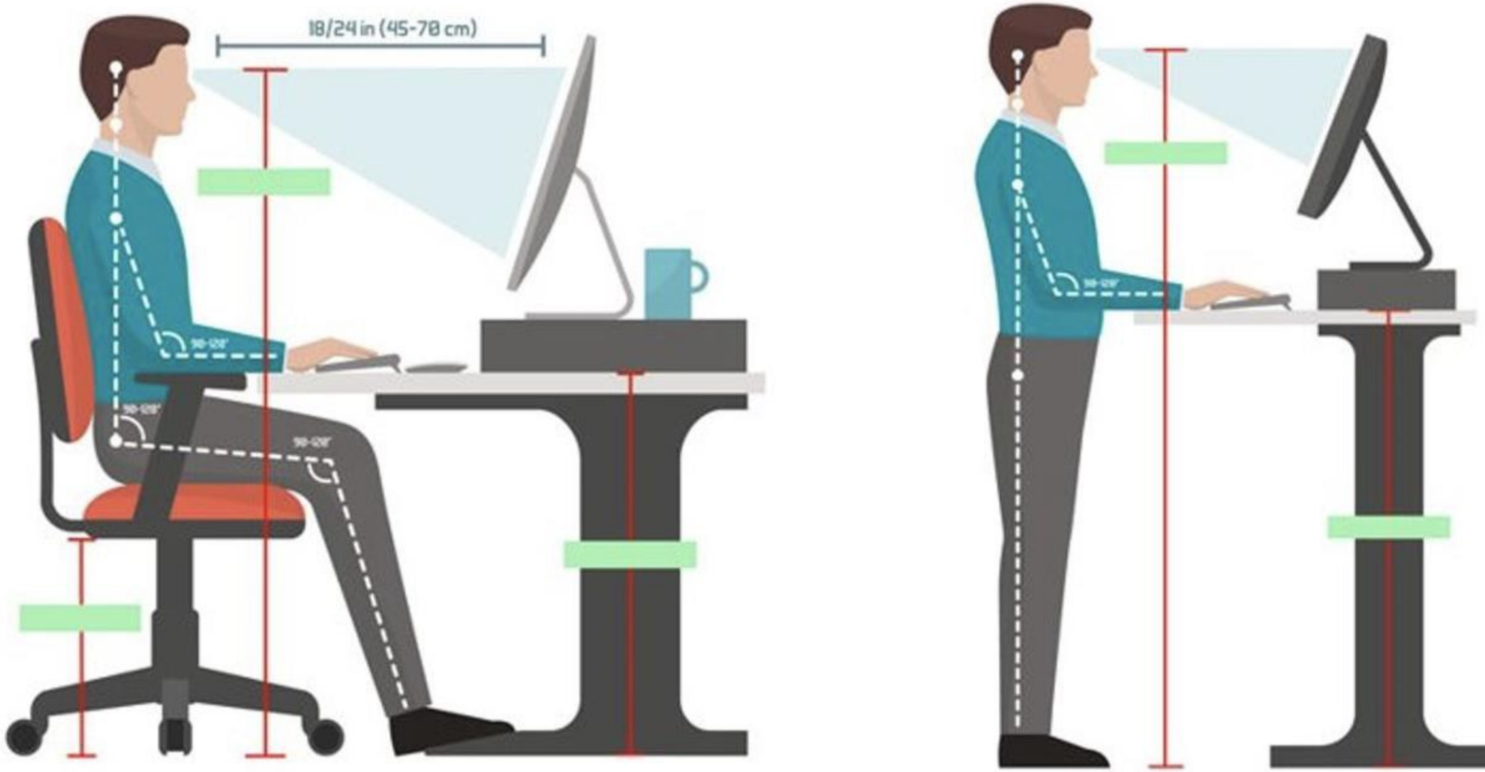
Briefing on Proposal for Distributed Energy Resources Action Plan 2.0

Tribal Consultation | September 16, 2021, 9:00 am

California Public Utilities Commission

Welcome

- DER Action Plan 2.0 Tribal Consultation
- The event is being recorded
- Workshop materials will be available online
- Safety
  - Note surroundings and emergency exits
  - Ergonomic check
  - Call 9-1-1 or use chat



Logistics

- All attendees have been muted
- If using the chat, make sure it is sent to "everyone"
- To ask questions, please 'raise your hand' and host will unmute you so you can ask your question. If you would rather type, use the "Q&A" function (send to "all panelists")
- Questions will be read aloud by staff; attendees may be unmuted to respond to the answer. (Reminder: Mute back!)

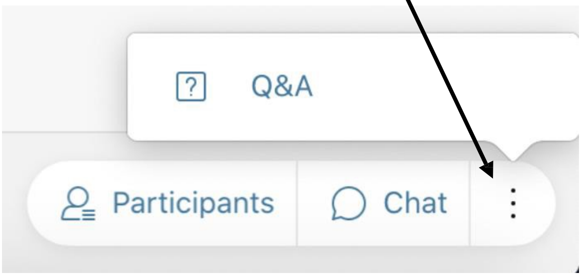
Mute/ Unmute

Participant List

Chat

Audio Options

"Q&A": on the bottom right of screen, click "3 dots"



