

EPIC POLICY + INNOVATION COORDINATION GROUP

EPIC 5 Investment Plan Workshop

A three-day public workshop on the EPIC Administrators' 2026–2030 Investment Plans

DATES

October 20, 22, & 27 2026

IN PERSON

CPUC Auditorium, 505 Van Ness Ave, San Francisco

VIRTUAL

Zoom webinar option for all three days

Facilitated by The Accelerate Group, EPIC Policy + Innovation Coordination Group Project Coordinator, under the guidance of the CPUC Energy Division

Welcome

Opening remarks and introductions

WELCOME

WHY YOU ARE HERE

The four EPIC Administrators will present their EPIC 5 Investment Plans. Your questions and feedback help the CPUC review how well those plans achieve the Strategic Objectives it adopted in D.26-02-037.

One or more CPUC or CEC Commissioners, Advisors, and Administrative Law Judges may attend. No official Commission action will be taken at this event.

HOSTED BY

CPUC Energy Division

California Public Utilities Commission staff who oversee EPIC on behalf of the ratepayers who fund it.

FACILITATED BY

The Accelerate Group

EPIC Policy + Innovation Coordination Group (PICG) Project Coordinator, under the guidance of CPUC Energy Division.

PRESENTING

CEC · PG&E · SCE · SDG&E

The four EPIC Administrators, each presenting the Strategic Initiatives and Research Topic Areas in its filed plan.

Before we begin

A few logistics for in-person and online participants

HOUSEKEEPING

IN THE ROOM

- Please silence your phone.
- Scan the QR code to submit a Question.
- We will be using a floor microphone for CPUC SMEs to participate in the discussion, so online participants can hear

ON ZOOM

- Attendees are muted by default.
- Follow the link in chat to submit a Question.
- Zoom technical issues:
picg@theaccelerategroup.com

PUBLIC RECORD

- This is a public workshop noticed to the service lists for R.19-10-005 and related proceedings.
- Slides and materials are posted at epicpartnership.org/epic5.html
- Recordings will be posted after the workshop at epicpartnership.org/epic5.html

Workshop notice issued pursuant to Rule 8.1 of the Commission's Rules of Practice and Procedure.

Why we are convening

WORKSHOP PURPOSE

Administrators present their EPIC 5 Investment Plans for public transparency and CPUC review

PURPOSE

Give the four EPIC Administrators an opportunity to present their EPIC 5 Investment Plans and show how their proposals achieve the Strategic Objectives approved by the CPUC in D.26-02-037.

1

Administrators present

CEC, PG&E, SCE, and SDG&E walk through their proposed Strategic Initiatives.

2

Plans are mapped to objectives

Discussion covers how Strategic Initiatives and Research Topic Areas (RTAs) achieve each Strategic Objective.

3

Participants weigh in

Participants will be able to ask questions and give feedback on the proposed EPIC investment portfolios.

3

workshop days

13

Strategic Objectives

4

EPIC Administrators

2026–2030

investment period

About the EPIC Program

Ratepayer-funded research, development & demonstration for California’s clean energy future

EPIC PROGRAM

The Electric Program Investment Charge (EPIC) supports the development of new, emerging, and pre-commercial clean energy innovations in California.

The CPUC requires EPIC portfolios to demonstrate ratepayer benefits: equitable access to safe, affordable, reliable, and environmentally sustainable energy.

The program is funded by California utility customers under the auspices of the CPUC.

WHO ADMINISTERS EPIC FUNDS



80%

California Energy Commission (CEC)

20%

Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E), together

Each Administrator files its own Investment Plan for the EPIC 5 period.

EPIC at a glance

EPIC BACKGROUND

Ratepayer-funded clean energy innovation, overseen by the CPUC since 2011

2011

EPIC established under the authority of the CPUC

\$2.4 billion

Allocated to the EPIC program to date

\$1 billion

Proposing to be invested in EPIC 5

2026–2030

EPIC 5 investment plan cycle

THREE PROGRAM AREAS

- 1 Applied Research and Development**
Early-stage research on new and emerging technologies
- 2 Technology Demonstration and Deployment**
Testing pre-commercial solutions in real-world settings
- 3 Market Facilitation**
Helping proven innovations reach the market and scale

RATEPAYER BENEFIT (D.21-11-028)

EPIC’s mandatory guiding principle, as related to California’s electric system:

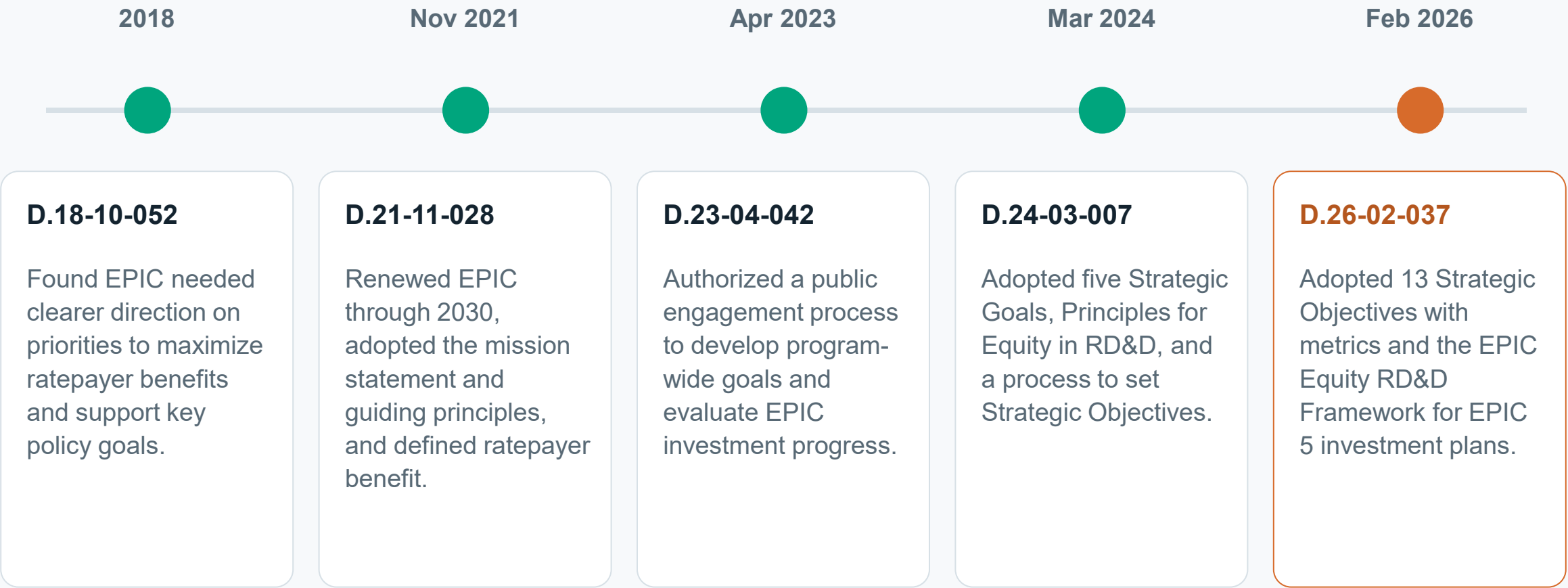
- Improving safety
- Increasing reliability
- Increasing affordability
- Improving environmental sustainability
- Improving equity

D.21-11-028 renewed EPIC through December 31, 2030, in two five-year cycles (EPIC 4: 2021–2025; EPIC 5: 2026–2030). D.26-02-037 authorized the IOUs to continue as Administrators for EPIC 5 and set the next program evaluation for 2028.

Commission direction toward measurable outcomes

EPIC BACKGROUND

Each decision has moved EPIC from broad priorities toward clear, measurable targets



Sources: D.26-02-037 (Background and Section 7); D.21-11-028; D.24-03-007.

Opening Remarks

KAREN DOUGLAS

Commissioner, California Public Utilities
Commission

The EPIC program is funded by California utility customers under the auspices of the California Public Utilities Commission.

