

1. Logistic details:

Meeting: Seville Community Energy Option Assessment Workshop

Meeting date: May 16, 2018

Location: Stone Corral Elementary Primary, 15590 Ave 383, Visalia, CA 93292

2. Attendance: Approximately 20

Community members: Approximately 120

3. Presenters and presentation topics, listed in order

- Commissioner Martha Guzman-Aceves, CPUC – *Overview and Introduction*
- Abigail Solis, Self Help Enterprises (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 Seville, CA (Electrification Energy Options)*
- Alicia Bohigian, GRID Alternatives – *Home Energy Upgrades, Battery Storage, and Community Solar: A Clean Energy Program Proposal for Seville*
- Raul Gordillo, Southern California Gas Company – *Affordable Energy Options for Seville, CA Natural Gas Pipeline Extension Proposal*
- Abigail Solis, Self Help Enterprises (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 Seville

Accessibility of Programs and Discussion

- The Seville 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 residents:
 - Explained frustrations about how her father started a petition over 60 years ago petitioning for natural gas in Seville, but nothing came of it. She continued to describe issues with propane usage due to high costs and unreliable deliveries.

1. Overview and Introduction [CPUC]

- Statements by Commissioner Guzman-Aceves:
 - Introduced the CPUC and the CPUC staff working on this proceeding. The CPUC's function is focused on several parts of the economy to protect California consumers and their health - focusing 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. She is one of five commissioners, she needs support from the other commissioners to approve one of today's proposals.
 - Purpose of the workshop is to discuss energy options so that the Seville 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.
- Why are we here? 2014 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. 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. She also presented a map of the 12 proposed pilot communities including Seville. PG&E provides electricity

service and natural gas service is provided by Southern California Gas Company.

- Residential natural gas and electric alternatives will be presented as ideas for potential pilots. The CPUC is here to listen to your input. Commission 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 hearing meetings. Sarah Sharpe is here in Fresno if you have questions, visit web or send your letter to the CPUC. Please subscribe so you can know when the September meetings will be held. We 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.
- The Commissioner informed the audience that this will be a quick turnaround so the Commission needs communities to say what they prefer today. Followed by saying they 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: Prefers natural gas to cook. Many residents have to cook their tortillas outside with firewood to avoid using too much propane.
- Resident: Prefers to cook with natural gas and would like to have natural gas to heat home to save money and it being more reliable.

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

- Caesar Gonzalez, Pacific Gas and Electric Company Presentation
 - Presented PG&E's Gas and Electric Service Territories.
 - 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 paired with PG&E solar energy – from solar panels and discount on bill, the panels are installed in Option 2: change your house so no longer using propane and using electric appliances, Option 3:

beyond just changing appliances – PG&E would install insulation in attic, more efficient lights, and more efficient refrigerators. More detail on each Option provided on the slides.

- Alicia Bohigian, GRID Alternatives
 - 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.
- Timeline: presented in deck described
 - Commissioner: The consumers for each of the companies presenting will be paying for these pilots. I need to talk to other commissioners to see what we will decide.
 - Resident: Asked for clarity on how residents would

save 45% and was confused as to how it would work.
GRID explained their method of calculating the 45%
savings.

- Raul Gordillo (SoCalGas) – Natural Gas Presentation
 - Welcomed community members to the workshop and provided the proposal to bring natural gas service to the community of Seville 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.
 - If the proposal is approved, bringing natural gas service to the community of Seville has the potential for job creation (short term – local contractors handling the pipeline installations) and community development options (long term – opportunities for new businesses, restaurants utilizing our natural gas system).
 - 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.
 - Provided a map of the of proposed construction area.
 - SoCalGas’ natural gas proposal is broken down into three phases. The first phase is the current phase – the planning and assessment phase where SoCalGas is gathering input and participation from the community. The second phase is the construction of their natural gas pipelines in the street and to the meter of each

home. This activity could take approximately four months per community. Prior to any construction work they plan to notify each resident of the work hours and dates in addition to any traffic impacts. The third phase is where they convert each household. Here they plan to replace your propane heater, water heater, cooking stove and clothes dryer (if a resident has one). This could take approximately 2 days for the conversion. 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.

- Provided the audience with a view of sample natural gas appliances which they would replace if they are propane-based or wood fired.
- Estimated the current cost of \$3.50 per gallon of propane (including delivery fees) and came up with current monthly propane cost \$122+ per month. Raul (SoCalGas) asked the audience what they currently pay per month on propane. Residents stated that they pay more than \$3.50 per gallon of propane including delivery fees.
- Showed how much residents would pay each month on natural gas if SoCalGas' proposal is approved. Future monthly costs would be between \$22 - \$39. Monthly savings: \$83-\$100. If residents qualify for CARE, monthly savings would be approximately \$91 - \$105.
 - Resident: Asked if \$22 - \$39 was the average price for natural gas service, could it be more? Raul indicated that the price provided was only an estimate. Rates will vary depending on natural gas usage per home.
- Discussed the cost for construction would be approximately \$63,400 per household and total project \$6,598,600 for the Seville community. Overall, if SoCalGas' proposal is approved, SoCalGas' residential customer monthly bills would cost 1 cent additionally.

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

- Abigail Solis (Self Help Enterprises)
 - Energy Options Questionnaire filled out by everyone at the workshop.
- Abigail Solis: Which option do you support the most?
 - Residents: A majority expressed interest in natural gas.
 - Resident: Has both electricity and propane and does not have a preference. Expressed interest in community solar/electricity.
 - Resident: Preferred to keep all electricity with solar because it would be easier to leave as is than switch to all natural gas.
 - Resident: Complained about unreliable propane deliveries and high costs of propane.
 - Resident: Many residents have to choose between cooking and heating their home in the winter. Residents have to use extra blankets because they cannot afford to purchase propane.
 - Residents: All agreed to let contractors in home to make improvements.
 - Resident: Asked for clarity on how much customers would pay for the pilot.

5. Wrap up and next steps [CPUC]

- Commissioner shared the timeline and process. One of the challenges is the cost. The Commission needs to hear what you really want. The Commissioner would need to fight for whatever you want. It is helpful to hear what you want tonight.
- You need to talk to your community and spread the word so you know what is best for you. There are approximately 160 residents
- No decision will be made tonight, but she is only one of five Commissioners. The Commission will need to decide what the best solution is. The Commission has to analyze the costs as 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
Seville, CA
May 16, 2018





What is the California Public Utilities Commission?



Electricity



Telecommunications



Natural Gas



Water



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
is already experiencing
the impacts of
CLIMATE CHANGE

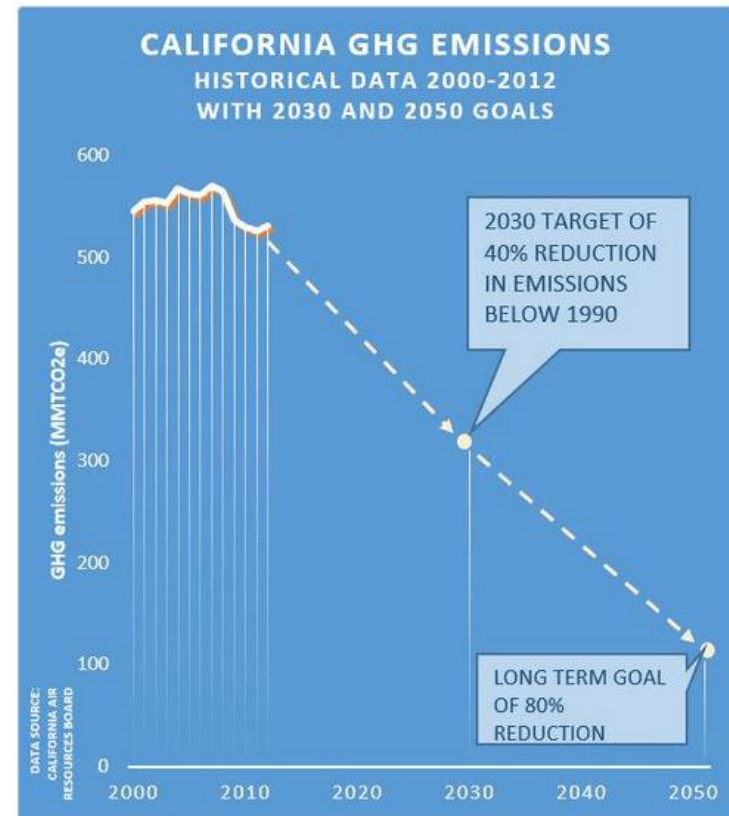
IN 2015 THE DROUGHT COST THE AGRICULTURE INDUSTRY IN THE CENTRAL VALLEY AN ESTIMATED \$2.7 BILLION & 20,000 JOBS





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



VERY DIRTY

VERY CLEAN

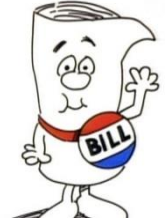
Highest annual pollution 244 lbs. of annual pollution 97 lbs. of annual pollution 27 lbs. of annual pollution <1/4 lb of annual pollution <1/6 lb of annual pollution ZERO annual pollution

