC's recommendation, if the Commission were to prefer a physical solution for the Southern System minimum flow problem, the Commission should direct the Applicants to reconsider their design criteria to determine the amount of capacity needed to meet the Southern System minimum flow requirement.
- If, contrary to SCGC's recommendation, if the Commission were to decide that a physical solution rather than a suite of non-physical alternatives is preferable to address the Southern System minimum flow requirement, the Commission should direct the Applicants to consider the physical solutions that are offered by several interstate pipeline and direct the Applicants to either conduct an open season or to negotiate with the interested interstate pipeline that offers safe and reliable service at the lowest reasonable cost because the physical alternatives proposed by interstate pipelines would provide greater flexibility to adjust to accommodate

future circumstances than the North-South Project and would avoid burdening ratepayers with stranded costs.

- If, contrary to SCGC's recommendation, the Commission were to desire a physical solution to the Southern System minimum flow requirement that would be on the SoCalGas system rather than on a interstate pipeline system, there is a on-system alternative to the North-South Project that the Applicants fail to mention but which should be considered.
- Insofar as the North-South Project is unnecessary, if the Applicants are nevertheless permitted to proceed with the Project, the cost of the Project should not be recovered on a rolled-in basis from the general body of ratepayers but, instead, should be recovered on a "let-the-market-decide" basis with incremental rates being charged to customers that contract for capacity, most likely in conjunction with capacity on Line 3602 and other pipeline segments that would provide a 36-inch pipeline path from Adelanto to Otay Mesa at the U.S.-Mexico international border for export to Mexico.
- If the Commission were to permit the Applicants to pursue the North-South Project and to recover the costs on a rolled-in basis contrary to SCGC's recommendation, the Applicants should be required to wait to recover any North-South Project costs until after a reasonableness review in the Applicants' General Rate Case ("GRC") following completion of the Project.
- If, contrary to SCGC's recommendation, the Commission permits SoCalGas to proceed with the North-South Project and to recover the cost in rates prior to the GRC following Project completion, the Commission should reject the Applicants' proposal to recover the "full cost" of the Project through the interim rates by

limiting the Applicants' rate recovery to the amount of savings that ratepayers would realize from placing the North-South Project in operation.

- The Commission should deny the Applicants' request to record and recover incremental pre-startup operation and maintenance ("O&M") costs and incremental post-startup O&M costs through the proposed North-South Project Infrastructure Memorandum Account.
- If the Commission were to approve the North-South Project with recovery of costs on a rolled-in basis, the costs of the project should be capped.

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Southern California Gas Company (U 904 G) and San Diego Gas & Electric Company (U 902 G) For Authority To Recover North-South Project Revenue Requirement In Customer Rates And For Approval Of Related Cost Allocation And Rate Design Proposals	A.13-12-013

SOUTHERN CALIFORNIA GENERATION COALITION REPLY BRIEF

In accordance with Rule 13.11 of the Rules and Procedure of the California Public Utilities Commission ("Commission")[1] and the Order of Administrative Law Judge Karl J. Bemesderfer,[2] the Southern California Generation Coalition ("SCGC") respectfully submits this reply brief on issues raised by the Southern California Gas Company ("SoCalGas") and San Diego Gas and Electric Company ("SDG&E") (jointly, "Applicants") in their opening brief in this proceeding. This reply brief also addresses several points raised by The Utility Rate Normalization ("TURN") in its opening brief. SCGC addresses the issues generally in the sequence in which the issues were raised in the opening briefs.

I. INTRODUCTION.

The opening briefs filed in this proceeding demonstrate that, overwhelmingly, problems with maintaining minimum flows through the SoCalGas interconnection with the El Paso Natural Gas Company ("El Paso") at Ehrenberg are the result of economic forces rather than physical

[1] 20 Cal. Code of Reg. § 13.11.

[2] Transcript ("Tr.") 990.

impediments on the El Paso system. El Paso delivers gas to Ehrenberg at a 99.85 percent reliability level.[3] However, SoCalGas permits its customers to deliver gas into the SoCalGas system at any of its receipt points regardless of whether the receipt point is on the Southern System or the Northern System.[4] Thus, customers on the Southern System may elect to receive lower priced gas through receipt points other than Ehrenberg. Consequently, the deliveries through Ehrenberg can fall below the level of demand on the Southern System minus the amount of flowing supplies that SoCalGas is able to flow from its Northern System to its Southern System, in which case the Applicants' System Operator needs to obtain deliveries through Ehrenberg to meet the Southern System minimum flow requirement.[5]

Given that the minimum flow problem for the Southern System primarily results from customers seeking to deliver gas through receipt points other than Ehrenberg for economic reasons, non-physical solutions are appropriate for addressing the need to deliver supplies to meet the Southern System minimum flow requirement. The Applicants have met the Southern System minimum flow requirement successfully through the non-physical tools that are currently available to them. Those tools are, primarily, Memoranda In Lieu of Contracts ("MILCs") between the Applicants' System Operator and the Applicants' Gas Acquisition Department to meet the minimum flow requirement associated with core demand on the Southern System, baseload contracts to meet the minimum flow requirement associated with noncore demand on the Southern System, occasional spot purchases, and discounts for backbone transmission service on the Southern System to encourage deliveries at Ehrenberg.

Those tools have served to meet the minimum flow requirement on the Southern System at what is now a declining cost. The cost of maintaining minimum flows at Ehrenberg hit a peak

[3] Exhibit ("Ex.") EP-1, Sanabria Direct Testimony, p. 9 (Table 2); Tr. 882 (Applicants/Chaudhury).

[4] Ex. SCG-2, Marelli Updated Direct Testimony, p. 2.

of $20.0 million for the twelve months September, 2012, through August, 2013.[6] Total costs declined to $15.9 million for the twelve months September, 2013, through August, 2014,[7] and declined again, precipitously, to $4.7 million for the twelve months September, 2014, through August, 2015.[8]

Even assuming the $20 million cost of meeting the Southern System minimum flow requirement which was recorded for the twelve month period September, 2012, through August, 2013, the current non-physical tools for meeting the Southern System minimum flow requirement are extremely cost effective when compared to the enormous cost that would be imposed on ratepayers if the North-South Project were constructed and the associated revenue requirement were included in rates. The Applicants estimate that the annual revenue requirement for the first year in which the North-South Project is projected to be operational, 2020, will be $133.6 million,[9] nearly seven times the $20 million peak cost of using the current non-physical tools for meeting the Southern System minimum flow requirement and a staggering 28 times the $4.7 million cost recorded for the most recent reported period, September, 2014, through August, 2015. The cumulative North-South Project revenue requirement that would be imposed on ratepayers through 2096 would be $2.782 billion.[10]

Insofar as the North-South Project would be part of the Applicants' Backbone Transmission System, the cost of the Project would be recovered through the Applicants' rate for Backbone Transmission Service ("BTS").[11] For the first year in which the North-South Project

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[5] *Ibid*, pp. 1-2.

[6] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 6, Table 1.

[7] *Ibid.*

[8] SoCalGas Advice No. 4866-A, p. 3 (October 1, 2015).

[9] Ex. SCG-8, Yee Updated Direct Testimony, p. 3, Table 3.

[10] Ex. SCG-8, Yee Updated Direct Testimony, p. 4, Table 5.

[11] Ex. SCG-9, Bonnett Updated Direct Testimony, p. 1.

would be operational, 2020, the BTS rate would increase by 81 percent to reflect the inclusion of the North-South Project costs.[12] This rate increase would apply to the transportation of every therm of gas that flows through the Backbone Transmission System to the Applicants' Citygate for redelivery to core and noncore customers alike.

The Applicants clearly realize that their physical solution to the Southern System minimum flow requirement, the North-South Project, is vastly less cost effective than either the current or potential future non-physical solutions. They make no attempt whatsoever to present any cost-benefit analysis of the North-South Project. Instead, they claim in their opening brief that increasing the reliability of service to Southern System customers is the "primary reason" for proposing the North-South Project.[13] They say that having a single pipeline, El Paso, supplying the Southern System "is the crux of the problem."[14]

The Applicants do not contest the 99.85 percent reliability level for deliveries through El Paso to Ehrenberg. Instead, they point to a single *force majeure* event that occurred on February 1-5, 2011, when extremely cold weather east of California caused well "freeze offs" upstream of the El Paso System, resulting in a curtailment of Southern System noncore load.[15] SCGC witness Yap demonstrated, however, that even using extremely conservative assumptions, the frequency of freeze offs that affect the Applicants' system is about 1-in-30 years.[16] Thus, the North-South Project cannot be justified as a means to maintain service to noncore customers, given the Commission's 1-in-10 cold year core plus noncore firm service planning standard.[17] The Project comes closer to being justified under the Commission's 1-in-35 cold year standard

[12] *Ibid*, p. 2.

[13] Applicants Opening Brief, p. 39.

[14] *Ibid*, p. 43.

[15] *Ibid*, pp. 21-22.

[16] Ex. SCGC-1, Yap Updated Direct Testimony, pp. 26-27.

for core service,[18] but there are much less expensive options for maintaining service to the core in the event of an occurrence as rare as a freeze off that affects the Applicants' system. Thus, if the North-South Project is to be considered as physical solution to a physical reliability problem, the Project is still not cost effective and should be rejected.

In this reply brief, SCGC addresses various ill-founded arguments by the Applicants that there is a need for the North-South Project. After addressing and rebutting the Applicants' claims about need, SCGC addresses the Applicants' ratesetting requests, although SCGC urges the Commission to reject the North-South Project, obviating any need to address ratesetting issues.

Additionally, SCGC addresses several non-physical alternatives to the North-South Project that are presented by TURN. SCGC appreciates that TURN, like SCGC, strongly opposes the North-South Project. SCGC also understands that TURN, like SCGC, presented alternatives to demonstrate that there are non-physical alternatives to the North-South Project that are much more economic for ratepayers than the North-South Project. It would go beyond the scope of this proceeding for the Commission to decide upon the non-physical alternatives that are presented by, primarily, SCGC, TURN, and the Office of Ratepayer Advocates ("ORA").[19] However, SCGC addresses some of the non-physical alternatives that TURN raises out of an abundance of caution that the Commission may reach beyond the North-South Project to rule upon additional tools to address the Southern System minimum flow requirement. Also, SCGC addresses a rate-related issue raised by TURN.

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[17] D.02-11-073, p. 31 (November 21, 2002).

[18] *Ibid.*

[19] Assigned Commissioner's Scoping Memo and Ruling, p.13 (May 5, 2014).

II. RESPONSES TO THE APPLICANTS' ALLEGATIONS OF NEED FOR THE NORTH-SOUTH PROJECT.

The largest portion of the Applicants' opening brief attempts to make a case that there is a need for the North-South Project. The Applicants fail to make any convincing arguments that there is a need in light of the vastly more cost effective alternatives to meeting the Southern System minimum flow requirement. SCGC discusses the Applicants' arguments, for the most part, in the sequence in which the arguments arise in the Applicants' opening brief.

A. Gas from the Honor Rancho Storage Field Can Be Delivered to the Southern System.

The Applicants contend in their opening brief as well as in their testimony that there is a need for the North-South Project because the Southern System "does not have access to our storage fields" without the North-South Project.[20] However, when the Applicants were asked to "describe the path that gas withdrawn from Honor Rancho would have to take in order to reach the Chino and Prado crossovers and ultimately Moreno Station," the Applicants answered: "Gas withdrawn from Honor Rancho for delivery to Moreno Station via the Chino and Prado crossover stations would utilize Transmission Lines 2000, 225, 4000, 1185, 235, 4002, 335, and 2001,"[21] clearly implying that Honor Rancho storage gas can be delivered currently to the Southern System.

If the pipelines that are identified in the data response are put in a proper geographic sequence from the Honor Rancho storage field in the North to Moreno in the South, the sequence would be:

- Line 225 from Honor Rancho to Quigley,
- Lines 335 and 235 from Quigley to Adelanto,

[20] Applicants Opening Brief, p. 13; Ex. SCG-2, Marelli Updated Direct Testimony, p. 2.

[21] Ex. SCGC-16, p. 6.

- Line 1185 south from Adelanto to an interconnection with Lines 4000 and 4002 at Cajon,
- Lines 4000 and 4002 from Cajon to interconnections with Lines 2001 and 2000 at the Chino and Prado valve stations respectively. Chino is a valve station where Lines 4000 and 4002 cross Line 2001. Prado is a valve station south of Chino where Lines 4000 and 4002 cross Line 2000.[22]
- Line 2001 from Chino to Moreno and Line 2000 from Prado to Moreno.[23]

The path from the Honor Rancho storage field over Line 225 to Quigley and then Lines 335 and 235 from Quigley to Adelanto would be precisely the same path that would be utilized to transport Honor Rancho storage gas to the Adelanto Compressor Station and the proposed North-South Pipeline northern terminus at Adelanto.

Under the Applicants' proposal, in addition to following the Adelanto-Cajon-Chino/Prado-Moreno path from Adelanto to Moreno, gas withdrawn from Honor Rancho could flow across the North-South Pipeline from Adelanto to Moreno. Hence, the Applicants' witness Bisi saw the North-South Project as equivalent to looping Lines 4000 and 4002 in conjunction with looping Line 1185 between Adelanto and Cajon and looping Line 2001 between Chino and Moreno: "I sort of see though the North-South Project is that looping of Line 4000 and 4002 that you are asking about."[24]

[22] Ex. SCGC-17.

[23] Tr. 700-702 (Applicants/Bisi); Ex. SCGC-17, 6-02 Map of SoCalGas Facilities.

[24] Tr. 717 (Applicants/Bisi).

B. The Applicants Attempt to Understate the Degree to Which the Cost of Using Currently Effective Tools for Meeting the Southern System Minimum Flow Requirement Has Declined, Making the Use of Non-Physical Solutions Even More Cost Effective in Comparison to the North-South Project.

The Applicants claim that the cost of supporting the Southern System, calculated as being the cost recorded in the System Reliability Memorandum Account ("SRMA") plus the cost of BTS discounts, was "roughly doubling every year since the transfer of support responsibility from Gas Acquisition to the System Operator in April of 2009 – from $2.2 million in 2009-10 to $20 million in 2012-13."[25] The Applicants then say: "Southern System requirements leveled off in 2014 and 2015."[26] That is a colossal understatement.