EPIC 5 Strategic Planning Process

CPUC oversight of ratepayers' funds for electricity research, development & demonstration

EPIC 5 OVERVIEW



Figure 1. EPIC Strategic Pyramid

HOW WE GOT HERE

- 2024**
D.24-03-007
CPUC adopts 5 Strategic Goals
- Feb 2026**
D.26-02-037
CPUC adopts 13 Strategic Objectives for 2026–2030
- Aug 26, 2026**
Investment Plans
Administrators file Strategic Initiatives and RTAs
- Oct 20–22, 2026**
This workshop
Public review of the plans against the objectives

Five Strategic Goals anchor EPIC 5

STRATEGIC GOALS

Adopted in D.24-03-007; the 13 Strategic Objectives each support one or more of these goals

10

objectives support
this goal

**Transportation
Electrification**

7

objectives support
this goal

**Distributed Energy
Resource
Integration**

9

objectives support
this goal

**Building
Decarbonization**

6

objectives support
this goal

**Achieving 100
Percent Net-Zero
Carbon Emissions
and the
Coordinated Role
of Gas**

4

objectives support
this goal

Climate Adaptation

From goals to objectives: D.26-02-037 adopted 13 Strategic Objectives for 2026–2030 as clear, measurable, and robust targets to guide EPIC 5 investment plan strategies to scale and deploy innovation.

What Strategic Objectives are

Near-term, measurable sub-targets of the long-term Strategic Goals

STRATEGIC OBJECTIVES

DEFINITION (D.26-02-037)

“Clear, measurable, and robust targets that will guide effective EPIC investment plan strategies to scale and deploy innovation that will benefit the ratepayers who fund the program.”

STRATEGIC OBJECTIVES ARE INTENDED TO

- 1 Address the key identified gaps for critical pathways to progress on California’s climate, energy, and equity goals
- 2 Focus on the unique role ratepayer-funded RD&D should play in leading innovation investment
- 3 Incorporate crosscutting principles, including equity, identified in D.24-03-007

EPIC EQUITY RD&D FRAMEWORK · APPLIES TO INVESTMENT PLANS, PROJECT SELECTION, AND EVALUATION

1 Prioritization

2 Engagement

3 Metrics

4 Access

5 Outreach

Administrators report equity investments and direct impacts on Disadvantaged and Vulnerable Communities (DVCs) and Tribes quarterly.

From objectives to initiatives, RTAs, and metrics

PLAN STRUCTURE

How an Investment Plan is expected to connect to the Commission's Strategic Objectives

Strategic Objective

Set by the Commission

A specific, measurable target with adopted metrics

Strategic Initiative

Proposed by the Administrator

A focused strategy for achieving one Strategic Objective

Research Topic Area (RTA)

Proposed by the Administrator

Specific research that directly advances that objective

Projects

Selected during plan implementation

Individual awards that deliver measurable results

ON METRICS (D.26-02-037)

“If an Administrator proposes a metric not listed above, that metric (or metrics) must be of similar granularity and still allow for a measurement-based evaluation of progress towards the identified Strategic Objective.”

WHAT WE ARE LISTENING FOR

- Which Strategic Objective each initiative primarily aims to achieve
- How each RTA directly advances that objective
- How results will be measured against the adopted metrics

Four Administrators filed Investment Plans

INVESTMENT PLANS

Filed with the CPUC on August 26, 2026 for the 2026–2030 investment period

CEC

**California Energy
Commission**

Administers 80% of EPIC funds

[View Investment Plan →](#)

PG&E

**Pacific Gas and
Electric**

Investor-owned utility

[View Investment Plan →](#)

SCE

**Southern California
Edison**

Investor-owned utility

[View Investment Plan →](#)

SDG&E

**San Diego Gas &
Electric**

Investor-owned utility

[View Investment Plan →](#)

Strategic Initiatives

Each plan proposes initiatives for the investment period.

Research Topic Areas (RTAs)

Each initiative is broken into specific research areas.

Measurable progress

Every initiative must show how it will achieve and track measurable progress toward a CPUC-approved Strategic Objective.

EPIC evaluation criteria

EVALUATION

Your input will help the CPUC evaluate EPIC 5 investment plan applications against Commission direction, including:

FOCUS & ALIGNMENT

- 1 Strategic Initiatives and RTAs must be sufficiently granular for the Commission to understand what is being proposed and what will result.
- 2 All proposed elements must align with and support achievement of EPIC Strategic Goals and Strategic Objectives.
- 3 The investment plan must focus on addressing the most pressing and impactful issues/barriers.

RATEPAYER ROLE & INNOVATION

- 4 Each element must be clearly in the role of ratepayer funding and have strong promise to produce ratepayer benefit as defined by D.21-11-028 at Appendix A.
- 5 Each proposed RTA must be truly innovative and non-duplicative.
- 6 Alignment with policy and CPUC proceedings must be described in detail.

