1. Logistic details:

Meeting: Lanare Community Energy Option Assessment Workshop

Meeting date: May 17, 2018

Location: Lanare Community Center 20620 S Grantland Ave, Riverdale CA 93656

2. Attendance: Approximately 18

Community members: approximately 142

3. Presenters and presentation topics, listed in order

- Commissioner Martha Guzman-Aceves, CPUC Overview and Introduction
- Leslie Martinez, Leadership Council (on behalf of Pilot Team) Listening session #1: Gather community feedback on current energy conditions and needs
- Cesar Gonzalez, Pacific Gas and Electric Company Affordable Energy Options for Lanare, CA (Electrification Energy Options)
- Alicia Bohigian, GRID Alternatives and Hector Urlarte, Proteus Home Energy Upgrades, Battery Storage, and Community Solar: A Clean Energy Program Proposal for Lanare
- Daisie Cristobal Sanchez, Southern California Gas Company Affordable Energy Options for Lanare, CA Natural Gas Pipeline Extension Proposal
- Leslie Martinez, Leadership Council (on behalf of Pilot Team) *Listening Session #2: Questions on energy options and next steps*
- Commissioner Martha Guzman Aceves, CPUC Wrap up, Q&A and next steps

Summary of Discussion Topics & Community Input in Lanare

Accessibility of Programs and Discussion

- The Lanare presentation was conducted in Spanish, with real-time translation services provided via headset and translator. Some discussions were in English with Spanish translation.
- Statement by long-time resident/community member:
 - We are paying very high bills and in this meeting, we are looking to get basic services and we hope all of you can help us. We had a walk through in our community and the residents told the companies about their needs, water, roads, septic, no internet and there are many things they need. Not luxuries but basic needs that everyone should have. Thank you to the residents and the companies for attending tonight.

1. Overview and Introduction [CPUC]

- Statements by Commissioner Guzman-Aceves:
 - o The Commissioner introduced the CPUC and the CPUC staff working on this proceeding. The Commissioner described the CPUC's function and how it is focused on several parts of the economy to protect California consumers and their health.

 The CPUC's focus is on electricity, natural gas, telecommunications, water, rail and transportation.

 Commissioner Guzman-Aceves will propose potential projects for investments, but is going to need the support of the other Commissioners. Several steps will be required to obtain their support. Commissioner asked the audience "How

many have natural gas?" (4 hands raised in the audience) and then she asked, "How many are on propane?" (4 hands raised in the audience). The Commissioner went on to state that in Lanare their water is public and that there are available funds with regard to Obama era telephone policies. She advised the audience that she is one of five commissioners, and she needs the support from the other commissioners to approve one of today's proposals. The purpose of the workshop is to discuss energy options so that the Lanare community members can offer their opinion on which energy option is preferred.

- There are a variety of current programs that the CPUC offers

 such as CARE, which provides electricity discounts. The
 discussion at this workshop is important because the

 Commission can offer different types of programs.
- The Commissioner also discussed pollution resulting from emissions of fine particulates on a scale of very dirty to very clean.
- Assembly Bill 2672 passed by Assemblyman Perea directed the CPUC to seek solutions for communities lacking access to natural gas and affordable energy options. After Assembly Bill 2672 passed in the California legislature, the Commission began the San Joaquin Valley proceeding. From the 170 disadvantaged communities identified in Phase 1, 12 pilot communities were chosen to potentially host pilot projects.

Yesterday, we were in Seville and they have no natural gas. Phase 2, the current phase of the proceedings, is to explore the pilot projects. The Commissioner's goal is to facilitate investment in all 12 communities, but this goal and the selected pilots must be voted on and approved by all five CPUC Commissioners.

- The Commissioner presented a map of all 170 communities. Some communities have partial natural gas service, others have none like Seville. She also presented a map of the 12 proposed pilot communities including Lanare which has approximately 142 households. PG&E provides electricity service and natural gas service is provided by Southern California Gas Company.
- o Residential natural gas and electric alternatives will be presented today as ideas for potential pilots. The CPUC is here to listen to your input. The Commissioner will make a recommendation and return to the valley with what we can do, she will not be able to come back to every community. Commission needs you to go to Fresno and Visalia to attend the public participation hearing meetings. Sarah Sharpe is here in Fresno if you have questions, visit the CPUC web or send your letter to the CPUC. The Commissioner asked attendees to please subscribe so they can know when the September meetings will be held. She indicated that during today's meeting they are going to present 3 options: two electricity and one natural gas.

- Next steps after community energy option assessment workshops in May-June 2018 include the following:
 - CPUC releases staff recommendation for pilot phase (August 2018),
 - Workshops on staff proposal with parties (August 2018),
 - Public participation hearings (2-3) in larger cities in San Joaquin Valley (September 2018),
 - Judge and Commissioner release their Proposed
 Decision (Fall 2018), and
 - Commissioners vote on Proposed Decision (Fall 2018).
 - If Proposed Decision is approved, pilot work could potentially begin Winter 2018-2019.
- This will be a quick turnaround so the Commission needs communities to say what they prefer today. We are here to listen today.
- 2. Listening session #1: Gather community feedback on current energy conditions and needs [Pilot Team moderated discussion with community]
 - Resident: Said their natural gas bill is more affordable. Had
 an \$80.00 natural gas bill in the winter months and when
 they had propane, their bill was \$280.00-\$320.00 per month.
 Winter would be 2-3x more for the propane bill, which
 included a heater for the house, stove and water heater.

- Resident: When they use propane to cook it makes the pots black and the propane has a very strong odor when they are cooking. They now have natural gas, and the food is healthier and cooking is easier on a natural gas stove.
- Leslie (Pilot Team): Asked if anyone had an electric stove:
 Residents did not respond. No one specified that they had an electric stove in the audience.
- o Resident: Stated that they have a fireplace that they use in the winter. The propane heater wastes propane and it is more expensive, so they use the fireplace instead. The resident will spend \$40.00 for firewood approximately every 12 days to heat trailer. The resident explained that if the propane tank runs out of propane completely the propane company charges \$125.00 to safety check the boiler and stove. Resident stated that they can't tell when they will run out of propane. The resident described that they have to save a lot of money to prepare for winter and to be sure that they do not waste too much propane. This resident stated that they have 7 people living in the house and that their electric bill is too expensive, in summer approximately \$150.00 a month. The resident did say that they use the electric space heater in the winter.
- Resident: A resident stated their electric bill is expensive and so they try to turn the lights off and not run the A/C. Resident stated that the CARE program helps with lowering the electric bill.

- Resident: Stated they are not on CARE and their electric bill
 was \$300.00 last summer, resident said they never have had
 a bill so high in twenty years. Continued to say that they turn
 off lights just to help with lowering the bill.
- Resident: Stated they only use a propane stove. Resident pays \$45.00 a month for propane, but they also have a charge of \$20-25 dollars for insurance on their propane stove.
- Resident: Stated they have an electric dryer but they hang their clothes on the outside line to get them dry because it is too expensive to run the dryer. Sometimes they hang the clothes in the sun to get them a little dry and then they put them in the dryer.

3. Overview of community energy options [Utilities/Third Parties]

- Cesar Gonzalez, Pacific Gas and Electric Company Presentation
 - Presented PG&E's Gas and Electric Service Territories.
 - o Presented Electrification Energy Options: 3 main concepts range from simple to more complicated (Option 1 is the simplest. Option 3 is the most complicated). Option 1: single savings 10% discount on your bill similar to PG&E's SolarChoice program. No panels need to be installed the solar credit is from solar energy produced elsewhere on PG&E's system. In Option 2: change appliance in your house so that you are no longer using propane and using electric appliances. Option 3: beyond just changing out propane

appliances – PG&E would install insulation in attic, more efficient lights, and more efficient refrigerators, which would provide more energy savings.

- Resident: Asked if I am in a trailer do I qualify? PG&E
 Response: Yes. Resident asked, do we have to buy the
 stove?: PG&E Response: No. PG&E would provide the
 electric stove.
- Resident: Asked will my electric bill go up? PG&E
 Response: Yes, your electricity would go up but you
 are eliminating propane bill. Also, CARE program, if
 you qualify, is additional savings to your electric bill.
- Resident: Asked what about when the electricity goes
 out? When there is an accident my electricity goes
 out at times. PG&E Response: This may still happen
 due to accidents your electricity may go out but PG&E
 will work 24/7 to serve you to restore service.
- PG&E stated: Solar is the cleanest energy. Customer asked what would be the cost difference in the electric and solar? PG&E Response: Your electric rates will remain the same, you will receive a 10% solar discount as described in Option 1.
- Resident: Stated my sister has solar and she gets a very good rate. PG&E Response: We will provide a 10% discount – electric rate will remain the same.
- Resident: Asked if a proposal is selected do we have

to have our house converted? PG&E Response:
PG&E proposes that all the community members
participate but you can opt out and not participate if
you do not want to.