Instead of "leveling off," the cost of meeting the Southern System minimum flow requirement by using the current tools has plummeted from $20.0 million for the twelve months September, 2012, through August, 2013, to $15.9 million for the twelve months September, 2013-2014, and to $4.7 million of the twelve months September, 2014, through August, 2015.[27] The $4.7 million expense for the most recent reported period is only 3.5 percent of the estimated $133.6 revenue requirement for the North-South Project in its first year of operation.

Even if the cost experienced for the twelve months September, 2012, through August, 2013, $20.0 million, were seen as being the cost of using non-physical alternatives to the North-South Project, the cost of using non-physical alternatives would be only 15 percent of the estimated $133.6 million first year revenue requirement of the North-South Project. The current non-physical tools for maintaining Southern System minimum flows are vastly more cost-effective than the Applicants' proposed physical solution.

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[25] Applicants Opening Brief, p. 15.

[26] *Ibid,* p. 16.

[27] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 6 (Table 1); Advice No. 4866-A, 2015 Annual Compliance Report on Utility System Operators Southern System Reliability Purchase and Sales (September 1, 2014 through August 31, 2015), p. 2.

C. Increased Supplies Will Be Available to Serve California as Well as Mexico and East of California Customers on the El Paso South Mainline.

The Applicants contend that "substantial future flows to Mexico over the El Paso South Mainline will further reduce flows to Blythe."[28] This contention has no merit. First, as SCGC discussed in its opening brief, increased deliveries into Mexico to date have not resulted in a decrease of deliveries of gas into the SoCalGas system at Ehrenberg.[29] To the contrary, as shown by a graph produced by witness Yap, deliveries from El Paso into the SoCalGas system at Ehrenberg increased in 2014 in comparison to both 2012 and 2013 even though deliveries to Mexico also increased,[30] and the Applicants' witness Chaudhury agreed.[31]

Second, the projected increase in gas production in the Permian Basin, which is connected directly to the El Paso South Mainline, will be sufficient to meet the increasing demand for gas off of the El Paso South Mainline for delivery to Mexico.[32]

Third, as witness Chaudhury agreed, the reversal of flow on the Tennessee Gas Pipeline to bring shale gas from northern states to Texas will make additional gas supplies available to Mexican markets and, also, will tend to push Permian Basin gas west to El Paso's traditional Arizona and California customers as well as to Mexico.[33]

Lastly, as witness Chaudhury admitted, Mexico passed a constitutional reform in December, 2013, that will allow foreign companies to share profits with PEMEX and to explore and drill for oil and gas in Mexico, providing "PEMEX with some of the expertise and

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[28] Applicants Opening Brief, p. 17.

[29] SCGC Opening Brief, pp. 7-8.

[30] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 10 (Figure 3).

[31] Tr. 855 (Applicants/Chaudhury).

[32] SCGC Opening Brief, pp. 8-9.

[33] *Ibid,.* pp. 9-11; Tr. 860 (Applicants/Chaudhury).

equipment to properly extract its natural gas resources instead of having to rely on imports from the United States."[34]

Thus, for all of these reasons, the Applicants' claim that Mexican demand for imported gas from the United States will diminish supplies available to California should be given no credence.

D. The Applicants' Attempt to Characterize Non-Physical Solutions to the Minimum Flow Requirement as a "Short Term Approach" Ignores the Potential For Making the Non-Physical Solutions Longer-Term and, More Importantly, Ignores the Flexibility Inherent in Using the Non-Physical Solutions in Comparison to the Inescapable Long-Term Cost Burden that the North-South Project Would Impose On Ratepayers.

The Applicants repeatedly attempt to characterize tools such as the MILCs to meet minimum flow requirements for core customers and baseload contracts to meet minimum flow requirements for noncore customers as "short-term approaches" which should be replaced with a "long-term solution [that] can only be accomplished through a physical solution" like the North-South Project.[35] The Applicants completely ignore the fact that non-physical solutions such as the MILCs and baseload contracts could be extended to have terms longer than one year, as discussed by SCGC witness Yap.[36] Witness Yap also suggested a non-physical solution to the minimum flow requirement that would involve having the Applicants' System Operator hold contracts for capacity on the El Paso South Mainline for periods of three to five years with Rights of First Refusal ("ROFR") to ensure that the System Operator would continue to have El Paso capacity available into the future.[37] Thus, non-physical solutions clearly could have longer terms.

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[34] SCGC Opening Brief, pp. 10-11; SCG-14, Chaudhury Rebuttal on the Alternatives, p. 7.

[35] Applicants Opening Brief, pp. 27-28.

[36] Ex. SCGC-1, Yap Updated Direct Testimony, pp. 14-15.

[37] *Ibid*, p. 16.

More importantly, the fact that non-physical solutions are not necessarily long-term is a distinct advantage of the non-physical solutions over the North-South Project. The North-South Project would be a fixed asset that would have a long life, burdening ratepayers through the year 2096 and costing ratepayers a cumulative $2.782 billion.[38] By contrast, the use of non-physical solutions including both current tools and additional tools as suggested by witness Yap could be adjusted as circumstances warrant.

It is quite likely that circumstances will change to reduce the minimum flow requirement, ultimately making the North-South Project an enormous stranded cost burden on ratepayers. First, although the Southern System minimum flow requirement increased in 2012 and 2013 from relatively flat previous levels largely due to the outage of the San Onofre Nuclear Generating Station ("SONGS"),[39] the average Southern System minimum flow requirement has declined since 2013, and deliveries into the Southern System have increased, as shown by SCGC witness Yap's Figure 1.[40] These are the phenomena that have resulted in the dramatic 77 percent plunge in the cost of using the non-physical solutions to meet the Southern System minimum flow requirement from $20.0 million for the twelve months September, 2012, through August, 2013, to $4.7 million for the twelve months September, 2014, through August, 2015.

Second, looking into the future, policies have been adopted in California to depress the consumption of fossil fuels including natural gas. Senate Bill ("SB") 350 (De Leon) was passed by both the California State Senate and the California State Assembly on September 11, 2015, and was signed by Governor Brown and chaptered on October 7, 2015.[41] SB 350 mandates a

[38] Ex. SCG-8, Yee Updated Direct Testimony, p. 4.

[39] Ex. SCG-2, Marelli Updated Direct Testimony, pp. 6-7.

[40] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 9 (Figure 1). *See* SCGC Opening Brief, pp. 27-29.

[41] Governor Brown Signs New Energy Law, Los Angeles Times, p. B1 (October 7, 2015); Chapter. 547, Statutes. of 2015.

Renewal Portfolio Standard ("RPS") of 50 percent and a doubling of energy efficiency savings by 2030. SCGC witness Yap performed a study of the potential impact of SB 350. She found that by 2030 "more than half of the Southern System requirements would be eliminated."[42]

California policies to reduce greenhouse gas ("GHG") are also likely to depress demand for natural gas on the Southern System as well as across California. The California Global Warming Solutions Act of 2006, Assembly Bill ("AB") 32, mandates a reduction in California GHG emissions to the 1990 level by 2020. [43] A bill that is currently pending in the California Legislature, SB 32 (Pavley), would require the California Resources Board ("CARB") to approve a statewide 2030 GHG emissions limit that is 40 percent below the 1990 level.

The Applicants' failure to recognize the potential impact of California policies such the RPS and the limitations on GHG emissions results in the Applicants failing to recognize the very real potential for the North-South Project to become an extremely costly stranded asset far before the end of its useful life.

E. The Applicants' Claim that the "Crux of the Problem" Is that There Is a "Single Pipeline Source" for Southern System Does Not Justify the North-South Project.

Given that their argument that Mexican deliveries will reduce supplies at Ehrenberg is not convincing, and given that non-physical solutions are far more cost effective than the North-South Project as a solution to the minimum flow requirement, the Applicants turn to what they call their "primary reason" for proposing the North-South Project: reliability of supply to the Southern System in the event of an upstream *force majeure* event.[44] They say: "All of the existing tools for dealing with Southern System reliability problems are saddled with the same

[42] Ex. SCGC-3, Yap Rebuttal Testimony on Ratesetting, p. 9; *see* SCGC Opening Brief, p. 33.

[43] Chapter 488, Statutes of 2006.

[44] Applicants Opening Brief, p. 39.

single pipeline source constraint that exists today, which is the crux of the problem."[45] The Applicants point to a February 1-5, 2011, event in which "extremely cold weather East of California caused well freeze offs upstream of the SoCalGas system"[46] that resulted in a curtailment of Southern System load.[47]

SCGC addressed the February, 2011, freeze up in its opening brief.[48] The February, 2011 freeze up was an exceptionally severe weather event. The System Operator was unable to obtain sufficient gas supplies to meet Southern System minimum flow requirements, resulting in a 200 MMcf/d curtailment of noncore usage on the Southern System on February 3, 2011.[49] Ironically, while the Applicants point to the February, 2011 event as the primary reason for the North-South Project, they admit that the North-South Project would not have prevented the February 3, 2011 curtailment on the Southern System:

> With respect to the testimony on Page 8 lines 11-21 and page 9, lines 1-4, SoCalGas and SDG&E do not believe that either the North-South pipeline or deliveries from Honor Rancho would have been able to support the Southern System on February 2 and 3, 2011. SoCalGas and SDG&E were short of supply across their entire system during that event, and there were no supplies available on its Northern System to transport to the Southern System.[50]

1. There Is at Most a 1-in-30 Chance that a Well Freeze-Up Event Would Affect the Applicants' System.

The Applicants made no attempt whatsoever to identify the frequency of events that affected the Applicants' system like the February, 2011 freeze up. SGCG witness Yap did.

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[45] Applicants Opening Brief, p. 43.

[46] *Ibid,* p. 21.

[47] *Ibid,* p. 22.

[48] SCGC Opening Brief, pp. 20-23.

[49] Ex. SCGC-1, Yap Updated Direct Testimony, p. 25.

[50] Ex. SCGC-1, Yap Updated Direct Testimony, Attachment E, Applicants Response to Data Request SCGC-10, Q.10.1.

Witness Yap's research showed that freeze ups occurred to varying degrees in various locations in the Rocky Mountain, New Mexico, Texas, and Gulf Coast production areas during 1983, 1989, 2003, 2006, 2008, and 2010 as well as in February, 2011. Witness Yap researched each of those events to determine whether there was any impact on the SoCalGas system. The 1989, 2003, 2006, 2008, and 2010 events did not have any significant impact on the deliveries of gas supplies through Ehrenberg.[51] Insofar as SoCalGas no longer has daily operating data available for 1983, it was not possible for witness Yap to determine if the 1983 freeze up had any impact on deliveries at Ehrenberg. Accordingly, she made the extremely conservative assumption that there was an impact. Based on that assumption, she came to the conclusion that freeze-ups that affect Ehrenberg deliveries occur only about once every three decades.[52] Of course, if data were available showing no impact on Ehrenberg deliveries during the 1983 event, her conclusion would have been that freeze-ups affect Ehrenberg deliveries even less frequently.

Thus, the Applicants are proposing a Project having $621.3 million direct cost,[53] a fully loaded and escalated cost $855.5 million,[54] and a cumulative revenue requirement over the life of the Project of $2.782 billion[55] to address a type of event that has an impact on the SoCalGas system only about once in thirty years and perhaps even less frequently. The Applicants make absolutely no effort to do a cost-benefit analysis of building a very expensive North-South Project to address the impact of an event that has a very low probability of reoccurring.

[51] Ex. SCGC-1, Yap Updated Direct Testimony, p. 27.

[52] *Ibid.*

[53] Ex. SCG-3, Buczkowski Updated Direct Testimony, p. 5.

[54] Ex. SCG-8, Yee Updated Direct Testimony, p. 3.

[55] *Ibid,* p. 4.

2. Purchasing Gas in Mexico for Delivery into the Applicants' System at Otay Mesa Would Be Much More Economic than the North-South Project to Address the Rare Well Freeze-Up Event that Affects the Applicants' System.

Worst yet, the Applicants did not recognize the potential to serve Southern System load in the event of another *force majeure* event by buying gas from Mexico, most likely from the Costa Azul LNG import terminal in Baja California near Ensenada, for delivery into the Applicants' system at the Otay Mesa interconnection point at the U.S.-Mexico international border. Costa Azul has been in operation since 2008 and can process up to 1 Bcf of gas per day.[56]

The cost of regasified LNG is very high. At the time of witness Yap's testimony, LNG was selling for $15.65/dth.[57] Thus, it would cost about $1.6 million for every 100 MMcf of gas that had to be purchased to meet the Southern System minimum flow requirement.[58] However, the purchases would occur very rarely. As a result, purchasing gasified LNG to meet the Southern System minimum flow requirement to address the impact of a *force majeure* event would be vastly more economic than bearing the cumulative $2.782 billion cost of the North-South Project.

3. If the Commission Were to Desire a Physical Solution to Address the Rare Well Freeze-Up Event that Affects the Applicants' System, an LNG Storage Facility to serve the Core Would Be More Economic than the North-South Project.

Witness Yap also pointed out that if the Commission desired a physical solution for the very rare *force majeure* event that affected the Applicants' system, an LNG storage facility could be constructed on the Southern System at a cost of approximately $259 million for a facility with

[56] Ex. SCGC-1, Yap Updated Direct Testimony, p. 28.

[57] *Ibid,* p. 29.

[58] *Ibid.*

a 2.0 Bcf inventory capacity and 200 MMcf/d withdrawal rate.[59] Given that the standard for maintaining service to noncore customers is 1-in-10 cold year plus noncore firm service and the standard for maintaining service to core customers is 1-in-35 cold year core, an LNG storage facility would only be constructed to serve the core.[60]

The Applicants state "an LNG peak-shaving facility with capacity for a period of 3 days would require storage capacity of 2.4 BCF, a maximum withdrawal/regasification rate of 800 MMcfd, and adequate liquefaction facilities to refill" would "cost well over $1 billion."[61] However, the Applicants erroneously assume that the plant would be designed to deliver vastly more gas than would be required to meet Southern System core demand.

