Santa Fe County Board of County Commissioners Hearing

August 11, 2025

350 Santa Fe

Presentation Outline

1. Introduction and Context
2. PNM Renewable Energy Transition
3. Climate Science
4. SGMP - SLDC Obligations
5. A Youth Perspective
6. Solar and Storage Go Together
7. Closing Remarks

Pecos River

1. Introduction and Context

Robert Cordingley

350 Santa Fe Chapter Mission Statement

a challenging road ahead

Our mission is to promote rapid and just reductions in greenhouse gas emissions through education and advocacy in Santa Fe and New Mexico, as we work to secure a healthy planet.

For the past 50 years, our electricity has come from coal power plants hundreds of miles away.

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2. PNM Renewable Energy Transition

Glenn Wikle

New Mexico Passed Landmark Legislation

- Retire dirty coal and gas plants
- Replace fossil fuels with cheaper renewable energy
- Electrify buildings and transportation
- Deliver 24/7 grid reliability through local energy generation and storage

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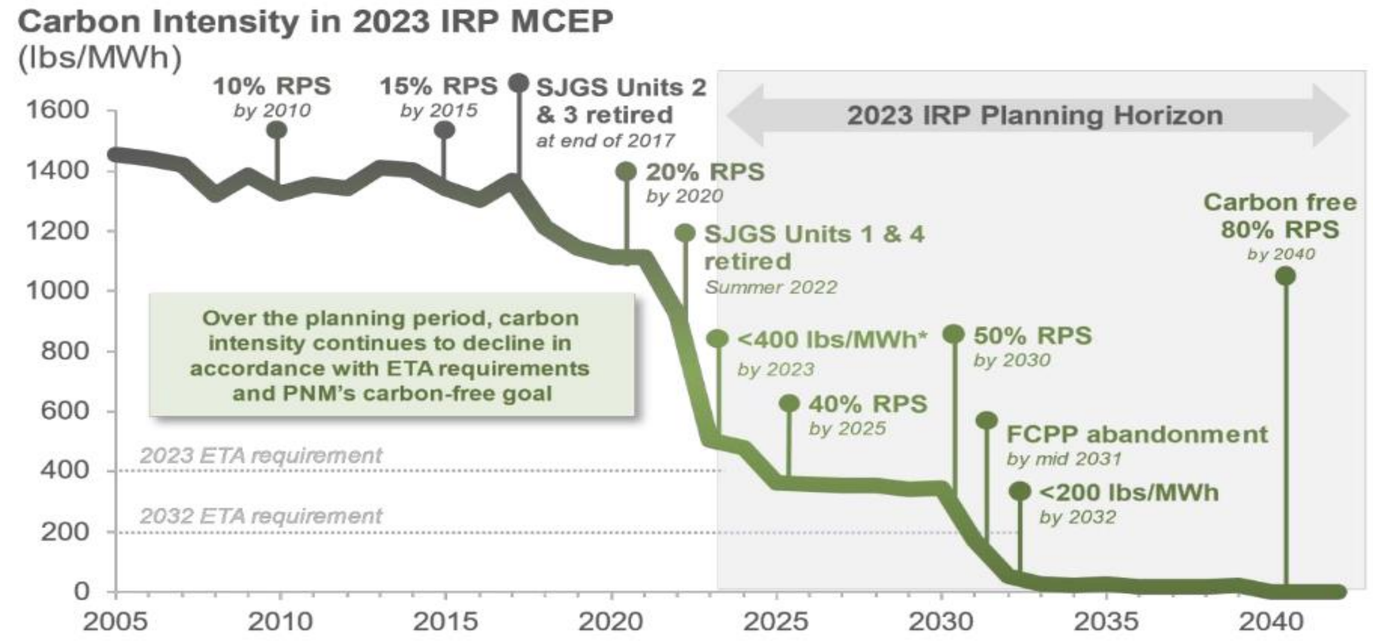
PNM Acquiring Renewable Energy to Comply With NM Energy Transition Act

Figure 2. Carbon intensity over time under PNM's proposed MCEP



Reported carbon intensity is calculated from modeling results by dividing total emissions from PNM internal generation by total annual energy requirements. Actual outcomes may vary depending on final rules adopted by the NMPRC. Delays of replacement resources for SJGS and PVNGS may also have an impact on PNM's ability to meet ETA carbon intensity requirements in 2023 and 2024.

- PNM needs to be 100% carbon free by 2045

"PNM has communicated a **need for about 2,000 MW in the 2024-30** period and between 5,400 MW and 8,700 MW through the end of its 20-year planning horizon in 2042." *

- Source: P. 8 of https://www.prc.nm.gov/wp-content/uploads/2024/07/RPS-Report-6-28-Final.pdf

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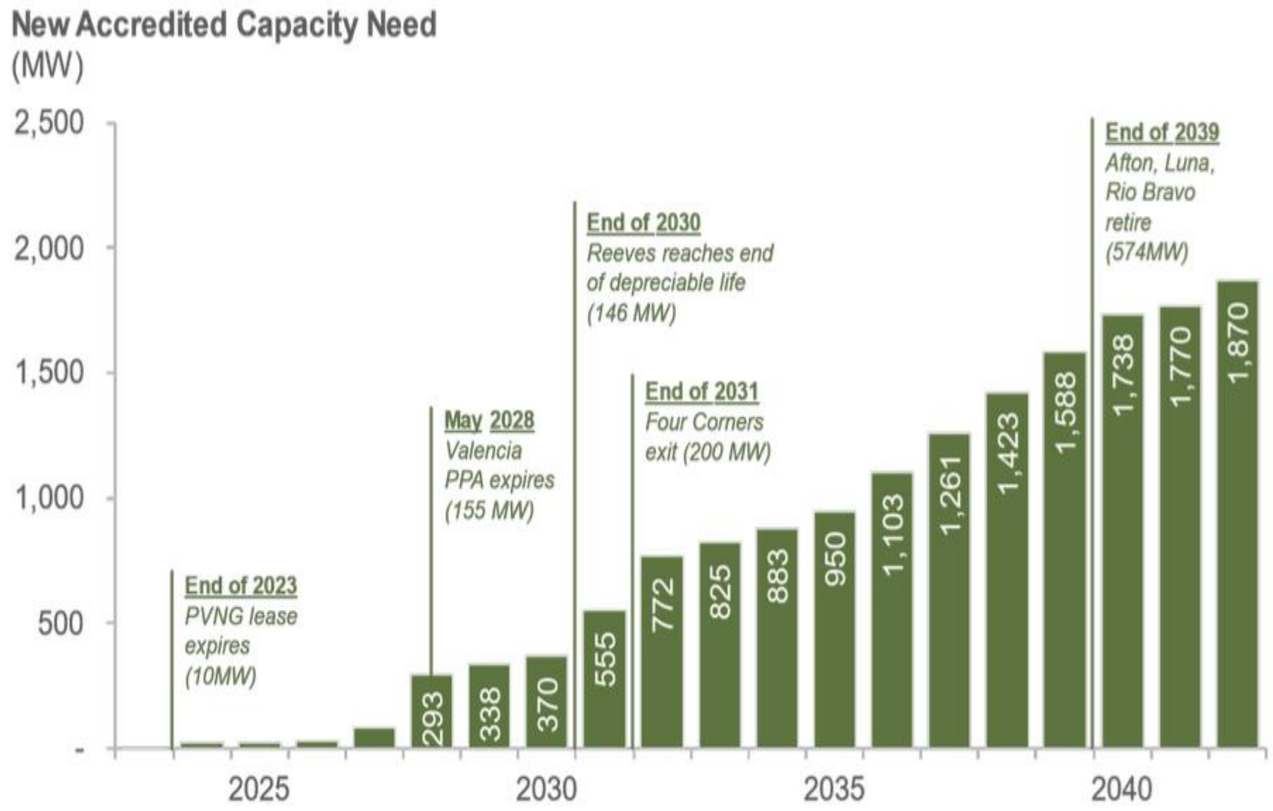
PNM's 20 Year Plan

Figure 65. PNM's growing capacity need for new capacity over time



500MW of coal retired.