Commissioner Darcie L. Houck

Christina Snider

Governor Newsom's Tribal Advisor

Agenda

Time	Topic of Discussion
9:00-10:35 am	Welcome
	Opening Remarks from CPUC Commissioner Darcie Houck and Christina Snider, Governor's Tribal Advisor
	Workshop Goals and Agenda
	Overview of CPUC Tribal Consultation Policy
	Overview of DER Action Plan
	Overview of High DER Rulemaking
10:35-10:45 am	*Break*
10:45 am- 12:00 PM	Panel of Tribal Representatives
	Discussion •Do you have any preliminary input on the DER Action Plan or High DER Rulemaking?
	Next Steps
11:55 am-12:00 pm	Meeting Close

CPUC's
Tribal Consultation Policy

Kenneth C. Holbrook
Tribal Advisor
California Public Utilities Commission
kenneth.holbrook@cpuc.ca.gov

Basis for Tribal Consultation Policy at CPUC

Executive Order B-10-11 declares that “the State is committed to strengthening and sustaining effective government-to-government relationships between the State and the Tribes by identifying areas of mutual concern and working to develop partnerships and consensus.”

The Executive Order directs state executive agencies and departments to “encourage communication and consultation with California Indian Tribes.” It further directs state agencies and departments “to permit elected officials and other representatives of tribal governments to provide meaningful input into the development of legislation, regulations, rules, and policies on matters that may affect tribal communities.”

For purposes of this policy, the terms “tribes” and “tribal governments” refer to elected officials and other representatives of federally-recognized tribes and other California Native Americans consistent with the definitions set forth in A.B. 52.

Goals
Tribal Consultation Policy at CPUC

1. Recognize and respect tribal sovereignty
2. Encourage and facilitate tribal government participation in CPUC proceeding
3. Give meaningful consideration to tribal interests in issues within the CPUC's jurisdiction
4. Encourage and facilitate tribal government participation in CPUC-approved utility programs
5. Protect tribal cultural resources
6. Encourage investments by tribal governments and tribal members in onsite renewable energy generation, energy efficiency; low carbon transportation and energy storage.

This policy is not intended to replace or supplant obligations mandated by federal law. It sets forth provisions for consultation, communication and collaboration with tribes to the extent that a conflict does not exist with applicable laws or regulations. This policy is not a regulation and it does not create, expand, limit, waive, or interpret any legal rights or obligations.

Resources

CPUC's Tribal Resources webpage:

https://www.cpuc.ca.gov/tribal/ (under revision)

CPUC's Tribal Consultation Policy

Executive Order B-10-11

https://www.ca.gov/archive/gov39/2011/09/19/news17223/index.html

Introductions

Meet the Tribal Liaisons from…

Pacific Gas & Electric (PG&E)

PG&E's Tribal Liaisons

Reno Keoni Franklin
PG&E's Tribal Liaison

Tribe: Kashia Pomo Tribe (Chairman Emeritus)
Past Chairman of:

- California Rural Indian Health Board
- National Indian Health Board
- National Association of Tribal Historic Preservation Officers

Appointed by President Obama to the ACHP
Federal Fire Fighter BIA Engine 1 SRA
Elected tribal leader since 2000

Denise M. Shemenski
PG&E's Deputy Tribal Liaison

Tribe: Blackfoot, Apache

Prior Role:

- Tribal Advisor for CA Governor Office of Emergency Service (CalOES)
- Tribal Advocate for CA Governor's Office of Homeland Security (Cal OHS)
- Firefighter/Dispatcher with Cal Fire

- Possess deep understanding of tribal culture, tradition, and experiences
    - Federal: subject matter experts for DOD and DOJ on tribal agency consultation
    - State-level: prior experience at state and local agencies
- Advise on PG&E's engagement and initiatives with tribal governments, communities, and organizations
- Drive initiatives for Community Wildfire Safety Program/PSPS support in partnership with the Cultural Resources Specialist team
- Support enterprise-wide efforts to better understand tribal needs and minimize environmental / cultural impacts of PG&E

Tribes within PG&E's Service Area (Electric)

California has the 2nd Highest Native American population in the U.S. (303,998)

PG&E serves 62 Federally Recognized Tribes in the PGE Service Area.
58 of those tribes have trust or allotment lands.
(109 federally recognized tribes in CA)

PG&E serves 40 Non-Federally Recognized Tribes in the PG&E Service Area

The PG&E service area has more federally recognized tribes than South Dakota, North Dakota, Minnesota, Wisconsin and Oklahoma combined!

Federally Recognized Tribes by County

62 Tribes Total Across PG&E's Service Area

*Denotes tribe is in multiple counties

Alpine

1. Washoe Tribe of CA and NV

Amador

1. Buena Vista Rancheria of Mi-Wuk Indians
2. Ione Band of Miwok Indians of California
3. Jackson band of Mi-Wuk Indians

Butte

1. Tyme Maidu Tribe-Berry Creek Reservation
2. *Enterprise Rancheria
3. Mechoopda Indian Tribe
4. Mooretown Rancheria

Contra Costa

1. *Lytton Rancheria of California

Colusa

1. Cachil DeHe Band of Wintun Indians of the Colusa Indian Community
2. Cortina Rancheria

El Dorado

1. Shingle Springs Band of Miwok Indians

Fresno

1. Big Sandy Rancheria
2. Cold Springs Rancheria
3. Table Mountain Rancheria

Glen

1. Grindstone Indian Rancheria

Humboldt

1. Bear River Band of the Rohnerville Rancheria
2. Big Lagoon Rancheria
3. Blue Lake Rancheria
4. Trinidad Rancheria
5. Hoopa Valley Tribe
6. Karuk Tribe
7. Yurok Tribe
8. Wiyot Tribe