Given the extreme infrequency of *force majeure* events such as the February, 2011 freeze up that have an impact on the Applicants' system, and given that there are much more cost effective alternatives for addressing *force majeure* events, assuming that the events should be addressed at all, there is no merit to the Applicants' alleged "primary reason" for constructing the North-South Project.

F. The Applicants Err in Saying that Gas Supply that Flows Through the Otay Mesa Interconnection Between TGN and SDG&E Only Comes From El Paso.

The Applicants observe that one of the tools that the System Operator currently has available to address Southern System minimum flow requirements is deliveries through the Otay Mesa interconnection between TGN and SDG&E at the U.S.-Mexico international border.[62] The Applicants contend that the possibility of delivering gas into SDG&E through Otay Mesa "does

[59] Ex. SCGC-1, Yap Updated Direct Testimony, p. 30.

[60] D.02-11-073, p. 31 (November 21, 2002).

[61] Applicants Opening Brief, pp. 50-51.

[62] *Ibid,* p. 44.

not mitigate the fact that the supplies still come from the single pipeline source of El Paso."[63] The Applicants fail to recognize that supplies that originate in Mexico, including gasified LNG that is sold at the Costa Azul facility, would also be available at Otay Mesa.

G. The Applicants Fail to Show that the North-South Project Is the Best Physical Solution, Assuming that a Physical Solution Is Actually Warranted.

The Applicants say that they "believe that the only long-term solution to Southern System reliability is a physical solution, and the best physical solution by far is the North-South Project."[64] The Applicants make this assertion on the strength of a comparison of the North-South Project to two hypothetical alternatives, the River Route Pipeline and the Cross Desert Project.

The River Route Pipeline would involve the installation of approximately 100 miles of 36-inch diameter pipeline between North Needles and South Needles on the SoCalGas Northern System to Blythe on the Southern System.[65] However, supplies transported on the River Route Pipeline would be limited to supplies delivered to SoCalGas at the North Needles and South Needles receipt points.[66] By contrast, the North-South Project would be able transport supplies delivered at the North Needles, South Needles, Kramer Junction, Wheeler Ridge, and Kern River receipt points as well as storage supplies from the Honor Rancho storage field to the Southern System.[67] Additionally, the estimated direct cost of the River Route Pipeline is $769 million, more than the $621.3 million capital costs of the North-South Project.[68]

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[63] *Ibid.*

[64] Applicants Opening Brief, p. 32.

[65] *Ibid,* p. 35.

[66] *Ibid,* p. 36.

[67] *Ibid,* p. 35.

[68] *Ibid,* p. 36; Ex. SCG-3, Buczkowski Updated Direct Testimony, p. 5.

The other alternative is the Cross Desert Project, a 200 mile, 36-inch diameter pipeline that would extend from the Adelanto Compressor Station to Blythe.[69] The Cross Desert Project could transport the same supplies to the Southern System as the North-South Project, but it would have a much higher estimated direct cost, $1,538 billion instead of the $621.3 million direct cost of the North-South Project.[70]

1. Physical Solutions Offered by Interstate Pipelines.

In claiming that the North-South Project is "the best physical solution" in their opening brief, the Applicants ignore the proposals by three interstate pipelines to construct facilities that could transport gas from the SoCalGas Northern System to the SoCalGas Southern System. Proposals were submitted by El Paso,[71] by TransCanada Pipelines Limited and North Baja Pipeline, LLC ("North Baja"),[72] and by Transwestern Pipeline Company, LLC ("Transwestern').[73] The interstate pipeline alternatives offer advantages that cannot be obtained from any physical solution constructed by the Applicants.

All of the interstate pipeline alternatives offer the possibility of adjustments over time to accommodate future changed circumstances. SoCalGas ratepayers would be obligated only for the duration of the contract term with the interstate pipeline.[74] The Applicants could contract for capacity for a term of years, but they could adjust the contracted capacity to a lower amount when their contract terminates and they rollover to a new contract. The Applicants could assure

[69] *Ibid,* p. 36.

[70] *Ibid,* pp. 36-37

[71] Ex. EP-1, Sanabria Updated Direct Testimony.

[72] Ex. NP-1, Schoene Direct Testimony.

[73] Ex. TW-1, Hearn Direct Testimony.

[74] Ex. TW-2, Hearn Direct Testimony on Rate Setting, p. 3.

themselves of continued service on the interstate pipeline by including a Right of First Refusal ("ROFR") in a contract with the interstate pipeline.[75]

As discussed above, demand on the Southern System is likely to diminish due to the effects of California policies such as the RPS and energy efficiency as mandated by SB 350 or by reductions in greenhouse gas emissions as mandated by AB 32 and, potentially, by SB 32. As a result of the flexibility offered by contracting with interstate pipelines rather than constructing the North-South Project on the Applicants' system, the burden on ratepayers could be reduced as the demand on the Southern System diminishes. By contrast, if the Applicants were permitted to construct the North-South Project, ratepayers would be burdened by the cost of the Project over the life of the Project until 2096.[76]

Given the flexibility inherent in interstate pipeline physical solutions rather than the North-South pipeline, SCGC supports the Office of Ratepayer Advocates ("ORA") suggestion that if the Commission prefers a physical rather than a non-physical solution to the minimum flow problem, the Commission should direct the Applicants to conduct an open season for interstate pipelines to offer transportation service from the Applicants' Northern System to the Southern System or, alternatively, direct the Applicants to negotiate with the interstate pipeline that "offers the safest and most reliable service at the lowest reasonable cost."[77]

2. An Alternative Physical Solution on the Applicants' System.

If, in spite of the flexibility that would be offered through an interstate pipeline physical solution, the Commission desires the Applicants to construct a physical solution that is on their system, there is a clear alternative that, for unknown reasons, was not presented by the Applicants. The alternative would have the same advantages over the River Route Pipeline and

[75] Tr. 977-979 (El Paso/Sanabria).

[76] Ex. SCG-8, Yee Updated Direct Testimony, p. 4.

the Cross Desert Project as the North-South Project, but it would potentially be less costly than the North-South Project and could potentially take better advantage of the capacity on existing SoCalGas backbone transmission pipelines. Like the North-South Project the alternative could deliver gas to Moreno from the Honor Rancho storage field and, likewise, could deliver gas from all of the SoCalGas Northern Zone receipt points to Moreno. As discussed in SCGC's Opening Brief, the alternative would be a path from Adelanto to Cajon over Line 1185, from Cajon to the Chino and Prado valve stations over Lines 4000 and 4001, and from the Chino and Prado valve stations to Moreno over Lines 2000, 2001, and 5000.[78]

Given that the Applicants are already planning to loop Line 1185 from Adelanto to Cajon as the first leg of the North-South pipeline, and given that the Applicants apparently are moving forward to completing the looping of Line 2001 between Chino and Moreno by closing a 30 mile gap in Line 5000 between Chino and Moreno, all that remains to take advantage of the Adelanto-Cajon-Chino/Prado-Moreno path is looping Lines 4000 and 4001 between Cajon and Chino.[79] A looped Adelanto-Cajon-Chino/Prado-Moreno path could deliver up to 751 MMcf/d to Moreno.[80]

The Adelanto-Cajon-Chino/Prado-Moreno route could be a superior path to transport gas from the Northern System to Moreno in comparison to the North-South Pipeline. Using the Adelanto-Cajon-Chino/Prado-Moreno path could take advantage of the up to 300 MMcf/d of capacity that already exists on Lines 4000 and 4001 to deliver gas from Cajon to Chino, and it could take advantage of the up to 300 MMcf/d of capacity that already exists to transport gas from Chino/Prado to Moreno.[81] Thus, the Adelanto-Chino-Chino/Prado-Moreno path may be

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[77] Ex. ORA-2, Sabino Direct Testimony, p. 89.

[78] SCGC Opening Brief, pp. 43-47.

[79] *See* SCGC Opening Brief, p. 46.

[80] *Ibid.*

[81] *See* SCGC Opening Brief, p. 47.

less costly than the North-South pipeline. Additionally, it may require less compression, thus reducing the cost of reconstructing the Adelanto Compressor Station. Yet, the Adelanto-Cajon-Chino/Prado-Moreno path has the same advantages as the North-South Project over the River Route pipeline and the Cross Desert Project. The Adelanto-Cajon-Chino/Prado-Moreno path should not have been ignored by the Applicants.

H. The North-South Project Would Not Be the Only Physical Solution that Would Increase Total System Receipt Point Capacity.

The Applicants contend that the North-South Project is the only physical alternative that would increase Northern Zone receipt capacity.[82] The Applicants say that the Northern Zone receipt capacity would be increased by 300 MMcf/d to 1,890 MMcf/d.[83] However, the Applicants fail to recognize the potential of the Adelanto-Cajon-Chino/Prado-Moreno alternative, which would have all of the alleged benefits of the North-South Project, including increasing the receipt capacity in the Applicants' Northern Zone.

III. NORTH-SOUTH PROJECT COST RECOVERY AND RATESETTING ISSUES.

For the reasons discussed above and in SCGC's Opening Brief, SCGC urges the Commission to reject the Applicants' proposed North-South Project as unnecessary and as wildly cost-ineffective. Thus, it should not be necessary for the Commission to reach the cost recovery and rate-related issues that are raised in the Applicants' application. However, if the Commission were to approve the North-South Project contrary to SCGC's recommendation, it would be necessary to reach the cost recovery and rate-related issues. Thus, SCGC addresses below the arguments in the Applicants' opening brief regarding cost recovery and rate setting.

[82] Applicants Opening Brief, p. 39.

[83] *Ibid.*

A. Insofar as the North-South Project Is Unnecessary, the Cost of the North-South Project Should Not Be Recovered on a Rolled-In Basis from the General Body of Ratepayers.

The Applicants should be required to recover the cost of the North-South Project on an incremental rather than rolled-in basis. In their opening brief, the Applicants proposed to recover the full cost of the North-South Project through BTS rates on a rolled-in basis.[84] SCGC witness Yap explained, however, that insofar as the North-South Project is unnecessary to maintain Southern System reliability, it would be unreasonable to permit recovery of the North-South Project on a rolled-in basis.[85] She explained that the Commission should direct the Applicants to recover the cost of the Project through incremental rates that would be paid only by participants who voluntarily contract for Project capacity on a "let-the-market-decide" basis.[86]

Ms. Yap also explained that the North-South Project would have the potential to attract shippers to contract for North-South transportation service on an incrementally priced basis.[87] The completion of the North-South Project, when combined with the completion of Line 3602 in SDG&E's service territory, would create a large diameter north-to-south transmission path consisting of the new 36-inch North-South Pipeline from Adelanto to Moreno, the existing Rainbow Corridor capacity from Moreno to Rainbow, the new 36-inch Line 3602 from Rainbow to Santee that the Applicants propose in A.15-09-013,[88] and the existing 36-inch pipeline from Santee to Otay Mesa at the U.S.-Mexico border.[89] Thus, the Applicants would be able to market transportation service from north to south across their system, providing access to Mexican

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[84] Applicants Opening Brief, p. 77.

[85] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 12.

[86] *Ibid.*

[87] *Ibid,* p. 13.

[88] Application of SDG&E and SoCalGas for a Certificate of Public Convenience and Necessity for the Pipeline Safety & Reliability Project, A.15-09-013 (Sept. 30, 2015)

[89] *Ibid.*

markets and Costa Azul for shippers on upstream interstate pipelines such as Kern River Gas Transmission Company ("Kern River").

Kern River submitted testimony supporting the North-South Project.[90] Kern River said that the SoCalGas Northern Zone "has access to natural gas supplies from SoCalGas' storage facilities and from six interstate pipelines (Kern River, Mojave Pipeline Company, Southern Trails Pipeline, Transwestern Pipeline Company, El Paso Natural Gas Company, and Gas Transmission Northwest vis the intrastate system of Pacific Gas and Electric Company)."[91] Shippers on those pipelines would be able to obtain access to Mexican markets and Costa Azul by contracting for transportation service across the Applicants' north-to-south path. As explained in SCGC's opening brief, the Applicants' parent company, Sempra Energy, is contemplating the installation of a natural gas liquefaction facility at the Sempra LNG Costa Azul terminal in Baja California to permit exports of natural gas abroad.[92]

The Applicants fail to address the proposal that the cost of the North-South Project, if it were permitted to proceed, should be recovered on an incremental rather than rolled-in basis, and they fail to comment on the clear potential for the North-South Project to attract shippers who desire transportation service across the Applicants' transmission system to the U.S.-Mexico border or for redelivery to points in Mexico, including the prospective Costa Azul LNG export terminal.

[90] Ex. KR-1, Dushinske Direct Testimony, p. 2.

[91] *Ibid.*

[92] SCGC Opening Brief, pp. 49-50.

B. If the Commission Were to Permit the North-South Project to Proceed and Were to Permit Rolled-In Ratemaking, the Commission Should Defer Cost Recovery Until the Applicants' Next GRC or, at a Minimum, Should Limit the Revenue Requirement Recovery that Occurs Through Interim Rates.

If, contrary to SCGC's recommendation, the Applicants were permitted to proceed with the North-South Project and were permitted to recover the cost on a rolled-in rather than incremental basis, SCGC witness Yap recommended that the recovery of the cost of the North-South Project should be deferred until after being reviewed for reasonableness in the Applicants' GRC following the date the North-South Project is placed in service.[93] If, less preferably, the Commission were to allow the Applicants to start recovering the Project revenue requirement in rates prior to the GRC following Project startup, SCGC witness Yap recommended that the Commission should limit the level of interim revenue requirement recovery to the level of the costs that are saved as a result of placing the North-South Project in operation.[94]

In the Applicants' Opening Brief, SoCalGas offers only one argument against SCGC witness Yap's two alternative proposals. The Applicants contend that "large undercollections could accumulate, and create significant rate impact to customers in future periods."[95] The Applicants say that they have proposed a three year 2016-2018 GRC period in their currently pending GRC in A.14-11-004 and A.14-11-004.[96] Assuming their GRCs stay on a three year cycle, the Applicants' next GRC will be for Test Year 2019 for the three year period 2019-2021, and their GRC after that will be for Test Year 2022.[97] The Applicants contend that insofar as the projected Project completion date is December 31, 2019, deferring the recovery of North-South Project costs until the GRC following Project completion would defer cost recover until the Test

[93] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, pp. 14-15; SCGC Opening Brief, p. 51.