RESULTS & MEASUREMENT

- 7 Each proposed RTA must have strong promise for meaningful and measurable near-term project outputs and mid-term and community-level outcomes.
- 8 Each proposed RTA must describe how scaling would lead to meaningful and measurable societal impact over the long term.
- 9 All metrics must be appropriate, measurable, and transparent.

Questions to keep in mind

EVALUATION

The same questions frame feedback on every Strategic Initiative and RTA

FOR EACH STRATEGIC INITIATIVE

- 1 Does it support achievement of the most pressing aspects of the Strategic Objective?
- 2 Does it directly and in detail address CPUC priorities, proceedings, or anticipated decision-making needs?

FOR EACH RESEARCH TOPIC AREA (RTA)

- 1 Is it technically sound, likely to achieve the Strategic Objective, and likely to provide meaningful, measurable ratepayer benefit?
- 2 Does it clearly fit EPIC's unique ratepayer role and differ from other research and efforts?
- 3 Do the proposed metrics align with the Commission-approved metrics for this Strategic Objective?
- 4 If not, do alternative metrics meet the Commission's standard for measuring progress?
- 5 Will it produce meaningful, decision-useful results on a timeline that aligns with CPUC needs?

Not every initiative must deliver full market impact by 2030; some outcomes may reasonably occur in the 2030–2038 timeframe.

Three days, each focused on different objectives

WORKSHOP AT A GLANCE

Attend all three days, or only the days covering the objectives most relevant to you

DAY 1

Tuesday, October 20

9:30 AM – 5:00 PM

Climate risk, resiliency & grid planning

- 8 Increase Predictability of Weather Impact on Intermittent Resources, Climate Risk, and Load
- 13 Cost-Effective Grid Hardening for Long-Term Climate Impacts
- 3 Smart Planning Tools for New Load and Clean Resources
- 9 Leveraging Distributed Energy Resources for Grid and Community Resiliency

DAY 2

~~Wednesday, October 21~~
Tuesday, October 27

9:00 AM – 5:00 PM

Transportation electrification & grid operations

- 1 Reducing Medium and Heavy-Duty Vehicle Charging Infrastructure Costs
- 2 Overcoming Barriers to EV Benefits in Disadvantaged Communities
- 10 Expediting and Streamlining Interconnection and Energization Processes
- 11 Providing Data Input into a Value of DER Framework
- 12 Optimizing Feeder / Circuit Operations

DAY 3

Thursday, October 22

9:00 AM – 4:00 PM

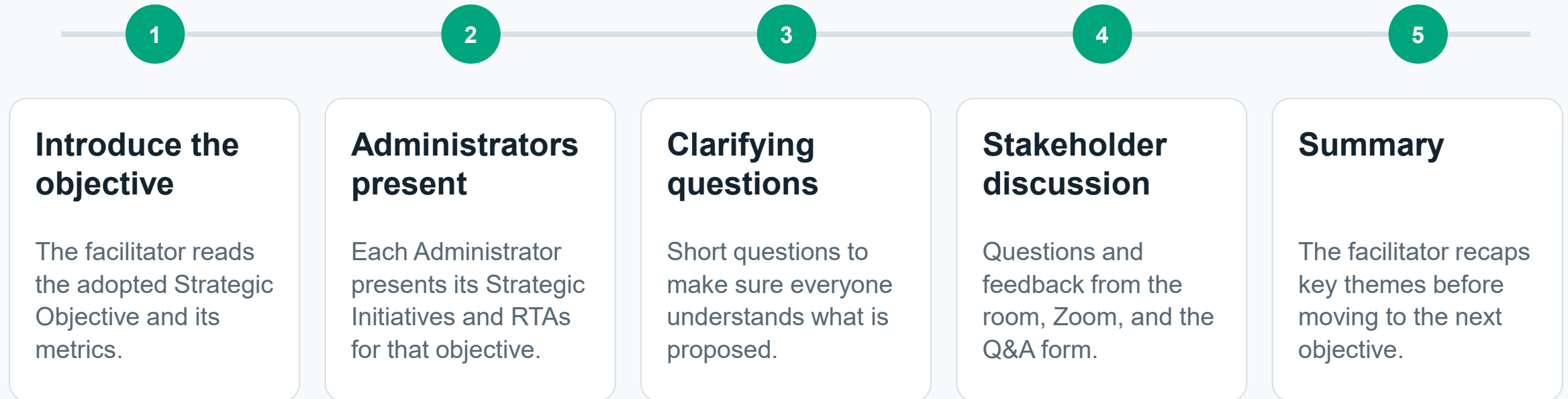
Building & community decarbonization

- 4 Reducing the Cost of Whole Home Electrification
- 6 Community-Scale Decarbonization
- 7 Impact Research for New Generation and Storage
- 5 Innovative Approaches for Difficult-to-Decarbonize Sectors