Last 200MW of coal to retire in 2031

Additional energy needs over next 15 years

2,700 MW of low-cost renewables+ 900 MW of energy storage

- Rancho Viejo proposal: 96MW low cost and 48 MW storage

Large solar and storage projects approved and running in other counties

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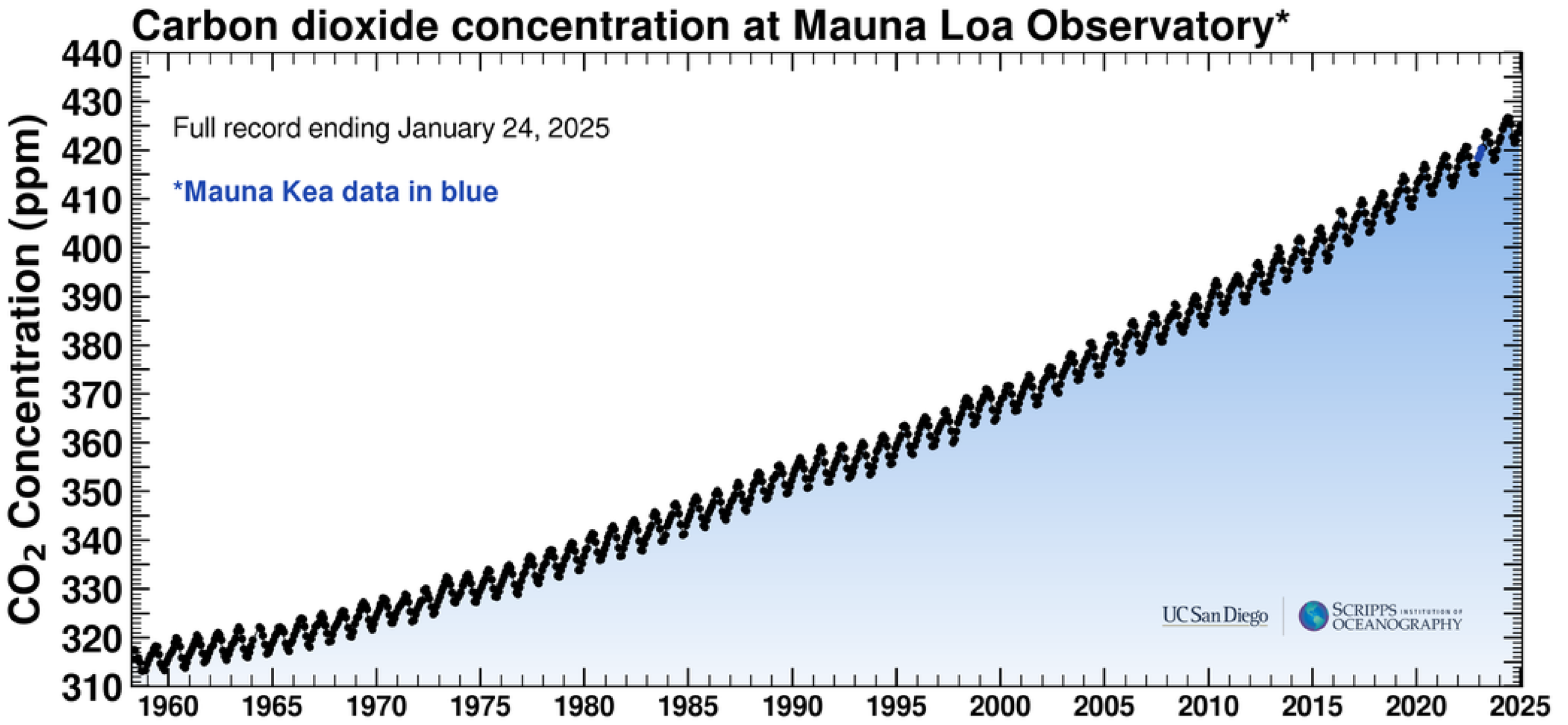
3. Climate Science

Robert Cordingley



Source: https://keelingcurve.ucsd.edu/

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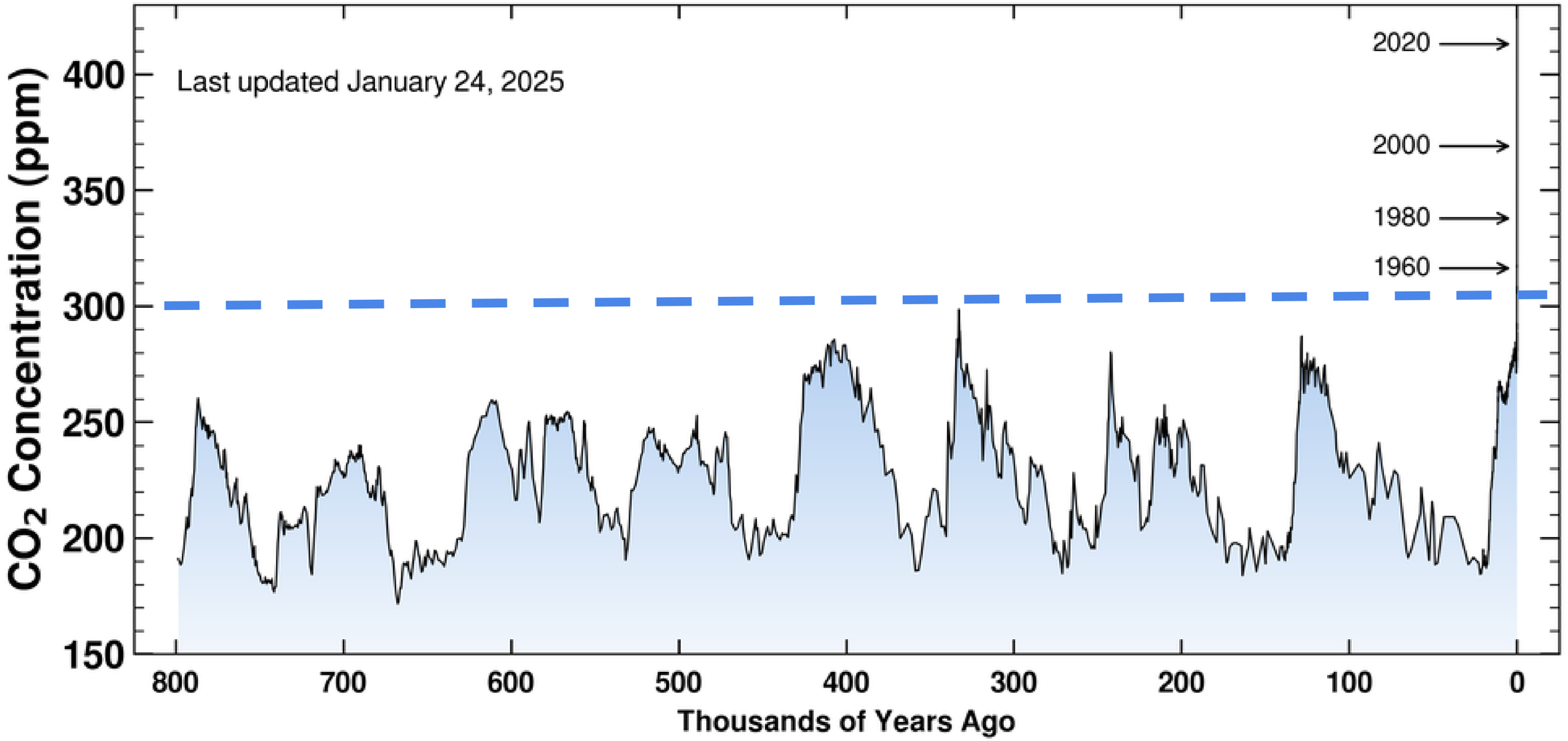

Source: https://keelingcurve.ucsd.edu/

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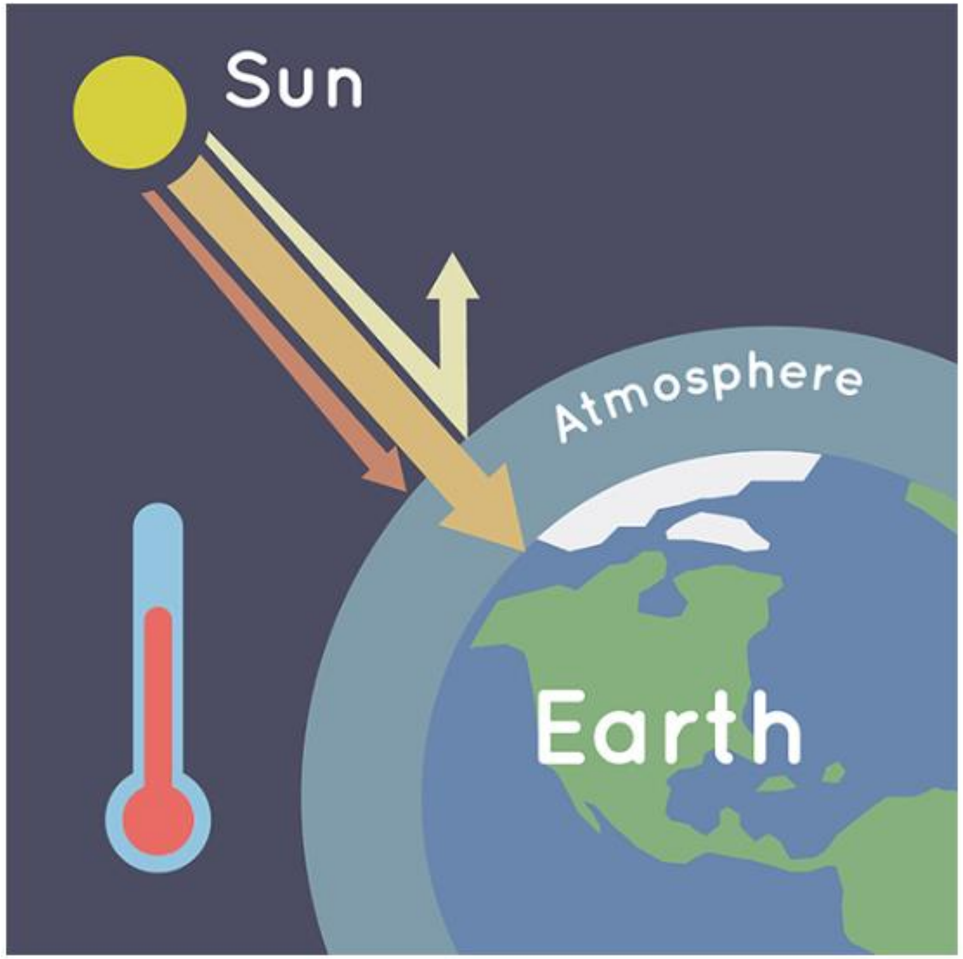
The Greenhouse Effect