[94] *Ibid,* p. 18; SCGC Opening Brief, pp. 52-53.

[95] Applicants Opening Brief, p. 80.

[96] *Ibid.*

[97] *Ibid.*

Year 2022 GRC.[98] They say deferring rate recovery until 2022 "would result in Project-related rate increase on January 1, 2022 of close to $375 million," and such a large rate increase "could potentially create rate shock."[99]

The Applicants do not explain how they derived the figure of $375 million. However, it appears obvious that the $375 million was derived by adding the annual revenue requirements projected by the Applicants' witness Yee for 2020 ($133.6 million), 2021 ($120.5 million), and 2022 (118.7 million), which totals $372.8 million.[100] If that is how they derived their $375 million figure, and there is no other plausible explanation, the Applicants are badly mistaken about what would happen in the 2022 GRC.

If recovery of the North-South Project costs were deferred to the Applicants' Test Year 2022 GRC, the 2022 revenue requirement recovery should be for one year's revenue requirement, not three. If the North-South Project costs were found to be reasonably incurred, the Applicants would be allowed to put the Project capital cost in the rate base for Test Year 2022. The Applicants would then be permitted to recover return, taxes, and depreciation on the Project capital cost that was added to rate base. In 2022, the Applicants would only be permitted to recover one year's return, taxes, and depreciation on the amount added to rate base in 2022, not three years' return, taxes, and depreciation.

Thus, the Applicants would not be permitted to recover in 2022 the $375 million sum of the revenue requirements that the Applicants project for recovery during the first three years after Project costs are included in rate base. Deferring commencement of the Project revenue requirement recovery until Applicants' Test Year 2022 GRC would not result in rate shock

[98] *Ibid.*

[99] *Ibid.*

[100] *Ibid.*

beyond the extent to which the first year revenue requirement, projected by witness Yee to be $133.6 million, would cause rate shock by increasing the BTS rate by 81 percent.[101]

C. The Commission Should Establish a Cost Cap for the Project.

ORA and TURN propose a cost cap on the total North-South Project cost.[102] SCGC supports their proposal.[103] The Applicants respond in their opening brief that putting a cap on project costs could, first, discourage infrastructure investment and, second, force utilities to increase their project estimates:

> Placing all risk upon a utility of the costs of a project exceeding a pre-established cost cap, regardless of whether those costs are reasonably-incurred, could either discourage infrastructure investment or force utilities to increase their initial project estimates to account for a broader range of potential risks that cannot be completely predicted or controlled.[104]

Neither of the arguments by the Applicants is convincing. First, precedent demonstrates that establishing cost caps does not discourage infrastructure investment by the Applicants. In A.09-07-014, SoCalGas proposed to expand its Honor Rancho storage field. In D.10-04-034 the Commission authorized the Honor Rancho Expansion Project but established a $37.4 million cap on the costs other than cost for cushion gas.[105] Likewise, in A.09-09-020 SoCalGas proposed to replace three obsolete gas turbine-driven compressors at the Aliso Canyon storage field.[106] In D.13-11-023, the Commission approved the application but established a cap of $200.9 million on Project costs.[107] The Honor Rancho Expansion Project has been completed, and the

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[101] Ex. SCG-9, Bonnett Updated Direct, p. 2.

[102] Ex. ORA-2 (Sabino Direct Testimony), p. 75; Ex. TURN-2 (Emmrich Direct Testimony, p. 2).

[103] SCGC Opening Brief, p. 55.

[104] Applicants Opening Brief, p. 79.

[105] D.10-04-034, pp. 2-4 (Ordering Paragraph 14) (April 22, 2010).

[106] A.09-09-020, pp. 1-2 (December 28, 2009).

[107] D.13-11-023, pp. 2, 72 (Ordering Paragraph 9).

associated revenue requirement is included in rates.[108] The Aliso Canyon replacement project is still underway. In neither instance did the establishment of a cap discourage infrastructure investment by SoCalGas.

The Applicants second argument that putting a cap on project costs would result in the Applicants' increasing initial project estimates is just as unconvincing as the first argument. In this proceeding, the Applicants have already submitted cost estimates. Witness Buczkowski projects total direct capital expenditures for the project of $621.3 million,[109] and witness Yee projects fully loaded and escalated costs of $855.5 million.[110] Those projections already include contingency factors to which witness Buczkowski testified under oath.[111] If the Commission issues a decision imposing a cost cap on the North-South Project, the Applicants would not be able to subsequently revise the contingency factors upward to increase the total cost of the Project above what was presented in the Applicants' application.

As for future projects, the Applicants may be suggesting that they would propose artificially inflated contingency factors if a cap were imposed on the North-South Project. However, as discussed above, cost caps were established for both the Honor Rancho Expansion Project and the Aliso Canyon Turbine Replacement Project. There is no indication in witness Buczkowski's testimony that, because of those cost cap precedents, he proposed contingency factors that were artificially inflated to account for the fact that a cap might be imposed on the recovery of North-South Project costs.[112]

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[108] D.14-06-007, p. 45 (June 12, 2014).

[109] Ex. SCG-3, Buczkowski Updated Direct Testimony, p. 6.

[110] Ex. SCG-8, Yee Updated Direct Testimony, p. 3.

[111] Ex. SCG-3, Buczkowski Updated Direct Testimony, pp. 14-16.

[112] *Ibid.*

D. If the Commission Sets a Cost Cap for the Project and the Applicants Exceed the Cap, the Commission Should Conduct a Reasonableness Review of All Project Costs in the General Rate Case Following Project Completion.

The Applicants propose that if the Commission finds that a cost cap is appropriate for the North-South Project, the cost cap should be equal to the Project's estimated fully loaded and escalated cost of $855.5 million.[113] Further, they propose that they be permitted to establish a memorandum account to record O&M and capital revenue requirement associated with Project costs in excess of $855.5 million cap.[114] They propose that only the costs that exceed the cap as recorded in the new memorandum account should be subject to reasonableness review in a future proceeding.[115]

Ratepayers would be better protected if the precedent established in the Aliso Canyon Turbine Replacement proceeding were followed. In that proceeding, the Commission permitted SoCalGas to establish a memorandum account to record costs in excess of a $200.9 million cap. However, if Aliso Canyon Turbine Replacement costs exceeded the cap, there would be a reasonableness review of all costs in the GRC following completion of the Aliso Canyon Turbine Replacement Project: "A review of the reasonableness of *all* costs will be conducted in the general rate case following Project completion if Project costs exceed $200.9 million."[116]

Following the Aliso Canyon precedent, if it were determined in the GRC following completion of the North-South Project that SoCalGas exceeded the $855.5 million cost cap as a result of an activity that was unreasonable and cost more than the amount that exceeded the cost cap, all of the unreasonably incurred cost should be disallowed, not just the portion of the unreasonable cost associated with the amount by which the cost cap was exceeded. If it is

[113] Applicants Opening Brief, p. 81.

[114] *Ibid.*

[115] *Ibid.*

[116] D.13-11-023, p. 72 (November 14, 2013) (emphasis added).

known that the Applicants unreasonably incurred costs, ratepayers should be relieved of the obligation to bear the burden of those costs in their entirety.

E. The Applicants' Projection of Post-Construction O&M Costs Should Be Reduced.

The Applicants originally projected that the North-South Project would result in approximately $2.4 million in estimated post-construction O&M costs.[117] The $2.4 million was made up of three components, each of which was serendipitously estimated to represent $800,000 of O&M expense. First, $800,000 of the projected total post-construction O&M costs was to account for an anticipated increased in GHG emission fees associated with the operation of the new Adelanto Compressor Station.[118] Second, $800,000 was associated with O&M pipeline operations and compliance.[119] Third, $800,000 was associated with incremental compressor station O&M.[120]

As a result of the repeated iterations of testimony in this proceeding, the Applicants' request for $2.4 million has been whittled down to a request for $1.0 million in estimated post start-up costs. As for the $800,000 for GHG emissions fees, witness Yap said that "SoCalGas Greenhouse Gas Balancing Account ("GHGBA") provides balancing account protection to the extent that the company incurs GHG costs in excess of the amounts provided for in base rates."[121] In their opening brief, the Applicants state that they agree with witness Yap:

> SoCalGas and SDG&E agree that our proposal to treat GHG emissions fees as post-construction O&M costs has been superseded by the Commission's guidance in D.14-12-020 directing us to establish the GHGBA to record costs associated

[117] Ex. SCG-3, Buczkowski Updated Direct Testimony, p. 17.

[118] SoCalGas Opening Brief, p. 87; Ex. SCG-13, Buczkowski Rebuttal Testimony on Ratesetting, p. 12.

[119] Applicants Opening Brief, p. 88; Ex. SCG-13, Buczkowski Rebuttal Testimony on Ratesetting, pp. 12-13.

[120] SoCalGas Opening Brief, p. 18; Ex. SCG-13, Buczkowski Rebuttal Testimony on Ratesetting, p. 12.

[121] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 22.

> with the California Air Resource Board's Cap-and-Trade program for SoCalGas' covered facilities.[122]

Thus, the $800,000 projected cost of GHG emission fees should be eliminated from the Applicants' projection of post-construction O&M costs.

Regarding the projected $800,000 incremental O&M costs for pipeline operations and compliance, Ms. Yap pointed out that the O&M costs for SoCalGas' 3,989 miles of transmission pipelines amounts to $4,813 per mile.[123] She concluded that the Applicants estimate of $800,000 for O&M pipeline operations and compliance was too high: "Mr. Buczkowski's estimate of $800,000 for O&M for pipeline operations and compliance plus right-of-way is too high since 63 miles at $4,813 per mile amounts to only $303,219.[124] Ms. Yap's testimony prompted the Applicants to reexamine their proposed $800,000 for post-construction pipeline operations and compliance O&M and to remove $600,000. The Applicants explain:

> As a result of examining SCGC's arguments, however, SoCalGas and SDG&E determined that our estimate for right-of-way mitigation fees ($600,000) was inadvertently included in both capital and O&M costs. These costs are appropriately included in our capital estimate. They should not also be included in our ongoing O&M estimate and will be removed.[125]

In witness Buczkowski's rebuttal testimony, the projected $800,000 for O&M pipeline operations and compliance was reduced to $200,000.[126]

Third, the Applicants continue to contend that they should be allowed $800,000 of incremental O&M costs for the updated Adelanto Compressor Station "based on requirements to operate and maintain four new gas turbine driven compressors (approximately 30,000

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[122] Applicants Opening Brief, p. 89.

[123] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, pp. 21-22.

[124] *Ibid*, p. 22.

[125] Applicants Opening Brief, p. 89.

[126] Ex. SCG-13, Buczkowski Rebuttal Testimony on Ratesetting, p. 13.

horsepower), emission controls equipment, gas piping, on-site power generation, and cooling system."[127] The $800,000 for compressor O&M excludes fuel costs because compressor fuel cost is recovered through an in-kind fuel charge under SoCalGas Schedule No. G-BTS.[128]

The Applicants already recover in rates the average annual O&M cost for the existing Adelanto Compressor Station of $60,000.[129] The Applicants provide no explanation whatsoever about why non-fuel-related O&M at the rebuilt Adelanto Compressor Station should be $860,000 ($60,000 plus the "incremental" $800,000), more than fourteen times the current $60,000 annual O&M costs for the existing station. The new Adelanto Compressor Station will consist of entirely new equipment as compared to the old equipment at the existing compressor station. If anything, the cost of maintaining all-new equipment should be less costly than maintaining old, outdated equipment.

The Applicants have failed to carry their burden to prove that the non-fuel O&M for the entirely new Adelanto Compressor Station should be fourteen times the annual average O&M for the existing compressor station. For failure to bear to their burden of proof, the proposed $800,000 incremental O&M should be eliminated entirely from the Applicants' projection of post-construction O&M costs.

After eliminating $800,000 for GHG emissions, eliminating $600,000 from the requested $800,000 for O&M pipeline operations and compliance, and eliminating $800,000 for incremental O&M at the Adelanto Compressor Station, the Applicants' originally projected post-startup O&M cost of $2.4 million would be reduced to $200,000. However, SCGC explains below that not even that amount of incremental post-startup O&M should be recovered through the Applicants' proposed North-South Infrastructure Memorandum Account ("NSIMA").

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[127] Ex. SCG-13, Buczkowski Rebuttal Testimony on Ratesetting, p. 12.

[128] Schedule No. G-BTS, Sheet 4; Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 21.

F. Pre-Startup O&M Expenses that Are Primarily for Office Space and Other Office-Related Costs that Should Be Considered to Be Part of the Applicants' Overhead.

The Applicants propose to recover pre-startup O&M expenses that are primarily for office space and other office-related costs through their proposed NSIMA.[130] Thus, the Applicants would directly charge the costs to the North-South Project.[131] Witness Yee said that it would be contrary to "company policy" to capitalize the costs because the costs would be "incurred by North-South Project back office employees rather than by North-South Project construction crews or by employees who provide general support to SoCalGas operations (the distinction is the latter can and should be capitalized)."[132] In that case, however, the costs should be considered to be part of the Applicants' overhead.

The cost of overheads is included in the factors used to gross up the cost of labor and non-labor direct expenses associated with the North-South Project, and the Applicants will recover their overheads through the loaders that are applied by witness Yee.[133] The Applicants should not be permitted to both fully load North-South Project costs as proposed by witness Yee and to simultaneously directly charge overhead office costs by recording the costs in the NSIMA. The Applicants' proposal to directly charge the back office and office related costs to the North-South Project by recording the costs in the NSIMA should be rejected.[134]

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[129] Ex. SCG-13, Buczkowski Rebuttal Testimony on Ratesetting, p. 12.

[130] Applicants Opening Brief, p. 95.

[131] Ex. SCG-19, Yee Rebuttal Testimony on Ratesetting, p. 4.

[132] *Ibid.*

[133] Ex. SCG-8, Yee Updated Direct Testimony, p. 3.

[134] Applicants Opening Brief, pp. 92-93.