- Alicia Bohigian, GRID Alternatives and Hector Urlarte, Proteus
 - GRID Alternatives, Proteus and Tesla is the Clean Energy Program Team. This team is going through the San Joaquin Valley counties and bringing home upgrades to these communities, increasing comfort in each home, air quality, reducing GHG emissions, and water conservation measures. GRID and Proteus have been working as a team for years. GRID and Proteus have construction certification to conduct these minor home upgrades. Tesla provides energy storage battery to store your own energy in event there was a grid outage. Explained home energy upgrades included and how community solar looks: new solar panels in one central area to be determined. Each community member will receive a credit for what those solar panels produces. Eligible individuals include those who rent, own, in a mobile home, whichever home – you would get savings (about 45% of annual usage) as long as you have an electric bill. The large solar array is a cleaner, more reliable, and less expensive source of energy. The financial benefits from this energy option will be at a cost savings of more than 45%, or \$1700-\$2400 annually). All residents would be eligible, regardless of home. If home upgrades are not desired, community solar

credits would still be available to lower your energy bills. Residents in nearby communities may also receive benefits. There is no cost to program participants. Costs would be recovered through utility sources and incentives at a cost of approximately \$34,000 per home. The timeline and process was shared with the goal to minimize number of visits as much as possible. The Clean Energy Program Team wants to provide the community the best services they can provide and works well as a team. Different contractors can do work at the same time to minimize visits. We will be providing training in this trade. We will eliminate all propane costs.

- We will provide a Community Solar it won't be at your house it will be at another location. Not on your roof. All residents can participate, no matter what type of home. Everyone can receive this type of energy in your home in your community.
- We will maintain and we will fix the solar panels if they breakdown.
- We will repair your house and provide a battery in case of a power outage.
- o Timeline: presented in deck and described.
- Calculation of bill savings in deck described.
 - Commissioner: The consumers for each of the companies presenting will be paying for these proposed pilots. PG&E customers will pay a little bit more, she does not know how much the customers

- will pay. She will need to talk to other commissioners to see what we will decide on for each community.
- Resident: Asks if you are going to install the solar
 equipment how long will they charge for? Grid
 Response: It will not be you that that will be paying, it
 is the PG&E customers that will pay.
- Resident: Asks how long will they pay? How much per person for the Lanare Community? Grid Response:
 Your bill will be \$66.00 with the savings of 45%.

Daisie Cristobal Sanchez (SoCalGas) – Natural Gas Proposal Presentation

- Provided information on proposal to bring natural gas service to the community of Lanare as part of the SJV OIR proceeding.
- Explained the benefits of natural gas including cleaner, safer and more reliable energy than propane. Explained that renewable gas is even cleaner, and can be produced from a variety of sustainable sources, like animal waste, landfills, crop residuals and food waste.
- During the tour of the area customers visited mentioned that when they run out of propane, the propane company charges extra fees and when that occurs to check all appliances. If this proposal is selected, residents will have customer support available 24 hours a day, 7 days a week, via phone calls or online. Technicians are available for appliance safety checks and to re-light pilots.
- Bring natural gas service to the community of Lanare has the potential for job creations both short and long term. SoCalGas has

programs to assist customers who are income qualified. During the presentation some mentioned they are already part of CARE, which is great. That is exactly why these programs are available to assist customers. Residents who are income qualified would be able to sign up for our customer assistance programs such as CARE where SoCalGas provides a 20 percent discount and Energy Assistance Program, for weatherization/home improvement work around the house at no-cost to the resident. Additionally, residents who have a medical condition could qualify for SoCalGas' Medical Baseline Allowance program where they offer natural gas at the lowest baseline rate.

- Map of construction area was provided on screen. Residents asked what would happen if they lived outside marked area.
- SoCalGas' natural gas proposal would take place in three phases the first phase being what we are doing today, providing information and gathering community input. Upon approval the second phase would begin and it is the construction phase and begins the installation of pipelines in the community leading to the meters of each home. This phase would last approximately 2 months. The third phase is where the conversion process in each household.

 Replacement of existing propane heaters, water heaters, cooking stoves, and dryers. Conversion would take approximately 2 days.

 Also within this phase, they plan to convert existing propane lines or install new house lines, install and connect new appliances, install proper venting, install meter in front of house and inspect and test appliances.

- Audience was provided with a slide showing sample of natural gas appliances that would replace existing propane or wood-fired items in home.
- Estimated the current cost of \$3.50 per gallon of propane (including delivery fees) and came up with current monthly propane cost \$115+ per month. Asked the audience what they currently pay per month on propane. Residents stated it was about the same as stated on slide.
- Further showed how much residents would pay each month on natural gas if the proposal is approved. Future monthly costs would be between \$22 - \$39. Monthly savings: \$76 - \$93. If residents qualify for CARE, the monthly savings would be approximately \$84 -\$98.
- Explained how the cost for construction would be approximately \$68,100 per HH and total project \$912,000 for the Lanare community.
- Overall, if SoCalGas' proposal is approved, residential customer monthly bills would cost less than a penny - one tenth of 1 cent additionally on all rate payers bills.
 - Resident: Indicated my house is outside of the border on the map in the deck. SoCalGas: SoCalGas will work on additional homes, the border on the map is 16 houses. If this proposal is selected SoCalGas will look at where it can provide additional homes with natural gas.

Resident: Asked so SoCalGas will not provide electricity? SoCalGas: No, SoCalGas just provides natural gas, it does not provide electricity and it will not touch the electricity appliances.

4. Listening session #2: Questions on energy options and next steps [Pilot Team Moderated discussion with public]

- Leslie Martinez (Leadership Council)
 - Had residents fill out Energy Options Questionnaire at the completion of the workshop.
 - PG&E reiterated the 3 options as the audience asked for description of the options.
 - Grid Response: Restated that electricity charges will still be through PG&E and they would provide community solar.
 Grid stated they will fix the home, whatever it needs so the air heat or air does not escape the home. They will use solar energy to reduce the cost. They will not switch out any natural gas appliances.
 - Customer: Restated that air conditioning and heating are using electric and costs about \$280.00 a month. Resident wanted to be sure that the proposal selected would be the best for the entire community and most affordable for the community. Resident also stated that the community center where the meeting is in needs upgrades.
- Leslie: Which option do you support the most?
 - Customer: Stated that he likes the Grid proposal. The Grid

- proposal seems more affordable. Natural Gas is an option and stated PG&E would still be charging high prices.
- Customer: Stated that they would switch to electricity if they
 save money savings is most important to them.
- Customer: Asked will you charge me for the solar panels?
 Grid Response: No, we will not charge you.
- Customer: Responded that they would let contractors in their home to make updates.
- Customer: Asked can I pick my appliances out? PG&E
 Response: PG&E will select a standard appliance and the
 most efficient appliances. PG&E would ask residents what
 appliances they would be interested in for color and what is
 available. PG&E stated they do not switch out natural gas
 appliances.
- Commissioner: Stated that the customer who has natural gas will not be qualified to get electrification but you will qualify for the weatherization and upgrade your home for efficiencies.
- SoCalGas stated that we will not switch out electric appliances.

5. Wrap up and next steps [CPUC]

 Commissioner shared the timeline and process. She stated one of the challenges is the cost. The Commission needs to hear what you really want. The Commissioner would need to

- fight for whatever community wants. It is helpful to hear what you want tonight.
- Encouraged residents to talk to their community and spread the word so they know what is best for them. There are approximately 142 residents in Lanare.
- Resident: Asked can we pick between the three different proposals? Commissioner Response: The community cannot individually select a proposal, the community must vote for one of the three proposals.
- Commissioner: Stated that there will not be a decision tonight. She is only one of five commissioners. The Commission will need to decide the best solution. The Commission has to analyze the costs each community has different prices for different proposals.



Exploring Affordable Energy Options for San Joaquin Valley residents



California Public Utilities Commission

Community Energy Option Assessment Workshop

Lanare, CA

May 17, 2018





What is the California Public Utilities Commission?