Kern

1. Tejon Indian Tribe

Kings

1. Tachi-Yokut Tribe (Santa Rosa Rancheria, Leemore, CA)

Lake

1. Big Valley Band Rancheria
2. Elem Indian Colony
3. Habematolel Pomo of Upper Lake
4. Lower Lake (Koi Tribe)
5. Middletown Rancheria of Pomo Indians
6. Robinson Rancheria
7. Scotts Valley Band of Pomo Indians

Lasen

1. Susanville Indian Rancheria

Madera

1. North Fork Rancheria
2. Picayune Rancheria of Chukchansi Indians

Mendocino

1. Cahto Tribe (Laytonville)
2. Coyote Valley Band of Pomo Indians
3. Guidiville Indian Rancheria
4. Hopland Band of Pomo Indians
5. Manchester Band of Pomo Indians
6. Pinoleville Pomo Nation
7. Potter Valley Tribe
8. Redwood Valley Little River Band of Rancheria of Pomo
9. Round Valley Reservation
10. Sherwood Valley Rancheria

Modoc

1. *Pit River

Placer

1. United Auburn Indian Community

Plumas

1. Greenville Rancheria

Sacramento

1. Wilton Rancheria

San Joaquin

1. California Valley Miwok Tribe

Santa Barbara

1. Santa Ynez Band of Chumash Mission Indians

Shasta

1. *Pit River Tribe
2. Redding Rancheria

Sonoma

1. Cloverdale Rancheria of Pomo Indians of California
2. Dry Creek Rancheria of Pomo Indians
3. Federated Indians of Graton Rancheria
4. Kashia Band of Pomo Indians of the Stewart's Point Rancheria
5. *Lytton Rancheria of California

Tehama

1. Paskenta Band of Nomlaki Indians

Tulare

1. Tule River Indian Reservation

Tuolumne

1. Chicken Ranch Rancheria
2. Tuolumne Band of Me-Wuk Indians

Yolo

1. Yocha Dehe Wintun Nation

Yuba

1. *Enterprise Rancheria

Non-Federally Recognized Tribes by County

40 Tribes Total Across PG&E's Service Area

Alameda

Amador

Butte

1. Butte Tribal Council

Contra Costa

1. Trina Marine Ruano Family
2. Xolon Salinan Tribe

Calaveras

1. Calaveras Band of Mi-Wuk Indians

El Dorado

Fresno

1. Dumna Wo-Wah Tribal Government
2. Dunlap Band of Mono Indians
3. Nor-Rel-Muk Nation
4. Dunlap Band of Mono Indians Historical Preservation Society
5. Haslett Basin Traditional Committee

Glen

Humboldt

1. Wailaki Tribe

Kern

1. Kern Valley Indian Council
2. Tubatulabal Tribe
3. Kawaiisu Tribe

Kings

1. Kings River Choinumni Farm Tribe
2. California Choinumni Tribal Project

Lake

Lassen

1. Honey Lake Maidu

Madera

1. The Mono Nation
2. Sierra Mono Museum

Mariposa

1. North Fork Mono Tribe
2. American Indian Council of Mariposa County (Southern Sierra Miwuk Nation)
3. Chaushila Yokuts

Mendocino

1. Noyo River Indian Community
2. Shelbelna Band of Mendocino Coast Pomo Indians

Monterey

1. Salinan Tribe of Monterey, San Luis Obispo and San Benito Counties

Placer

Plumas

Sacramento

1. Amah Mutsun Tribal Band

San Benito

1. Indian Canyon Mutsun Band of Costanoan

Santa Clara

1. Muwekma Ohlone Indian Tribe

Santa Cruz

1. Coastanoan Ohlone Rumsen-Mutsen Tribe
2. Ohlone Indian Tribe

San Luis Obispo

1. San Luis Obispo County Chumash Council

San Joaquin

1. Traditional Choinumni Tribe (East of Kings River)

Santa Barbara

1. Coastal Band of the Chumash Nation

Shasta

1. Winnemem Wintu Tribe
2. Wintu Tribe of Northern California
3. Northern Band of Mono Yokuts

Sonoma

1. Mishewal-Wappo Tribe of Alexander Valley

Tehama

Trinity

1. Tsungwe Council

Tulare

1. Wuksachi Indian Tribe
2. Wukchumni Tribal Council

Tuolumne

Yolo

Yuba

1. Strawberry Valley Rancheria

Introductions

Meet the Tribal Liaisons from…

San Diego Gas & Electric (SDG&E)

Jennifer Summers JSummers@sdge.com
Vanessa Vandever
VVandeve@sdge.com

Introductions

Meet the Tribal Liaisons from…

Southern California Edison (SCE)
Amy Olson Amy.Olson@sce.com
Aaron M Thomas
Aaron.M.Thomas@sce.com

DER Action Plan 2.0 Workshop Presenters

Energy Division Staff

Keishaa Austin - Staff Lead

Joshua Huneycutt- Transportation Electrification Lead

Forest Kaser- Grid Infrastructure Track Lead

Joy Morgenstern- DER Customer Lead

Gabe Petlin- Market Integration Track Lead

Paul Philips- Load Flexibility and Rates Lead

DER Action Plan 2.0

- **What is the DER Action Plan?**

A roadmap for CPUC decision-makers, staff, and stakeholders to facilitate forward-thinking DER policy.