G. The Cost of Environmental Monitoring Should Not Be Capitalized.

The Applicants propose to capitalize the cost of environmental permits, mitigation, and restoration "until the obligation to incur these costs is eliminated [by the] appropriate agency."[135] The Applicants propose to include in the North-South Project capital costs $2.6 million for the year following start-up for environmental monitoring.[136] They also propose to spend an additional $3.3 million over the next three decades for environmental monitoring.[137]

The Applicants sole argument for capitalizing the $2.6 million and the $3.3 million is that the Applicants' "capitalization policy calls for the capitalization of costs related to environmental permits, mitigation and restoration until the obligation to incur these costs is eliminated appropriate agency."[138]

The $2.6 million for the year following startup and the additional $3.3 million over the next three decades for environmental monitoring should not be capitalized. The Uniform System of Accounts, Plant Instructions, Components of Construction Cost, states: "(9) 'Privileges and permits' includes payments for and expenses incurred in securing temporary privileges, permits or rights in connection with construction work, such as for the use of private or public property, streets, or highways, but it does not include rents, or amounts chargeable as franchises and consents for which see account 302, Franchises and Consents."[139] Thus, the cost of permits that are intended to be capitalized are temporary privileges, permits, or rights for the period when a project is being constructed, not activities that occur after project start-up. In fact, the Uniform System of Accounts specifically prohibits capitalizing ongoing costs such as rents or franchise

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[135] Applicants Opening Brief, p. 93.

[136] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 22.

[137] *Ibid.*

[138] Applicants Opening Brief, p. 93.

[139] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 23.

fees. Thus, the Applicants' proposal to capitalize as Project capital expenses the post-startup cost of environmental permits, mitigation, and restoration should be rejected. The ongoing environmental costs should be considered part of the cost of operating the North-South Project and should be expensed along with the other North-South Project operating costs.[140]

H. The Applicants Should Not Be Permitted to Submit a Series of Advice Letters to Incorporate Into Rates the Costs of Various Portions of the North-South Project as Those Portions Become Operational Over Time.

In their opening brief, the Applicants proposed to file advice letters within 60 days after North-South Project assets are placed into service to incorporate the revenue requirement in rates for the month following advice letter approval.[141] Thus, the Applicants could file a series of advice letters to incorporate rates the cost associated of different portions of the North-South Project. The Applicants state in their opening brief: "It is possible that certain components of the North-South Project may be placed into service prior to completion of the entire project, and this process would apply when the individual assets are first placed into service – i.e., SoCalGas would not wait for completion of the entire project to begin incorporating the revenue requirement associated with used and useful assets into rates."[142]

The proposal for multiple advice letters should be rejected. First, the proposal conflicts with the testimony of the Applicants' witness Yee who stated that upon completion of the North-South Project as a whole, SoCalGas would determine the actual cost of the Project and would file an advice letter within 60 days after the project is placed in service to incorporate the revenue requirement in rates: "Upon project completion, SoCalGas will compute the actual capital and O&M costs and associated revenue requirement. SoCalGas will file an advice letter

[140] *Ibid.*

[141] Applicants Opening Brief, p. 93.

[142] *Ibid,* p. 93.

within 60 days after the assets are placed into service to incorporate the actual revenue requirement in rates on the first day of the next month following advice letter approval."[143]

Second, the North-South Project cannot be fully functional without all of its components. For example, the new Adelanto Compressor Station quite possibly will be completed before the North-South Pipeline. Although the Adelanto Compressor Station might be operational, it cannot be used to compress gas for transmission across the North-South Pipeline until the North-South Pipeline is completed. Project costs should not be placed in rates piecemeal as proposed in the Applicants' opening brief.

I. If the Commission Permits the Applicants to Establish the Proposed NSIMA, Neither Pre-Startup O&M nor Post-Startup O&M Should Be Recorded in the NSIMA, and the Revenue Requirement for the Period Between the Project In-Service Date and the Date Interim Rates Take Effect Should Be Limited to the Savings that Result from the North-South Project.

The Applicants request that the Commission authorize SoCalGas to establish the new interest bearing NSIMA to record three types of costs.[144] First, the Applicants would record pre-startup O&M expenses in the NSIMA.[145] However, as discussed above, the pre-startup O&M costs that the Applicants would seek to record in the NSIMA are back-office space and other office-related costs that should be recovered through loaders rather than being directly charged to the Project.[146] Thus, no pre-startup O&M costs should be recorded in the NSIMA.

Second, the Applicants propose to record in the NSIMA incremental O&M expenses that are incurred subsequent to completion of the North-South Project.[147] However, as discussed above, only $200,000 of post-startup pipeline operations and compliance cost could be

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[143] Ex. SCG-8, Yee Updated Direct Testimony, p. 4.

[144] Applicants Opening Brief, pp. 95-96.

[145] *Ibid.*

[146] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, pp. 19-20.

[147] Applicants Opening Brief, p. 96.

considered to be eligible for recording in the NSIMA. None of the post-startup costs associated with GHG emissions fees and none of the alleged incremental compressor O&M should be eligible for recovery through the NSIMA.

However, not even the $200,000 in post-startup pipeline operations and compliance cost should be recovered through the NSIMA. As explained in SCGC's opening brief,[148] the Commission should reject the Applicants' proposal to include any incremental post-startup O&M in the NSIMA, including the $200,000, because the Applicants should be required to manage post-startup costs of the new North-South facilities just as they manage O&M for all of their other transmission activities.[149]

Third, the Applicants propose to record in the NISMA the revenue requirement associated with the North-South Project for the period of time between when the North-South Project becomes operational and the advice letter proposing interim rates to recover the North-South Project revenue requirement becomes effective. For the reasons discussed above and in SCGC's opening brief, the amount of revenue requirement that is recorded in a NSIMA should be limited to the amount cost savings that ratepayers would realize as a result of placing the North-South Project in service.[150]

IV. SCGC'S RESPONSE TO SEVERAL POINTS RAISED IN TURN'S OPENING BRIEF.

In general, the points raised by TURN in its opening brief are aligned with the points raised in SCGC's opening brief as well as in ORA's opening brief. However, there are a few points in TURN's opening brief that call for a response for SCGC.

[148] SCGC Opening Brief, p. 54.

[149] Ex. SCGC-2, Yap Direct Testimony on Ratesetting, p. 20.

[150] SCGC Opening Brief, pp. 52-53.

A. Several of the Non-Physical Solutions Identified by TURN to Address the Southern System Minimum Flow Requirement Would Be Costly for Customers and, Hence, Inferior to the Non-Physical Solutions Presented by SCGC.

Towards the end of its opening brief, TURN suggests several non-physical solutions to address the Southern System minimum flow requirement which could be more costly for customers than the non-physical solutions identified by SCGC witness Yap.

It is appropriate to consider the availability of the non-physical solutions recommended by TURN as well as those recommended by SCGC for the purpose of determining whether there is a need for the North-South Project, and SCGC understands that TURN, like SCGC, raises several non-physical solutions beyond the solutions that are currently utilized by SoCalGas for purposes of determining that the non-physical solutions would be more cost effective than the physical solution proposed by the Applicants. However, the Commission should not proceed to adopt any of the non-physical alternatives raised in this proceeding. The scope of this proceeding is limited to the need for the North-South Project and the Applicants' proposals for favorable rate treatment for the Project. The proper course would be for the Commission to reject the North-South Project as unneeded in light of multitude of the alternatives that are vastly more cost effective than the North-South Project and direct the Applicants to submit an entirely new application proposing additional measures to maintain Southern System reliability if the Applicants believe that any new measures are necessary.

Nevertheless, in the event that the Commission elects to reach beyond the scope of this proceeding to consider non-physical alternatives on the basis of the record in this proceeding, SCGC now responds to several of the non-physical alternatives raised by TURN in its opening brief that are of particular concern to SCGC.

1. Adopting a Southern System Low Operational Flow Order to Require Noncore Customers to Deliver Volumes at Ehrenberg Would Be Unnecessarily Costly for Customers.

TURN looks back to a proposal made by SoCalGas in its 2008 Biennial Cost Allocation Proceeding ("BCAP"), A.08-02-001.[151] TURN says that under a SoCalGas proposal in that proceeding, all customers would be required to flow "up to 20 percent of their usage" through Ehrenberg on days when SoCalGas called a Southern System Operational Flow Order ("OFO").[152] TURN says that it is "highly likely that a Southern System delivery requirement, keyed towards operational flow conditions, may solve the minimum flow problems at Blythe."[153]

In resurrecting this proposal from A.08-02-001, TURN seems to be under the impression that while the core meets its Southern System minimum flow responsibility through the MILCs, the noncore does not meet its minimum flow requirement, necessitating a System Operator to buy gas supplies which result in costs being recorded in the Applicants' System Reliability Memorandum Account ("SRMA"), with SRMA costs being shared between the core and noncore. However, if the Applicants' Gas Acquisition Department fully meets the cores' share of the minimum flow requirement under the MILC, the MILC provides that the core will have no responsibility for SRMA costs.[154] Thus, the core and TURN should be indifferent to whether the noncore's share of the minimum flow requirement is met by the System Operator purchasing gas or by noncore customers physically delivering gas supplies at Ehrenberg.[155]

As a result of the use of baseload contracts to cover the noncore share of the minimum flow requirement for the Southern System in combination with some spot purchases, the

[151] TURN Opening Brief, p. 31.

[152] *Ibid.*

[153] *Ibid*, p. 32.

[154] Ex. SCGC-3, Yap Rebuttal Testimony on Ratesetting, p. 11.

[155] *Ibid.*

Applicants' System Operator has cost effectively met the noncore's share of the Southern System minimum flow requirement.[156] Requiring noncore customers to individually deliver physical quantities of gas to Ehrenberg as would be required under the proposal first raised in A.08-02-001 would be likely to increase the overall cost of meeting the noncore share of the minimum flow requirement because the System Operator can acquire gas supplies to meet minimum flow conditions more efficiently than individual customers.[157] For one thing, if noncore customers were required to respond to Southern System minimum flow orders as envisioned under the proposal broached in A.08-02-001, they would most likely be required to buy spot supplies, which are more expensive on a unit basis than supplies purchased for a longer term through baseload contracts.

The concept of imposing Southern System minimum flow orders on noncore customers was not adopted in A.08-02-001, and it should not be adopted elsewhere, insofar as superior tools for handling the Southern System minimum flow requirement have emerged in the nearly eight years since the proceeding in A.08-02-001.

2. Requiring SoCalGas to Maintain 5 to 10 Days Worth of LNG or Other Alternative Fuel Back-Up to Serve Noncore Customers On the Southern System Would Be Inconsistent With the Commission's Planning Standards and Would Be Much More Costly in Comparison to Other Alternatives.

TURN proposes that an alternative to the North-South Project to maintain service to electric generation ("EG") customers would be to have "5 to 10 days' worth of alternate fuel back-up" that TURN says could be "in the form of jet fuel, propane, or Liquefied Natural Gas (LNG) plants."[158] TURN says that the fuel back-up would be "used only during extreme weather

[156] *Ibid.*

[157] *Ibid.*

[158] TURN Opening Brief, p. 35.

conditions, most likely in winter months…."[159] However, as discussed above and in SCGC's opening brief, baseload contracts have worked well to maintain flows to meet the noncore portion of the Southern System minimum flow requirement during adverse weather conditions. The Applicants should not be directed to install the facilities proposed by TURN.

TURN alternatively suggests that the Commission should require major electric generators to maintain "5 to 10 days' worth of alternate fuel back-up" as an alternative to having SoCalGas maintain the "alternate fuel back-up."[160] However, the Commission lacks jurisdiction to impose such a requirement on generation owned by publicly owned utilities or by independently owned generation. Thus, even if the idea had merit, TURN's suggested solution could not be imposed directly upon electric generators.

3. Southern System Electric Generation Customers Should Not Be Required to Elect Core Status.

TURN somewhat hesitantly suggests that another alternative would be to permit electric generators to choose core service to receive more reliable service, albeit at higher rates.[161] TURN recognizes that, given that the planning standard for core customers is 1-in-35 cold year,[162] "SoCalGas may have to plan system expansions in order to meet the more restrictive core service reliability standards with a greater forecast core load."[163]

The Applicants say in response to the suggestion that EG customers be permitted to take core service: "Large EG operators are sophisticated enough to manage their own gas supplies.

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[159] TURN Opening Brief, p. 35.

[160] *Ibid.*

[161] *Ibid*, p. 36.

[162] D.02-11-073, p. 31 (November 21, 2002).

[163] TURN Opening Brief, p. 36.

As such they should remain noncore, and our ratepayers should not be obligated to build out the system for this additional level of service."[164] SCGC agrees.

B. TURN's Cost Allocation Proposal Fails to Recognize that if the North-South Project Were Built, the Facilities Would be Functionalized as Backbone Transmission with the Associated Costs Being Recovered Through BTS Rates.

TURN says that it believes core customers should pay none of the cost of the North-South pipeline because the core has consistently flowed gas through Ehrenberg and because both core average and peak day demands are forecast to decline through 2035.[165] Neither of TURN's arguments has merit.

First, to the extent to which the core through the Applicants' Gas Acquisition Department provides the core's share of the Southern System minimum flow requirement under MILCs, the core bears no SRMA costs.[166] All SRMA costs are then borne by the noncore. Thus, the core has already gotten its reward for having "consistently flowed gas into Blythe."

Second, while TURN argues that "both core average and peak day demand are forecasted to decline through 2035," it is highly likely that noncore demand is going to decline even more substantially due to California policies including the RPS, energy efficiency, and GHG emissions reductions policies as discussed above. Given the measures in SB 350, it is likely that noncore demand will go down faster than core demand. GHG emission reduction policies could drive noncore demand down even faster.

Alternatively, TURN argues that the core has incurred a "price premium" by purchasing more expensive gas at Blythe rather than the less expensive gas for delivery into the Northern System, so the core's responsibility for paying for the North-South Project should be limited to

[164] Applicants Opening Brief, p. 50.

[165] TURN Opening Brief, p. 45.

[166] Ex. SCGC-3, Yap Direct Testimony on Ratesetting, p. 2.

the average "premium" paid by the core per year over the years 2009-2014, $6.1 million.[167] However, to the extent to which the core has paid a premium for purchases at Ehrenberg, the core has been rewarded by being relieved of any responsibility for SRMA costs. Moreover, going forward, if the North-South Project were to be approved, the Applicants would cease relying upon the MILCs as well as baseload contracts and spot purchases to meet the Southern System minimum flow requirements. Consequently the core would no longer be required to bear a "price premium" for purchases for delivering to SoCalGas at Ehrenberg.