Telecommunications



Natural Gas





Rail and Transportation







CPUC Decisionmakers











- > 5 Commissioners
 - President Picker
 - Commissioner Peterman
 - Commissioner Randolph
 - Commissioner Guzman Aceves
 - Commissioner Rechtschaffen
- Appointed by the Governor; confirmed by the Senate
- Serve staggered, six-year terms
- ➤ Each Commissioner leads development of proceeding, then needs majority vote of all Commissioners for approval
- Today we are gathering input for Commissioner Guzman Aceves' PROPOSAL to present to all Commissioners





CPUC Offers Many Programs for Consumer Assistance and Education

California Alternate Rates for Energy (CARE) Program











CASF-Internet for All





The Big Picture

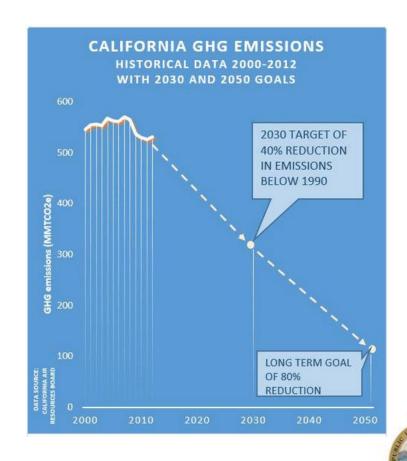






California's Path Forward

- Goal: Dramatically reduce greenhouse gas pollution -80% reduction by 2050
- Goal: Focus on communities with high pollution and poverty
- Goal: Phase out fossil fuels from all sectors to meet 50% renewable energy by 2030
- CPUC focused on energy and transportation sectors





CA Renewable Energy Transition





CPUC strategies:

- Use Less Energy-Energy Efficiency programs
- Cleaner Energy-Increasing Renewable Energy sources





Residential Natural Gas

- Propane and natural gas = fossil fuels (not renewable source of energy)
- Primarily used for heating, hot water, clothes drying and cooking
- California is reducing its reliance on natural gas to meet climate & air quality goals





Relative **Emissions** of Fine **Particles**



Woodburning **Fireplace**



Uncertified Woodstove



EPA Certified Woodstove



Pellet Stove



Oil **Furnace**



Gas **Furnace** or Stove



Electric Heat

VERY DIRTY

Highest annual pollution 244 lbs. of annual pollution

97 lbs. of annual pollution

27 lbs. of annual pollution

<1/4 lb of annual pollution

VERY CLEAN

<1/6 lb of annual pollution

ZERO annual pollution

Why are we here?







- OG ES
- Assemblyman Perea passed legislation in 2014
- Solutions for communities lacking access to natural gas and affordable energy options in SJV
- Determine whether any of the options would increase access in a cost effective manner and take appropriate action and determine appropriate funding sources



San Joaquin Valley Proceeding

Bill passed in legislature

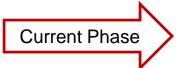
(AB 2672)

Commission Begins Proceeding

(15-03-010)

Phase 1

- Identify "disadvantaged communities"
- Hold first round of community meetings

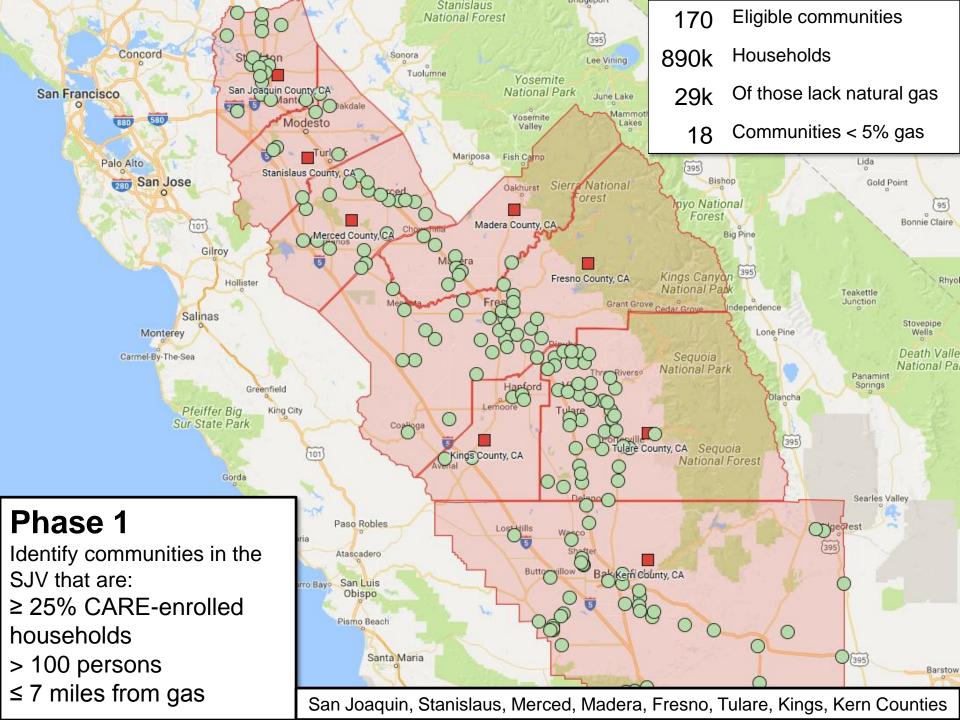


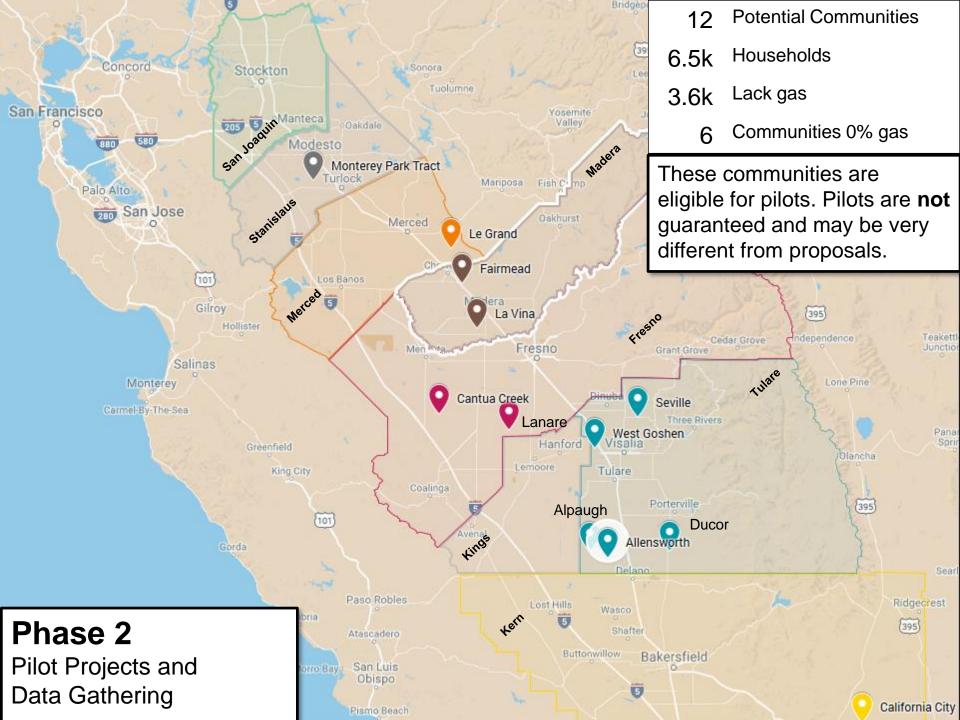
Phase 2

- Explore pilot projects
- Hold meetings on pilot projects in 12 communities
- Develop plan to gather data across the SJV

Phase 3

 CPUC Commissioners, with input from the public, choose a cost-effective option (if available) to bring affordable energy to all of SJV

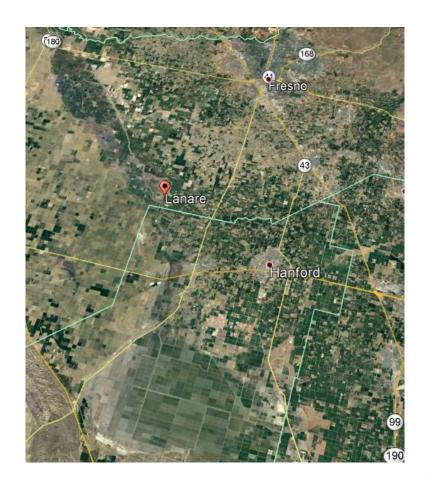






Lanare, CA

- 142 households (estimated)
- PG&E electricity service territory
- SoCalGas gas service territory (141 households ~99%)







General Pilot Project Concepts

Utilities and other parties will share more details of proposals.

Communities are eligible for pilots but pilots are not guaranteed/are subject to change.