How each Strategic Objective session works

SESSION FORMAT

Sessions follow the order of the Strategic Objectives on each day's agenda



Good to know: Each initiative is presented under the Strategic Objective its Administrator identified as primary. A few initiatives span more than one session; for example, PG&E Strategic Initiative 1 and SCE's SAFE initiative each appear twice on the agenda.

Day 1 · Tuesday, October 20: Strategic Objectives

DAY 1 · OCT 20

Climate risk, resiliency & grid planning · 9:30 AM – 5:00 PM

8

Increase Predictability of Weather Impact on Intermittent Resources, Climate Risk, and Load

By 2030, improve predictions of electric system operational climate risk, resource and demand forecasts under climate uncertainty, and coordination between weather observation and grid operations.

SUPPORTS GOALS

Net-Zero Carbon · DER Integration · Building Decarbonization · Transportation Electrification · Climate Adaptation

13

Cost-Effective Grid Hardening for Long-Term Climate Impacts

By 2033, develop and demonstrate data, tools, and frameworks for more cost-effective planning and capital investment in grid hardening, reducing outage risk and social burdens of outages.

SUPPORTS GOALS

Climate Adaptation · Building Decarbonization · Transportation Electrification

3

Smart Planning Tools for New Load and Clean Resources

Support development of transparent, open-access grid planning tools that increase forecasting of intermittent resources, EVs, and flexible load, and inform utility operations for grid services.

SUPPORTS GOALS

Transportation Electrification · Building Decarbonization · Net-Zero Carbon

9

Leveraging Distributed Energy Resources for Grid and Community Resiliency

Support technology development and real-world testing for using clean DERs to reduce outage impacts, keeping critical loads powered and reducing restoration time for vulnerable populations.

SUPPORTS GOALS

DER Integration · Building Decarbonization · Transportation Electrification · Climate Adaptation

Day 1 Agenda · Tuesday, October 20

DAY 1 AGENDA

9:30 AM – 5:00 PM · CPUC Auditorium, San Francisco + virtual

9:30 – 9:50 AM	I. Welcome and Opening Remarks
9:50 – 10:10 AM	II. EPIC 5 Strategic Goals and Strategic Objectives Process and Roadmap
10:10 – 10:30 AM	III. Strategic Objective: Increase Predictability of Weather Impact on Intermittent Resources, Climate Risks, and Load
10:30 – 11:05 AM	IV. Strategic Objective: Cost-Effective Grid Hardening for Long-Term Climate Impact
11:05 – 11:15 AM	V. <i>Break</i>
11:15 AM – 12:15 PM	VI. Strategic Objective: Cost-Effective Grid Hardening for Long-Term Climate Impact (cont.)
12:15 – 1:15 PM	VII. <i>Lunch</i>
1:15 – 2:55 PM	VIII. Strategic Objective: Cost-Effective Grid Hardening for Long-Term Climate Impact (cont.)
2:55 – 3:10 PM	IX. <i>Break</i>
3:10 – 4:55 PM	X. Introduce Strategic Objective: Smart Planning Tools for New Load and Clean Resources; Strategic Objective: Leveraging DERs for Grid and Community Resiliency
4:55 – 5:00 PM	XI. Wrap-up Discussion and Summary, Next Steps, Closing Remarks

Day 2 · Tuesday, October 27: Strategic Objectives

DAY 2 · OCT 24 27

Transportation electrification & grid operations · 9:00 AM – 5:00 PM

Rescheduled

1

Reducing Medium and Heavy-Duty Vehicle Charging Infrastructure Costs

Accelerate innovation and deployment that reduces IOU cost of medium- and heavy-duty charging infrastructure and associated grid upgrades by a stretch goal of 50% by 2035.