If the North-South Project were built and the Commission allowed rolled-in rather than incremental ratemaking, the cost of the North-South Project should be recovered by the Applicants through BTS rates. BTS rates are designed to recover the cost of facilities that are functionalized as backbone transmission, which would be the proper functionalization of the North-South Project.[168] Customers who subscribe to backbone transmission service pay a common rate to deliver gas across the Backbone Transmission System from any receipt point to the SoCalGas Citygate.[169] To the extent to which Gas Acquisition Department or any other customer subscribes to Backbone Transmission Service, the customer will pay the BTS rate directly. To the extent to which customers buy their gas supplies at the SoCalGas Citygate, they will pay the BTS rate indirectly to the extent to which a producer or marketer that sells gas to the customer at the Citygate includes the cost of BTS transportation in the price charged for gas at the Citygate.

[167] TURN Opening Brief, p. 45.

[168] Ex. SCG-9, Bonnet Updated Direct Testimony, p. 1.

[169] *Ibid.*

V. CONCLUSION.

For the reasons set forth above, SCGC respectfully request that the Commission adopt the recommendations herein, in SCGC's opening brief, and in the foregoing Summary of Recommendations.

Respectfully submitted,

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Attorneys for the **SOUTHERN CALIFORNIA GENERATION COALITION**

Dated: October 12, 2015

November 23, 2015

Via electronic mail

Public Scoping Comments
RE: North-South Project
505 Sansome Street, Suite 300
San Francisco, CA 94111
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Re: Sierra Club Scoping Comments on the North-South Pipeline
CPUC Application 13-12-013

To Whom It May Concern,

Sierra Club submits these comments in response to the Notice of Preparation/Scoping Notice for a Joint Environmental Impact Report/Environmental Impact Statement ("EIR/S") for the North-South Project Proposed by Southern California Gas Company and San Diego Gas and Electric CPUC Application No. 13-12-013, Forest Service Application No. FCD102314 issued on October 8, 2015 ("North-South Project"). At this early juncture in environmental review, Sierra Club identifies the following issues: 1) appropriate project objectives; 2) a reasonable range of alternatives; and 3) an assessment of the environmental impacts resulting from the North-South Project's facilitation of the export of liquefied natural gas from Sempra's Costa Azul LNG terminal.

I. Ensure Project Objectives Are Not Overly Narrow and that a Range of Alternatives, Including Alternatives That Avoid the Need for the Project, Are Fully Evaluated.

Project objectives are used by the lead agency to develop a reasonable range of alternatives. Narrow objectives can limit this range and thereby inhibit CEQA's informational purpose. Thus, the California Supreme Court has made clear that "a lead agency may not give a project's purpose an artificially narrow definition." *In Re Bay-Delta Coordinated Environmental Impact Report Coordinated Proceedings*, 43 Cal. 4th 1143, 1166 (2008). Sierra Club notes that the project applicant's environmental assessment includes the following project objective:

> Provide an interconnection allowing the Applicant to efficiently transport 800 MMcfd of natural gas supplies into the Southern System from interstate and intrastate receipt points located outside of the Southern System.[1]

[1] Proponent's Environmental Assessment North-South Project, Page 2-2.

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This project objective, which could only be met by the exact project proposed by the Applicant, is exactly the type of artificially narrow objective CEQA forbids. This project description cannot be lawfully included in the EIR/S for the North-South Project.

An alternatives analysis is the "core of an EIR." *Citizens of Goleta Valley*, 52 Cal.3d, 554, 564 (1990). The analysis must contain concrete information about each alternative sufficient to allow a fact-based comparison of the alternatives with the project and must be specific enough to allow informed decision-making and public participation. *See* 14 Cal. Code Regs § 15126.6(d); *Laurel Heights Improvement Ass'n v. Regents of Univ of Cal*., 47 Cal.3d 376, 406 (1988). Sierra Club notes that as part of A.13-12-013, parties such as Southern California Generation Coalition identified a number of non-physical solutions to address the purported reliability needs the North-South pipeline is intended to address.[2] These no action/non-physical alternatives must be fully explored in the EIR/S.

II. The EIR/S Must Analyze the Greenhouse Gas and Related Environmental Impacts from North-South and Related Projects' Facilitation of Natural Gas Exports from Sempra's LNG Facility in Ensenada, Mexico.

A. The North-South Project's Facilitation of Gas Exports through Sempra's Costa Azul LNG Terminal is a Reasonably Foreseeable Indirect Effect of the Project that Must Be Fully Analyzed in the EIR/S.

As parties to A.13-12-013 have noted, the proposed North-South Pipeline is designed with considerable excess capacity. Indeed, given the significant reductions in natural gas demand that will occur in California from the recently enacted 50 percent RPS and doubling of efficiency targets (which specifically reference reductions in end-use natural gas), it is unclear if any of the pipeline capacity would be needed to serve California customers. Taken with Sempra's proposed Line 3602 through San Diego, the construction of the North-South Pipeline will remove pipeline bottlenecks and allow Sempra to transmit enormous quantities of natural gas to its Energia Costa Azul liquefied natural gas ("LNG") import terminal in Ensenada, Mexico just south of San Diego. Completed in 2008, the Energia Costa Azul terminal was originally designed as an import facility and is the only LNG facility on the west coast.[3] Costa Azul has the capacity to re-gasify up to one billion cubic feet per day of natural gas and currently sits idle due to the lack of demand resulting from dramatic increases in U.S. natural gas production from advances in drilling technologies.[4] In February 2015, Sempra signed a Memorandum of Understanding with Pemex and IEnova covering the cooperation and

[2] *See, e.g.,* A.13-12-013, SCGC Opening Br. (Sept.25, 2015) pp. 11-13.
[3] http://www.ferc.gov/industries/gas/indus-act/lng/lng-existing.pdf.Two additional LNG import terminals are located on the North American west coast – in Alaska and the south of Mexico - but neither arewell positioned to accept natural gas deliveries from the continental U.S.
[4] https://www.btgpactual.com/Research/OpenPdf.aspx?file=27176.pdf at 16.

coordination of the parties in developing LNG export capabilities at the Energia Costa Azul terminal and would provide access to inexpensive U.S. natural gas to Asian markets.[5]

Significant impacts that must be analyzed under CEQA and NEPA include those that "are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable." CEQA Guidelines § 15358(a)(2); 40 C.F.R. § 1508.8(b). Similarly, an EIR/S must discuss the "characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively." CEQA Guidelines § 15126.2(d). Because the North-South Project will help enable significant gas exports from Sempra's LNG terminal, the impacts from creating a conduit to export natural gas extracted in the United States to Asian markets must be analyzed as part of the EIR/S. As discussed more fully below, enabling west coast LNG exports will induce additional natural gas production in the United States, primarily through hydraulic fracturing (fracking) of unconventional gas sources, thus causing the myriad environmental harms associated with such production. The facilitation of gas exports will also increase domestic gas prices, likely causing an increase in coal-fired electricity generation and thus increasing emissions of greenhouse gases, and conventional and toxic air pollutants**.** Finally, it is likely that LNG exports will also compete against wind, solar, and other clean renewable energy sources abroad that would have lower environmental impacts.

By authorizing the North-South Project, the Commission and Forest Service would be implicitly supporting a policy of continued investment and expansion of fossil fuel extraction and combustion when California has set aggressive climate reduction targets and encouraged other national and subnational governments to commit to the significant emission reductions needed to keep warming to below 2°C (Under 2° MOU).[6] Enabling massive export of liquefied natural gas flies in the face of these efforts.

B. The Project Will Induce Additional U.S. Gas Production

LNG exports like those enabled by the Project would lead to increased gas production in the U.S. LNG exports represent a new source of gas demand, composed of both the volume of gas exported as well as the gas necessary for the operation of export facilities. Multiple studies have repeatedly affirmed that exports will increase gas production, providing quantitative estimates of this impact. In January 2012, the U.S. Energy Information Administration ("EIA") issued a report commissioned by the U.S. Department of Energy titled "Effect of Increased Natural Gas Exports on Domestic Energy Markets"[7] ("Export Study") to assess the likely impacts of expanded exports.[8] It concluded, *inter alia*, that: (1) "Increased natural gas exports lead to increased natural gas prices" within the United States; (2) That "[n]atural gas markets in the United States balance in response … through increased natural gas production"; and (3) "Due to higher prices [of natural gas], the [U.S.] electric power sector primarily shifts to coal-fired

[5] http://www.prnewswire.com/news-releases/pemex-sempra-lng-and-ienova-sign-memorandum-of-understanding-for-developing-natural-gas-liquefaction-facilities-in-mexico-300038645.html.
[6] http://under2mou.org/
[7] http://energy.gov/sites/prod/files/2013/04/f0/fe_eia_lng.pdf.
[8] *Id.* at Appendix A.

generation."[9] The modeling EIA performed to produce the Export Study provided region-specific forecasts of where additional production would occur.[10] In October 2014, EIA updated the Export Study, affirming its basic conclusions.[11] This update concluded that if other federal actions limited growth of coal-fired electricity generation (actions which EPA has since undertaken), the connection between exports and production increases would be even stronger, as fewer electric producers would be able to respond to higher gas prices by switching to coal.[12] Most recently, EIA's 2015 Annual Energy Outlook again affirmed that increasing volumes of exports will cause increases in natural gas production (and, to a lesser extent, increases in coal use).[13]

The Export Study anticipates that production will increase by roughly 63% of the amount of demand created by exports.[14] The Updated Export Study found that LNG exports will cause an increase in domestic gas production equivalent to "about 61% to 84% of the increase in natural gas demand from LNG exports," with "[i]ncreased natural gas production from shale gas resources provides about 72%" of the total supply increase. [15]

At least five other forecasts, from three different consultants each using their own distinct models, have agreed with the EIA's conclusion that domestic natural gas markets will respond to exports primarily by increasing natural gas production and, secondarily, by shifting some existing demand from gas to coal. Deloitte Marketpoint, Made in America: The Economic Impact of LNG Exports from the United States (2011), at 10; ICF International, U.S. LNG Exports: State-Level Impacts on Energy Markets and the Economy (Nov. 2013) at 13, Charles Ebinger et. al., "Liquid Markets: Assessing the case for U.S. Exports of Liquefied Natural Gas," Brookings Institution (May 2012), at 32, (summarizing an earlier study by ICF International and two studies by Navigant).

Additionally, sophisticated tools, such as EIA's National Energy Modeling System and Deloitte Marketpoint's world gas model, can predict where this additional production is most likely to occur. Indeed, EIA has already provided region-specific predictions of increases in gas production both in connection with the 2012 EIA Export Study and the 2014 Updated Export

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[9] *Id.* at 6.

[10] The tabulated data is available at Energy Information Administration, Lower 48 Natural Gas Production and Wellhead Prices by Supply Region, http://www.eia.gov/oiaf/aeo/tablebrowser/#release=FE2011&subject=16-FE2011&table=72-FE2011&region=0-0&cases=rfhexslw-d090911a,rflexrpd-d090911a,rflexslw-d090911a,rfhexrpd-d090911a,ref2011fe-d020911a

[11] EIA, "Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets" (Oct. 29, 2014) ("Updated Export Study"), at 12, *available online at* http://www.eia.gov/analysis/requests/fe/pdf/lng.pdf).

[12] *Id.* Table B2 (but note that EIA predicts that even in this scenario, exports will cause an increase in coal use).

[13] EIA, "Annual Energy Outlook 2015" (Apr. 2015) at 6, 21-22, 24, *available online at* http://www.eia.gov/forecasts/aeo/pdf/0383(2015).pdf.

[14] Export Study at 6, 10.

[15] Updated Export Study at 12, 16.

Study.[16] Another report, by ICF, has already published forecasts of state-specific increases in gas production in response to exports.[17] The ICF State Level Impact study uses a detailed model of new production in response to exports. This same tool could likely be used to predict where production would increase in response to Sempra's Project. Alternatively, the general export scenario already conducted by this study provides a basis for evaluating the cumulative impacts of proposed export projects.

C. Induced Gas Production Will Cause Significant Environmental Harm

The additional gas production induced by exports facilitated by the Project would have significant foreseeable environmental impacts that must be considered in the EIR/EIS. These environmental effects include emissions of greenhouse gases, contribution to regional ozone formation, water consumption, groundwater contamination, habitat fragmentation, induced seismicity and others. Analysis of the environmental impacts of induced gas production does not require knowledge of the precise sites where additional production will occur. For example, one can evaluate environmental costs, and the economic costs which accompany them, in aggregate. The Commission and Forest Service can quantify the net increases in air pollution associated with the number of wells that the project will induce based on EPA's emissions inventories. The Commission and Forest Service can also derive the net volumes of waste from industry reports and state discharge figures. At a minimum, the Commission and Forest Service can localize these impacts by region. Even for those impacts that are more closely tied to a specific location, such as habitat fragmentation, the Commission and Forest Service can and must acknowledge that the impact will occur, including an estimate of the severity of the impact averaged across potential locations. *See Scientists' Inst. for Pub. Info. v. Atomic Energy Comm'n*, 481 F.2d 1079, 1096-97 (D.C. Cir. 1973) (where there are reasonable estimates of the deployment of nuclear power plants, the amount of waste produced, and the land needed to store waste, NEPA required analysis of the impacts of such storage even though the agency could not predict where such storage would occur). Moreover, NEPA regulations provide that the Commission and Forest Service "shall" obtain information that is essential to a reasoned choice among alternatives unless the costs of obtaining it are "exorbitant." 40 C.F.R. § 1502.22.