**Why are
we here?**





Assembly Bill 2762



- 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

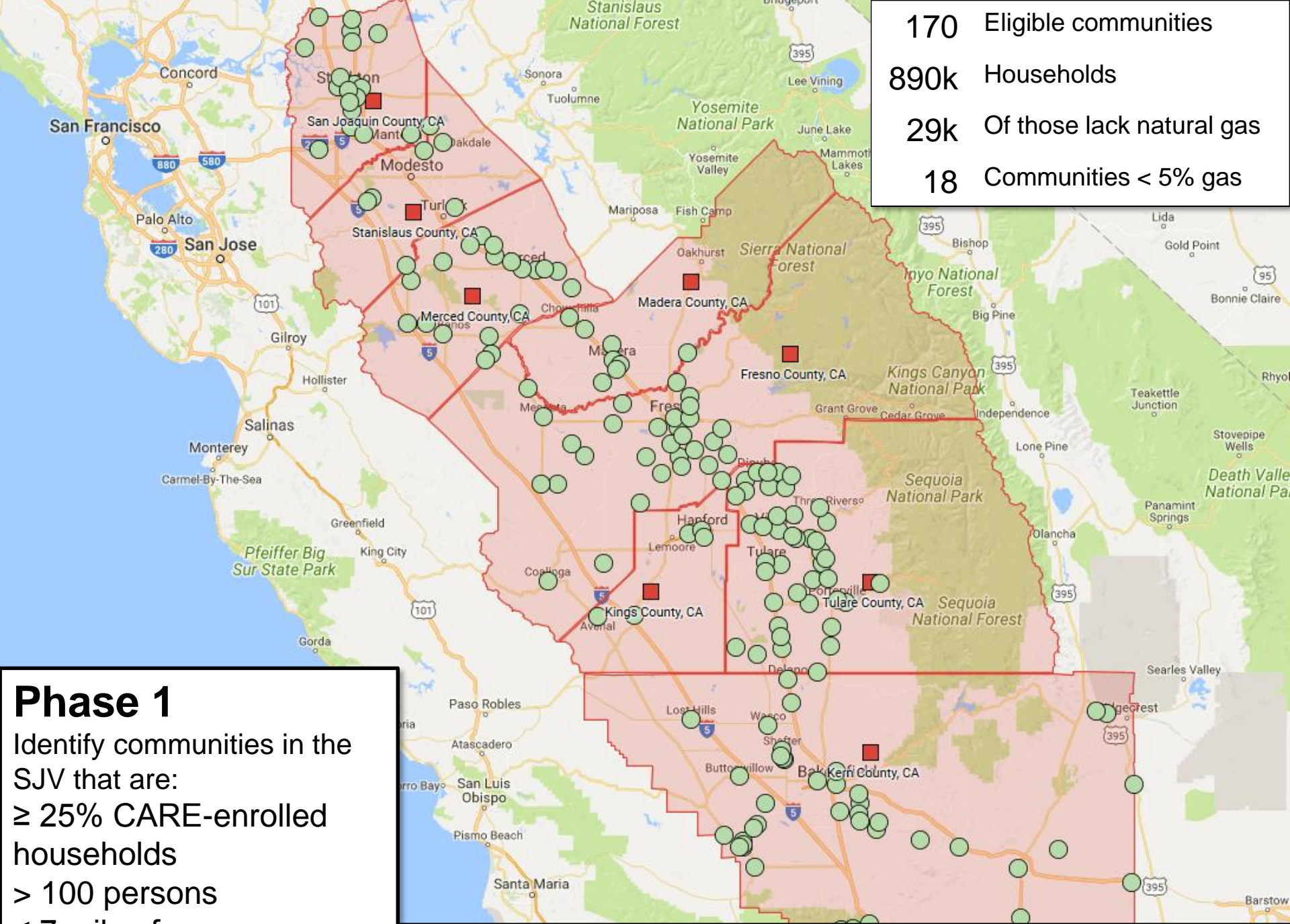
- Explore pilot projects
- Hold meetings on pilot projects in 12 communities
- Develop plan to gather data across the SJV

Phase 3

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

Current Phase

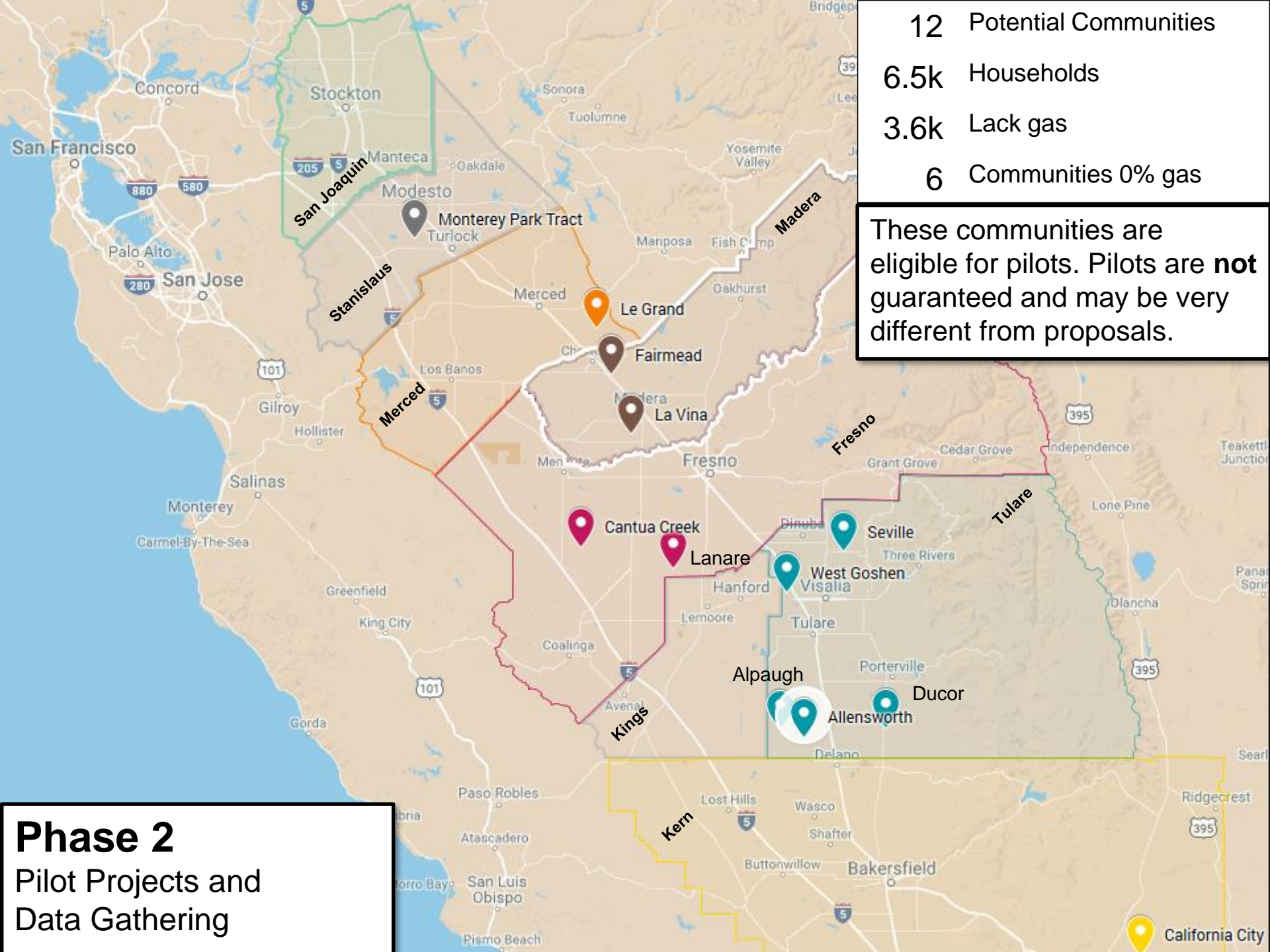




170 Eligible communities
 890k Households
 29k Of those lack natural gas
 18 Communities < 5% gas

Phase 1
 Identify communities in the SJV that are:
 ≥ 25% CARE-enrolled households
 > 100 persons
 ≤ 7 miles from gas

San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, Kings, Kern Counties



12 Potential Communities

6.5k Households

3.6k Lack gas

6 Communities 0% gas

These communities are eligible for pilots. Pilots are **not** guaranteed and may be very different from proposals.

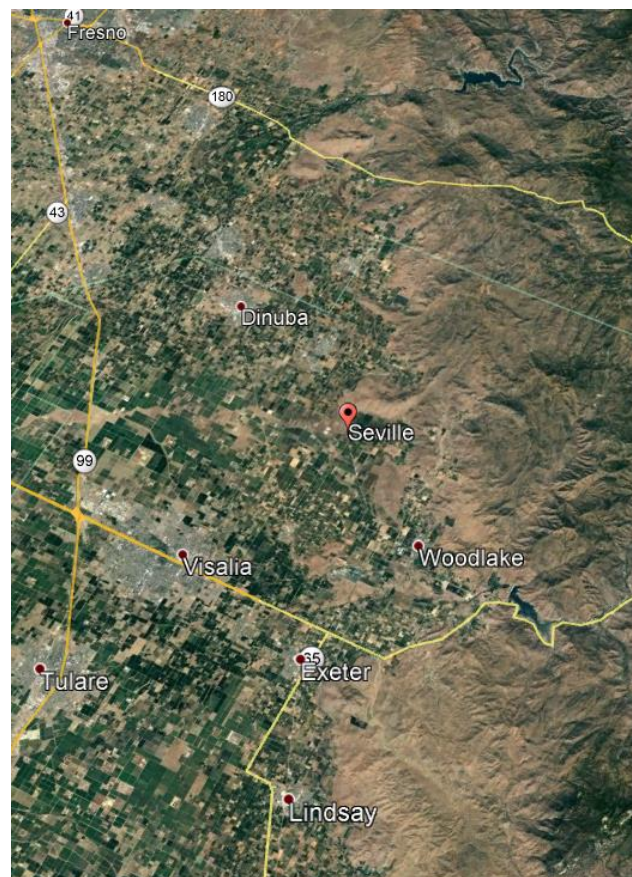
Phase 2
Pilot Projects and
Data Gathering

California City



Seville, CA

- 113 households (estimated)
- PG&E electricity service territory
- SoCalGas gas service territory (no gas service)





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 → 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:

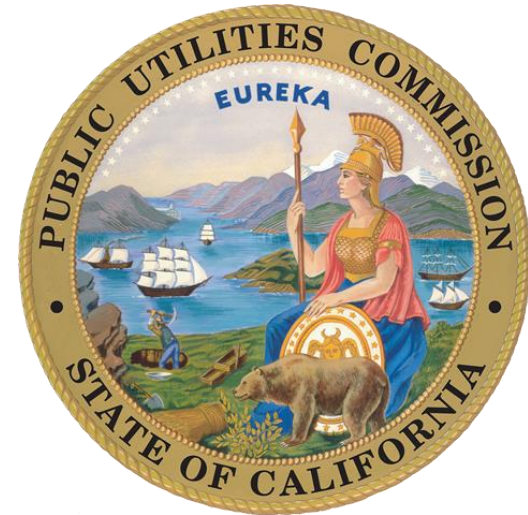
Public Advisor's Office
California Public Utilities Commission
505 Van Ness Ave.
San Francisco, CA 94102

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 Económicas de Energía por los residentes del Valle San Joaquín



Comisión de Servicios Públicos de California

Taller para Evaluar Opciones de Energía por la Comunidad

Seville, CA

16 de mayo, 2018





¿Qué es la Comisión de servicios públicos de California?