Propane — Electric:

Transition from Propane to All-Electric Incentives for switching to electric appliances Reduce electricity usage with energy efficiency Discounts on electricity from solar sources



Propane Natural Gas:

Transition from Propane to Natural gas Incentives for switching to natural gas appliances Extend gas lines to community, connect homes



Something in between \longrightarrow Less propane:

Switch some appliances to electric, focus on energy efficiency, keep propane



Next Steps

Event	Estimated Time
Community energy option assessment workshops	May – June 2018
CPUC release staff recommendation for pilot phase ("staff proposal" draws from pilot proposals, community workshops, and comments)	August 2018
Workshops on staff proposal with parties (parties [e.g., utilities, community groups, environmental organizations, ratepayer advocates, etc.] meet to discuss technical implementation and economic issues)	August 2018
Public Participation Hearings (2-3) in SJV (CPUC presents staff proposal to members of the public, collects their feedback)	September 2018
Judge / Commissioner release their Proposed Decision (PD takes into account all prior input, including staff proposal, and is the official document that may become policy; parties have final opportunity to comment)	Fall 2018
Commissioners vote on PD (at least 3 of 5 Commissioners must vote to approve in order to move forward)	Fall 2018
If PD approved, begin pilot work	Winter 2018-2019



CPUC Team

Who is working on this proceeding?

- Commissioner: Martha Guzman Aceves
 - Advisors: Sarah Sharpe, Maria Sotero,
 Adenike Adeyeye
- Administrative Law Judge: Darcie Houck
- Industry Divisions (Energy): Director Ed Randolph, Analyst Joshua Huneycutt
- Public Advisors Office: Claudia Sanchez/ Steven Klaiber





Stay involved!

You can send your written comments to:

Public Advisor's Office California Public Utilities Commission 505 Van Ness Ave. San Francisco, CA 94102 or

by email to: public.advisor@cpuc.ca.gov

Please reference Proceeding Number: R.15-03-010

Please stop by the Public Advisor's table if you are interested in subscribing to information regarding this proceeding. Or you can subscribe online at: http://subscribecpuc.ca.gov/

Thank you!

¡Gracias!





Explorando Opciones Económicos de Energía por los residentes del Valle San Joaquín



Comisión de Servicios Públicos de California

Taller para Evaluar Opciones de Energía por la Comunidad

Lanare, CA

17 de mayo, 2018





¿Qué es la Comisión de servicios públicos de California?



Electricity



Telecommunications



Natural Gas





Rail and Transportation





CPUC Responsables











- > 5 comisionados
 - Presidente Picker
 - Comisionada Peterman
 - Comisionada Randolph
 - Comisionada Guzmán Aceves
 - Comisionado Rechtschaffen
- Nombrado por el gobernador; confirmado por el Senado
- > Sirven términos escalonados, términos de seis años
- Cada Comisionado conduce el desarrollo del procedimiento, luego necesita el voto mayoritario de todos los comisionados para su aprobación
- Hoy estamos recogiendo opiniones para la propuesta de la Comisionada Guzmán Aceves de presentar a todos los Comisionados



CPUC ofrece muchos programas para la asistencia al consumidor y la educación

California Alternate Rates for Energy (CARE) Program

















La gran imagen

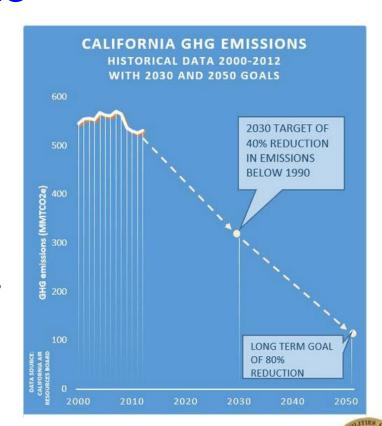






El camino de California hacia adelante

- Meta: reduzca dramáticamente la contaminación de los gases de invernadero-80% reducción por 2050
- Objetivo: centrarse en las comunidades con alta contaminación y pobreza
- Objetivo: eliminar gradualmente los combustibles fósiles de todos los sectores para satisfacer 50% de energía renovable por 2030
- CPUC se centró en los sectores de energía y transporte









Estrategias de CPUC:

- Usar menos energíacon programas de eficiencia energética
- Energía más limpiaaumentando las fuentes de energía renovables





Gas natural en residencias

- Propano y gas natural = combustibles fósiles (fuente no renovable de energía)
- Utilizado sobre todo para la calefacción, la agua caliente, para secar la ropa y cocinar
- California está reduciendo su dependencia del gas natural para cumplir con los objetivos de calidad del clima y del aire





Relative **Emissions** of Fine **Particles**



Woodburning **Fireplace**



Uncertified Woodstove



EPA Certified Woodstove



Pellet Stove



Oil **Furnace**



Gas **Furnace** or Stove



Electric Heat

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<1/6 lb of annual pollution

ZERO annual pollution

¿Por qué estamos aquí?









- El asambleísta Perea aprobó legislación en 2014
- Se solicitó soluciones para las comunidades que carecen de acceso a gas natural y opciones de energía asequibles
- Determinar si alguna de las opciones aumentaría el acceso de manera económica y tomaría las medidas apropiadas y determinaría las fuentes de financiación apropiadas



Procedimiento del Valle de San Joaquín

Proyecto de ley aprobado en la legislatura (AB 2672)

La Comisión comienza a proceder (15-03-010)

Fase 1

- Identificar "comunidades desfavorecidas"
- Reunir la primera ronda de reuniones comunitarias

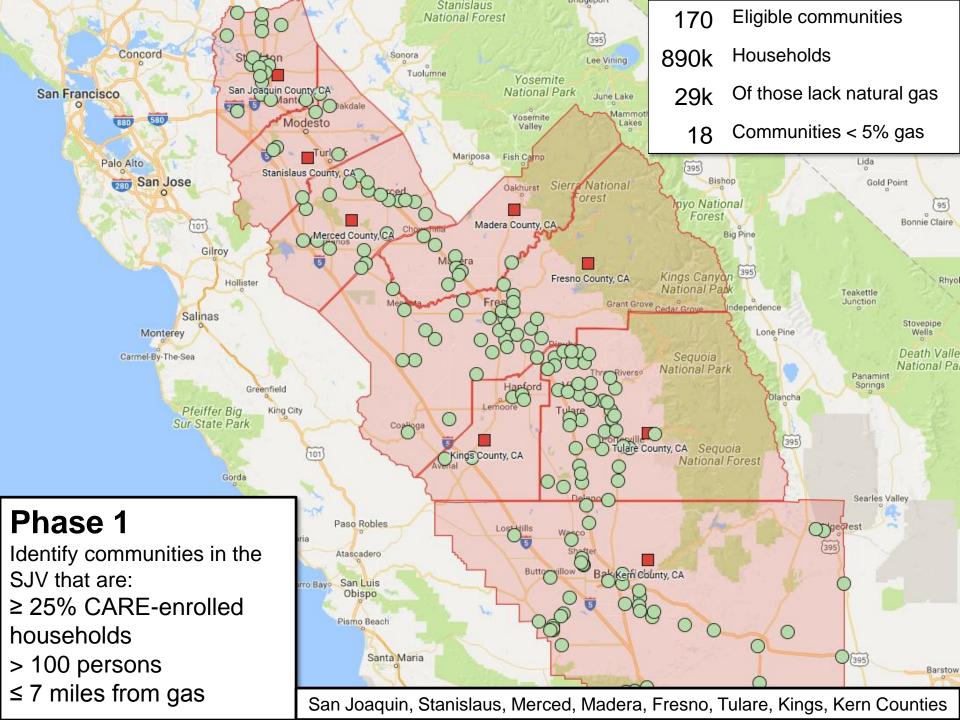
Fase actual

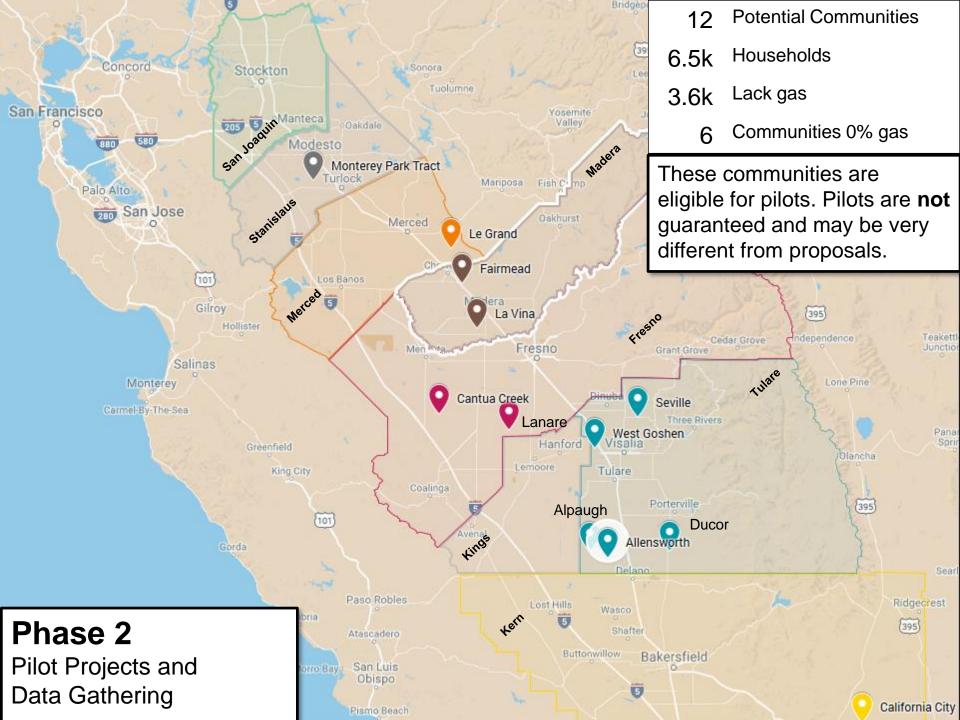
Fase 2

- Explorar proyectos pilotos
- Reunir reuniones sobre proyectos piloto en 12 comunidades
- Desarrollar un plan para recoger información a través de la SJV