- **What does the DER Action Plan do?**

Aligns the CPUC's vision with actions that can be taken by stakeholders to ensure DER policy implementation in support of SB 100 and California's energy and climate goals is coordinated across proceedings related to grid planning, affordability, load flexibility, market integration, and customer programs.

- **What is the goal of the DER Action Plan?**

To Maximize the ratepayer and societal value of millions of DERs on the grid, while ensuring affordable and equitable rates.

- **The DER Action Plan is not meant to:**

Determine outcomes of individual proceedings.

DER Action Plan Background

- Commission endorsed DER Action Plan in November 2016
- The purpose was not to determine outcomes of individual proceedings but to:
  - **Set a long-term vision** for DERs and supporting policies
  - **Identify CPUC Actions** needed to meet that vision
  - **Establish a coordinating framework** across 15+ proceedings and CAISO stakeholder initiatives

RATES
Customer Choice
Time-varying Rates
Innovative Rates & Tariffs
Aligned with Cost Causation
Affordable to non-DER customers

Grid Infrastructure
Transparent planning and sourcing
Utility "2.0" / IOU business model
Technology-neutral sourcing
Recognize full GHG and grid services value
Streamlined interconnection
DER-enabling grid investments for ratepayer benefit
Data communications and cybersecurity

Market Integration
Robust DER participation in wholesale markets
Multiple revenue streams
Market and interconnection rules supportive of BTM DERs
Predictable EV behavior in grid operations
Non-discriminatory market rules for EVs

Example of DER Action Items Fulfilled: DRP has transformed Grid Planning to utilize DERs

1. Reformed Utility Distribution Planning to use DERs instead of Wires, if and when possible

Distribution Investment Deferral Framework

Load and DER growth & Forecasting
Use CEC's IEPR system level forecast
+
Disaggregation to

Grid Needs Assessment (GNA)
Identify distribution system deficiencies to determine grid needs
+
Analyze for potential load transfers for no cost solutions

Distribution Deferral Opportunities Report (DDOR)
Identify planned distribution upgrades
+
candidate deferral projects

Distribution Deferral Approval
Advice Letter to review & approve DER projects

Competitive Solicitations

Guidance provided by Integrated Distributed Energy Resources (IDER) proceeding

2. Provided 3rd party DER providers with information about where DERs can go best

DER Integration Analyses

Integration Capacity Analysis (ICA)
Identify DER hosting capacity on each circuit

Locational Net Benefits Analysis (LNBA)
Calculate the net benefits of DER deferral of transmission and distribution upgrades

3. Reoriented Grid Investments described in GRCs to integrate DERs

Grid Modernization Investments / GRCs

IOUs propose technology investments to integrate DERs in each General Rate Case

DER ACTION PLAN 2.0

Scope and Structure

TRACK ONE

Load Flexibility & Rates

9 Vision Elements

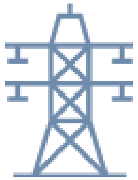
20 Action Elements

TRACK TWO

Grid Infrastructure

4 Vision Elements

19 Action Elements



TRACK THREE

Market Integration

5 Vision Elements

11 Action Elements

1 Undefined Action Element

TRACK FOUR

DER Customer Programs

6 Vision Elements

16 Action Elements

DER Action Plan 2.0
Overall Vision

- DER deployment is integral to achieving a 100% clean energy future.
- The CPUC continuously explores new policies, technologies, business models, and ideas to advance distributed energy resources deployment in a manner that maximizes ratepayer and societal value and contributes to equity and affordability for all customers.
- The CPUC is committed to ensuring that DER policy is harmonized with CPUC policy directives related to safety, reliability, affordability, equity and environmental stewardship, including, but not limited to:
    - Tribal Consultation & DACAG Stakeholder Engagement
- Collaboration with other agencies (e.g., CEC, CARB, CAISO) and stakeholders is critical to meet the objectives of the DER Action Plan 2.0.

DER ACTION PLAN 2.0
Proceeding and Initiatives List

TRACK ONE	TRACK TWO	TRACK THREE	TRACK FOUR
Load Flexibility & Rates	Grid Infrastructure	Market Integration	DER Customer Programs

• Net Energy Metering
• PG&E Day Ahead Hourly Real Time Pricing (DAHRTP) Rate and Pilot Application to Evaluate Customer Understanding and Supporting Technology
• SDG&E, PG&E and SCE GRC Phase 2
• Rate Design Applications for evaluating and implementing default residential TOU rate designs.
• SDG&E Application for Approval of Electric Vehicle High Power (EV-HP) Charging Rate Application
• Load Flexibility Management OIR, recommended by CPUC staff.
• CEC's Load Management Standard
	• High DER Future OIR
	• Streamlining Interconnection of Distributed Energy Resources and Improvements to Rule 21
	• Microgrids OIR
	• PG&E, SCE and SDG&E General Rate Case Phase 1
		• Resource Adequacy
		• Successor Storage and/or Demand Response OIR(s), as recommended by CPUC staff
		• Rule 21
		• FERC Order 2222 and Other FERC Proceedings
		• Potential CAISO Initiatives:
		  • Energy Storage and Distributed Energy Resources,
		  • Energy Storage Enhancements,
		  • Hybrid Resources,
		  • Transmission Planning Process,
		  • Storage as a Transmission Asset,
		  • Dispatch Enhancements (decremental market power and bid floor).
			• Self-Generation Incentive Program
			• Energy Efficiency
			• Building Decarbonization
			• Integrated Distributed Energy Resources
			• Transportation Electrification
			• Demand Response
			• Net Energy Metering
			• Energy Savings Assistance Program

DER Action Plan 2.0
Track One: Load Flexibility and Rates

The Load Flexibility and Rates track is focused on:

Improving demand-side resource management through more effective, integrated demand response (DR) and retail rate structures that promote widespread, scalable, and flexible load strategies enabled by electrification and DER deployment opportunities.