Electricity



Telecommunications



Natural Gas



Water



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



CALIFORNIA
is already experiencing
the impacts of
CLIMATE CHANGE

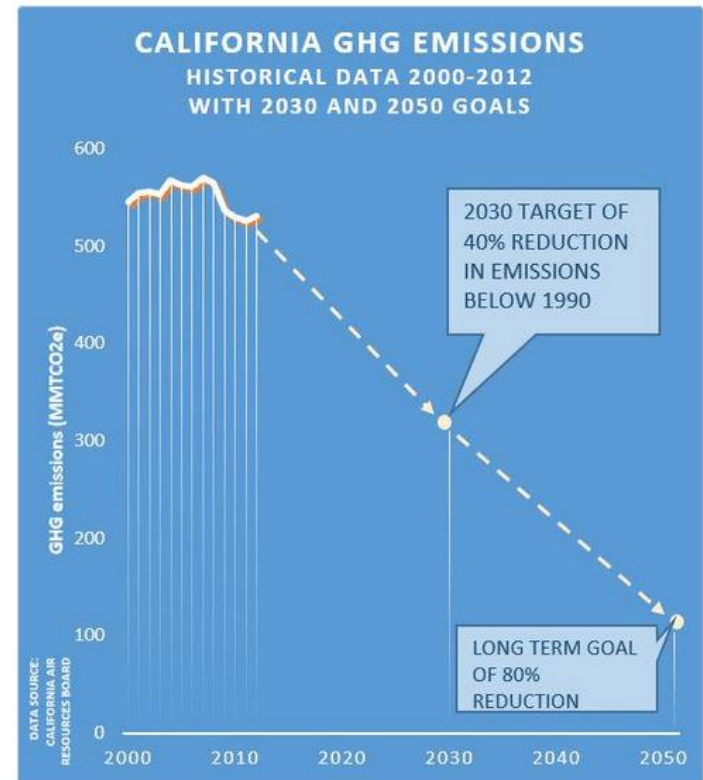
IN 2015 THE DROUGHT COST THE AGRICULTURE INDUSTRY IN THE CENTRAL VALLEY AN ESTIMATED \$2.7 BILLION & 20,000 JOBS





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





Transición a la energía renovable de California



Estrategias de CPUC:

- **Usar menos energía-** con programas de eficiencia energética
- **Energía más limpia-** aumentando 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



VERY DIRTY **VERY CLEAN**

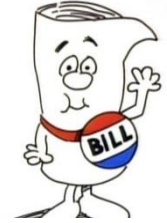
Highest annual pollution 244 lbs. of annual pollution 97 lbs. of annual pollution 27 lbs. of annual pollution <1/4 lb of annual pollution <1/6 lb of annual pollution ZERO annual pollution

¿Por qué
estamos
aquí?