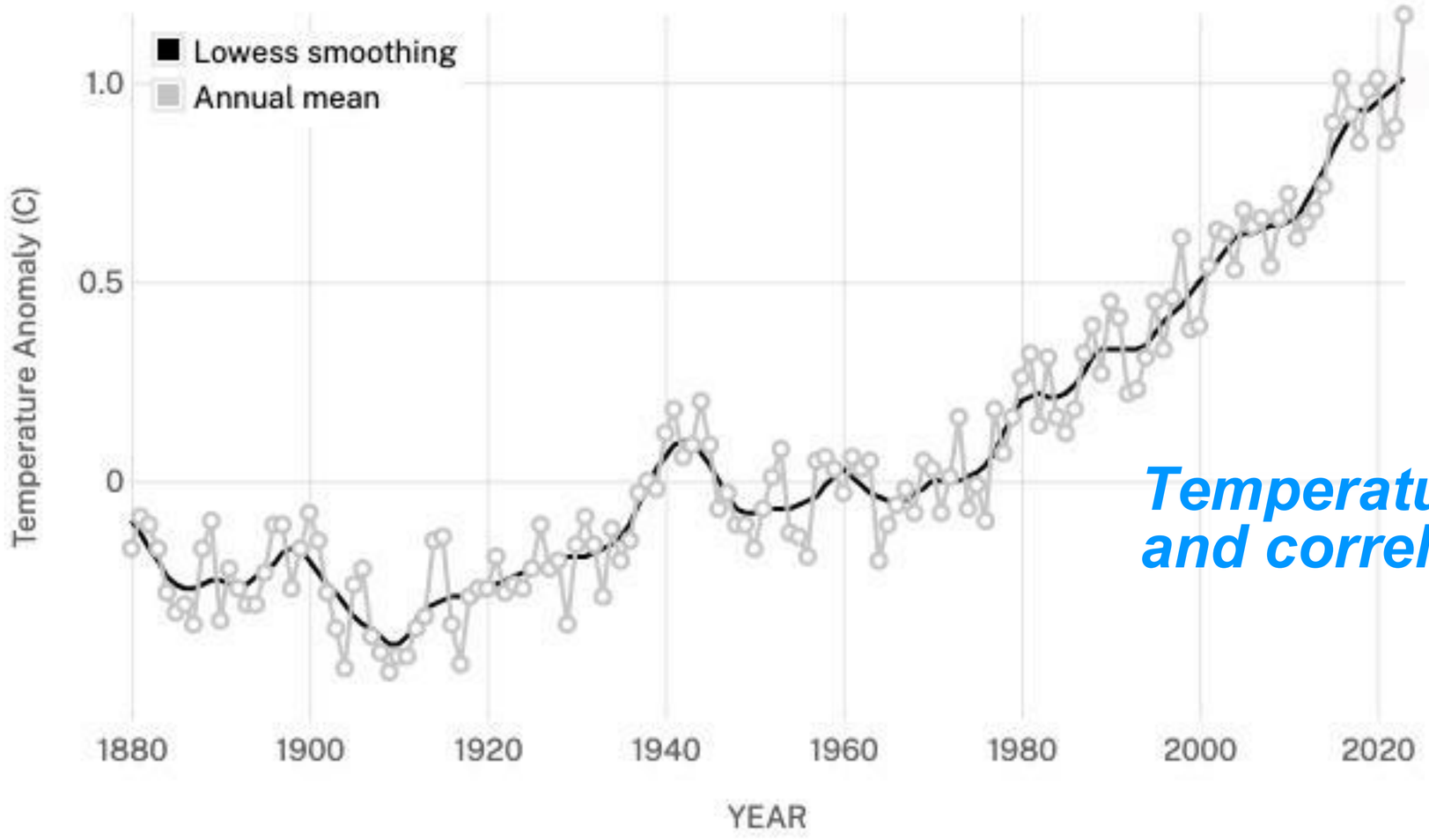
High levels of CO_2 in the atmosphere trap the sun's heat around the planet, making temperatures rise.

CO_2 is opaque to infrared (heat)



Earth's atmosphere traps some of the Sun's heat, preventing it from escaping back into space at night. Credit: NASA/JPL-Caltech.

Global Average Temperature Change/Anomaly



1880-2023

Temperatures are out of control and correlate with CO_2 levels

Source: NASA Goddard Institute for Space Studies

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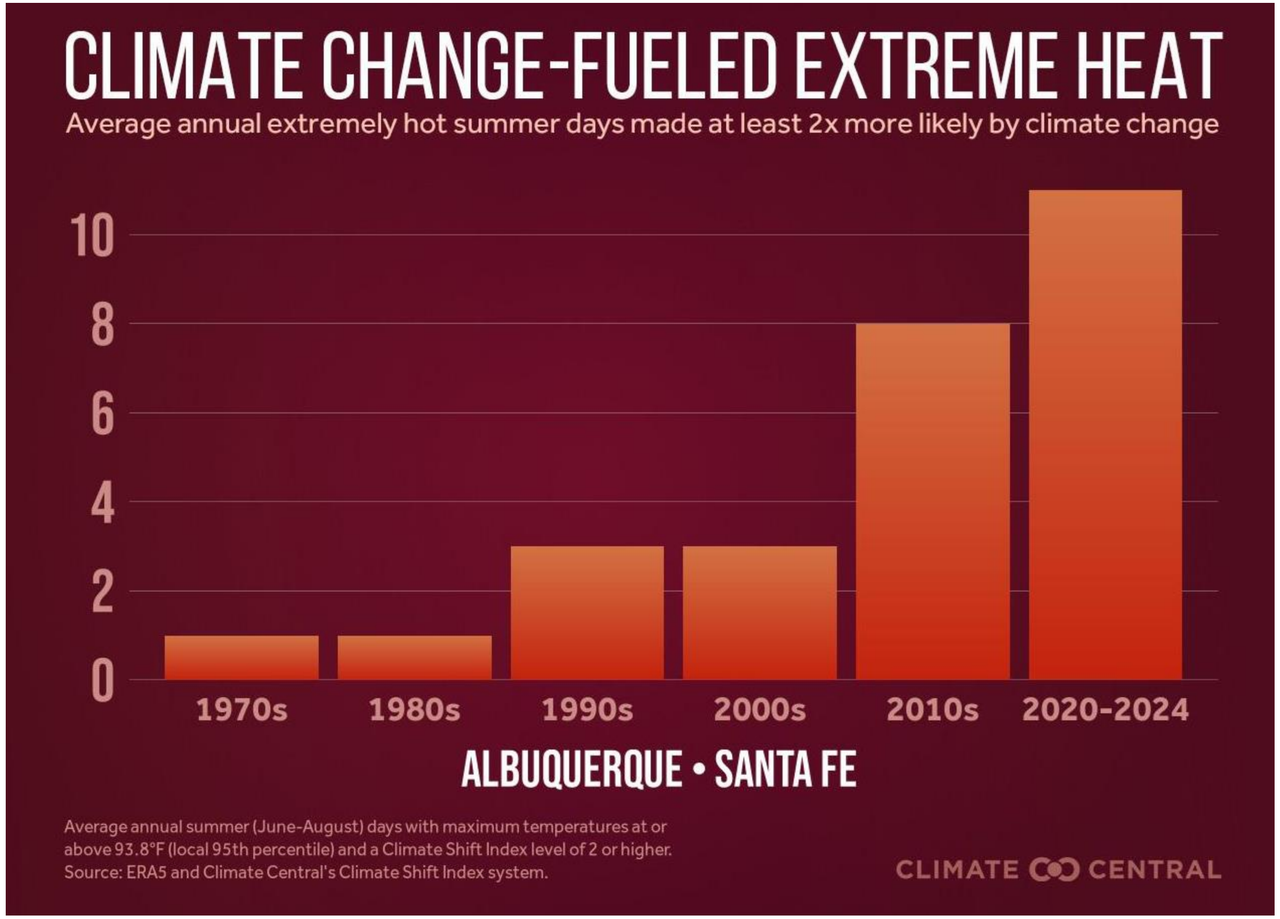
Local Summer Days of Extreme Heat



1970s -2024

Average number of days (June - August) when max temperatures at or above 93.8 °F made twice as likely by Climate Change.

Source: ERAS and Climate Central

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Some of the worst effects

Lethal heat waves

Desiccated woodlands and pastures

Forest fires

Some of the worst effects

Extreme weather events:

Heavy rainfall and flash flooding

As recently experienced in NM and TX

Camp Mystic Texas July 2025


Ruidoso July 2025


Roswell October 2024

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What Can We Do?

- ***Renewable Energy***
- ***Industrial Decarbonization***
- ***Storage Technologies***
- ***Regenerative Agriculture***
- ***Geothermal Energy***
- ***and much more!***

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How does more Renewable Energy work?

- ✖ ***Burning fossil fuels***
- ✖ ***Emitting CO_2 in the atmosphere***
- ✖ ***Rising temperatures***
- ⬇ ***Risk of wildfire***
- ⬇ ***Risk of extreme weather events, like Ruidoso flash floods***

4. SGMP and SLDC Obligations

Lucy Gent Foma

2015 Santa Fe County Sustainable Growth Management Plan (SGMP)

Santa Fe County General Plan

Santa Fe County

Sustainable Land Development Code

Adopted by Ordinance 2016-9
December 13, 2016

This is a reproduction of the Santa Fe County Sustainable Land Development Code (SLDC), enacted by Ordinance No. 2016-9, the original copy of which was recorded with the County Clerk as instrument number # 1812915. While efforts have been made to ensure its accuracy, this more legible reproduction is provided as a convenience to the public and does not trump the recorded SLDC. In the event of an inconsistency between this reproduction and the SLDC recorded with the County Clerk, the recorded SLDC is the controlling and official document.