The Commission and Forest Service must, for example, quantify the volume of greenhouse gases that will be emitted by the additional natural gas production induced by the Project. The National Energy Technology Laboratory's ("NETL") report titled "Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States," DOE/NETL-2014/1649 (May 29, 2014), illustrates one way in which this analysis can be accomplished.[18] Sierra Club notes that this report understates the emissions associated with natural gas

[16] *See* http://www.eia.gov/oiaf/aeo/tablebrowser/#release=FE2014&subject=0-FE2014&table=72-FE2014&region=0-0&cases=refaeo-d062614a,ref12-d080214a,ref16-d080214a,ref20-d080214a,ref20pd100614a

[17] *See* U.S. LNG Exports: State-Level Impacts on Energy Markets and the Economy (November 13, 2013), *available at* http://www.api.org/~/media/Files/Policy/LNG-Exports/API-State-Level-LNG-Export-Reportby-ICF.pdf.

[18] http://energy.gov/sites/prod/files/2014/05/f16/Life%20Cycle%20GHG%20Perspective%20Report.pdf

production, and thus that the inputs to this method of analysis should be changed.[19] For instance, the NETL reports drastically underestimated the quantity of methane that is emitted with natural gas production and transmission, as well as the impact of each ton of methane emitted. Additionally, generating electricity consumed by the Costa Azul LNG export terminal would also be a major source of indirect greenhouse gas emissions. Generation of this electricity would emit significant amounts of air pollution, including but not limited to greenhouse gases.

There are significant air pollution emissions caused by natural gas production. Numerous peer reviewed studies that have measured natural gas production methane leak rates in the atmosphere indicate a leak rate of approximately 3%.[20] A recent paper by researchers at Carnegie Mellon and the National Ocean and Atmospheric Administration concludes that the most likely methane leak rate is between 2 and 4 percent.[21] Emissions of methane are generally correlated with emissions of volatile organic chemicals (VOC) and other pollutants, as we explain below.

The Commission and Forest Service must also address the effect of additional gas production on ground-level ozone, or smog. Ozone impacts are particularly pertinent here, because the project will potentially draw natural gas from, and induce increases in natural gas production in regions where oil and gas production is already causing severe increases in ozone levels. The regional-level forecasts of induced gas production that can be provided by available tools provide a basis for assessing impacts on ozone levels, because ozone is generally assessed at the regional level. *See Sierra Club v. E.P.A.*, 774 F.3d 383, 385, 397-99 (7th Cir. 2014) (upholding EPA analysis that assesses ozone precursor reductions across a 22-state region as sufficient to demonstrate impacts on three discrete urban areas). Oil and gas production is a significant source of VOC and nitrogen oxides (NOx), which lead to ozone formation. Numerous areas of the country with heavy concentrations of drilling are now suffering from serious ozone problems.[22] On October 1, 2015, US EPA finalized a rule lowering the ozone standard from 75 to 70 parts per billion.[23]

As we have discussed above, EIA indicates that 84% of the gas demand created by LNG exports could come from new production. Total demand will equal the volume of exports plus gas consumed in the liquefaction process (which EIA predicts to add 10% to total demand). A significant fraction of this gas produced will leak during the gas lifecycle, from a conservative estimate of 1.4%[24] to 3.0%[25] to even higher.[26] For any given leak rate and volume of production,

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[19] Sierra Club et al., Comment on Climate Impacts of LNG Exports (July 21, 2014), *available at* https://fossil.energy.gov/app/docketindex/GetAttachment?ID=180.
[20] *Id.* at 7.
[21] Stefan Scheietzke et al., "Natural gas fugitive emissions rates constrained by global atmospheric methane and ethane" Environmental Science & Technology, (June 19, 2014), DOI: 10.1021/es501204c, *available at* http://pubs.acs.org/doi/abs/10.1021/es501204c (see pages 22 to 23 of "Just Accepted" manuscript).
[22] *See* Sierra Club's Comment on US DOE's Addendum to Environmental Review Documents Concerning Exports (July 21, 2014), at 16 – 19, *available at* https://fossil.energy.gov/app/docketindex/GetAttachment?ID=133.
[23] U.S. EPA, National Ambient Air Quality Standards for Ozone, *available at* http://www3.epa.gov/airquality/ozonepollution/pdfs/20151001overviewfs.pdf.
[24] Figure used in the NETL GHG lifecycle study.

EPA conversion factors allow us to estimate the emissions of individual pollutants included in the 'leaks.'[27] Little information on the expected capacity of Sempra's proposed Costa Azul export facility is available, but it is highly likely that the natural gas production induced to supply it would be responsible for thousands of tons of increased air pollution. For perspective, these emissions are far above the thresholds for "major" source permitting under the Clean Air Act, which are generally just tens of tons of pollution; for greenhouse gases, the threshold is generally 75,000 tons of carbon dioxide equivalent (note that the table above expresses methane as tons of methane, rather than tons of carbon dioxide equivalent). Sempra would thus greatly increase air pollution in the regions from which it draws its gas, imperiling public health and the global climate. NETL provides another method of estimating these impacts, illustrated by NETL's bottom-up estimate of NOx emissions.[28] NETL estimates that the cradle to transmission NOx emissions for natural gas used in combined cycle power plants are roughly 0.6 kilograms of NOx per megawatt hour generated, with roughly 0.5 kilograms specifically from production rather than transport.[29] Using NETL's assumption of a combined cycle power plant efficiency of 46% and EIA's estimate of a natural gas heat content of 1025 British thermal units per cubic foot,[30] NETL indicates that production and transmission of natural gas emits 87 metric tons of NOx per bcf of gas. Thus, using the tools described above to determine the location and amount of additional production the EIR/EIS could estimate the amount of VOC and NOx emissions that would be emitted by this production in these regions. This emissions estimate would provide a basis for meaningful discussion regarding impacts on regional ozone levels.

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[25] Miller et al. PNAS study, Sierra Club, et al., Comments on DOE Export Life Cycle Analysis, at 9, *available at* https://fossil.energy.gov/app/docketindex/GetAttachment?ID=180.

[26] Schneising, O, et al. (2014) Remote sensing of fugitive methane emissions from oil and gas production in North American tight geologic formations. Earth's Future. dx.doi.org/10.1002/2014EF000265.. Lavoie et al. (2015). Aircraft-based measurements of point source methane emissions in the Barnett Shale Basin. ES&T. dx.doi.org/10.1021/acs.est.5b00410. Lyon et al. (2015). Constructing a spatially resolved methane emission inventory for the Barnett Shale region. ES&T. dx.doi.org/10.1021/es506359c. Marchese et al. (2015). Methane emissions from United States natural gas gathering and processing. ES&T. dx.doi.org/10.1021/acs.est.5b02275. McKain et al. (2015). Methane emissions from natural gas infrastructure and use in the urban region of Boston, Massachusetts. PNAS. dx.doi.org/10.1073/pnas.1416261112. Zimmerle et al. (2015). Methane emissions from the natural gas transmission and storage system in the United States. ES&T. dx.doi.org/10.1021/acs.est.5b01669.

[27] EPA, Oil and Natural Gas Sector: Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution, Background Technical Support Document for the Proposed Rules, at 2-4 (July 2011) ("2011 TSD"), at Table 4.2, *available at* http://nepis.epa.gov/Exe/ZyPDF.cgi/P100CHTC.PDF?Dockey=P100CHTC.PDF. EPA calculated average composition factors for gas from well completions. EPA's conversions are: 0.0208 tons of methane per mcf of gas; 0.1459 lb VOC per lb methane; and 0.0106 lb HAP per lb methane. These estimates, which are based on a range of national data, provide a beginning point for quantitative work, although greater precision could be provided using forecasts of the distribution of production likely to be induced by the Project and emission rates particular to those plays.

[28] NETL, Life Cycle Analysis of Natural Gas Extraction and Power Generation, DOE/NETL-2014/1646, at 52- 54 (May 29, 2014), *available at* http://www.netl.doe.gov/File%20Library/Research/Energy%20Analysis/Life%20Cycle%20Analysis/NETL-NG-Power-LCA-29May2014.pdf.

[29] *Id.* at Figure 4-19, "Life Cycle NOx Emissions for Natural Gas Power Using Domestic Natural Gas Mix."

[30] http://www.eia.gov/tools/faqs/faq.cfm?id=45&t=8

The EIR/EIS must also address impacts to habitats and landscapes from additional gas production. For example, available tools can estimate the amount of gas that is ultimately produced by different types of wells[31] and the proportion of induced gas production that will result from different types of production[32]—and , thus, the rough number of individual wells that will be drilled a result of the Project. Available tools further estimate the surface area disturbed by each well pad and associated infrastructure and the spacing of well pads.[33] This type of information enables the Commission and Forest Service to discuss the extent and intensity of habitat fragmentation and landscape disruption that will be caused by the production induced by the Project.

In summary, all available evidence indicates that the Project will cause a significant increase in North American natural gas production. This increased production will have significant environmental impacts, including impacts on climate, ozone, and habitat. The Commission and Forest Service have an affirmative obligation to investigate and disclose these impacts in the EIR/EIS.

D. Environmental Impacts of Increased Domestic Gas Prices

The EIA studies and private models agree that natural gas exports will also increase coal use. EIA concluded that this effect would occur even if regulations were adopted to limit use of coal generally.[34] As with increased natural gas production, increased coal use will emit greenhouse gases, emit ozone-forming pollution, and cause other foreseeable environmental impacts.

E. Indirect Effects of Liquefied Natural Gas Use in Importing Markets

The Commission and Forest Service must also consider the environmental effects of transporting liquefied natural gas overseas and combusting it in end-use markets. Given Sempra's proposed LNG export terminal is located on the North American West Coast, exports are likely to be directed to Asia, an assumption supported by basic geography. The National Energy Technology Laboratory has concluded that the emissions associated with exports to Asia can be usefully illustrated by considering exports to Shanghai, China, and subsequent combustion in a combined cycle natural gas power plant.[35]

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[31] See, e.g., NETL Environmental Impacts of Unconventional Natural Gas Development and Production, DOE/NETL-2014/1651 at Exhibit 2-9 (May 29, 2014), *available at* http://www.netl.doe.gov/File%20Library/Research/Oil-Gas/publications/NG_Literature_Review3_Post.pdf

[32] *See, e.g.*, Export Study.

[33] NETL, Environmental Impacts of Unconventional Natural Gas Development and Production, DOE/NETL-2014/1651, at 115-120.

[34] Updated Export Study at Table B2.

[35] NETL, Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States, fn18, at 1. Although this NETL report considered exports originating in New Orleans, LA, NETL's methodology could be used to estimate the impacts of exports from the Costa Azul Terminal under consideration here.

In discussing these effects, the Commission and Forest Service cannot assume that exported natural gas will be used to displace coal or other fossil fuels. All available reports and studies indicate that increasing natural gas supply globally, and in Asia in particular, will increase overall energy consumption (*i.e.*, some of the exported gas won't "displace" anything), and that when displacement occurs, some renewables are displaced as well as coal.[36] The tools used in these studies can also be used to show how likely end-use markets will respond to U.S. LNG exports. See 40 C.F.R. § 1502.22.

Finally, the Commission and Forest Service cannot assume that, where the project does cause some end-users to use exported liquefied natural gas instead of coal, this substitution reduces greenhouse gas emissions. As we explain above, NETL underestimates the overall lifecycle emissions of liquefied natural gas exports. Correcting these issues undermines NETL's conclusions that substituting U.S. LNG exports for coal is likely to reduce global greenhouse gas emissions. The need to correct the NETL analysis on this issue, however, is not a basis for the Commission and Forest Service to ignore the NETL report entirely.

F. The EIR/EIS Must Use Updated Global Warming Potentials

Sempra's June 2014 Environmental Assessment ("PEA") purports to account for impacts of emissions of non-carbon-dioxide greenhouse gases by converting these emissions to their "CO2-equivalents."[37] In so doing, the PEA fails to account for the Intergovernmental Panel on Climate Change's (IPCC) 2013 revisions to the estimate of these gases' impacts.[38] In the IPCC's most recent assessment, the IPCC stated that the "better estimates" of the impact of methane and other non-CO2 greenhouse gases should account for "climate-carbon feedback[s]."[39] IPCC concluded that better estimate of the 100-year global warming potential of fossil methane was 36,[40] as opposed to the estimate of 21 the PEA used here.[41] The IPCC concluded that on a 20-year basis, the global warming potential of methane was 87. The Commission and Forest Service must use these updated estimates in its EIR/EIS so that climate carbon feedbacks are captured in the global warming potential. Doing so will likely increase the CO2e totals from the project.

Sierra Club appreciates the CPUC and Forest Service's attention to these comments and looks forward to assisting in a robust environmental analysis that capture that full extent of impacts resulted from the proposed project.

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[36] International Energy Agency, Golden Rules for a Golden Age of Gas, Ch. 2 p.91 (2012)); see also Haewon McJeon et al., Limited impact on decadal-scale climate change from increased use of natural gas, 514 Nature 482-485 (Oct. 23, 2014), http://www.nature.com/nature/journal/vaop/ncurrent/full/nature13837.html, doi:10.1038/nature13837

[37] PEA at 5-65.

[38] IPCC, Climate Change 2013: Physical Science Basis, Annex III: Glossary, 1455, available at https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5_AnnexIII_FINAL.pdf.

[39] *Id.* at 714.

[40] *Id.*

[41] PEA at 5-65.

Respectfully submitted,

/s/

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DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
915 WILSHIRE BOULEVARD, SUITE 930
LOS ANGELES, CALIFORNIA 90017

DEPARTMENT OF THE ARMY RESPONSE TO PREPARATION AND SCOPING NOTICE FOR THE NORTH-SOUTH PROJECT

November 18, 2015

To Whom It May Concern:
Public Scoping Comments
RE: North-South Project
505 Sansome Street, Suite 300
San Francisco, CA 94111

It has come to our attention that you are evaluating the Forest Service Application No. FCD102314 for the proposed North-South Project. The proposed project includes the construction, operation, and maintenance of a 65 mile long, 36-inch diameter, natural gas transmission pipeline. The project includes rebuilding the Adelanto Compressor Station, as well as the installation of additional pressure and communications equipment at the Moreno Pressure Limiting Station, the Whitewater Pressure Limiting Station, the Desert Center Compressor Station and the proposed Shaver Summit Pressure Limiting Station.