The vision and action elements address grid issues associated with:

The growth of renewables, electrification, and DER adoption in support of California’s clean energy goals, minimize cost of electricity service, and provide fair compensation for grid services provided by customer owned DERs.

DER Action Plan 2.0 Vision Elements

Track One: Load Flexibility and Rates

Vision 1A	Vision 1B	Vision 1C	Vision 1D	Vision 1E	Vision 1F	Vision 1G	Vision 1H	Vision 1I
A continuum of rate options, from the simple to complex, is available for customers, and customers are educated to make informed choices.	Available rates reflect time-variant and location-based marginal costs and include time of use, dynamic, and real time pricing options.	Dynamic and real time pricing rates are designed to maximize participation by customers in disadvantaged communities, load flexibility benefits and protections.	Available rates reflect cost causation and provide opportunities for fair compensation for the capacity benefits DERs provide.	Rates are designed to minimize cost-shift in either direction between customers on dynamic and real time pricing rates and other customer segments and classes.	A menu of time-varying rate options is made available to load management technologies through a "universal access" pricing platform and customized rates marketing, education and outreach for all customer segments.	Rates, charges, and tariffs are transparent, equitable, and aligned with load management standards.	Potential strategies, including non-ratepayer-funded strategies, are considered to address affordability concerns associated with high electric rates that may impede adoption of transportation and building electrification DER technologies, especially among low-income and environmental and social justice communities.	Electric vehicle owners, fleet operators, and charging station managers respond to price signals that reflect the real-time and dynamic costs and benefits of charging at different times to optimize grid operations and reduce charging costs.
3 Action Elements	3 Action Elements	1 Action Element	3 Action Elements	2 Action Elements	2 Action Elements	2 Action Elements	1 Action Element	3 Action Elements

DER Action Plan 2.0
Track One: Action Elements

Vision Element 1A A continuum of rate options, from the simple to complex, is available for customers, and customers are educated to make informed choices.
Action Element 1: By 2023, the large investor-owned utilities (IOUs) should design and complete focus group research to evaluate tolerance and acceptance of a range of dynamic and real time pricing (RTP) options for all customer segments. Small multijurisdictional utilities (SMJUs) and community choice aggregators (CCAs) are encouraged to participate in this effort.
Action Element 2: By 2023, the large investor-owned utilities (IOUs) should design and complete focus group research to evaluate tolerance and acceptance of a range of dynamic and real time pricing (RTP) options for all customer segments. Small multijurisdictional utilities (SMJUs) and community choice aggregators (CCAs) are encouraged to participate in this effort.
Action Element 3: By 2024, all utility customer classes have access to multiple rate options, including dynamic and RTP rate pilots that are informed by focus group research and supported by ME&O programs to match various customer preferences and engagement levels. SMJUs and CCAs are encouraged to provide the same for their customers.

DER Action Plan 2.0
Track One: Action Elements

Vision Element 1B Available rates reflect time-variant and location-based marginal costs and include time of use, dynamic, and real time pricing options.
Action Element 1: By Fall 2021, CPUC staff should issue a white paper proposal and recommend a load flexibility rulemaking process that considers how rates can be modified to better reflect dynamic and RTP pricing options that incorporate time-variant and location-based marginal costs.
Action Element 2: By Fall 2021, CPUC staff should initiate an ongoing stakeholder working group to address issues related to flexible load management and dynamic and RTP rates, including the development of IOU pilots that offer dynamic and RTP rates across all customer classes.
Action Element 3: By 2024, rates that incorporate dynamic and RTP designs should be offered on an opt-in basis to all customers.

DER Action Plan 2.0
Track One: Action Elements

Vision Element 1C Dynamic and real time pricing rates are designed to maximize participation by customers in disadvantaged communities, load flexibility benefits and protections.
1. By 2022, the CPUC should conduct a workshop and/or working group sessions to address stakeholder recommendations for maximizing equity and inclusion considerations in dynamic and RTP rate designs to increase opportunities for widespread DER adoption.

DER Action Plan 2.0
Track One: Action Elements

Vision Element 1D Available rates reflect cost causation and provide opportunities for fair compensation for the capacity benefits DERs provide.
Action Element 1: By 2022, the CPUC should conduct a workshop and/or working group sessions to address stakeholder recommendations for maximizing equity and inclusion considerations in dynamic and RTP rate designs to increase opportunities for widespread DER adoption.
Action Element 2: By 2023, the CPUC should evaluate the costs and benefits of dynamic and RTP rates through pilot evaluation studies to inform rate design options for IOU implementation.
Action Element 3: By 2023, the IOUs should submit proposals for opt-in and opt-out dynamic and RTP rates in certain customer classes, as permitted by law, informed by pilot evaluation studies in either a load flexibility rulemaking process or separate rate design window applications.

DER Action Plan 2.0
Track One: Action Elements

Vision Element 1E Rates are designed to minimize cost-shift in either direction between customers on dynamic and real time pricing rates and other customer segments and classes.
Action Element 1: By 2023, the CPUC should assess cost-shift associated with opt-in dynamic or RTP rate pilots, at each customer class level.
Action Element 2: By 2024, the CPUC should approve rate designs that incorporate principles that minimize the potential of cost-shift between customers on dynamic and RTP rates and other customers unless deemed necessary to meet specific policy goals.