SGMP clearly states the goal to support renewable energy

7.3 GOALS, POLICIES AND STRATEGIES

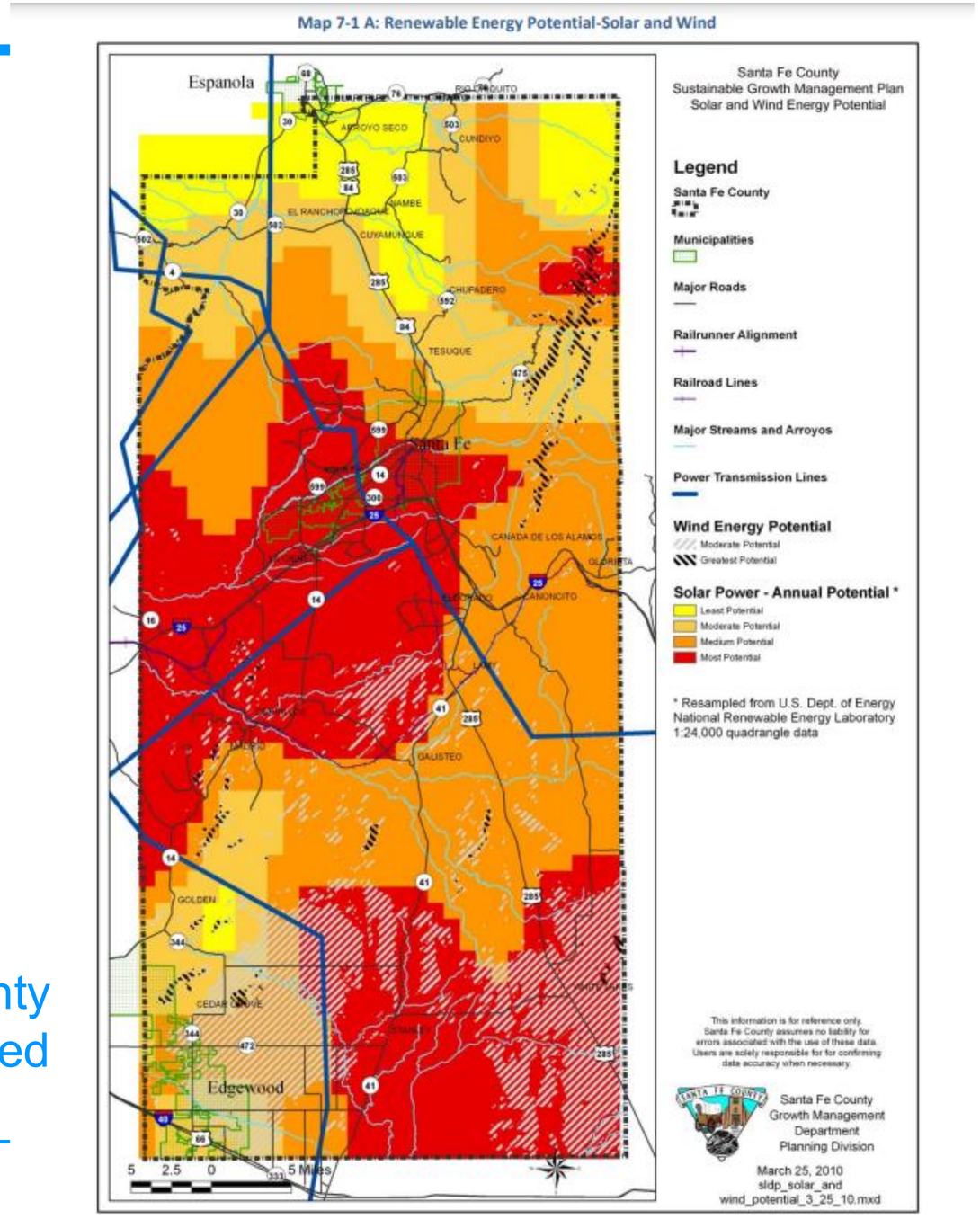
Goal 23: **Support energy efficiency and renewable energy to reduce greenhouse gas emissions and dependence on non-renewable energy use.**

Policy 23.1: Reduce energy use and greenhouse gas production through use of renewable energy systems, reduced vehicle miles traveled, alternative transportation modes, and environmentally responsible building and design.

Strategy 23.1.1: ***Pursue regional renewable energy, energy efficiency and sustainable design projects with private and public partners.***

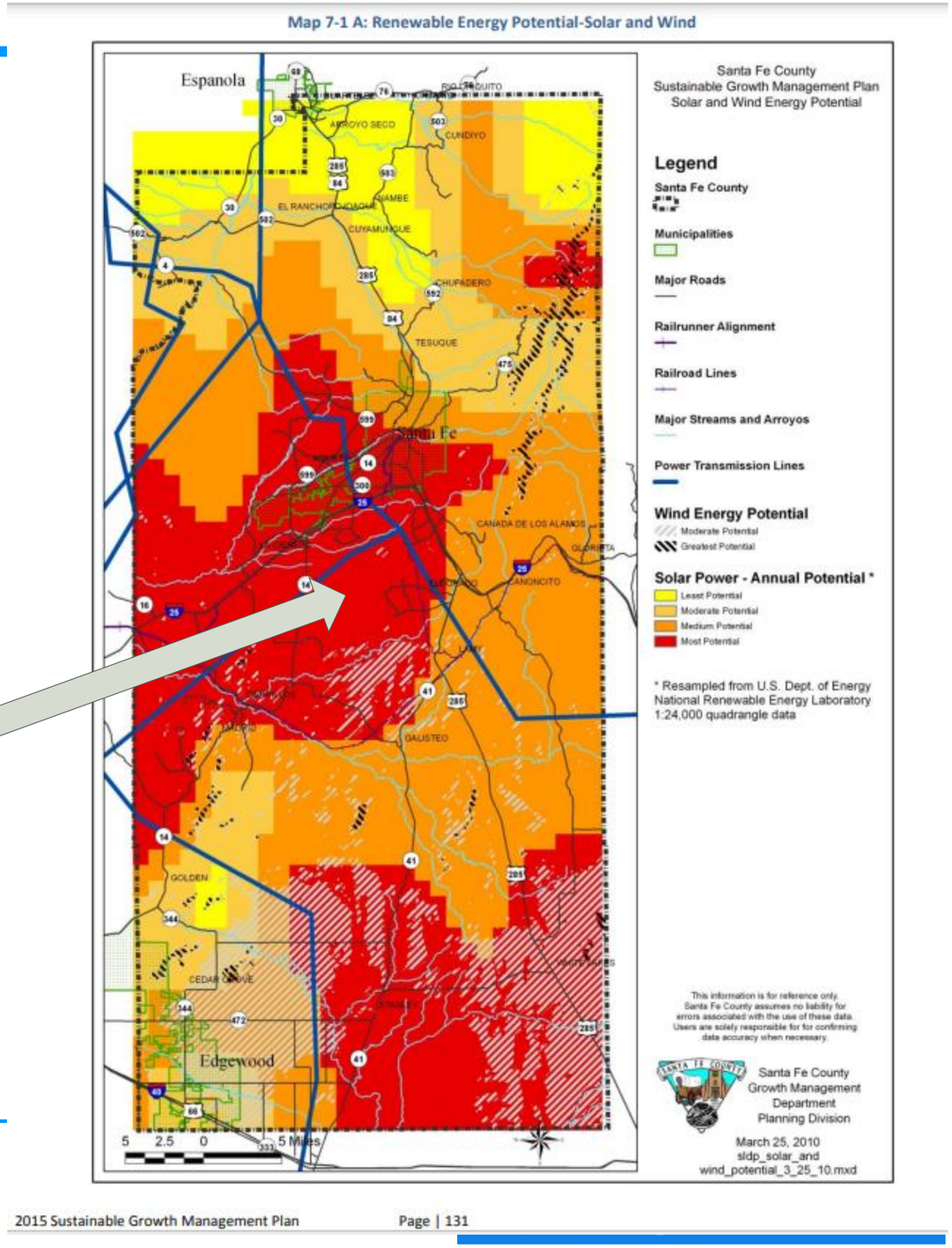
and tells us where to put it

SGMP Map of Santa Fe County
showing preferred locations in red



and tells us where to put it

AES Project Site



PNM needs 2,000 MW by 2030

- PNM **needs** >13 projects the size of AES or larger by 2030

Delaying solar & storage permits will ultimately lead to higher costs in utility bills and higher costs in environmental damage.

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SLDC tells us that solar must be developed

1.4.2 The SLDC Shall:

1.4.2.14. Restrict development within lands containing environmental, ecological, archaeological, historical or cultural sensitivity and preserve agriculture and ranch lands and utilize: clustering; use of purchase and transfer of development rights; federal and state income tax credits and deductions for donation of development and conservation easements; development of solar and wind resources and other incentives to maximize economic return and to preserve such resources to the maximum extent feasible;

Santa Fe County has notoriously difficult permitting criteria- and yet staff have approved this project

AES/Rancho Viejo Solar Project CUP Application Materials*

- RanchoViejo CUP Development Permit
- Warranty Deed Rancho Viejo Solar
- Approved Survey Plat
- Proof Of Taxes
- Assigned 911 Address Ranch[illegible]
- NMDOT Access Permit C-202[illegible]RanchoVi[illegible]o
- Notarized Letter Of Consent
- Neighborhood Meeting Report
- Written Report CUP Rancho Viejo
- Site Development Plan CUP
- NMED Septic Permit Request
- Water Availability Letter RanchoViejo
- TAC Letter EIR AppxA
- Site Threashold Analysis RanchoViejo
- Appraisal Review Memo - Hippauf Dry & Connelly
- EIR Rancho Viejo Solar
- Kirkland Appraisal Study
- Pre-IncidentPlan_EIR_AppxB (10-10-2024)
- Noise Report EIR AppxC
- Geotech Report EIR AppxD
- Decommissioning Plan EIR AppxE
- Revegetation Plan EIR AppxF
- First Responder_EIR_AppxG (10-10-2024)
- Preliminary HMA redacted EIR AppxH
- Aquatic Resources
- Ecological Survey Report
- Visual Impact
- Adequate Public Facilities
- EIR Third Party Review
- Concurrence Letter Log#118484
- Concurrence Letter Log#118830
- Concurrence Letter Log#119282
- Concurrence Letter Log#122238
- Pole Structures_Engineer Letter_20240913
- GSS Letter #2 to Dennis Kurtz_
- Incorrect Information in SWCA Noise Technical Report Rancho Viejo Solar Project
- 10-11-2024 Fire Review of AES CUP Application
- RanchoViejoSolarEIR_ThirdPartyReview_GGIDraft
- Rancho Viejo Utility Plume Study