Fase 3

 Los comisionados de CPUC, con aportes del público, eligen una opción rentable (si está disponible) para traer energía asequible a todas las comunidades elegibles del SJV

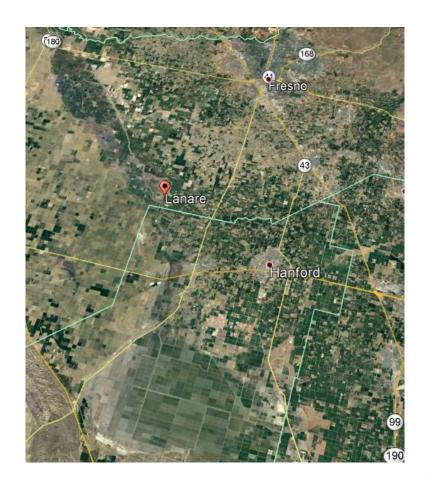






Lanare, CA

- 142 hogares (estimados)
- Territorio del servicio de electricidad PG&E
- Territorio del servicio del gas de SoCalGas (141 hogares ~ 99%)







Conceptos generales de proyectos pilotos

Los servicios públicos y otras partes compartirán más detalles de las propuestas. Las comunidades son elegibles para los pilotos, pero los pilotos no están garantizados/están sujetos a cambios.

Propano — eléctrico:

Transición de propano a todo-eléctrico
Incentivos para el cambio a aparatos eléctricos
Reduzca el uso de electricidad con eficiencia energética
Descuentos en electricidad de fuentes solares

Gas natural → propano:

Transición del propano al gas natural Incentivos para el cambio a los aparatos de gas natural Extienda las líneas de gas a la comunidad, conecte los hogares



Algo entre los dos — menos propano:

Cambie algunos aparatos a eléctrico, enfoque en la eficiencia energética, mantenga el propano





I IUXIIIIUS PASUS	
Evento	Tiempo estimado
Talleres de evaluación de opciones comunitarias de energía	Mayo-junio 2018
CPUC lanzamiento de la recomendación del personal para la fase piloto ("propuesta de personal" se basa en propuestas piloto, talleres comunitarios y comentarios)	Agosto 2018
Talleres sobre la propuesta del personal con las partes (partidos [por ejemplo, servicios públicos, grupos comunitarios, organizaciones medioambientales, defensores de defensores, etc.] se reúnen para debatir sobre la implementación técnica y las cuestiones económicas)	Agosto 2018
Audiencias de participación pública (2-3) en SJV (CPUC presenta la propuesta de personal a los miembros del público, recoge sus comentarios)	Septiembre 2018
Juez/Comisionado lanzan su propuesta de decisión(PD toma en cuenta todas las aportaciones anteriores, incluyendo la propuesta del personal, y es el documento oficial que puede convertirse en política; las partidos tienen la oportunidad final de comentar)	Otoño 2018
Comisionados votan sobre propuesta de decision (por lo menos 3 de 5 comisionados deben votar para aprobar para avanzar)	Otoño 2018
Si propuesta de decisión aprueba, inicie el trabajo piloto	Invierno 2018-2019



Equipo de la CPUC

- ¿Quien esta trabajando en este procedimiento?
- Comisionada: Martha Guzman Aceves
 -Consultoras: Sarah Sharpe, Maria Sotero
- Juez Administrativa: Darcie Houck
- División de la industria (Energía): Director Ed Randolph, Analista Joshua Huneycutt
- Oficina de Consultores por el Publico: Claudia Sanchez/Steven Klaiber





¡ Mantense involucrado!

Puede enviar sus comentarios por escrito a:

Oficina del Asesor Público California Public Utilities Commission 505 Van Ness Ave. San Francisco, CA 94102

0

Por correo electrónico a: Public.Advisor@cpuc.ca.gov



Por favor número de procedimiento de referencia: R. 15-03-010

Por favor, pase por la mesa del Asesor Público si está interesado en suscribirse a información sobre este procedimiento. O puede suscribirse por internet en: http://subscribecpuc.ca.gov/

> Thank you! ¡Gracias!

Affordable Energy Options for Lanare, CA

R.15-03-010
San Joaquin Valley
Disadvantaged Communities OIR





Gas & Electric Service Territories

- PG&E delivers clean, safe and reliable service to 4.3 million natural gas customers and 5.4 million electric customers
- 70,000 sq. miles with diverse topography
- 49,00 miles of natural gas transmission and distribution pipelines
- 125,000 miles of electric transmission and distribution lines







Proposed Electrification Energy Options

OPTION 1

Electric Bill Savings

+

PG&E Energy from Solar in California (not on your roof)

OPTION 2



Option 1

+

Replace Propane (or Wood) Appliances with Electric Appliances

OPTION 3



Options 1 & 2

+

Other Improvement



Proposed Option #1

Electric Bill Savings + PG&E Energy from CA Solar

ADVANTAGES

Save ~\$10%/yr on electric bill

No contractor work in house

Quick: 1 Home Visit

Reduced GHG

DISADVANTAGES

Still have propane

Minimal improvements to home

TYPICAL PG&E ELECTRIC BILL

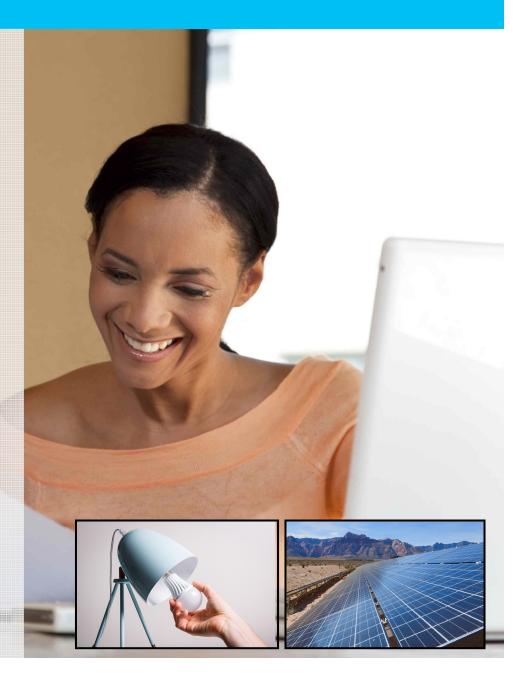
Old Total: \$1,000/year
Discount: -\$100/year
New Total: \$900/year

TYPICAL PROPANE BILL

Old Total: \$1,400/year New Total: \$1,400/year

Least Cost: ~\$4,000/Home*

* PG&E proposed that participants do not pay any costs, but participant cost is not decided





Proposed Option #2

Option 1 + Replace Propane (or Wood) Appliances with Electric Appliances

ADVANTAGES

- Save ~\$710-1,300 on energy
- Eliminate propane
- Some improvements to home safety and comfort
- Reduced GHG

DISADVANTAGES

- Some contractor visits/minor construction
- Takes longer/more visits

TYPICAL PG&E ELECTRIC BILL

Old Total: \$1,000/year New Usage: +\$270/year New Total: \$1,270/year

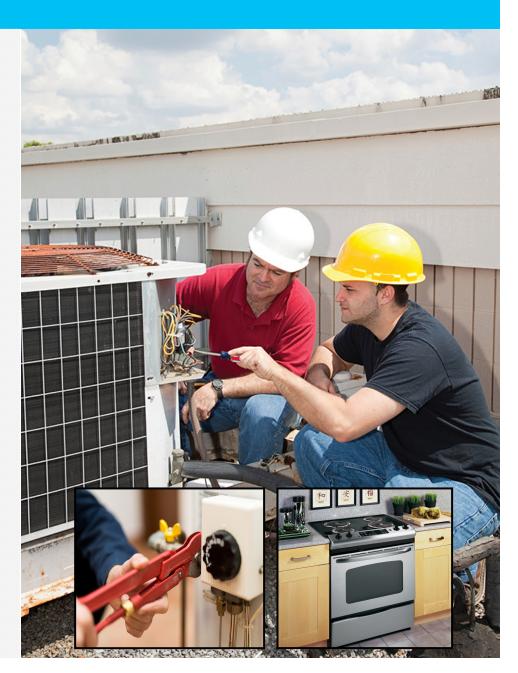
TYPICAL PROPANE BILL

Old Total: \$1,400/year

New Total: \$0/year

More Costly: ~\$40,000/Home*

* PG&E proposed that participants do not pay any costs, but participant cost is not decided