Assembly Bill 2762



- 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

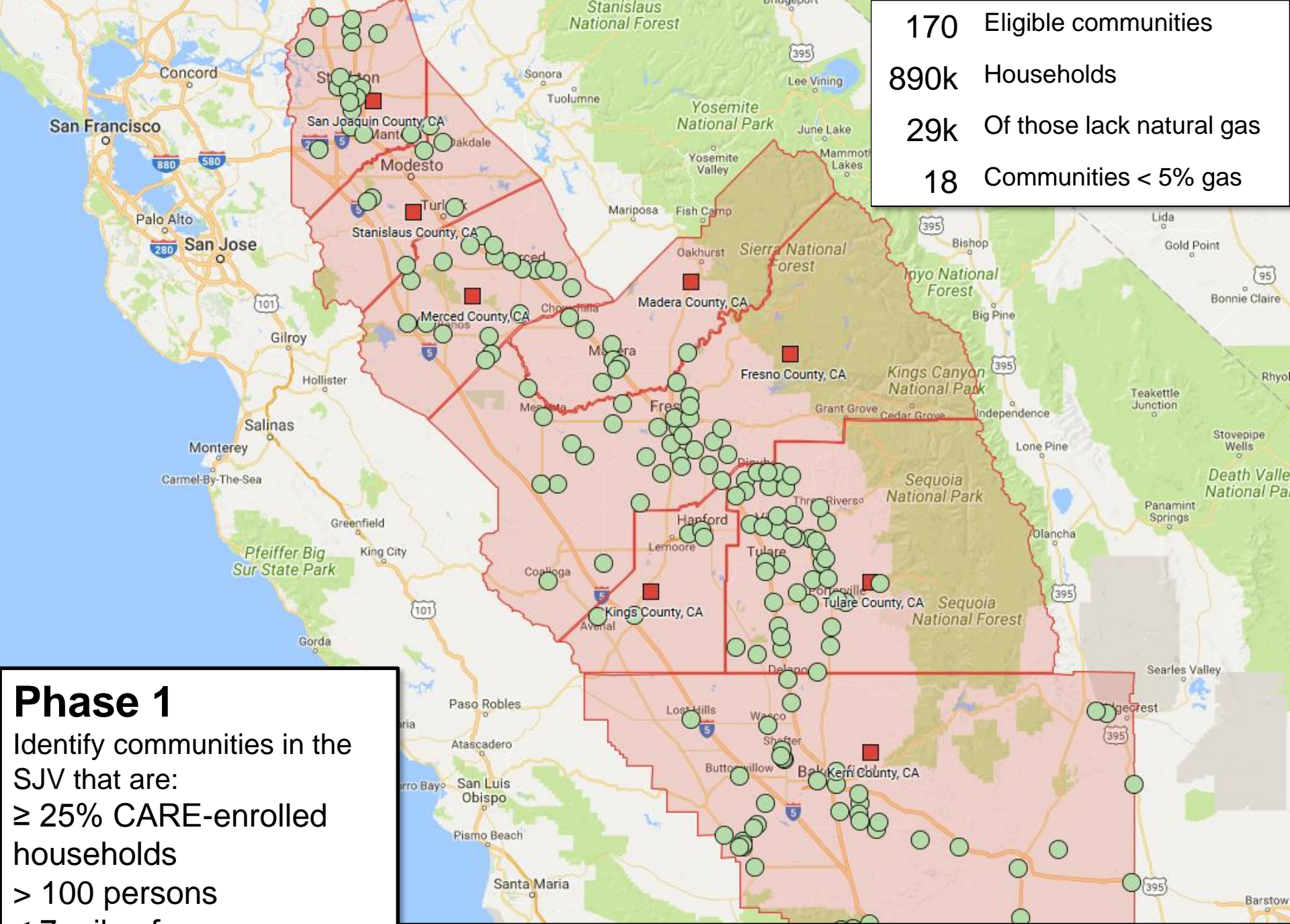
Fase 2

- 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

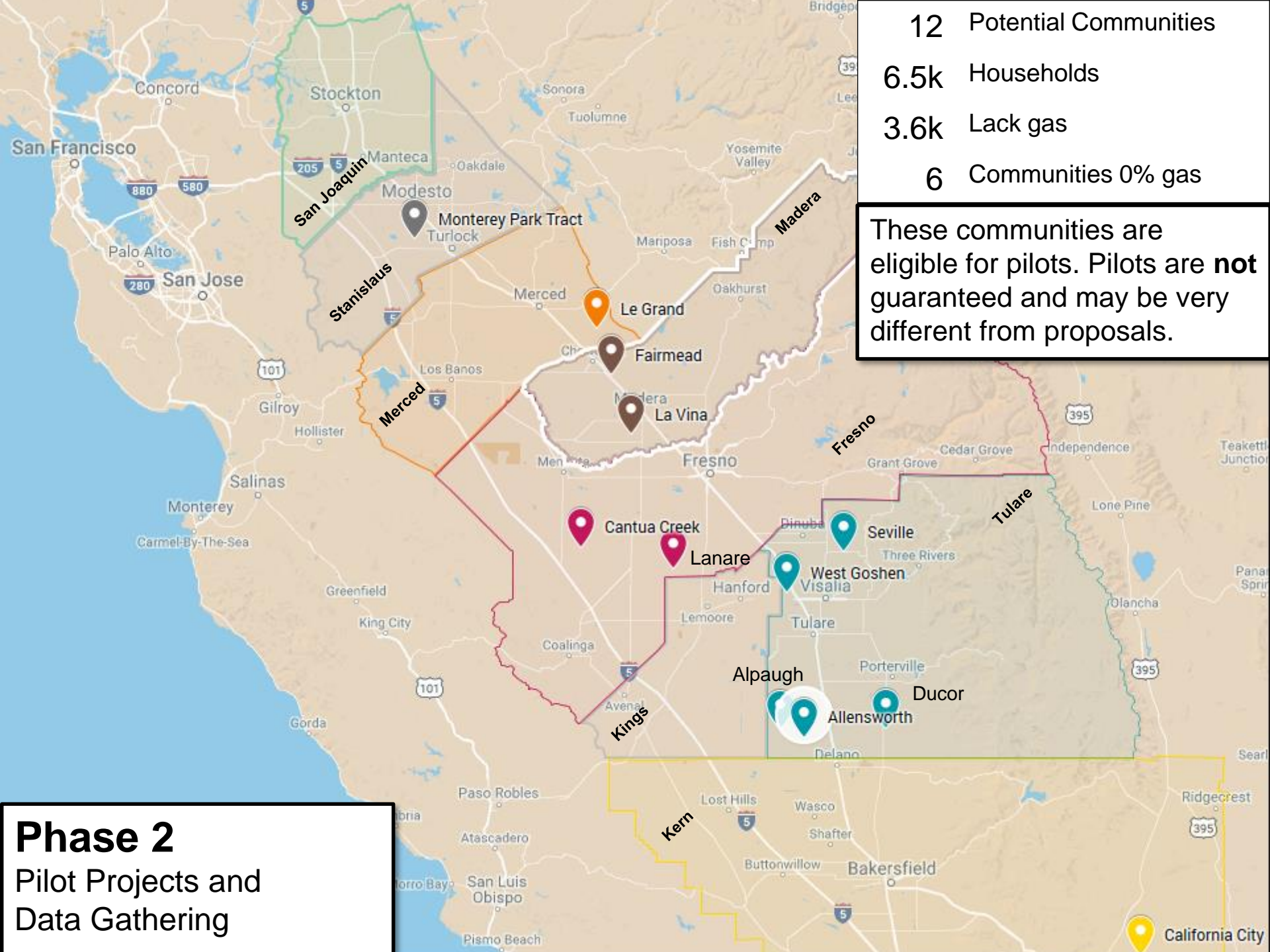




170 Eligible communities
 890k Households
 29k Of those lack natural gas
 18 Communities < 5% gas

Phase 1
 Identify communities in the SJV that are:
 ≥ 25% CARE-enrolled households
 > 100 persons
 ≤ 7 miles from gas

San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, Kings, Kern Counties



12 Potential Communities

6.5k Households

3.6k Lack gas

6 Communities 0% gas

These communities are eligible for pilots. Pilots are **not** guaranteed and may be very different from proposals.

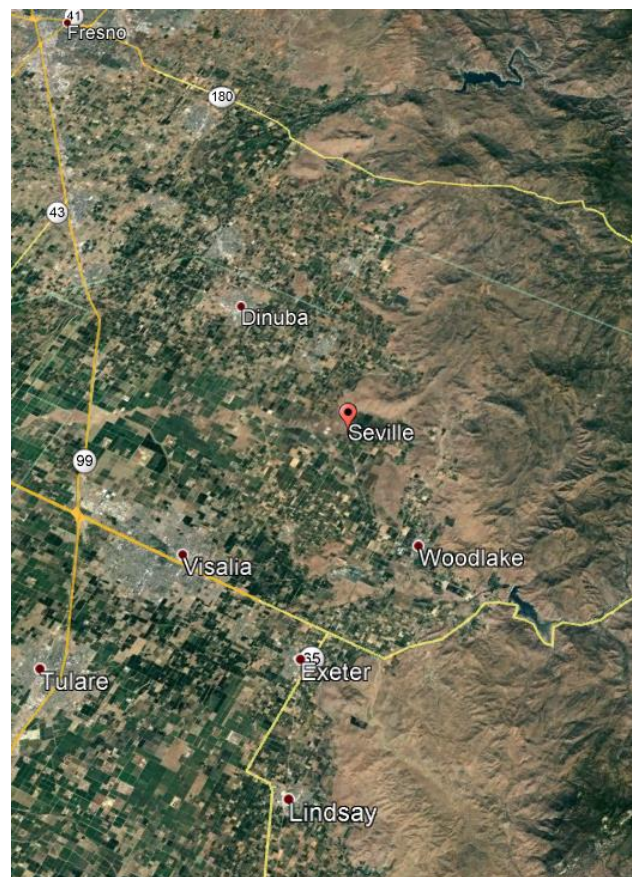
Phase 2
Pilot Projects and
Data Gathering

California City



Seville, CA

- 113 households (estimated)
- PG&E electricity service territory
- SoCalGas gas service territory (no gas service)





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



Propano → Gas natural :

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





Próximos pasos

Evento	Tiempo estimado
Talleres de evaluación de opciones comunitarias de energía	Mayo-junio 2018
<p>CPUC lanzamiento de la recomendación del personal para la fase piloto</p> <p>("propuesta de personal" se basa en propuestas piloto, talleres comunitarios y comentarios)</p>	Agosto 2018
<p>Talleres sobre la propuesta del personal con las partes</p> <p>(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)</p>	Agosto 2018
<p>Audiencias de participación pública (2-3) en SJV</p> <p>(CPUC presenta la propuesta de personal a los miembros del público, recoge sus comentarios)</p>	Septiembre 2018
<p>Juez/Comisionado lanzan su propuesta de decisión</p> <p>(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)</p>	Otoño 2018
<p>Comisionados votan sobre propuesta de decision</p> <p>(por lo menos 3 de 5 comisionados deben votar para aprobar para avanzar)</p>	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

o

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 Seville, CA

R.15-03-010

San Joaquin Valley

Disadvantaged Communities OIR

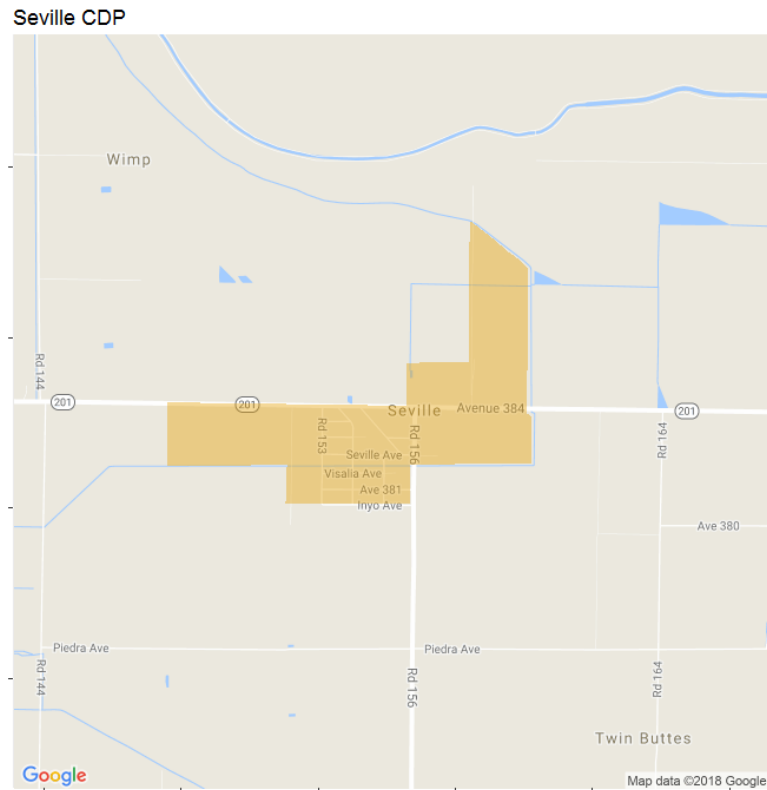
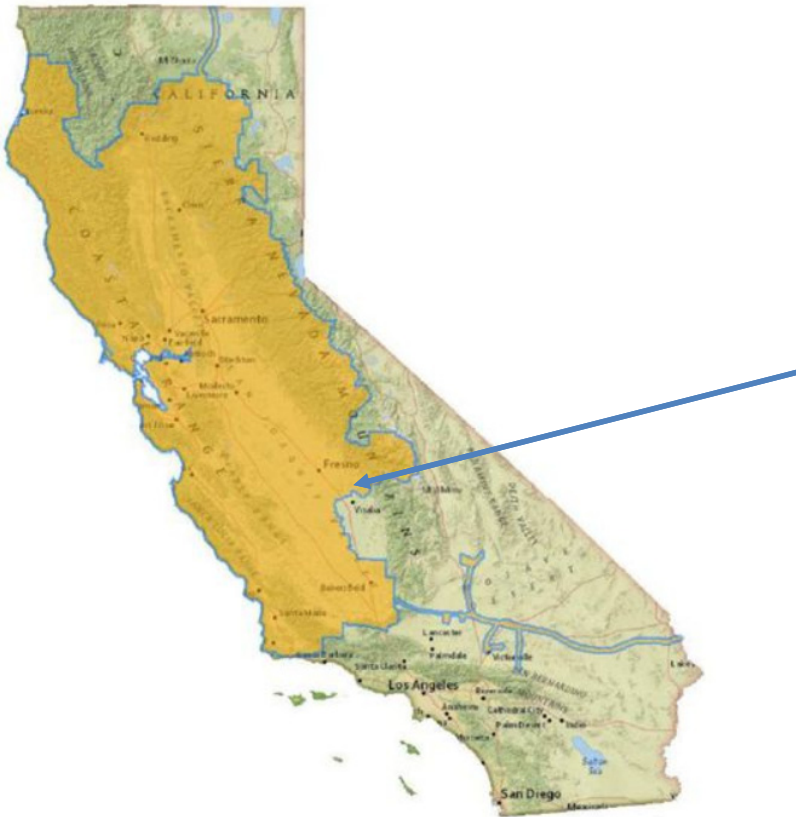


Together, Building
a Better California



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
- 49,000 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