39 Documents!!

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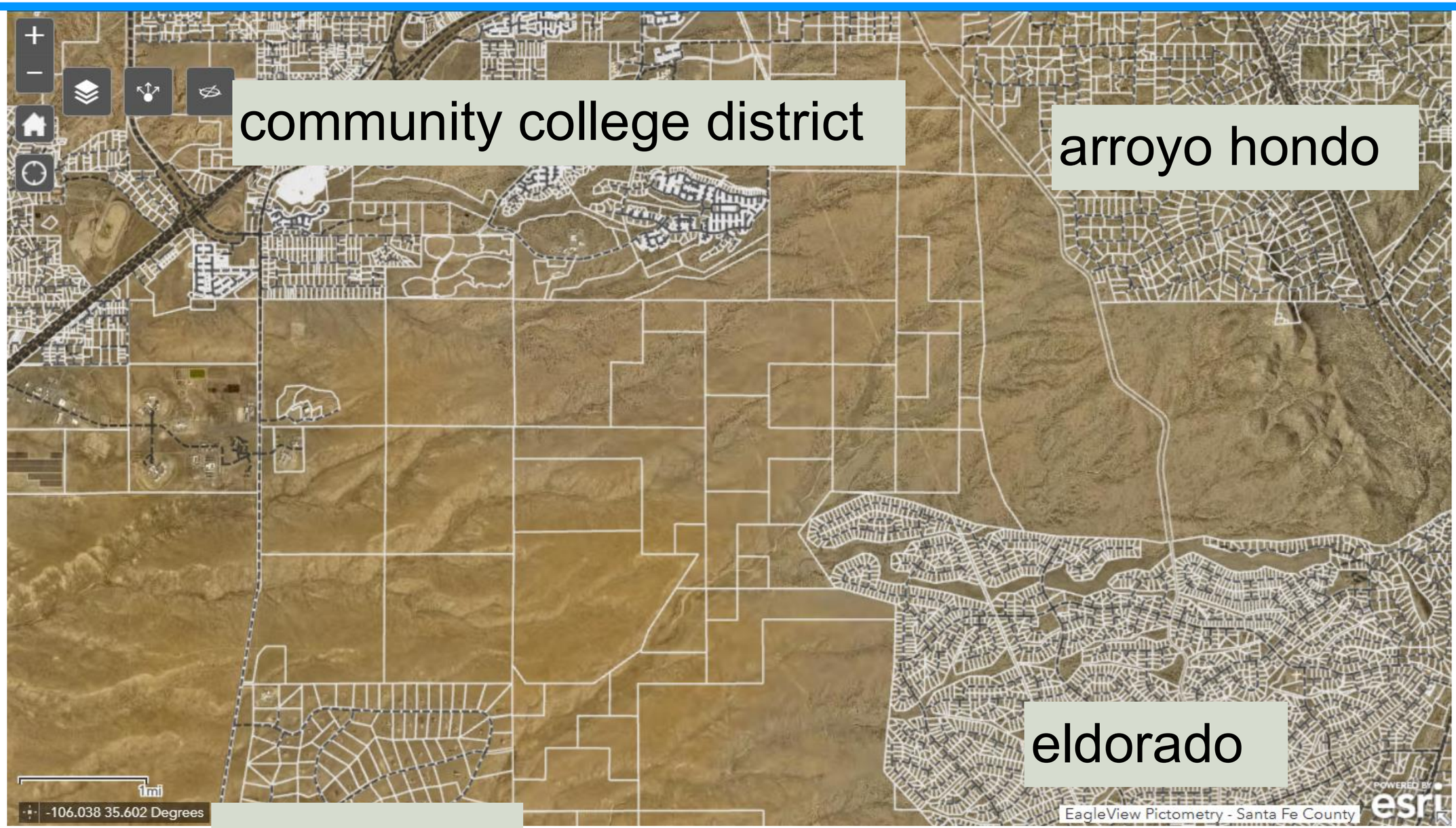
community college district
arroyo hondo
eldorado
san marcos
1mi
-106.038 35.602 Degrees
EagleView Pictometry - Santa Fe County
esri


WILL BE DEVELOPED
1mi
-106.038 35.602 Degrees
EagleView Pictometry - Santa Fe County
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1mi
-106.038 35.602 Degrees
EagleView Pictometry - Santa Fe County
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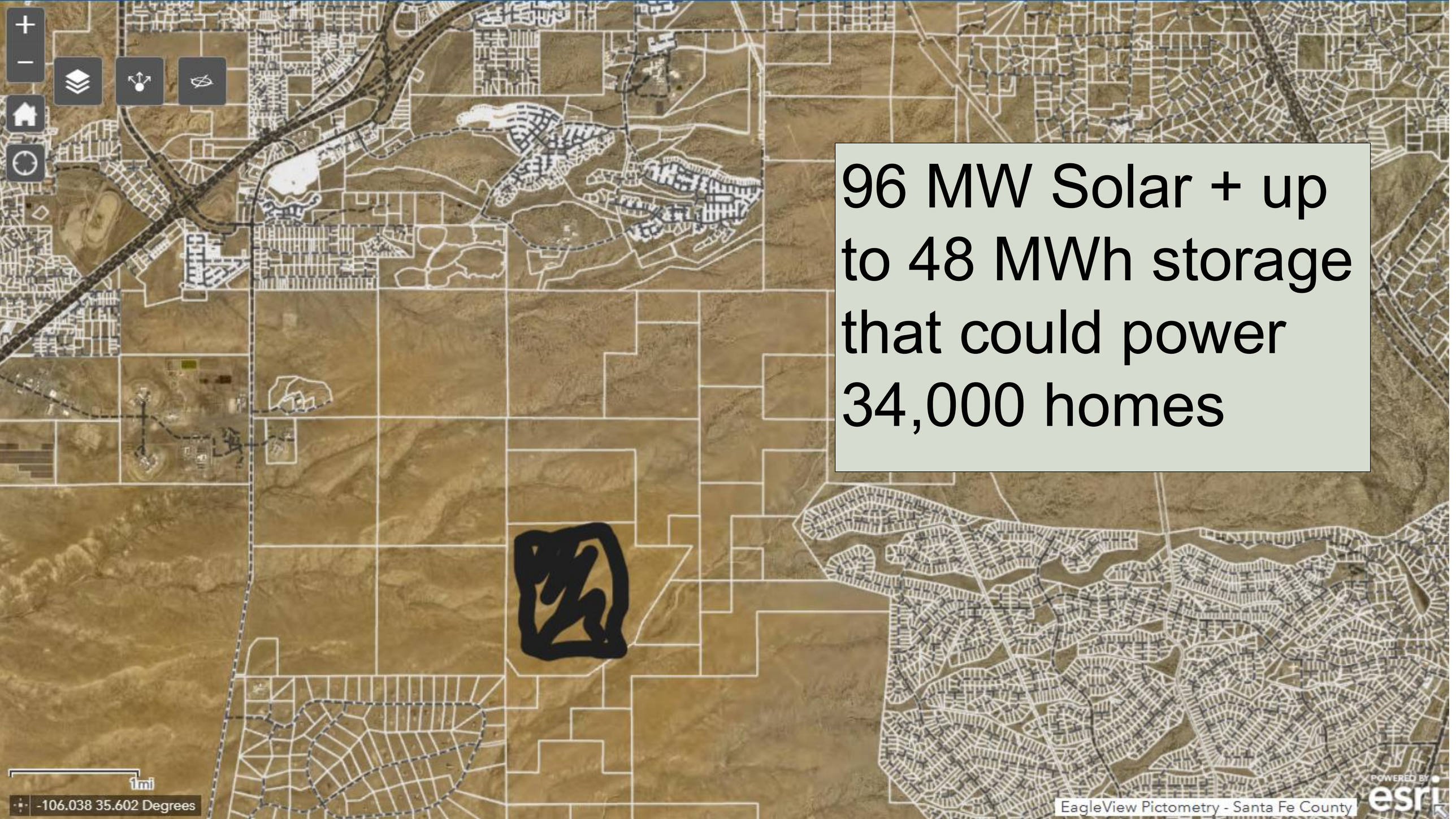

96 MW Solar + up to 48 MWh storage that could power 34,000 homes
1mi
-106.038 35.602 Degrees
EagleView Pictometry - Santa Fe County
POWERED BY esri

Use Matrix **Allows** Commercial Solar through CUP process

- Use Matrix **intentionally includes** “Commercial Solar Energy Production Facility”- regardless of size- separate from “Gas or Electric Power Generating Facility”.
- Would have stated “Gas or Solar Electric Power Generating Facility” otherwise, **since all other renewables are separated out**.