Proposed Option #3

Options 1 & 2 + Other Home Improvements

ADVANTAGES

- Save ~\$790-1,300 on energy
- Eliminate propane
- Improvements to home air quality, safety and comfort
- Reduced GHG

DISADVANTAGES

- Many contractor visits
- Takes longer / more visits

TYPICAL PG&E ELECTRIC BILL

Old Total: \$1,000/year New Usage: +\$240/year New Total: \$1,240/year

TYPICAL PROPANE BILL

Old Total: \$1,400/year

New Total: \$0/year

Most Costly -\$44,000/home*

* PG&E proposed that participants do not pay any costs, but participant cost is not decided



Opciones Energéticas a Precio Accesible en Lanare, CA

R.15-03-010 Valle de San Joaquín OIR de Comunidades en Desventaja





Acerca de PG&E

- PG&E suministra servicio limpio, seguro y confiable a
 - 4.3 millones de clientes de gas natural y
 - 5.4 millones de clientes de electricidad
- 70,000 millas cuadradas con una topografía diversa
- 49,000 millas de tuberías de transmisión y distribución de gas natural
- 125,000 millas de líneas de transmisión y distribución de electricidad







Propuesta de Opciones para Mejoras de Energía Usando Electricidad

OPCIÓN #1

Ahorros en la Factura Eléctrica

+

Energía de PG&E de California Solar (no en tu techo)

OPCIÓN # 2



Opción #1

+

Reemplazar aparatos domésticos de propano (o leña) con aparatos domésticos eléctricos

OPCIÓN#3



Opción 1 & 2

4

Otras Mejoras en el hogar



Opción Propuesta #1

Ahorros en la Factura Eléctrica + Energía de PG&E de California Solar

VENTAJAS

- Ahorros del 10% en la factura eléctrica
- Sin visitas del contratista al hogar
- Rápido: 1 visita al hogar
- Reducción de gases de efecto invernadero

DESVENTAJAS

- Aún se usa propano
- Mejoras mínimas en el hogar

FACTURA ELÉCTRICA DE PG&E TÍPICA

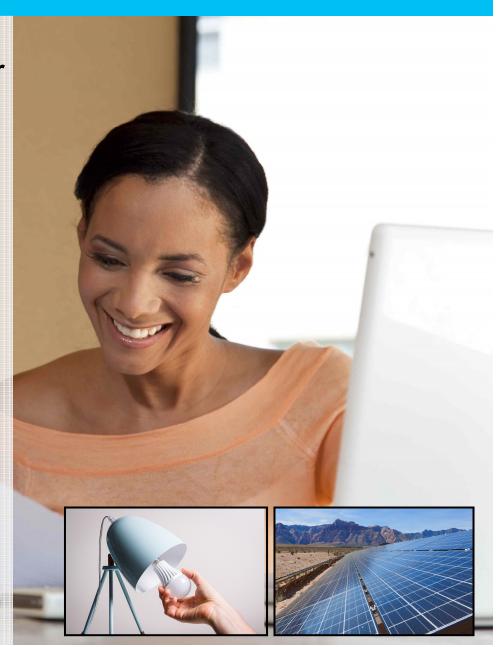
Antiguo total: \$1,000/año 10% de descuento: -\$100/año Nuevo total: \$900/año

FACTURA DE PROPANO TÍPICA

Antiguo total: \$1,400/año Nuevo total: \$1,400/año

Menos costoso* (\$4,000)

* PG&E propuso que los participantes no paguen ningún costo, pero los costos del participante aún no se han decidido.





Opción Propuesta #2

Opción # 1 + Reemplazar los aparatos domésticos de propano (o leña) con aparatos domésticos eléctricos

VENTAJAS

- Ahorros de ~\$710-1,300/año en energía
- Eliminación del propano
- Algunas mejoras en la seguridad y comodidad del hogar
- Reducción de gases de efecto invernadero

DESVENTAJAS

- · Algunas visitas del contratista
- Requiere más tiempo / más visitas

FACTURA ELÉCTRICA DE PG&E TÍPICA

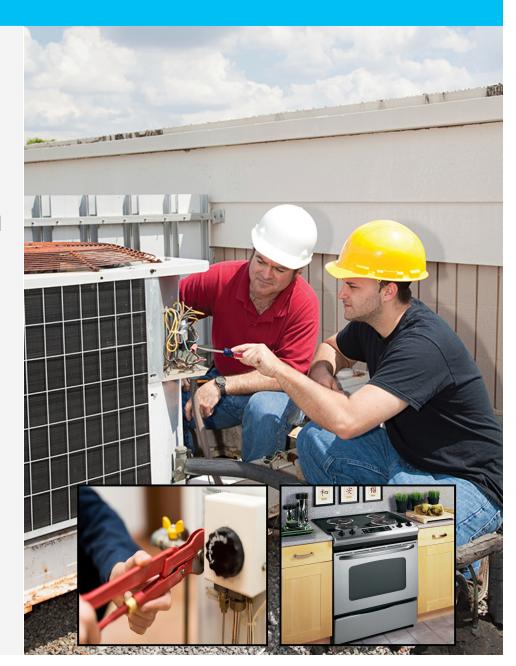
Antiguo total: \$1,000/año
Nuevo consumo: +\$270/año
Nuevo total: \$1,270/año
FACTURA DE PROPANO TÍPICA

Antiguo total: \$1,400/año

Nuevo total: \$0/año

Más costoso* (\$40,000)

* PG&E propuso que los participantes no paguen ningún costo, pero los costos del participante aún no se han decidido.





Opción Propuesta #3

Opción # 1 & 2 + Otras Mejoras en el Hogar

VENTAJAS

- Ahorros de ~\$790-1,300/año en energía
- Eliminación del propano
- Mejoras adicionales en la calidad del aire, en la seguridad y en el confort del hogar
- Reducción de gases de efecto invernadero

DESVENTAJAS

- Muchas visitas del contratista
- Requiere más tiempo / más visitas

FACTURA ELÉCTRICA DE PG&E TÍPICA

Antiguo total: \$1,000/año
Nuevo consumo: +\$240/año
Nuevo total: \$1,240 /año

FACTURA DE PROPANO TÍPICA

Antiguo total: \$1,400/año

Nuevo total: \$0/año

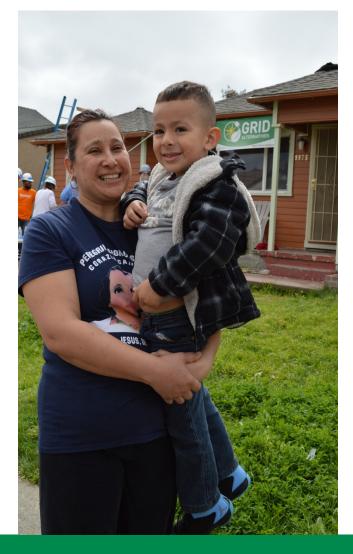
Lo más costoso* (\$44,000)

* PG&E propuso que los participantes no paguen ningún costo, pero los costos del participante aún no se han decidido.