SUPPORTS GOALS
Transportation Electrification

2

Overcoming Barriers to EV Benefits in Disadvantaged Communities

Accelerate innovation to overcome obstacles to equitable transportation electrification benefits in disadvantaged and vulnerable communities and non-attainment air districts.

SUPPORTS GOALS
Transportation Electrification

10

Expediting and Streamlining Interconnection and Energization Processes

Accelerate development of technology, protocols, and modeling to streamline interconnection and energization for DERs and new load, prioritizing disadvantaged and vulnerable communities.

SUPPORTS GOALS
DER Integration · Transportation Electrification

11

Providing Data Input into a Value of DER Framework

Conduct analysis and real-world demonstrations supporting an evidence-based framework for the location-, time-, and performance-based value of grid services, usable by grid operators and DERs alike.

SUPPORTS GOALS
DER Integration · Building Decarbonization · Transportation Electrification

12

Optimizing Feeder / Circuit Operations

Accelerate deployment of replicable methods to increase circuit/feeder capacity utilization and reduce peak loads, avoiding costly grid upgrades through DER, EV, and flexible-load coordination.

SUPPORTS GOALS
DER Integration · Building Decarbonization · Transportation Electrification · Net-Zero Carbon

Rescheduled Day 2 Agenda · Tuesday, October 27

DAY 2 AGENDA

9:00 AM – 5:00 PM · CPUC Auditorium, San Francisco + virtual

9:00 – 9:10 AM	I. Welcome and Opening Remarks
9:10 – 9:30 AM	II. EPIC 5 Strategic Goals and Strategic Objectives Process and Roadmap
9:30 – 9:40 AM	III. Strategic Objective: Reducing Medium and Heavy-Duty Vehicle Charging Infrastructure Costs
9:40 – 10:50 AM	IV. Strategic Objective: Overcoming Barriers to EV Benefits in DVCs
10:50 – 11:00 AM	V. <i>Break</i>
11:00 AM – 12:30 PM	VI. Strategic Objective: Expediting and Streamlining Interconnection and Energization Processes
12:30 – 1:30 PM	VII. <i>Lunch</i>
1:30 – 2:20 PM	VIII. Strategic Objective: Expediting and Streamlining Interconnection and Energization Processes (cont.)
2:20 – 3:10 PM	IX. Introduce Strategic Objective: Providing Data Input into a Value of DER Framework; Strategic Objective: Optimizing Feeder / Circuit Operations
3:10 – 3:25 PM	X. <i>Break</i>
3:25 – 4:55 PM	XI. Strategic Objective: Optimizing Feeder / Circuit Operations (cont.)
4:55 – 5:00 PM	XII. Wrap-up Discussion and Summary, Next Steps, Closing Remarks

Day 3 · Thursday, October 22: Strategic Objectives

DAY 3 · OCT 22

Building & community decarbonization · 9:00 AM – 4:00 PM

4

Reducing the Cost of Whole Home Electrification

Accelerate reliable, scalable approaches that reduce the all-in cost of whole-home electrification and enable demand flexibility by 50% for single- and multi-family buildings by 2035.

SUPPORTS GOALS

Building Decarbonization

6

Community-Scale Decarbonization

Demonstrate technology, tools, deployment strategies, and business models for achieving 100% neighborhood- or community-scale electrification, prioritizing disadvantaged and vulnerable communities.

SUPPORTS GOALS

Building Decarbonization · Net-Zero Carbon ·
Transportation Electrification · DER Integration ·
Climate Adaptation

7

Impact Research for New Generation and Storage

Conduct lifecycle and techno-economic analysis to identify emerging zero-carbon technologies with the lowest adverse and highest beneficial impacts on California communities, including DVCs.

SUPPORTS GOALS

Net-Zero Carbon · DER Integration

5

Innovative Approaches for Difficult-to-Decarbonize Sectors

Accelerate strategies and business models achieving lifecycle cost-parity for hard-to-decarbonize commercial and industrial buildings and processes, reducing pollutants impacting DVCs.