SANTA FE COUNTY CODE

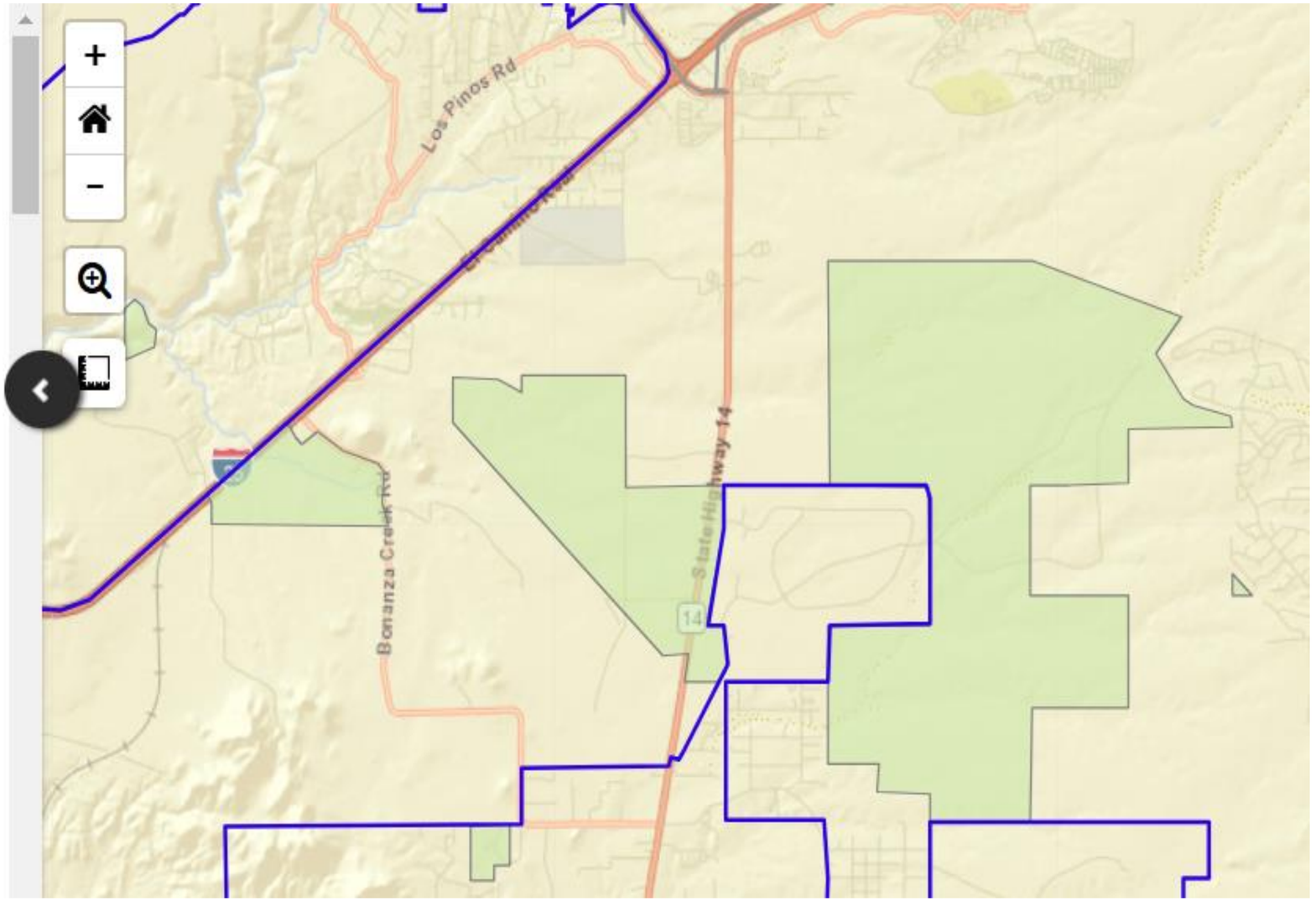
Use	Function	Structure	Activity	Agriculture/ Ranching	Rural	Rural Fringe	Rural Residential	Residential Fringe	Residential Estate	Residential Community	Traditional Community	Commercial Neighborhoo	Mixed Use	Commercial General	Industrial General	Industrial Light	Public Institutional	Planned Development
Commercial solar energy production facility				C	C	C	X	X	X	X	C	C	C	C	P	P	X	P
Geothermal production facility		6450		C	C	C	X	X	X	X	X	X	C	C	P	P	C	P
Large-scale wind facility				C	C	C	C	X	X	X	X	X	C	C	P	C	X	C
Small scale wind facility				A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

RUR-F Rural Fringe

Clear

District Description Collapse

The purpose of the Rural Fringe (RUR-F) district is to designate areas suitable for a combination of estate-type residential development, agricultural uses and other compatible uses. The RUR-F designation provides an intermediate step in development density between typical open space and agricultural/ranching lands and primarily residential (low density) parcels. This zone also serves to protect agricultural and environmental areas that are inappropriate for more intense development due to their sensitivity. The RUR-F zone accommodates primarily large lot residential, eco-tourism, equestrian uses and renewable resource-based activities, seeking a balance between conservation, environmental protection and reasonable opportunity for development. Density transfers and clustered development shall be allowed in order to support continued farming and/or ranching activities, conserve open space or protect scenic features and environmentally sensitive areas.



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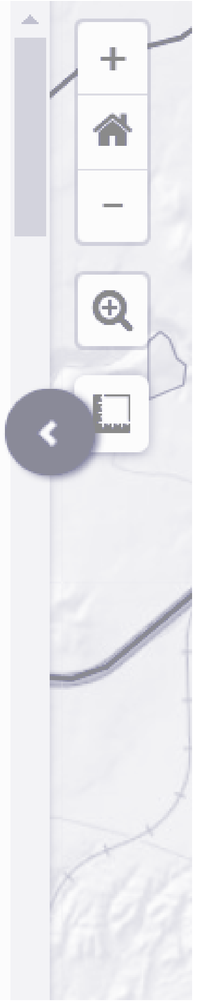


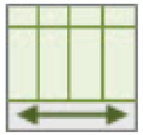
Dimensional Standards for District

Collapse

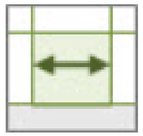
Density

Density requirements: 20 acres per dwelling unit.

Lots



Lot width, maximum (ft.): n/a.

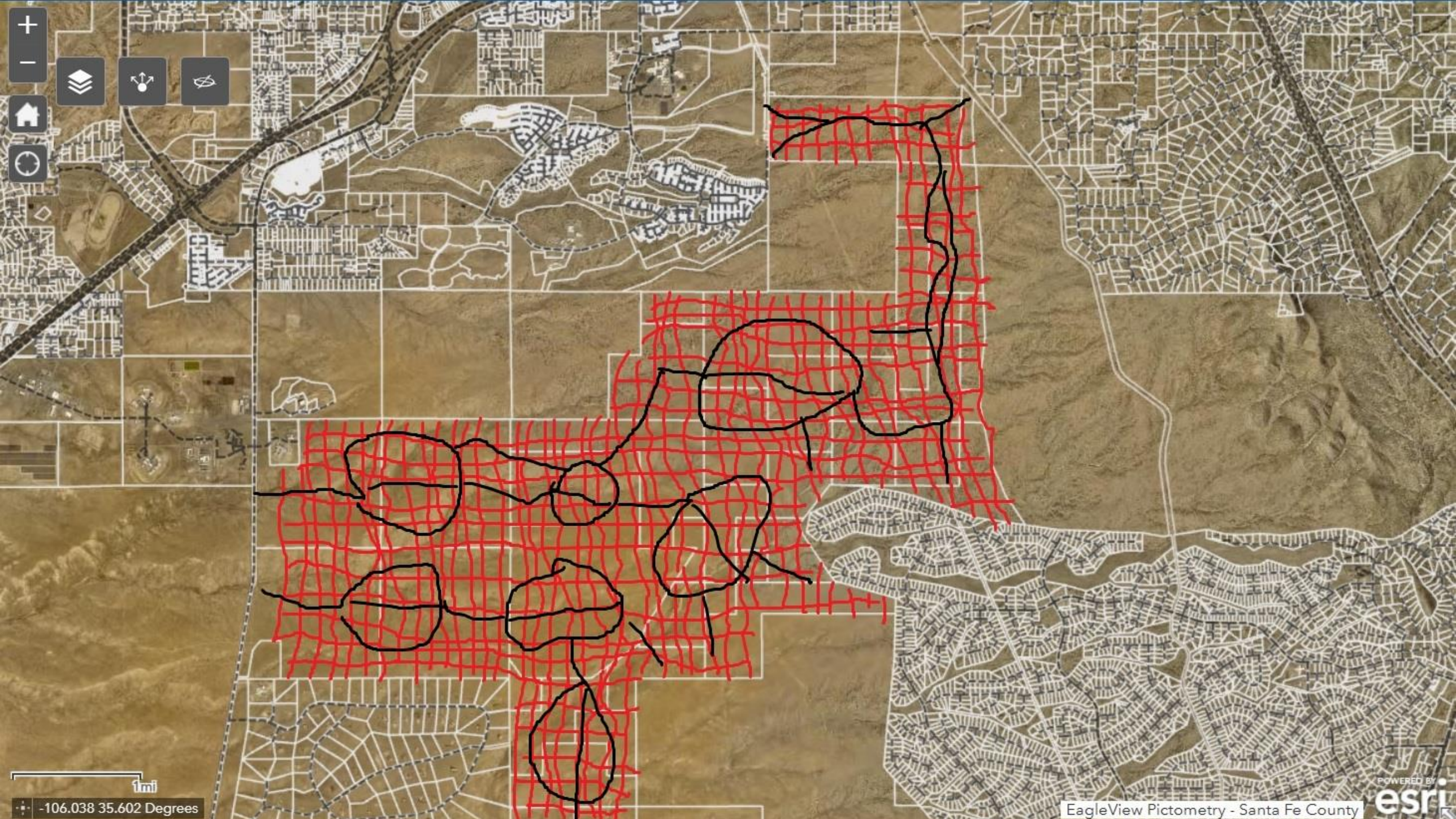


Lot width, minimum (ft.): 100 feet.

Buildings and Structures

Height, maximum (ft.): 36 feet.