Home Energy Upgrades, Battery Storage, and Community Solar

A Clean Energy Program for Lanare May 17, 2018

*This is a proposal to gain community feedback – all options are under review

*Proposed Project

Clean Energy Program Team

GRID Alternatives (GRID)

Provides renewable energy technology and training to underserved communities, and has completed more than 10,000 solar installations for low-income families

GRID Central Valley office in Fresno serves the San Joaquin Valley

Proteus

Electrification and home efficiency contractor based in Visalia, with more than 45 years of experience providing home upgrades to families in the San Joaquin Valley

GRID and Proteus work together to provide job training to local communities, expanding career opportunities in the clean energy economy

Tesla

Battery storage and electric vehicle manufacturer, working to accelerate the world's transition to sustainable energy

*This is a proposal to gain community feedback – all options are under review

*Proposed Project

Proposed Clean Energy Program Benefits

- Estimated Financial Savings \$1,700 \$2,400 annually
- Community Solar Reduces electric payments
- Electrification Eliminates Propane and Wood payments
- New Electric Appliances Electric appliances are cleaner, more reliable, and less expensive to operate
- Energy Efficient Home Get more out of your energy use and increase comfort
- Battery storage Provides resilience and reliable energy when the power goes out
- Career Opportunities Job training and local hiring with a focus on working with local high schools
- Cleaner Air Clean appliances and solar energy reduces local air pollutants

*This is a proposal to gain community feedback – all options are under review

*Proposed Project

Estimated Total Energy Bill Savings



Home Electrification: Eliminates Propane and wood payments

New Propane Payment: \$0.00

Community Solar: Reduces electricity bill

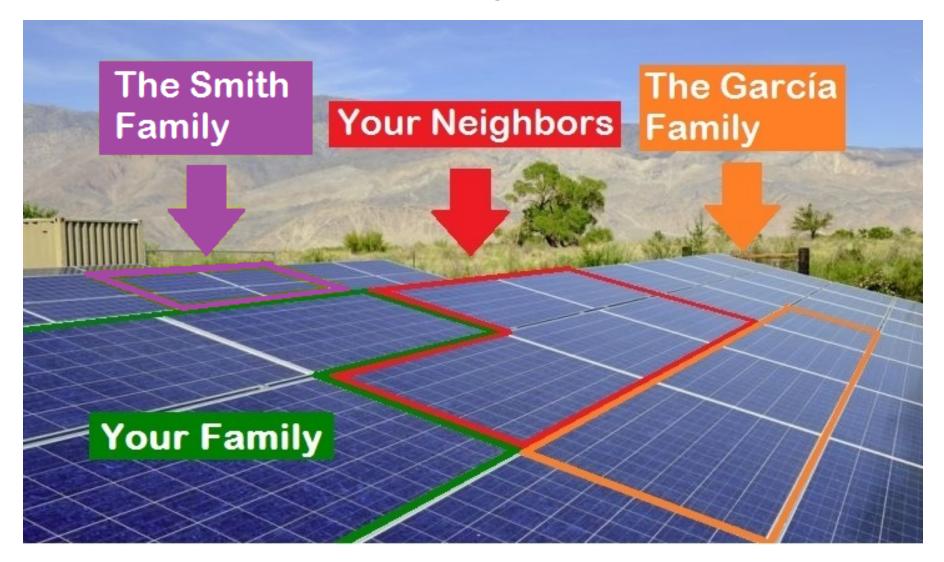
New Electric Payment: 45% lower after new electric appliances

Total Energy Bill Savings:

\$1,700 - \$2,400 annual savings

*This is a proposal to gain community feedback – all options are under review

Community Solar



Proposed Community Solar



- Maximizes household savings
- New solar panels built in or near your community – not on top of your roof
- Solar panels create electric energy from the sun, available for all residents
- Solar energy provides savings to your electricity bill
- Maintenance fully included guaranteed regular production from central location
- Job training opportunities available, including local high schools

*This is a proposal to gain community feedback – all options are under review

*Proposed Project

Proposed Home Electrification Upgrades



- Replace wood and propane with all-electric appliances
- Upgrades to home heating system, water heater, cooking range and clothes dryer
- Energy efficiency measures, including insulation, window replacement and gap sealing
- Minor home repairs and electric panel upgrades as needed
- Battery storage provides energy when the power goes out

*This is a proposal to gain community feedback – all options are under review

Clean Energy Program Timeline and Process

GRID, Proteus and Tesla will partner with residents to plan an efficient process for all work done in the home

Timelines will vary according to the unique needs of each home and family

Home Assessment – see what work is needed

Estimated time in home: 1-2 hours

• Electrification – upgrades to your electric system

Estimated time in home: 1-2 days

Energy Efficiency & Appliances – new installations

Estimated time in home: 2 full days

Community solar - no panels installed at your home.

Estimated time in home: None

Follow Up - to confirm upgrades and appliances are working

Estimated time: Phone call or 1-2 hours

Stage 5:

Stage 1:

*This is a proposal to gain community feedback – all options are under

Who would be Eligible?



We have proposed that <u>all residents</u> would be eligible for home upgrades and community solar credits

- Homeowners and renters welcome
- All home types mobile homes, single family, multi-family
- Battery Storage offered to all residents
- If home energy upgrades cannot be completed due to home or roof conditions, community solar credits will still be available to lower your energy bills

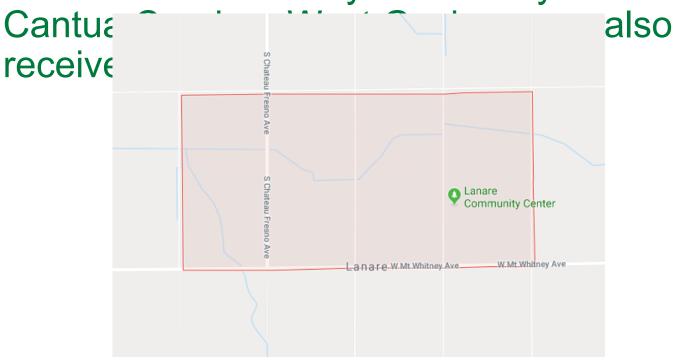
^{*}This is a proposal to gain community feedback – all options are under review

Where will services be offered?



We propose that this Clean Energy Program will be offered to all residents in Lanare

Residents in a nearby community such as



^{*}This is a proposal to gain community feedback – all options are under review

*Proposed Project

Estimated Total Energy Bill Savings



EXAMPLE

Current Propane Bill: \$115.00

Current Electric Bill: \$120.00

New Propane Bill: \$0.00

New Electric Bill: \$66.00

> 45% Lower after new electric appliances

Monthly Savings: \$169.00

Annual Savings: \$2,028.00

^{*}This is a proposal to gain community feedback – all options are under review

Clean
Energy
Program
Cost
Information



YOU PAY: NOTHING!



Costs recovered through utility sources and incentives.

The program cost per home: Approximately \$34,000

*This is a proposal to gain community feedback – all options are under

Thank you! Do you have questions?

Contact Us

Community Solar: **Tom Esqueda, GRID Alternative**s

Email: tesqueda@gridalternatives.org

Phone: (559) 261-4743

Alicia Bohigian, GRID Alternatives

Email: abohigian@gridalternatives.org

Phone: (886) 921-4696

Electrification: **Jose Landeros, Proteus Inc.**

Email: josel@proteusinc.org

Phone: (559) 733-5423

Battery Storage: **Damon Franz, Tesla Inc.**

Email: dfranz@tesla.com Phone: (805) 681-5100



Glad to be of service.®



SoCalGas®

- Nation's largest natural gas distribution utility.
- SoCalGas delivers clean, safe and reliable energy to 21.6 million customers in more than 500 communities.
- Our service territory covers
 Central and Southern
 California, from Visalia to
 the Mexican border.
- California is our home, too.
 We strive to improve the quality of life in our communities.



Benefits of Natural Gas

AFFORDABLE

9 out of 10 Southern California families choose natural gas for space and water heating and they prefer it 4 to 1 over electricity because it is inexpensive and more reliable*.

RELIABLE

Natural gas can provide you with a reliable supply of hot water, temperature control for cooking, faster drying for laundry and more efficient heating for your home. Natural gas is there for you, whether the sun is shining or the wind is blowing.

CLEAN & RENEWABLE

The cleanest fossil fuel, and a highly efficient form of energy, natural gas has many advantages over propane that result in less pollution. Renewable gas is even cleaner, and can be produced from a variety of sustainable sources, like animal waste, landfills, crop residuals and food waste.



*California Building Industry Association. (2018). Energy Choice Survey.

Additional Benefits

Health, comfort, safety, & the environment

 Natural gas produces less Greenhouse gases and Particulate Matter than burning propane or wood

Potential economic development of the proposals

- Short-term jobs with local contractors doing home pipeline installations
- Long-term community development options with natural gas

No-cost services

- Appliance safety check and furnace re-lighting for winter
- Online "My Account" and Customer Call Center are available 24/7 for bill payment and service orders

Customer Assistance Programs



- California Alternate Rate for Energy (CARE) – provides income-qualified customers a 20% monthly discount on their SoCalGas bill.
- Energy Savings Assistance
 Program provides qualifying
 customers home improvements at no cost.
- Medical Baseline Allowance offers additional natural gas at the lowest SoCalGas baseline rate

These programs are funded by California utility customers and administered by Southern California Gas Company under the auspices of the California Public Utilities Commission.







Construction Area



Project Timeline

PLANNING/ASSESSMENTS

with community participation (ongoing)

CONSTRUCTION OF PIPELINES approximately 2 months

We plan to install pipelines at each community, with natural gas meters at each home.