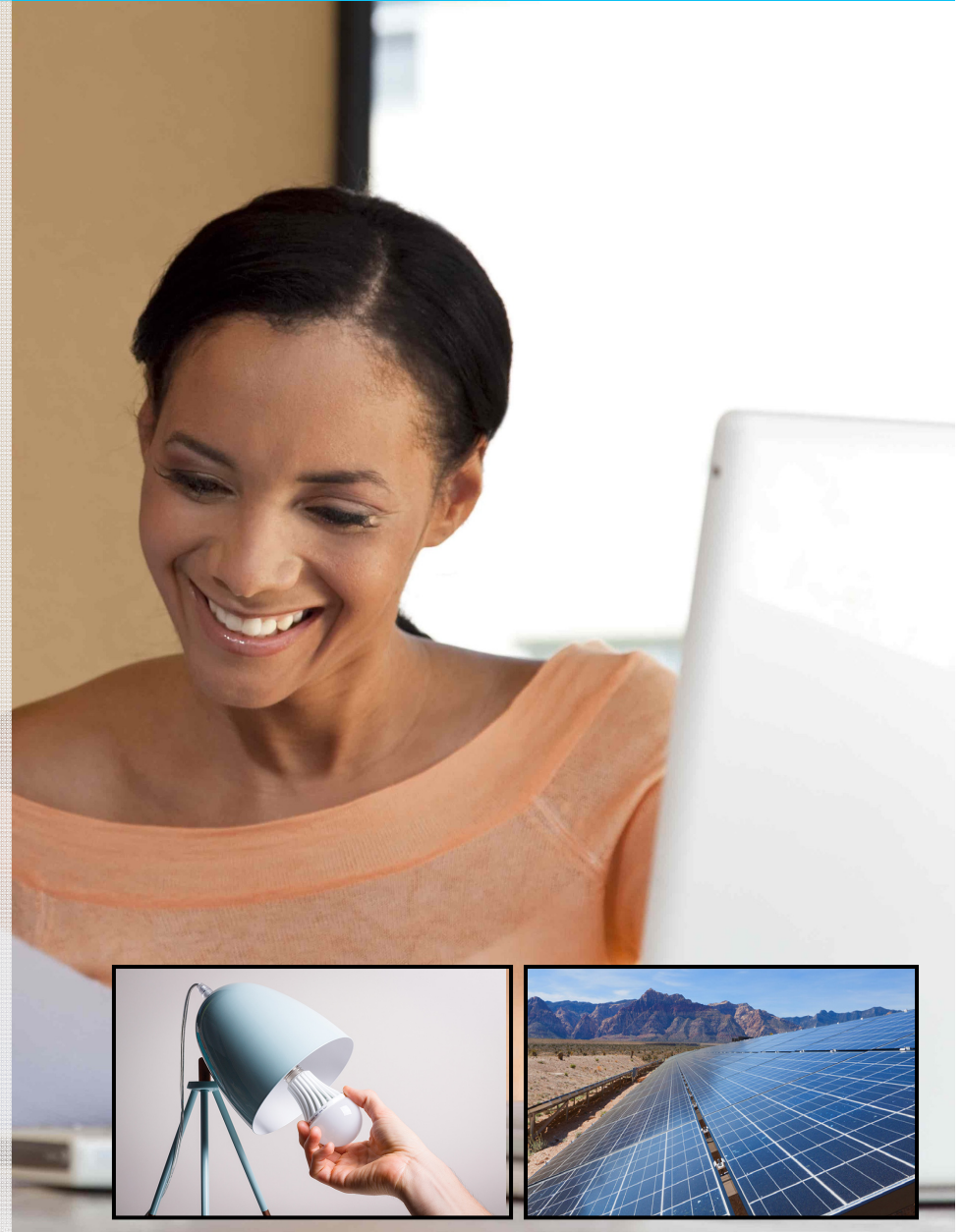
TYPICAL PROPANE BILL

Old Total: \$1,500/year

New Total: \$1,500/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 ~\$790-1,400 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: +\$280/year

New Total: \$1,280/year

TYPICAL PROPANE BILL

Old Total: \$1,500/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 ~\$870-1,400 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: +\$250/year

New Total: \$1,250/year

TYPICAL PROPANE BILL

Old Total: \$1,500/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 Seville, CA

R.15-03-010

Valle de San Joaquín

OIR de Comunidades en Desventaja

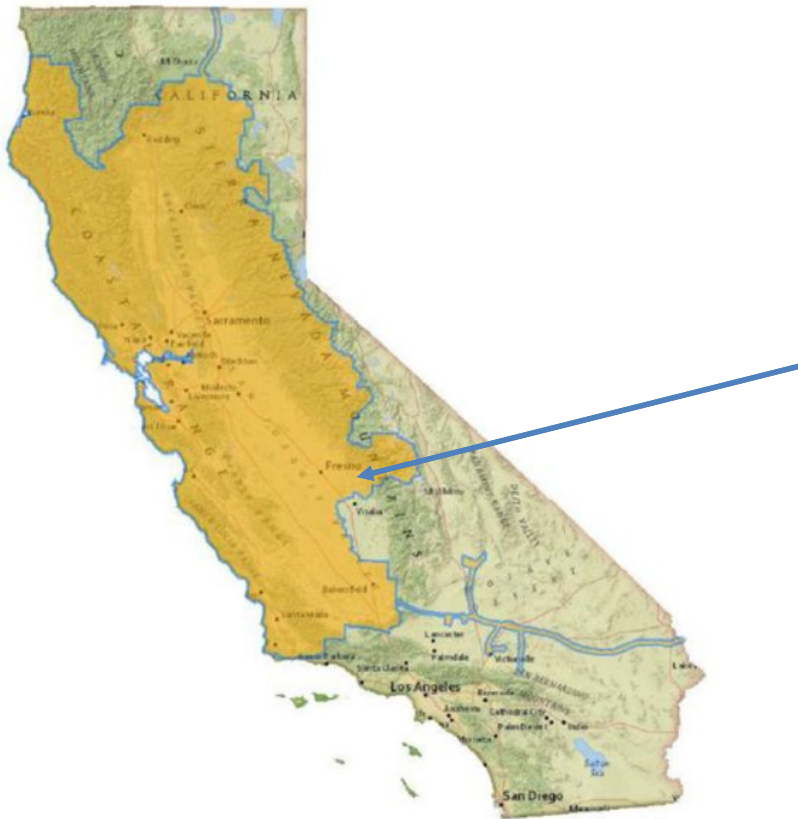


Together, Building
a Better California

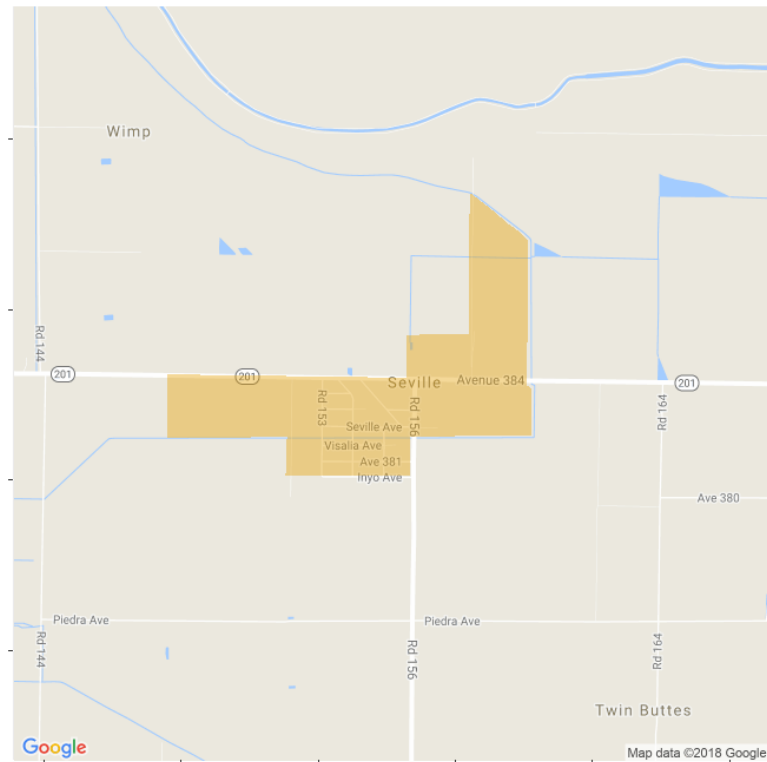


Acerca de PG&E

- 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



Seville CDP





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
+
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