DER Action Plan 2.0
Track One: Action Elements

Vision Element 1F A menu of time-varying rate options is made available to load management technologies through a "universal access" pricing platform and customized rates marketing, education and outreach for all customer segments.
Action Element 1: By 2023, the CPUC initiates consideration of proposals to ensure that customers, technology vendors, and third-party service providers have access to pricing information for a wide range of rates through a "universal access" pricing platform.
Action Element 2: By 2024, the CPUC initiates consideration of criteria to evaluate third-party subscription "pay for load shape" load management services including an assessment of how to promote participation and benefits to low-income and ESJ communities.

DER Action Plan 2.0
Track One: Action Elements

Vision Element 1G Rates, charges, and tariffs are transparent, equitable, and aligned with load management standards.
1. Starting in 2021, CPUC and CEC staff should continuously coordinate on elements of rate design and tariffs to ensure alignment with load management standards.
2. By 2024, rates that enable flexible load management and DERs to provide system benefits should be widely available to customers.

DER Action Plan 2.0
Track One: Action Elements

Vision Element 1H Potential strategies, including non-ratepayer-funded strategies, are considered to address affordability concerns associated with high electric rates that may impede adoption of transportation and building electrification DER technologies, especially among low-income and environmental and social justice communities.
Action Item 1: By 2022, a workshop and/or series of working meetings will be convened in an appropriate proceeding to address affordability issues and barriers to participation in the transportation and building electrification DER marketplace, including alternative sources of funding for DERs, supporting technologies, and third-party load management services.

DER Action Plan 2.0
Track One: Action Elements

Vision Element 1I
Potential strategies, including non-ratepayer-funded strategies, are considered to address affordability concerns associated with high electric rates that may impede adoption of transportation and building electrification DER technologies, especially among low-income and environmental and social justice communities.
Action Element 1: By 2022, utilities should offer EV owners and fleet operators RTP pilot rates set forth in the current General Rate Case (GRC) cycle and individual IOU EV rate applications, which incorporate location-based marginal costs to address grid optimization issues.
Action Element 2: By 2024, CPUC staff should complete analysis of RTP pilots to assess the ability of EV charging loads and BTM energy storage to integrate excess supply of renewables through flexible load management response to dynamic price signals.
Action Element 3: By 2024, CPUC staff should analyze the impact of RTP rates and consider whether EV owners and fleet operators should be offered such rates on an opt-out basis, as permitted by law.

DER Action Plan 2.0
Track Two: Grid Infrastructure

The Infrastructure Track is focused on:

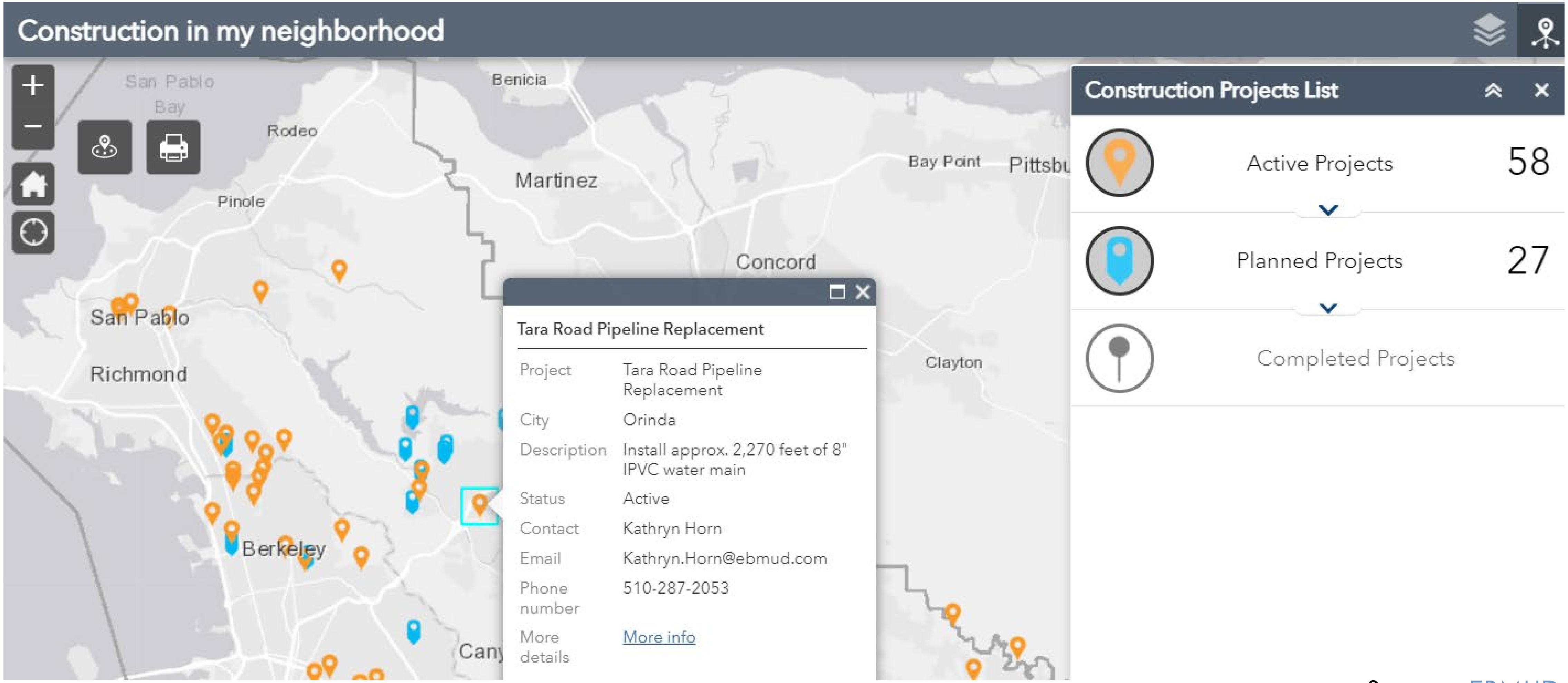
“CPUC actions to guide utility infrastructure planning and operations to maximize the value of DERs interconnected to the electric grid”.