HOUSEHOLD CONVERSIONS approximately 2 months

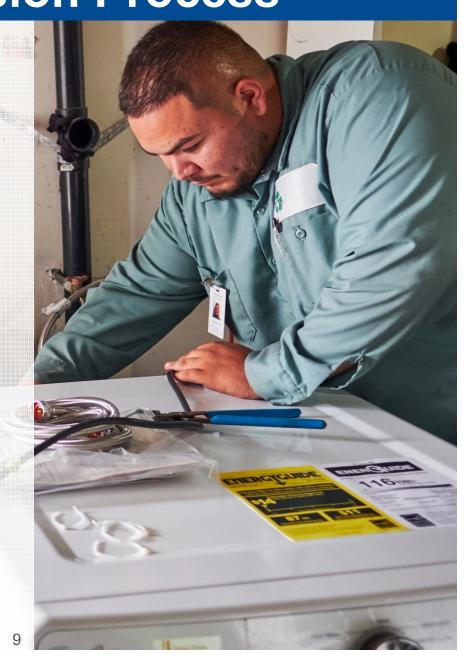
- SoCalGas plans to replace your propane heater, water heater, cooking stove and clothes dryer (if you have one). Approximately 2 days for conversion.
- Eligible homeowners and renters may be able to receive home improvements to make homes warmer in the winter and cooler in the summer, at no cost to the resident.

Home Conversion Process

 Install pipes below ground to the house

approximately 2 days per home

- Convert existing propane lines or install new house lines
- Install and connect new appliances
- Install proper venting
- Install meter in front of house
- Inspect and test appliances



Replacement Appliance Examples



Natural Gas Stove



Natural Gas Dryer



Natural Gas Wall Furnace



Natural Gas Water Heater

Appliance makes and models subject to change

Energy Cost Comparison

Current
Monthly Costs*
PROPANE

\$115+

VS.

Future
Monthly Costs**

NATURAL

GAS

\$22-\$39

^{*} Estimated current cost based on \$3.50 per gallon of propane (including delivery fees)

^{**} Estimated future cost based on approximately 17-35 therms of natural gas at 2018 rates

Estimated Monthly Savings

Monthly Savings

\$76-\$93

Annual Savings \$910-\$1,114

Income Qualified Customers can

Save Additional 20%

Monthly Savings

\$84_\$98

Annual Savings

\$1,006-\$1,174

or more

^{*} Estimated current cost based on \$3.50 per gallon of propane (including delivery fees)

^{**} Estimated future cost based on approximately 17-35 therms of natural gas at 2018 rates

Estimated Construction Costs

	Per Home	Total Project
Construction of Pipelines	\$50,100	\$752,000
Home Pipeline Installation	\$3,800	\$56,500
Appliances & Installation	\$6,900	\$103,500

Estimated Total: \$60,800 \$912,000

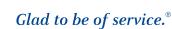
These estimates are for approximately 15 households and is a proposal for the CPUC; all elements are subject to change and approval by the CPUC.

Residential Customer Monthly Bill Impact +\$0.001

Thank You!



This is a proposal for the California Public Utilities Commission (CPUC); all elements are subject to change and approval by the CPUC.







SoCalGas®

- La empresa de servicios públicos de distribución de gas natural más grande del país.
- SoCalGas distribuye energía limpia, segura y confiable a 21.6 millones de clientes en más de 500 comunidades.
- Nuestro territorio de servicio abarca el Centro y Sur de California, desde Visalia hasta la frontera mexicana.
- California también es nuestro hogar. Nos esforzamos por mejorar la calidad de vida en nuestras comunidades.



¿Cuáles son los beneficios del gas natural?

ECONÓMICO

Nueve de cada diez familias en el Sur de California eligen el gas natural para su calefacción y para el calentamiento del agua, y lo prefieren cuatro veces más que la electricidad porque es más económico y confiable.*

CONFIABLE

El gas natural puede ofrecerle una cantidad confiable de agua caliente, control de la temperatura para cocinar, un secado de ropa más rápido y una calefacción más eficiente de su casa. El gas natural está allí para usted, sin importar si brilla el sol o sopla el viento.

LIMPIO Y RENOVABLE

Siendo el combustible fósil más limpio, y una forma altamente eficiente de energía, el gas natural tiene muchas ventajas sobre el gas propano que se traducen en menos contaminación. El gas renovable es aún más limpio, y se puede producir de diferentes formas sustentables, como excrementos de animales, basureros, y residuos agrícolas y alimenticios.

*Asociación de la Industria de la Construcción de California (California Building Industry Association). (2018). Encuesta de Energy Choice.



Beneficios adicionales

Salud, comodidad, seguridad, y el medio ambiente

 El gas natural produce menos gases de efecto invernadero y partículas suspendidas en el aire

Potencial desarrollo económico de la propuesta

- A corto plazo empleos con contratistas locales que realizan instalaciones de tuberías en casas
- A largo plazo opciones de desarrollo comunitario con el gas natural

Servicios sin costo

- Chequeo de seguridad de los aparatos domésticos y reencendido del piloto de calefactor para el invierno
- "My Account" en línea y el centro de servicio al cliente están disponibles 24 horas los 7 dias de la semana para pagos de facturas y órdenes de servicio

Programas de Asistencia al Cliente



- Programa de Tarifas Alternas para Energía en California (CARE): ofrece un 20% de descuento mensual en la factura para clientes que califiquen.
- Energy Savings Assistance Program:
 Ofrece mejoras sin costo para el hogar para clientes que califiquen.
- Asignación Médica Inicial: proporciona gas natural adicional a la tarifa inicial más baja de SoCalGas.

Estos programas están financiados por los clientes de las empresas de servicios públicos de California y administrados por Southern California Gas Company, bajo los auspicios de la Comisión de Servicios Públicos de California.







Área de construcción



Etapas del proyecto

PLANIFICACIÓN/EVALUACIÓN

Con la planificación y participación continua de la comunidad

CONSTRUCCIÓN DE TUBERÍAS aproximadamente 2 meses

Planeamos instalar tuberías en cada comunidad, con medidores de gas natural en cada casa.

conversiones en las casas aproximadamente 2 meses

- SoCalGas planea reemplazar el calefactor, el calentador de agua, la estufa y la secadora de ropa de gas propano (si cuenta con uno de éstos). Aproximadamente 2 días por casa.
- Los propietarios de casa y los inquilinos que cumplan con los requisitos pueden recibir mejoras para la casa a fin de hacer los hogares más calientitos en invierno y más frescos en verano, sin costo para el residente.

Proceso de conversión al gas natural

 Instalar tuberías subterráneas hacia la casa

aproximadamente 2 días por casa

- Convertir las líneas existentes de gas propano o instalar nuevas líneas en la casa
- Instalar y conectar aparatos domésticos nuevos
- Instalar ventilación apropiada
- Instalar un medidor al frente de la casa
- Inspeccionar y probar los aparatos



Ejemplos de aparatos domésticos



Estufa de gas natural



Secadora de gas natural



Calefactor de pared de gas natural



Calentador de agua de gas natural

Las marcas y modelos de los aparatos están sujetos a cambios

Comparación de costos de energía

Costos mensuales actuales*

GAS PROPANO \$115+

Futuros costos mensuales**

GAS NATURAL VS

\$22_\$39

^{*} Costo actual estimado con base en un precio de \$3.50 por galón de gas propano (incluye cargos por entrega)

^{**} Costo futuro estimado con base en un consumo de aproximadamente 17-35 termias de gas natural a tarifas de 2018

Ahorros estimados

Ahorros mensuales

\$76-\$93

Ahorros anuales

\$910-\$1,114

Los clientes que reúnen los requisitos de ingreso pueden

ahorrar un 20% adicional Ahorros mensuales

\$84_\$98

Ahorros anuales

\$1,006-\$1,174

^{*} Costo actual estimado con base en un precio de \$3.50 por galón de gas propano (incluye cargos por entrega)

^{**} Costo futuro estimado con base en un consumo de aproximadamente 17-35 termias de gas natural a las tarifas de 2018

Costo Estimado de construcción

	Por casa	Total del proyecto
Construcción de tuberías	\$50,100	\$752,000
Instalación de tuberías en la casa	\$3,800	\$56,500
Aparatos domésticos e instalación	\$6,900	\$103,500

Total estimado:

\$68,100

\$912,000

Estas estimaciones son para aproximadamente 15 casas y es una propuesta para la CPUC; todos los elementos están sujetos a cambios y la aprobación de la CPUC.

Impacto mensual en la factura del contribuyente residencial

+\$0.001

¡Muchas Gracias!



Ésta es una propuesta para la Comisión de Servicios Públicos de California (CPUC); todos los elementos están sujetos a cambios y la aprobación de la CPUC.

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