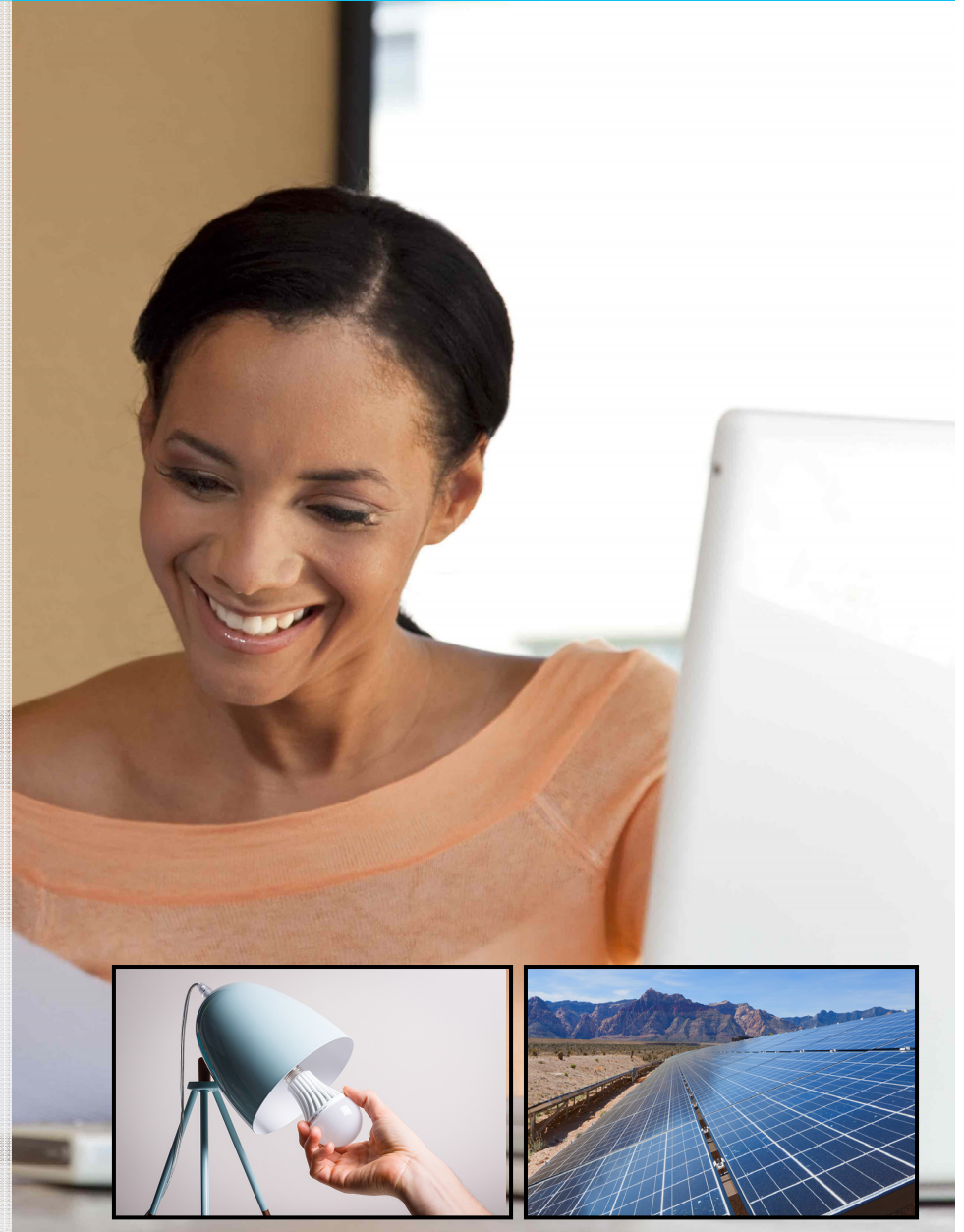
FACTURA DE PROPANO TÍPICA

Antiguo total: \$1,500/año

Nuevo total: \$1,500/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 ~\$790-1,400/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: +\$280/año

Nuevo total: \$1,280/año

FACTURA DE PROPANO TÍPICA

Antiguo total: \$1,500/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 ~\$920-1,400/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: +\$250/año

Nuevo total: \$1,250 /año

FACTURA DE PROPANO TÍPICA

Antiguo total: \$1,500/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.





*Proposed Project



Home Energy Upgrades, Battery Storage, and Community Solar

A Clean Energy Program for Seville

May 16, 2018

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

Alicia Bohigian, GRID Alternatives | Ruben Gonzalez, Proteus

Outline for Today

1. Team overview
2. Benefits of pilot project
3. Total Energy Bill Savings
4. Customer eligibility
5. Cost of services
6. Timeline and process
7. Questions and answers



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

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 Clean Energy Program Benefits



- **Financial Savings** - **more than 72%, or \$1,800 - \$2,500 annually** off your total current energy bill
- **New Electric Appliances** - Electric appliances are cleaner, more reliable, and less expensive to operate than wood and propane
- **Energy Efficient Home** - Energy efficiency services in the home will let you get more out of your energy use, and will increase comfort
- **Reliability & Resilience** - Battery storage provides energy when the power goes out and may provide even greater bill savings
- **Career Opportunities** – Job training and local hiring integrated into home upgrade and solar installation programs
- **Cleaner Air** – Clean appliances and solar energy reduces local air pollutants, and ensures your community leads California's clean energy transition

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

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**

Total Energy Bill Savings:

\$1,800 - \$2,500 annual savings

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

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*

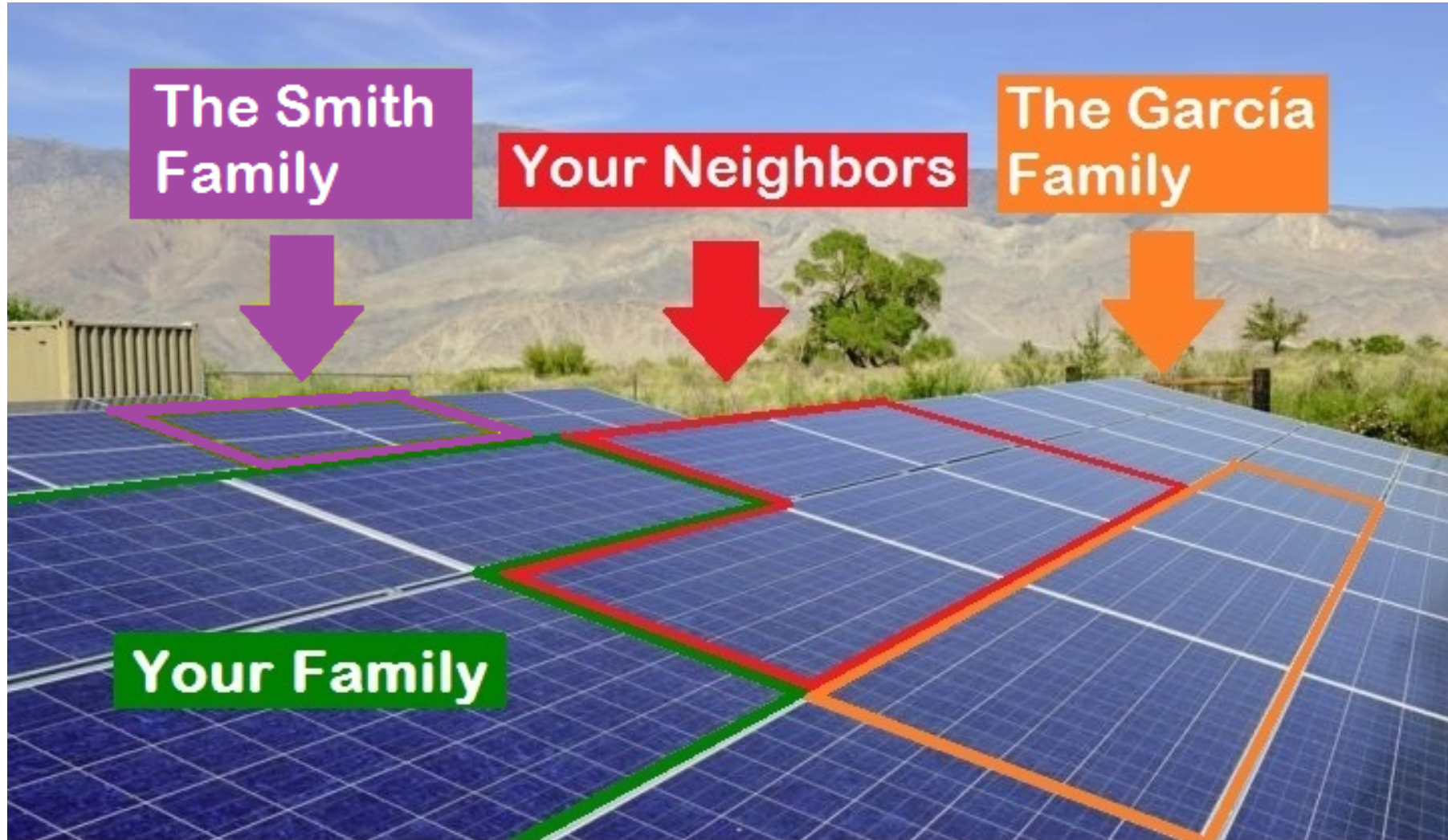
Proposed Community Solar



- **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*

Community Solar



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**

Total Energy Bill Savings:

\$1,800 - \$2,500 annual savings

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

Who would be Eligible?



We have proposed that all residents 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

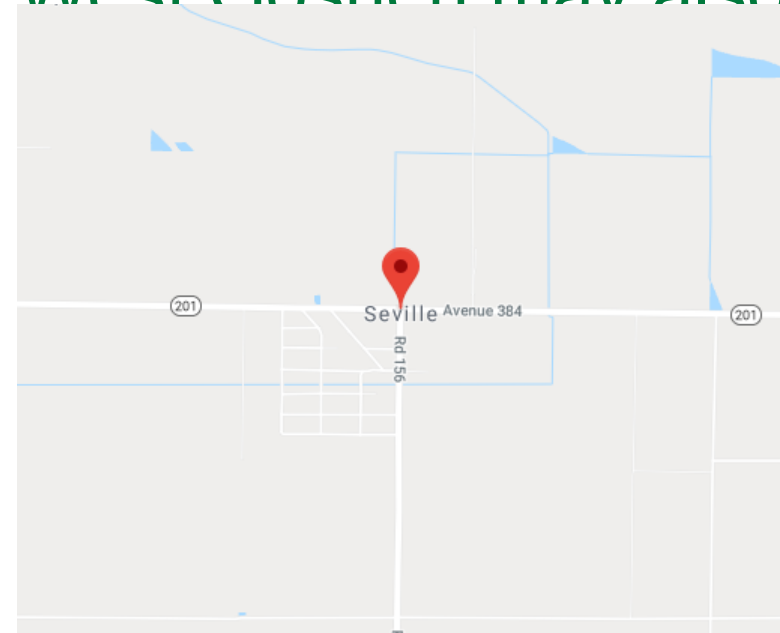
**This is a proposal to gain community feedback – all options are under review*

Where will services be offered?