Track 2 Vision In Plain Language

Distributed energy resources can be a type of electrical infrastructure. Electrical infrastructure and distributed energy resources should be:

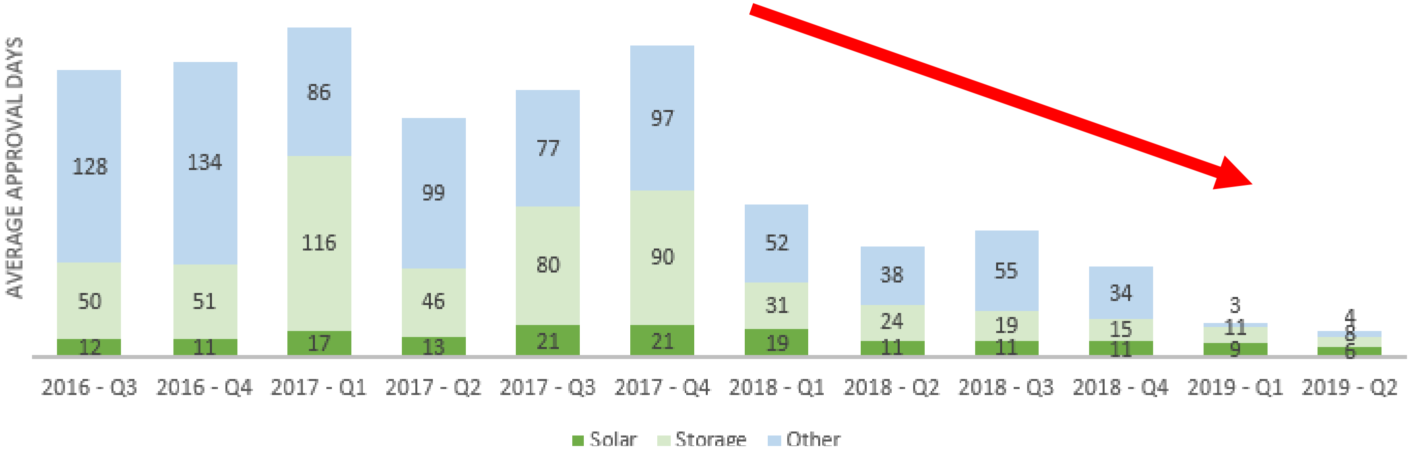
- 2A: Integrated and responsive to local conditions
- 2B: Rapidly and safely interconnected
- 2C: Interoperable and cybersecure
- 2D: Helpful for electrification