SUPPORTS GOALS

Building Decarbonization · Net-Zero Carbon

Day 3 Agenda · Thursday, October 22

DAY 3 AGENDA

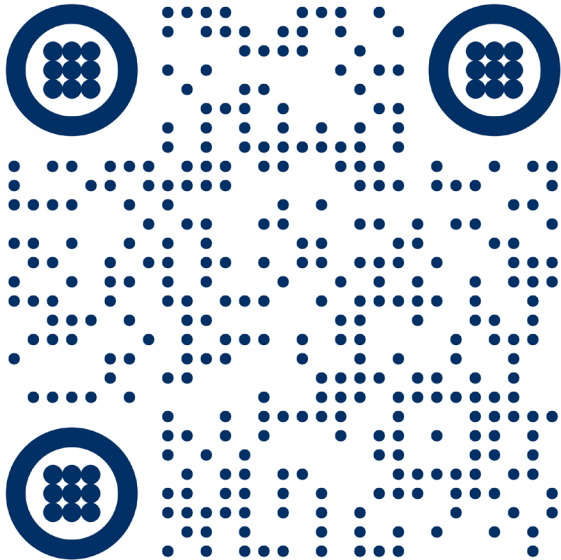
9:00 AM – 4:00 PM · CPUC Auditorium, San Francisco + virtual

9:00 – 9:10 AM	I. Welcome and Opening Remarks
9:10 – 9:25 AM	II. EPIC 5 Strategic Goals and Strategic Objectives Process and Roadmap
9:25 – 10:45 AM	III. Strategic Objective: Reducing Cost of Whole Home Electrification
10:45 – 11:00 AM	IV. Break
11:00 – 11:30 AM	V. Strategic Objective: Reducing Cost of Whole Home Electrification (cont.)
11:30 AM – 12:10 PM	VI. Introduce Strategic Objective: Community-Scale Decarbonization; Strategic Objective: Impacts Research for New Generation and Storage
12:10 – 1:30 PM	VII. Lunch
1:30 – 2:50 PM	VIII. Strategic Objective: Innovative Approaches for Difficult-to-Decarbonize Sectors
2:50 – 3:05 PM	IX. Break
3:05 – 3:35 PM	X. Strategic Objective: Innovative Approaches for Difficult-to-Decarbonize Sectors (cont.)
3:35 – 4:00 PM	XI. Wrap-up Discussion and Summary, Next Steps, Closing Remarks

Ask your questions

Q&A

Two ways to pose questions to the Administrators during each session



Scan for the Q&A form

forms.gle/61aZ9ycZYxLvDDgu7

1

Q&A form (in person or online)

Scan the code or open the link, choose your participant type and the Strategic Initiative, then submit your question.

2

CPUC SMEs in the room

CPUC SME's should raise their hand during discussion and use the floor microphone. Please state your name and team.

How to participate

PARTICIPATION

Join in person or online, and register separately for each day you plan to attend

IN PERSON

CPUC Auditorium

- 505 Van Ness Avenue, San Francisco, CA 94102
- Register for each day you plan to attend in person

VIRTUAL

Zoom webinar

- Available for all three days
- Join using the link in your registration confirmation
- Zoom access issues:
picg@theaccelerategroup.com

DURING THE WORKSHOP

Ask & comment

- Hear each Administrator's proposed Strategic Initiatives, RTAs, and budgets
- Ask questions and give feedback on the proposed EPIC investment portfolios

One or more CPUC or CEC Commissioners and Advisors, and Administrative Law Judges may attend, but no official Commission action will be taken at this event. Discussion of open proceedings not on the notice may be treated as ex parte communications (Rule 8.4).

Ground rules for a productive discussion

GROUND RULES

Helping every participant be heard within the time available

1

Stay on the plans

Focus questions on the proposed Strategic Initiatives, RTAs, and how they achieve the Strategic Objectives.

2

Be concise

One question at a time, so more voices can be heard.

3

Identify yourself

Share your name and organization before speaking.

4

Be respectful

Engage constructively with presenters and other participants.

5

Keep focused

Stay focused on the outcomes of this workshop, not other proceedings

6

Keep it moving

The facilitator may not get to all questions. We will capture any Q&As not discussed live.

Resources & contact

Everything you need before and during the workshop

EPIC 5 page

Strategic Goals, Objectives, agenda, and registration

epicpartnership.org/epic5 →

Decision D.26-02-037

Adopted the 13 Strategic Objectives

[View decision \(PDF\)](#) →

Decision D.24-03-007

Adopted the 5 Strategic Goals

[View decision \(PDF\)](#) →

Questions & Zoom support

EPIC Policy + Innovation Coordination Group

picg@theaccelerategroup.com →

The EPIC program is funded by California utility customers under the auspices of the California Public Utilities Commission.