Height, (hay or animal barn, silo), maximum (ft.): 50 feet.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EagleView Pictometry - Santa Fe County
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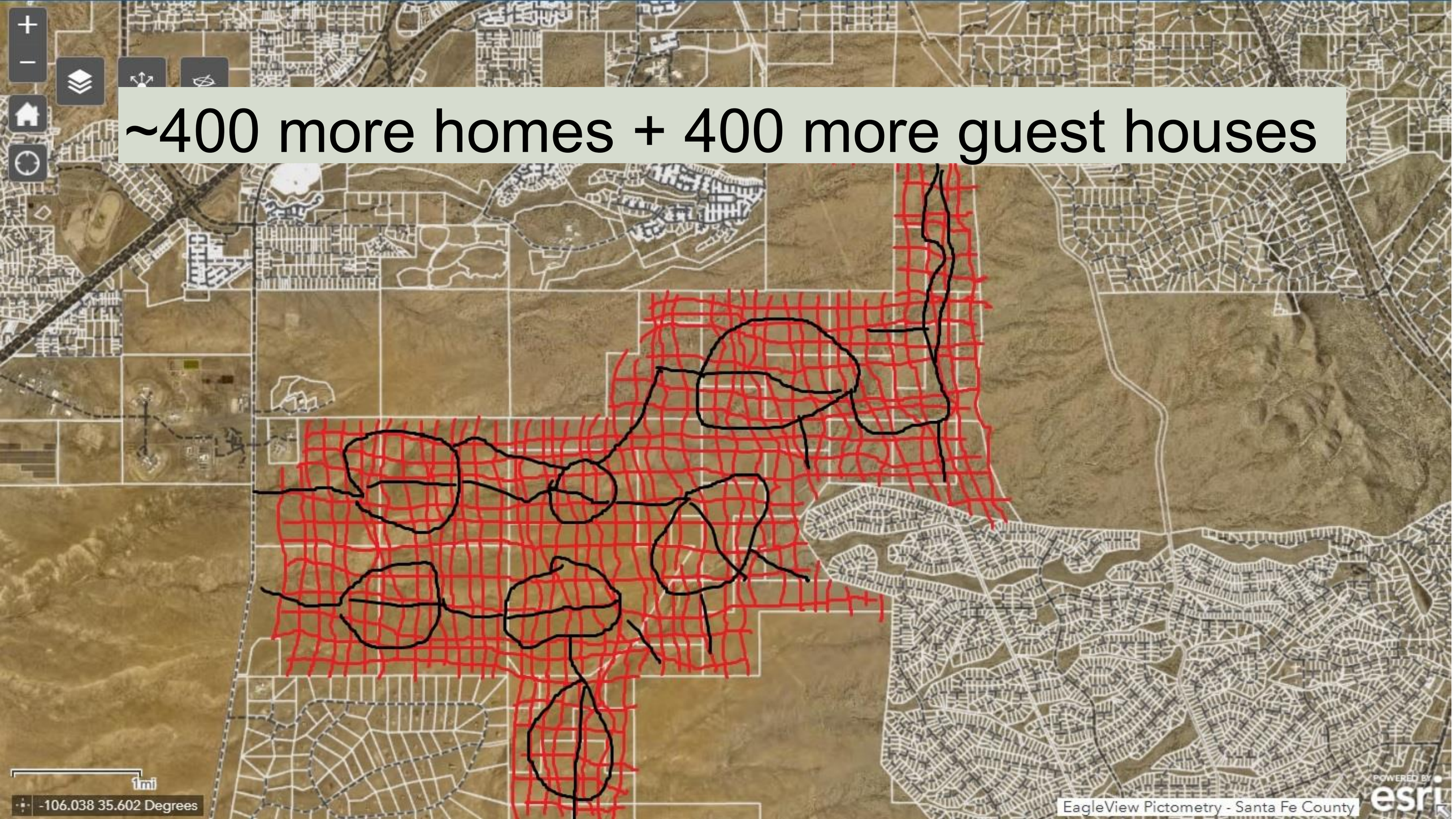
~400 more homes + 400 more guest houses
1mi
-106.038 35.602 Degrees
EagleView Pictometry - Santa Fe County
esri

KOP 3: View near San Marcos Loop Residence looking northeast - Existing Condition

KOP 3: View near San Marcos Loop Residence looking northeast - Simulated Condition Option 2

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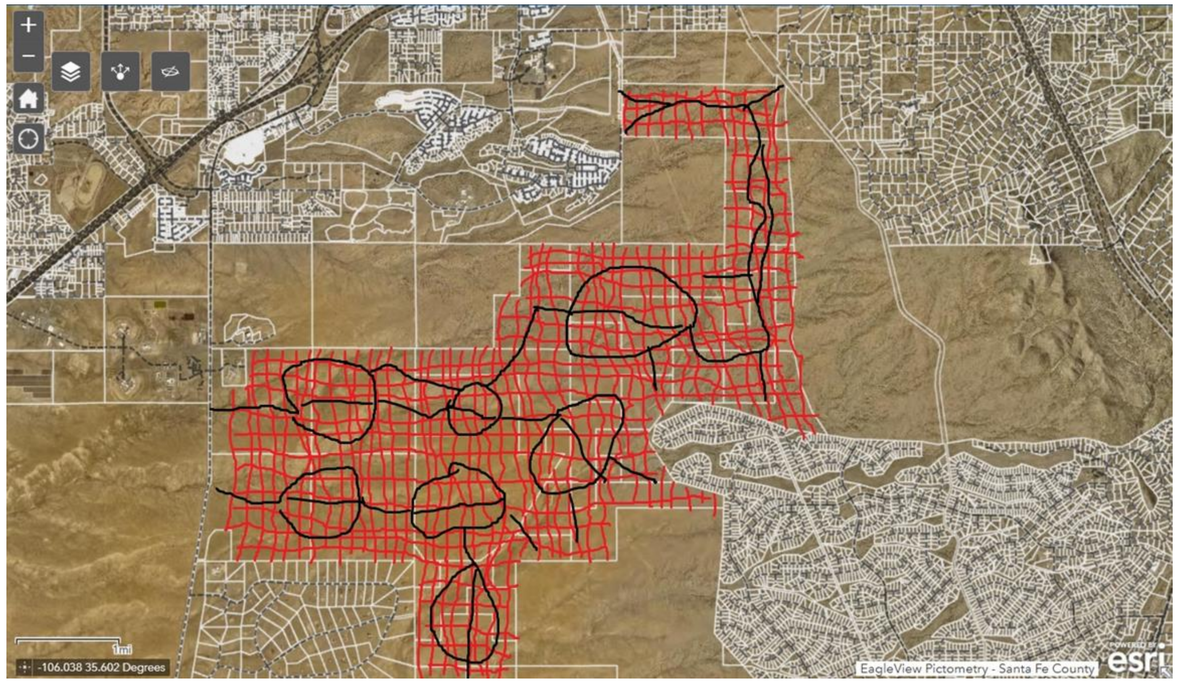
Development Choices:

This

or

This



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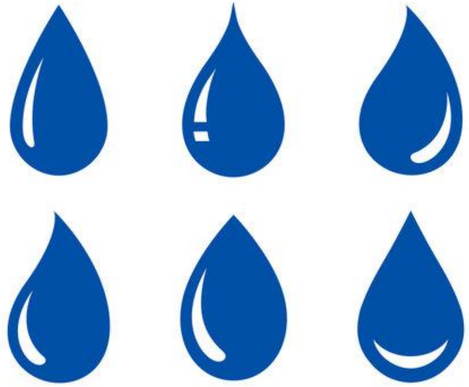
Water Demand Choices:

This



<u>More than 58 million</u> gallons of water **EVERY YEAR**

or

This

<u>Up to 48 million</u> gallons of water **ONCE** during construction plus 30 thousand stored on site

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Climate Choices:

This

or

This

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My choice - Our choice

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5. A Youth Perspective

https://youtu.be/aSJnxaOhdIA

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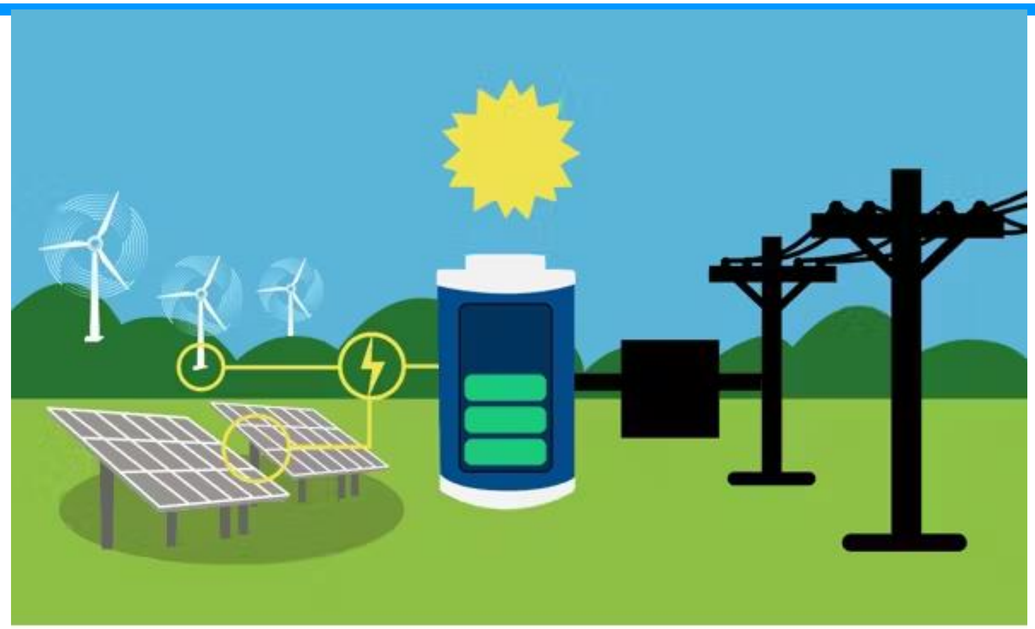
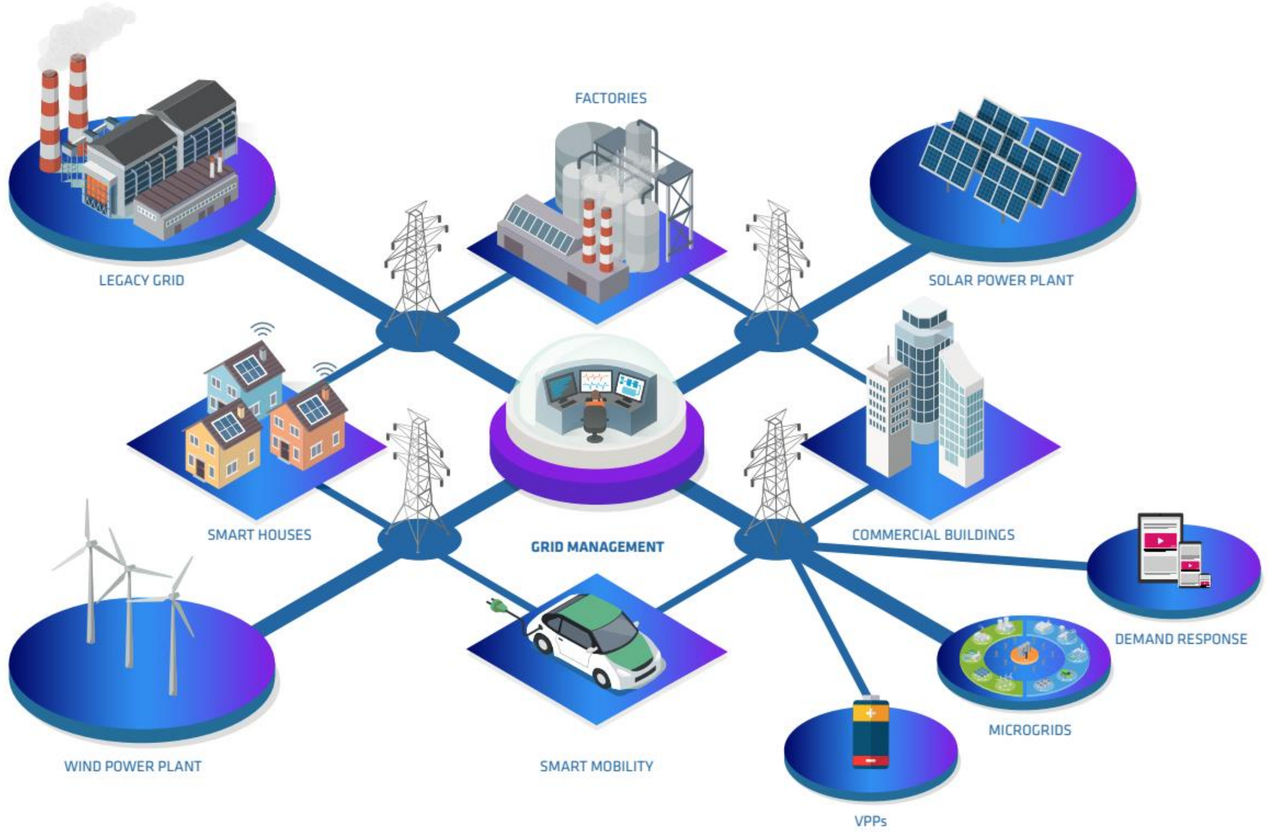
6. Solar and Storage Go Together