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

Residents in a nearby community such as Lanare or West Goshen may also receive services



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

Clean Energy Program Cost Information



**Proposal: Absolutely no cost to
program participants at any time**

YOU PAY: \$0.00

Propane Payment: \$0.00

Electric Payment: 45% less

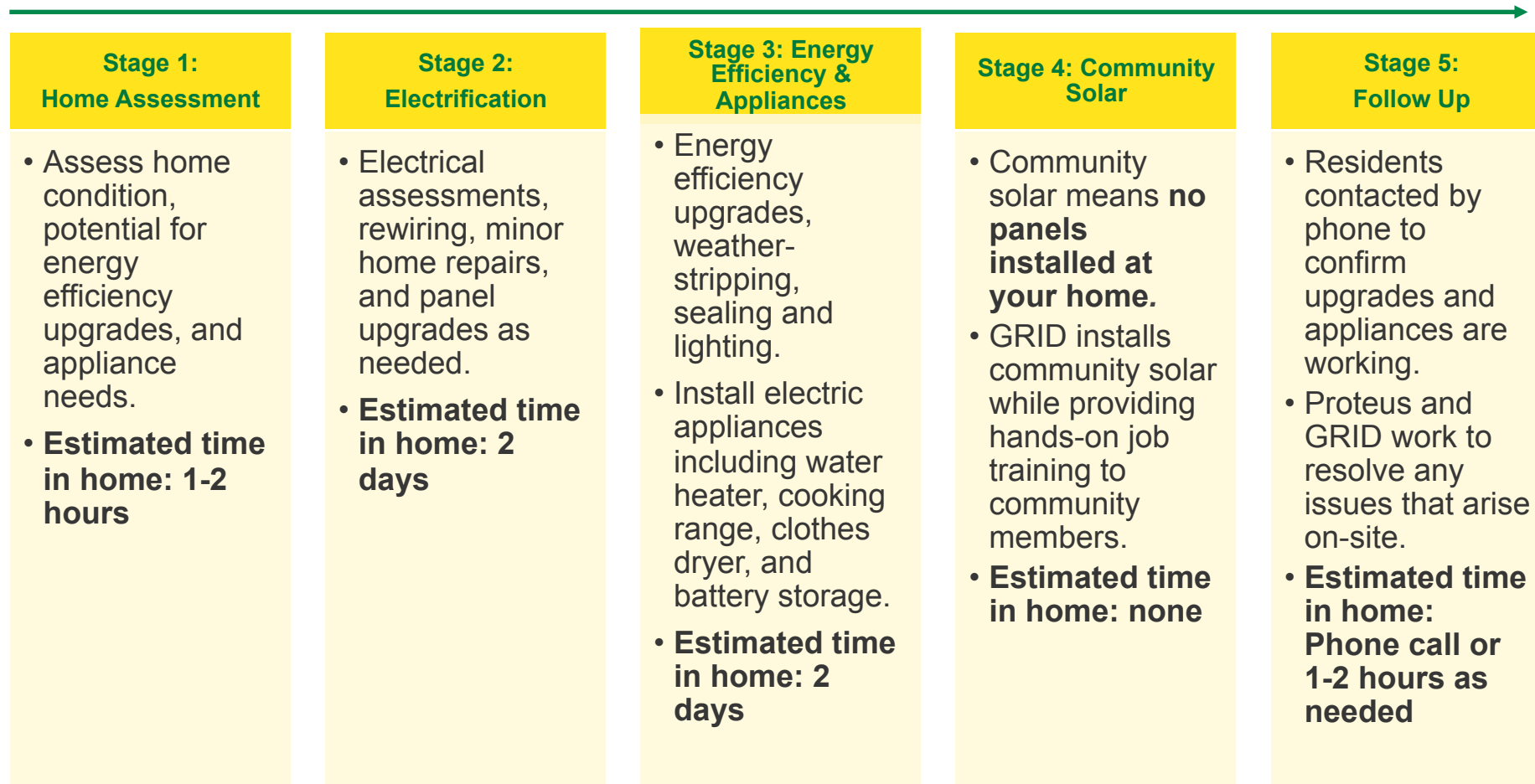
Costs recovered through utility sources and
incentives. The program cost per home:
Approximately \$34,000

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



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

Comparison of Proposals: Clean Energy Program vs. PG&E Electrification Pilot

	Clean Energy Program – GRID, Tesla, Proteus	Electrification Pilot – PG&E
Energy Efficiency Services	Yes	Yes
Electrification: Replace Wood and Propane with Electric Appliances	Yes	Yes
Community Solar Discount Offered	More than 45% off electric bill	10% off electric bill
Workforce Development and Training	Yes	No
Implementer Leads	GRID Alternatives and Proteus (local community organizations)	PG&E (electric utility)

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

Thank you! Do you have questions?

Contact Us

Community Solar:

Tom Esqueda, GRID Alternatives

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

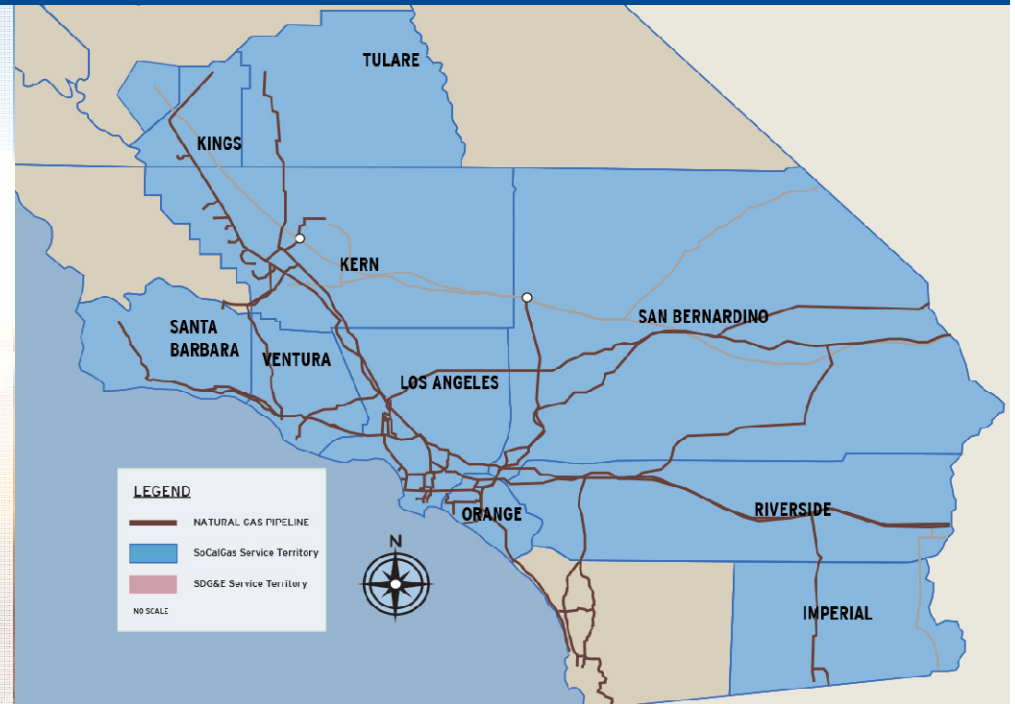
Phone: (805) 681-5100



NATURAL GAS PROPOSAL FOR SEVILLE

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.

Non-Energy Benefits

Health, comfort, safety, reliability & 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

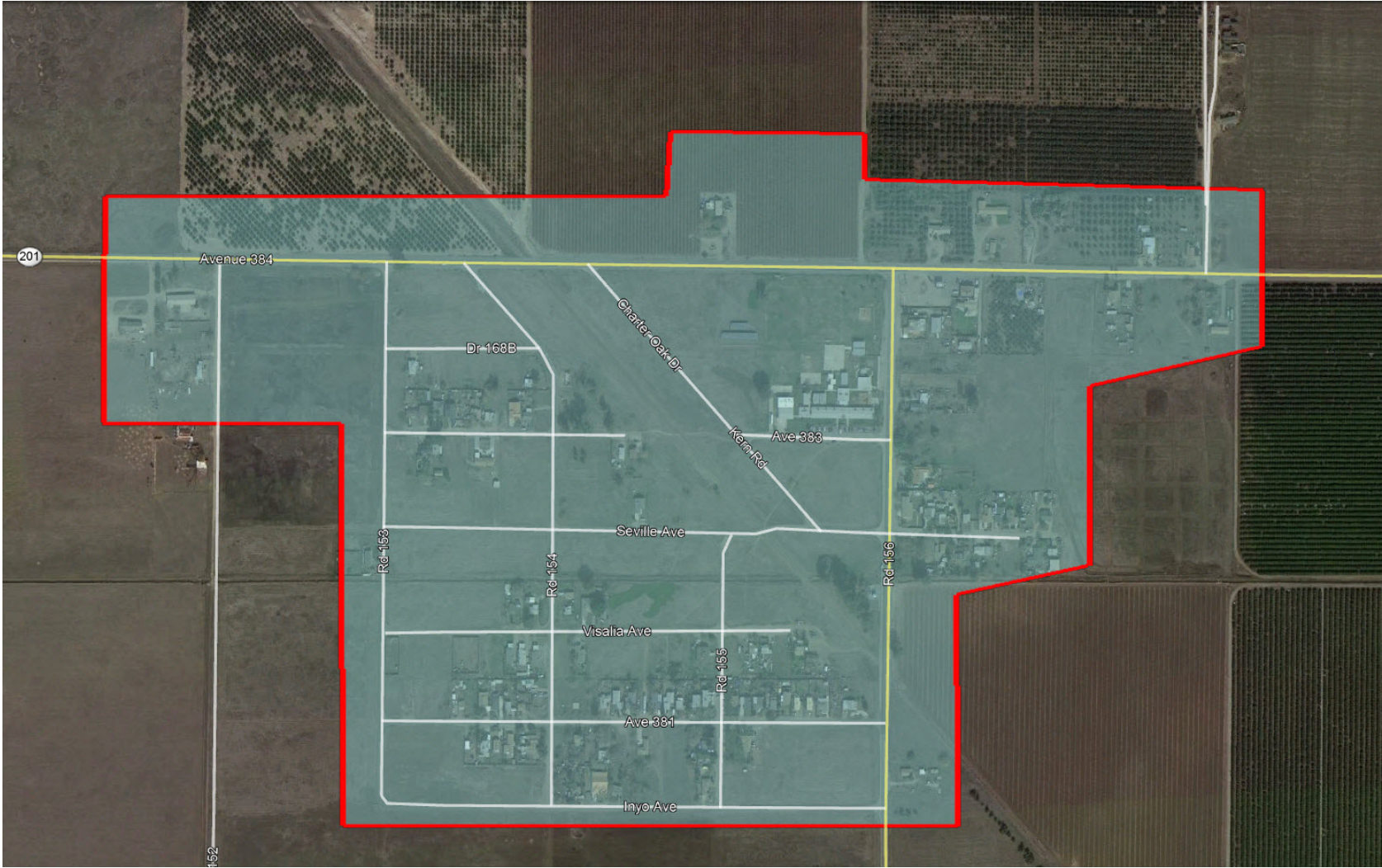
These programs are funded by California utility customers and administered by Southern California Gas Company under the auspices of the California Public Utilities Commission.