This activity may require a U.S. Army Corps of Engineers permit. A Corps of Engineers permit is required for:

a) structures or work in or affecting "navigable waters of the United States" pursuant to Section 10 of the Rivers and Harbors Act of 1899. Examples include, but are not limited to,

1. constructing a pier, revetment, bulkhead, jetty, aid to navigation, artificial reef or island, and any structures to placed under or over a navigable water;
2. dredging, dredge disposal, filling and excavation;

b) the discharge of dredged or fill material into, including any redeposit of dredged material other than incidental fallback within, "waters of the United States" and adjacent wetlands pursuant to Section 404 of the Clean Water Act of 1972. Examples include, but are not limited to,

1. creating fills for residential or commercial development, placing bank protection, temporary or permanent stockpiling of excavated material, building road crossings, backfilling for utility line crossings and constructing outfall structures, dams, levees, groins, weirs, or other structures;
2. mechanized land clearing, grading which involves filling low areas or land leveling, ditching, channelizing and other excavation activities that would have the effect of destroying or degrading waters of the United States;

3. allowing runoff or overflow from a contained land or water disposal area to re-enter a water of the United States;
4. placing pilings when such placement has or would have the effect of a discharge of fill material;

c) the transportation of dredged or fill material by vessel or other vehicle for the purpose of dumping the material into ocean waters pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972;

d) any combination of the above.

Furthermore, I cannot determine whether your proposed activity would interfere with any existing or proposed Federal project. If the proposed activity would affect an existing or proposed U.S. Army Corps of Engineers authorized project, pursuant to 33 U.S. Code 408 ("Section 408"), a 408 approval would be required. For information on our Section 408 application review process, please contact Stephen Vaughn in our Engineering Division at 213-452-3654 or via e-mail at Stephen.Vaughn@usace.army.mil and Phil Serpa in our Asset Management Division at 213-452-3402 or via e-mail at Phillip.J.Serpa@usace.army.mil.

If you have questions regarding our Regulatory program requirements, please contact me at 213-452-3414 or via e-mail at Daniel.P.Swenson@usace.army.mil.

Please refer to Corps File No. SPL-2015-00809 in any future correspondence on your proposed project with our Regulatory, Engineering, and/or Asset Management Division offices.

Thank you for participating in the Regulatory Program. Please help me to evaluate and improve the regulatory experience for others by completing the customer survey form at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. An application for a Department of the Army permit is available on our website: http://www.usace.army.mil/Portals/2/docs/civilworks/permitapplication.pdf.

Sincerely,

Daniel P. Swenson, D. Env.
Chief, LA and San Bernardino Section
North Coast Branch
Regulatory Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco. CA 94105-3901

NOV 23 2015

Jody Noiron
United States Forest Service
Public Scoping Comments Re: North-South Project
505 Sansome Street, Suite 300
San Francisco, California 94111

Subject: Notice of Intent to Prepare a Joint Environmental Impact Report/Environmental Impact Statement for the North-South Project, San Bernardino and Riverside Counties, California

Dear Ms. Noiron:

The U.S. Environmental Protection Agency has reviewed the above-referenced document pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508) and our NEPA review authority under § 309 of the Clean Air Act.

On September 30, 2015, the EPA received a letter from the United States Forest Service inviting the EPA to join as a cooperating agency. The EPA accepted cooperating agency status via a letter dated October 22, 2015. The EPA looks forward to working with the Forest Service on the project.

To assist in the scoping process for this project, we have identified several issues for your attention in the preparation of the Draft EIR/EIS. These issues include: impacts to water, air, biological resources, invasive species management and habitat protection, among others.

We appreciate the opportunity to review this project and are available to discuss our comments. Please send one hard copy of the Draft EIR/EIS and one CD ROM copy to the address above (mail code: ENF-4-2). If you have any questions, please contact Scott Sysum, the lead reviewer for this project. Scott can be reached at (415) 972-3742 or sysum.scott@epa.gov.

Sincerely,

Tom Plenys
Environmental Review Section

Enclosures:
EPA's Detailed Comments

US EPA DETAILED COMMENTS ON THE NOTICE OF INTENT TO PREPARE A JOINT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT FOR THE NORTH-SOUTH PROJECT, SAN BERNARDINO AND RIVERSIDE COUNTIES, CALIFORNIA, NOVEMBER 23, 2015

Purpose and Need

The Draft Environmental Impact Report/Environmental Impact Statement should clearly identify the underlying purpose and need for the project and for which alternatives are being proposed (40 CFR 1502.13). When formulating the need, identify and describe the underlying problem, deficiency, or opportunity that the action is meant to address. The purpose then defines the measurable objectives to be used for evaluating the effectiveness of potential alternatives toward meeting the need.

Alternatives Analysis

Reasonable alternatives should include, but are not necessarily limited to, alternative configurations and routes for the pipeline. The Draft EIS should provide a discussion of the reasons for the elimination of alternatives which are not evaluated in detail.

A reasonable range of alternatives will include options for avoiding environmental impacts. The Council on Environmental Quality regulations for implementing the National Environmental Policy Act state that alternatives should include appropriate mitigation measures not already included in the proposed action or alternatives (40 CFR 1502.14(f)).

Water Resources

Water Supply and Water Quality

The Draft EIS should estimate the quantity of water the project will require during the construction phase and during operations. Describe the source of this water and potential effects on other water users. If groundwater will be used, the potentially-affected groundwater basin should be identified and impacts to groundwater recharge, springs or other surface water bodies and biologic resources should be analyzed. The Draft EIS should include a discussion of cumulative impacts to groundwater resources within the hydrographic basin, including reasonably foreseeable impacts from other projects that have been proposed. Available technologies to minimize or recycle water should be identified. Any landscaping around buildings should utilize xeric native plants.

The Draft EIS should also address the potential effects of project discharges on surface and groundwater quality, including wastewater discharges from any office or maintenance buildings, discharge of hydrostatic testing waters and discharge of dewatering water.

Clean Water Act Section 404

The project applicant should coordinate with the U.S. Army Corps of Engineers to determine if the proposed project requires a Section 404 permit under the Clean Water Act. Section 404 regulates the discharge of dredged or fill material into waters of the United States (WOUS), including wetlands and other *special aquatic sites*. The Draft EIS should describe all WOUS that could be affected by the project alternatives, and include maps that clearly identify all waters within the project area, including ephemeral drainages. The discussion should include acreages and channel lengths, habitat types, values, and functions of these waters. If a 404 permit is required, the project must comply with *Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials* (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA ("404(b)(1) Guidelines"). Pursuant to 40 CFR 230, any permitted discharge into WOUS must be the least environmentally damaging practicable alternative available to achieve the project purpose. The Draft EIS should include, and craft NEPA alternatives consistent with, evaluating project alternatives in this context, in order to demonstrate

the project's compliance with the 404(b)(1) Guidelines. If, under the proposed project, dredged or fill material would be discharged into WOUS, the Draft EIS should discuss alternatives to avoid those discharges.

Avoiding Desert Washes Regardless of Jurisdiction

The arid Southwest and Midwest portions of the country have the highest number of seasonal and rain-dependent streams. According to the National Hydrography Dataset, 73% of California's stream network is classified as non-perennial. Non-perennial streams represent nearly all of the stream network in more arid regions and most of the headwater streams in the more mountainous regions of the State.[1] For these non-perennial streams, infrequent, short-lived but high-volume flash flows are the norm. These flows, although rare, are essential to the integrity of the nation's arid ecosystems, underscoring the importance of their protection. These flows also recharge groundwater by storing and circulating water in the stream network across a landscape.

The Draft EIS should commit to the use of natural washes, in their present location and natural form and with adequate natural buffers, for flood control to the maximum extent practicable. Because placement of the underground pipeline could result in erosion, migration of channels and local scour, the pipeline route should avoid washes if practicable to minimize direct and indirect impacts to the washes. The potential damage that could result from disturbance of flat-bottomed washes includes alterations to the hydrological functions that natural channels provide in arid ecosystems: adequate capacity for flood control, energy dissipation, and sediment movement, as well as impacts to valuable habitat for desert species.

Air Quality

The Draft EIS should provide a detailed discussion of ambient air conditions (baseline or existing conditions), National Ambient Air Quality Standards and nonattainment areas, and potential air quality impacts of the project, including cumulative and indirect impacts, for each fully evaluated alternative.

Emissions should be estimated for the construction phase and the operational phase. Mitigation measures, both applicant proposed mitigation measures and Forest Service proposed mitigation measures, for construction emissions, fugitive dust and operations should be discussed. Typical mitigation measures include construction emission reduction strategies, fugitive dust control measures, mobile and stationary source controls and administrative controls.

Biological Resources and Habitat

Desert Biodiversity

Impacts to biological resources can be substantial in desert habitats. Less than 1% of the vegetation in deserts is riparian (streamside), yet most desert animal species, whether birds, mammals, reptiles or amphibians, rely on riparian habitat for at least part of their life cycle.

Efforts to preserve vegetation and habitat should be pursued. In arid areas, disturbed vegetation is slow to recover. Practices that preserve habitat, minimize weed invasion, and prevent erosion should be incorporated into the project.

The potential impacts of construction, installation, and maintenance activities on habitat and species should be discussed in the Draft EIS.

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[1] California State Water Resources Control Board. *Extent of California's Perennial and Non-Perennial Streams.* October 2011. <http://www.swrcb.ca.gov/water_issues/programs/swamp/docs/reports/mgmt_memo2extent.pdf>

Species and Habitat Protection
The Draft EIS should identify all petitioned and listed threatened and endangered species and critical habitat that might occur within the project area. The Draft EIS should identify and quantify which species or critical habitat might be directly, indirectly, or cumulatively affected by each alternative and mitigate impacts to these species. Emphasis should be placed on the protection and recovery of species due to their status or potential status under the Endangered Species Act. We recommend that the Forest Service consult with the U.S. Fish and Wildlife Service and, if required, prepare a Biological Opinion under Section 7 of the ESA if there are threatened or endangered species present. The Draft EIS should provide a recent status update of this report if this action has been or will be undertaken. Analysis of impacts and mitigation on covered species should include:

- Baseline conditions of habitats and populations of the covered species;
- A clear description of how avoidance, mitigation and conservation measures will protect and encourage the recovery of the covered species and their habitats in the project area;
- Monitoring, reporting and adaptive management efforts to ensure species and habitat conservation effectiveness.

The Draft EIS should indicate what measures will be taken to protect important wildlife habitat areas from potential adverse effects of proposed activities.

Invasive Species
Executive Order 13112, *Invasive Species* (February 3, 1999), mandates that federal agencies whose actions may affect the status of invasive species shall use their relevant authorities to prevent their introduction, provide for their control, and minimize the economic, ecological, and human health impacts that invasive species cause. The Draft EIS should describe how the project will meet the requirements of E.O. 13112. The EPA recommends including an invasive plant management plan for the monitoring and control of noxious or invasive weeds.

Cumulative Impacts

Cumulative impact analyses describe the threat to resources as a whole, presented from the perspective of the resource instead of from the individual project. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR §1508.7). Discussions of cumulative impacts are usually more effective when included in the larger discussions of environmental impacts from the action (the environmental consequences chapter), as opposed to locating cumulative impact analyses in a separate chapter.

The Draft EIS should describe the methodology used to assess cumulative impacts. We recommend the methodology developed jointly by the EPA, the Federal Highway Administration, and the California Department of Transportation, available at: http://www.dot.ca.gov/ser/cumulative_guidance/approach.htm. While this methodology was developed for transportation projects, the principles and steps in this guidance offer a systematic way to analyze cumulative impacts for any project.

The analysis of cumulative impacts should consider the impacts of other projects, in addition to other developments in the area and general resource trends, on the resources that would be affected by the proposed project. We recommend thorough discussions of cumulative impacts to water resources and biological resources.

Climate Change Effects

The EPA believes the Council on Environmental Quality's December 2014 revised draft guidance for Federal agencies' consideration of greenhouse gas emissions and climate change impacts in NEPA outlines a reasonable approach, and we recommend that the Forest Service use that draft guidance to help outline the framework for its analysis of these issues. Accordingly, we recommend the Draft EIS include an estimate of the GHG emissions associated with the project, qualitatively describe relevant climate change impacts, and analyze reasonable alternatives and/or practicable mitigation measures to reduce project-related GHG emissions. In addition, we recommend that the NEPA analysis address the appropriateness of considering changes to the design of the proposal to incorporate GHG reduction measures and resilience to foreseeable climate change. The Draft EIS and Final EIS should make clear whether commitments have been made to ensure implementation of design or other measures to reduce GHG emissions or to adapt to climate change impacts.

Hazardous Materials/Waste Management

The Draft EIS should address potential direct, indirect and cumulative impacts of waste generation, including hazardous waste, from construction and operation. The document should identify projected waste types and volumes and identify expected storage, disposal, and management methods. Identify the applicability of federal and state hazardous and solid waste requirements. The generation of hazardous waste should be minimized.

Valley Fever (Coccidioidomycosis)

The number of Valley Fever cases in the United States has been steadily increasing over the past few years. There were over 20,000 reported cases in 2011, and the Center for Disease Control estimates that an additional 150,000 cases go undiagnosed each year. About 25% of all cases occur in California. In 2011, there were 75 cases of Valley Fever in San Bernardino County, an incidence rate of 3.4 cases per 100,000 people.[2]

Underground pipeline projects that disturb desert soil may have impacts on the health of nearby residents, including valley fever and other respiratory complaints.

The Draft EIS should assess potential exposures to the fungus Coccidioides that could result from soil-disturbing activities of the project, and the susceptibilities of workers and nearby residents to Valley Fever. Include, in the Draft EIS, an Environmental Awareness Program to be implemented for the workers and a notification plan for the nearby residents.

The worker training should include training on the health hazards of Valley Fever, how it is contracted, what symptoms to look for, proper work procedures, how to use personal protective equipment, the need to wash prior to eating, smoking or drinking and at the end of the shift, and the need to inform the supervisor of suspected symptoms of work-related Valley Fever. The training should identify those groups of individuals most at risk and urge individuals to seek prompt medical treatment if Valley Fever symptoms (flu-like illness with cough, fever, chest pain, headache, muscle aches, and tiredness) develop.

[2] San Bernardino Department of Public Health, Division of Environmental Health Services. *Coccidioidomycosis*. Updated June 2015. <http://www.sbcounty.gov/uploads/dph/dehs/Depts/EnvironmentalHealth/EHSDocuments/Coccidioidomycosis.pdf>