Dan Baker

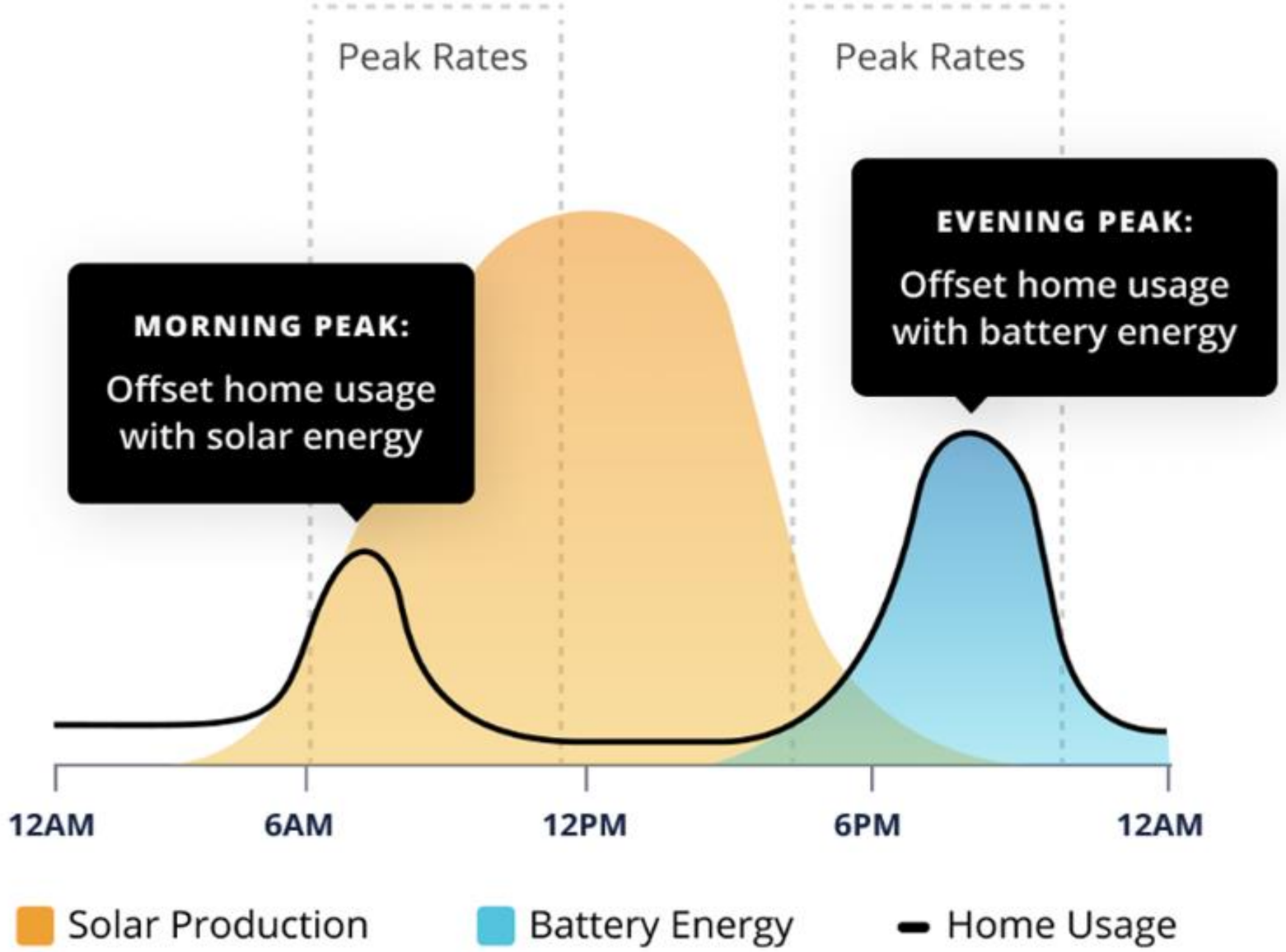
We need renewable energy and we can’t get to 100% renewable without battery storage (BESS)

Intermittent Supply





Batteries help to manage and match variable power supply to meet demand



Peak generation hours are 10am-2pm

New Mexico Law supports Solar Rights

- NMSA 3.18.32.a
A county or municipality shall not restrict the installation of a solar collector as defined pursuant to the Solar Rights Act [47-3-1 to 47-3-5 NMSA 1978]

- NMSA 47-3-4.c
Unless a singular overriding state concerns occur which significantly affect the health and welfare of the citizens of this state, permit systems for the use and application of solar energy shall reside with county and municipal zoning authorities.

QUESTION: Is there any Evidence that the proposed BESS system presents significant Risk to citizens' Health or Welfare ?

Opponents’ Concerns

High risk of Fire spreading from BESS Facility - NO EVIDENCE

Only (7) incidents of "containerized" BESS fires nationwide over last 5 years per EPRI database indicates level of risk of ignition is FAR LOWER RISK than pre existing sources such as lightning, roadside (cigarettes, mufflers, sparks), car fires, house fires, camp fires, fire pits, etc.

https://storagewiki.epri.com/index.php/BESS_Failure_Incident_Database

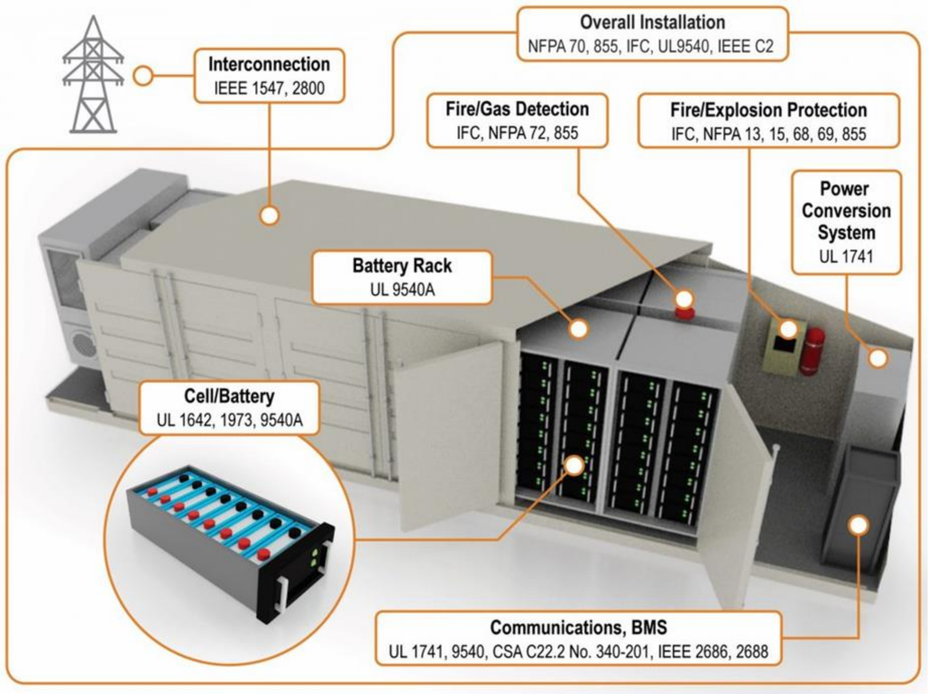
Toxic gas from a BESS fire - NO EVIDENCE

EPA air monitors detected no Toxic gases during or after a fire at a "last generation" BESS container incident (Escondido, CA, Sept.2024).

One of 24 containers was affected, fire did not spread, and facility was operational 72 hours later.

PFAS contamination from BESS fire suppression - NO EVIDENCE

Current NFPA-855 protocols dictate that EPA-approved “clean agents” like Novec-1230 are deployed internally to suppress fires. Containers are not opened and flooded with water.



There can be no delivery of “bad” PFAS to ground or groundwater

Sound pollution - Unlikely from 38 air conditioners over a mile from closest residence

Light pollution - N/A, compliant with "Night Sky" Ordinance

The Rancho Viejo Solar+BESS project should be strongly supported by County Planning, Permitting and Zoning authorities as New Mexico Law requires to enable our transition to 100% Renewable Energy.

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7. Closing Remarks - In Summary

Cañones, New Mexico

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Questions

?