Natural Gas Proposal

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

Construction Area



Project Timeline

PLANNING/ASSESSMENTS

with community participation (ongoing)



CONSTRUCTION OF PIPELINES

approximately 4 months

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



HOUSEHOLD CONVERSIONS

approximately 5 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 **\$122+**

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

\$83-\$100

Annual Savings

\$1,001-\$1,205

Income Qualified Customers can

Save Additional 20%

Monthly Savings

\$91-\$105

Annual Savings

\$1,097-\$1,265

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	\$53,900	\$5,610,600
Home Pipeline Installation	\$3,500	\$364,000
Appliances & Installation	\$6,000	\$624,000

Estimated Total: **\$63,400** **\$6,598,600**

These estimates are for approximately 104 households and is a proposal for the CPUC; all elements are subject to change and approval by the CPUC.

Residential Customer Monthly Bill Impact +\$0.01

Thank You!



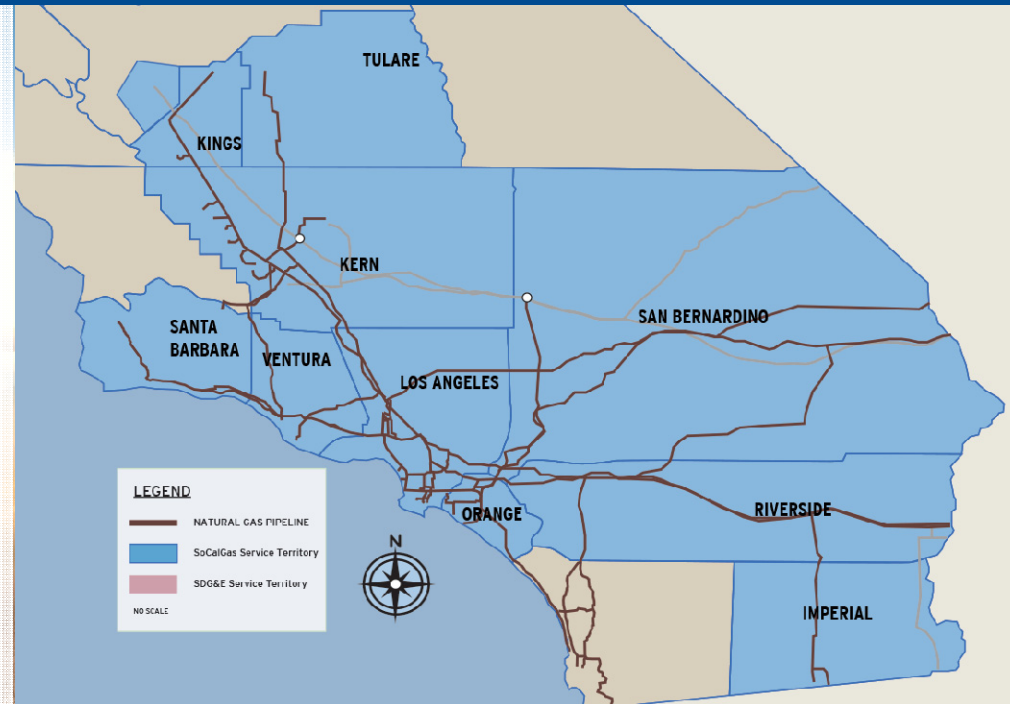
This is a proposal for the California Public Utilities Commission (CPUC); all elements are subject to change and approval by the CPUC.



PROPUESTA DE GAS NATURAL PARA SEVILLE

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, confiabilidad 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 días 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.

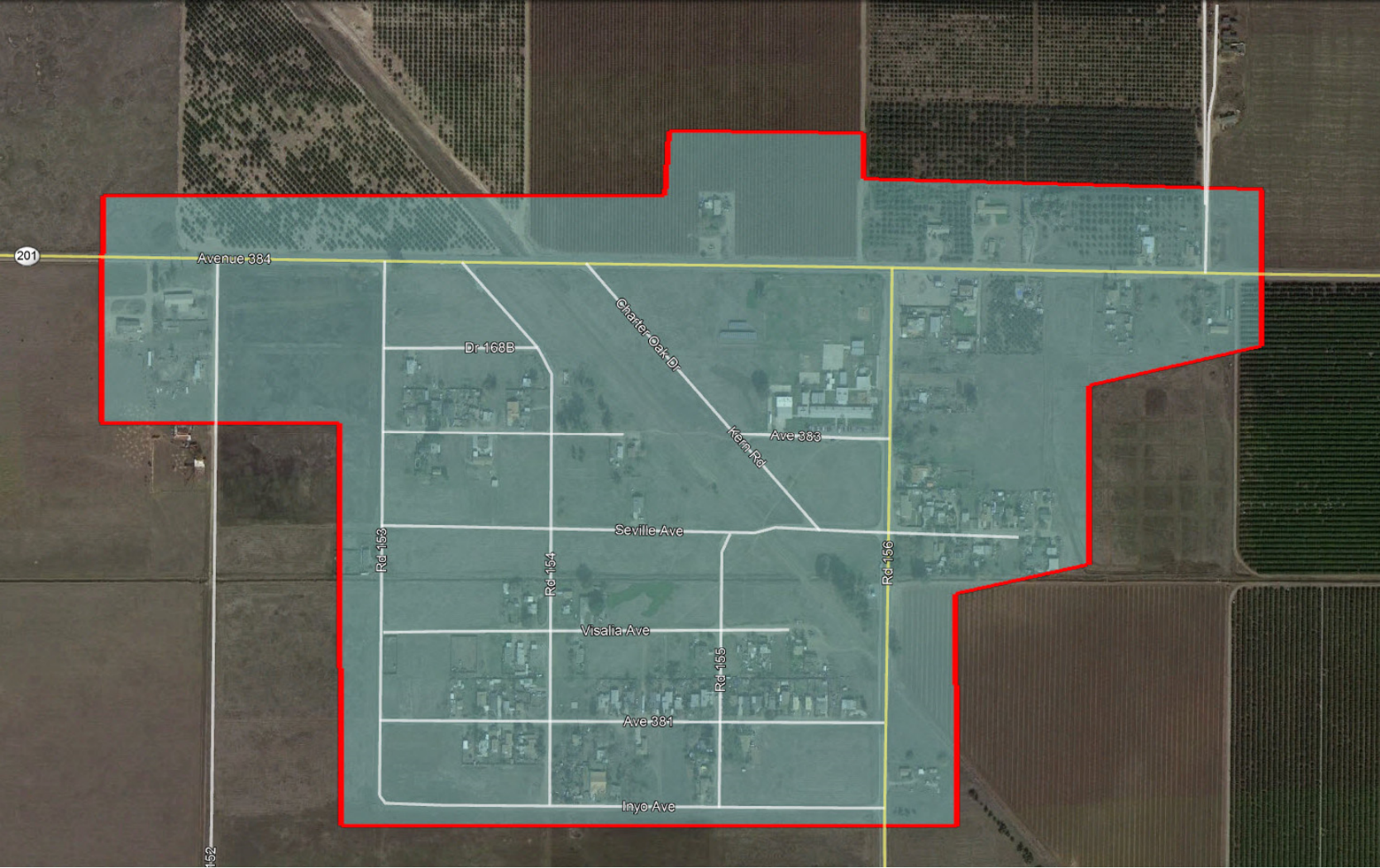
Estos programas están financiados por los clientes de las empresas de servicios públicos de California y administrados por Southern California Gas Company, bajo los auspicios de la Comisión de Servicios Públicos de California.



Propuesta de gas natural

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.

Área de construcción



Etapas del proyecto

PLANIFICACIÓN/EVALUACIÓN

Con la planificación y participación continua de la comunidad



CONSTRUCCIÓN DE TUBERÍAS aproximadamente 4 meses

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



CONVERSIONES EN LAS CASAS aproximadamente 5 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

\$122+

vs

Futuros costos
mensuales**

GAS
NATURAL

\$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

Ahorros estimados

Ahorros mensuales

\$83-\$100

Ahorros anuales

\$1,001-\$1,205

Los clientes que reúnen los requisitos de ingreso pueden

**ahorrar un 20%
adicional**

Ahorros mensuales

\$91-\$105

Ahorros anuales

\$1,097-\$1,265

* 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	\$53,900	\$5,610,600
Instalación de tuberías en la casa	\$3,500	\$364,000
Aparatos domésticos e instalación	\$6,000	\$624,000
Total estimado:	\$63,400	\$6,598,600

Estas estimaciones son para aproximadamente 104 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

+\$0.01

¡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.