

# CLEAN ENERGY COMMUNITY ADVISORY COMMISSION

## Mission Ad Hoc:

**Gerald Gottheil**

**Desiree Grahm**

**Richard Zahner**

**Glen Garfunkel**

**November 18, 2021**

# CECAC

---

**Members have an average of more than 20 years relevant experience**

Responsibilities per San Jose Municipal Code 2.08 include advising the City Council and City Manager on matters of SJCE operating principles, opportunities for reducing carbon emissions, prioritization of energy program strategy, and best practices

# ABOUT THE REPORT

---

- Not exhaustive: covers a limited set of issues; focus on energy goals
- Analysis includes multiple sides of some issues
- Ad Hoc members' views varied – key points of discussion included

# ASSUMPTIONS

---

- SJCE is operating in an extremely complex, difficult, and dynamic situation
- The industry and environment have changed very much since SJCE started
- SJCE mission, priorities and goals should be reviewed, and revised as needed to meet the City's needs

# MISSION AD HOC ASSIGNMENT

---

- What were the original clean energy goals of SJCE and what are they now?
- Is SJCE meeting these expectations?
- What should the goals be going forward?
- Are the plans and technologies for storage adequate to meet our needs?
- Should market risk due to current and planned purchases of solar be more fully investigated?



# PROCESS

---

- Sept 21 – Nov 9: Hypothesis -> discovery -> analysis -> conclusions
- Oct 15 – progress report to CECAC
- Nov 18 – recommendation and draft report for CECAC review
- Next steps:
  - Approve/modify the ad hoc's recommendations
  - Review/input from Staff (1 week)
  - \*\*Request input from Council liaison on content and process
  - Revised report due to CECAC for Dec meeting

# RECOMMENDATION

---

Ask City Council to appoint members, staff, and outside resources as needed to:

- Evaluate and update San Jose Clean Energy's goals
- Investigate ways to greatly expand energy storage, including consideration of alternative technologies
- Further investigate financial risks of power purchase contracts and other related areas of concern

# EXECUTIVE SUMMARY (1 OF 3)

---

- 1. Clarify and/or revise SJCE mission.** The mission, priorities, and goals of SJCE should be reviewed and revised as needed to meet the City's expectations. Progress toward these goals should be available for residents to review.
- 2. Establish carbon-free goals.** In addition to its renewable energy goals, SJCE should have greenhouse gas reduction goals consistent with San Jose's Nov. 8, 2021 resolution for carbon neutrality by 2030.
- 3. Re-evaluate energy programs.** A cost/benefit analysis that measures programs based upon CO2 removed per program dollar is suggested. If it would significantly help efficiency in the near term, consider temporarily suspending programs pending improvement of SJCE's financial situation.



# EXECUTIVE SUMMARY (2 OF 3)

---

**4. Consider expanding beyond current plans for electrical storage.** Given the variability of solar and wind RE, and our reliance on natural gas, future emissions improvement will likely require dramatic increases in grid storage. We suggest the city carefully review and track not just Li-Ion batteries and other pure storage technologies, but also hybrid systems. Assessments of benefits, risks, costs, scalability, practicality, and timing should be included.

**5. Investigate the feasibility of a joint powers agreement,** effectively combining with other CCA(s) to achieve scale and efficiency. Consider the need and cost of maintaining a separate City department compared to near or long term tangible benefits to the citizens and rate payers.

# EXECUTIVE SUMMARY (3 OF 3)

---

**6. Market/financial risks** associated with the purchase of solar are an area of concern and should be investigated further. CCAs that go long on solar PV to achieve carbon neutrality take on both buy-side and sell-side market risk. Excess solar that cannot be stored must be sold in the market, often at a loss, because most CCAs and municipal utilities are using the same carbon-neutral strategy

# OPTIONS FOR CECAC FOR NOV. 18

---

- A. Approve the Ad Hoc memo to advance (staff input)
- B. Approve the Ad Hoc memo and report with modifications
- C. Convene a special CECAC meeting for additional review and discussion

## Next steps:

- Approve/modify the Ad hoc's recommendations
- Review/input from Staff (1 week)
- Request input from Council liaison on content and process
- Revised report due to CECAC for Dec meeting

**SUPPORT SLIDES**

# SJCE GOALS\*

---

The City of San Jose's primary objectives in implementing SJCE are to **provide cost competitive electric services; reduce electric sector greenhouse gas emissions ("GHGs") within the City; stimulate renewable energy development; promote energy efficiency and demand reduction programs; and sustain long-term rate stability** for residents and businesses through local control.

\*SJCE Community Choice Aggregation Implementation Plan and Statement of Intent, adopted August 29, 2017

# SJCE BENEFITS\*

---

The prospective benefits to consumers include **increased renewable and other low-GHG emitting energy** supplies, **stable and competitive electric rates**, and the opportunity for **public participation in determining which technologies are utilized** to meet local electricity needs.

\*SJCE Community Choice Aggregation Implementation Plan and Statement of Intent, adopted August 29, 2017

# ENERGY GOALS

Goal	GreenValue	GreenSource	TotalGreen	PG&E	Met?	Comment
Climate Smart: carbon neutral by 2021					NA	
<u>100% carbon-free by 2021</u>	80%	<u>up to 90%</u>	100%	<u>88%</u>	No	may/may not be marginally better than PG&E, going forward.
Title 26: meet RPS 60% renewable by 2030 SJCE IRP plans 70% renewable by 2030	36%	55%	100%	39%	NA	Are we on track? Is it achievable and affordable?
Title 26: meet RPS 100% carbon-free by 2045						Should we have a more aggressive timeframe? Change metric to MTCO <sub>2</sub> /kWh, per capita, or total carbon emitted?
Title 26: at least one rate equal or lower to PG&E					yes	GreenValue is less by a fraction of 1%
Competitive cost (with PG&E) for typ home*	\$132.35	\$134.74	\$139.39	\$132.35	?	What is meant by "competitive"? Was this meant to imply lower cost? What should the goal be?
Implementation Plan - offer one option 10% or more renewable than PG&E					Yes	Will SJCE set 70% for 2030? Is 10%+ sustainable long term?
Implementation Plan - establish renewable and energy efficiency programs					No	4 years later, programs hindered by resources, impact is modest. Should this be suspended as a goal?
Storage goal 150-400 MW by 2030 depending on case from 46 MMT to carbon neutral					NA	IRP is in development

\* Rate comparisons for typ house with 456 kWh/mo, E-TOU-C rate, as of May. 15, 2021 for SJCE; [SJCE residential rate page](#); [PG&E rate comparison](#) as of Mar. 15, 2021

# VIEWPOINTS / DISCUSSION

---

- SJCE mission should be clarified and simplified. Hard choices will need to be made between a climate action focus of clean, renewable energy and lowest cost energy. Achieving more aggressive clean energy goals may require additional investment in SJCE.
- San Jose can make a critical difference in the environment for our community and our children, as well as gain more control over its energy, To do so may require a bold move, such as expanding SJCE to a municipal utility, or effectively combining with another CCA via a JPA to gain scale and ideally reduce city financial risk.



# VIEWPOINTS / DISCUSSION (CONT)

---

- Is the original value proposition for SJCE still valid? Is there a significant enough benefit when compared to PG&E to justify the risk?
- Adaptation programs - The current programs of San Jose Clean Energy require cost and financial risk. The long term impact on worldwide climate change may not be significant. While outside of current SJCE and CECAC scope, consider programs to adapt to (inevitable) climate change and transition to new electric power sources thorough market based incentives.

**QUESTIONS?**