Utilities Should Have Transparent and Locally Responsive Business Processes



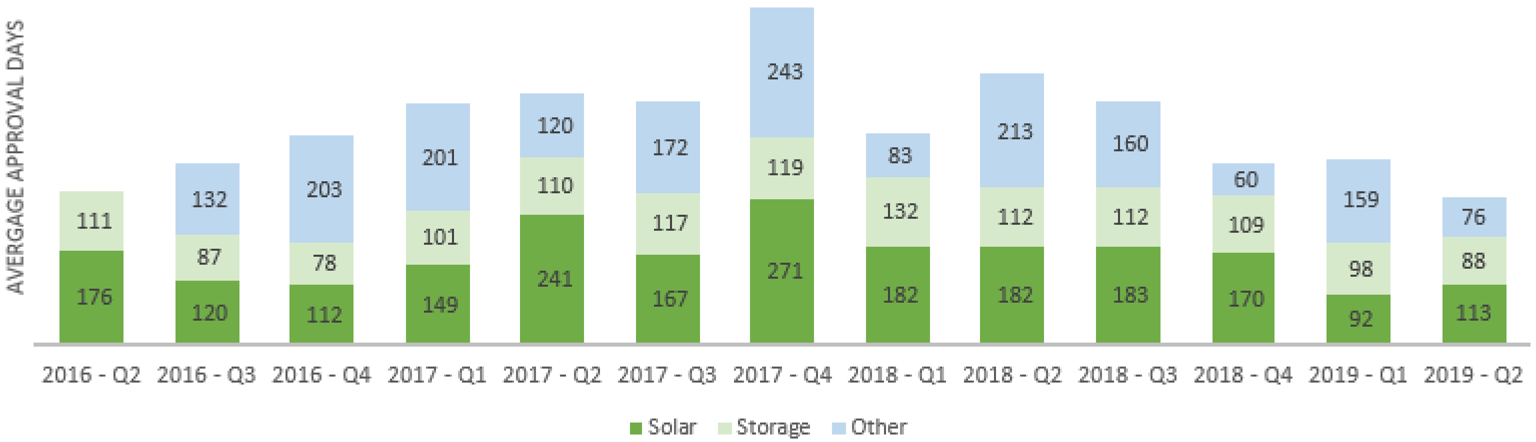
Source: EBMUD

Utilities Should Continue to Improve Interconnection



NEM

Total time for project approval appears to be improving over time



Non-NEM

Less pronounced trend

Source: Guidehouse Inc. Rule 21 Interconnection Evaluation, March 2021

Utilities Should Facilitate Interoperability of Distributed Energy Resources

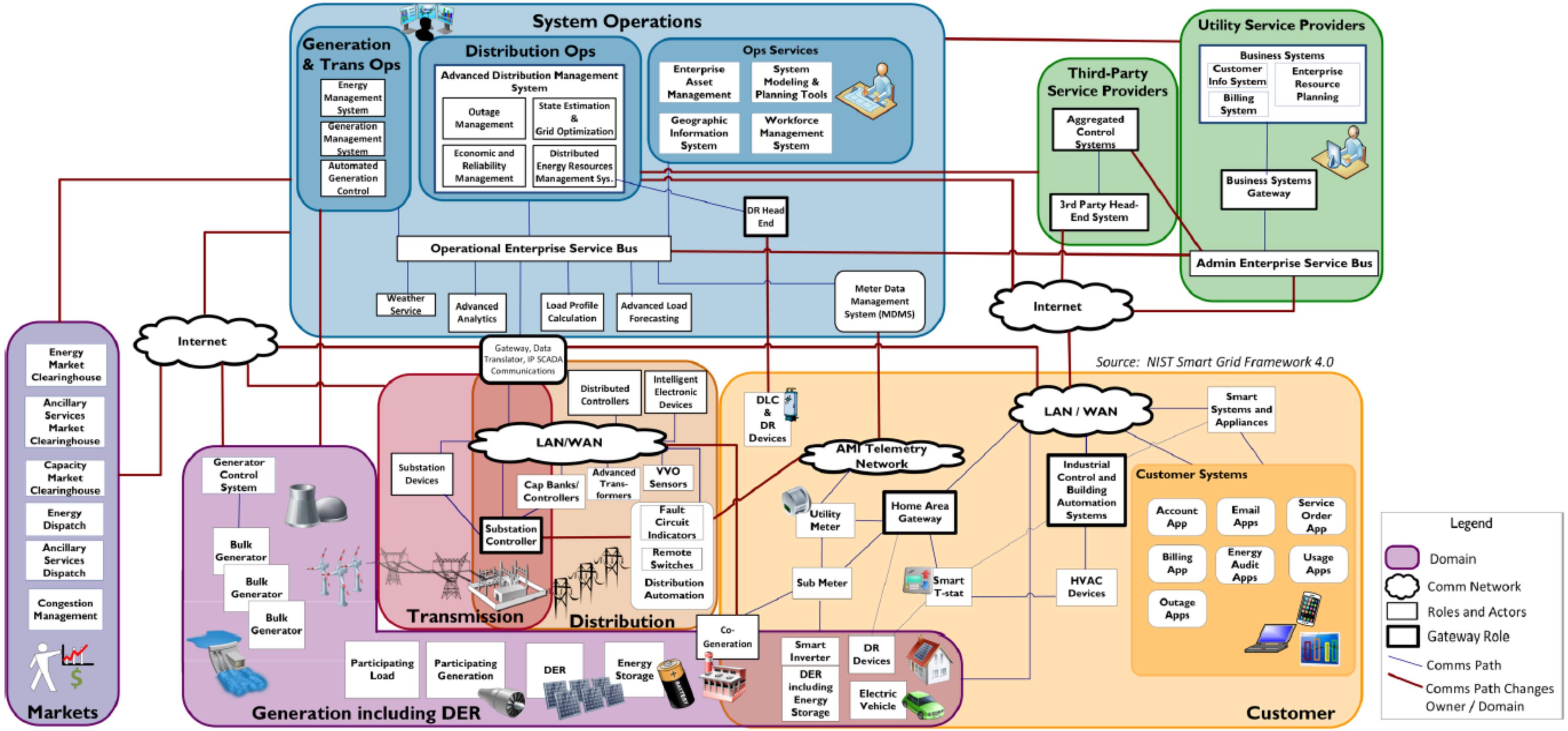
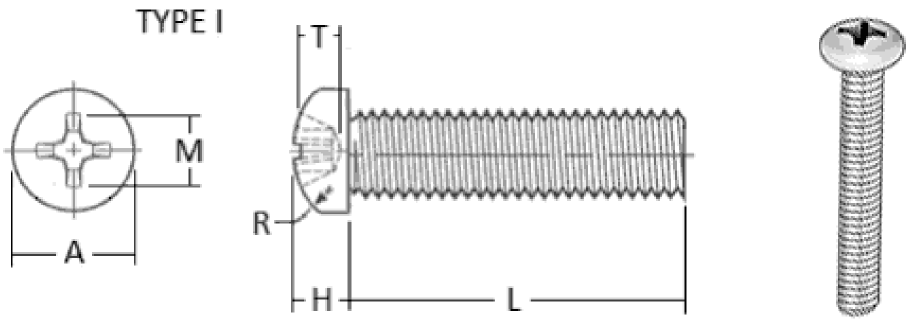


Figure 6 – High-DER communication pathways scenario

Source: NIST Interoperability Framework and Roadmap Release 4.0

Visualizing Interoperability of Simpler Systems

Machine Screw, Pan Head, Cross Recessed, 18-8 Stainless Steel



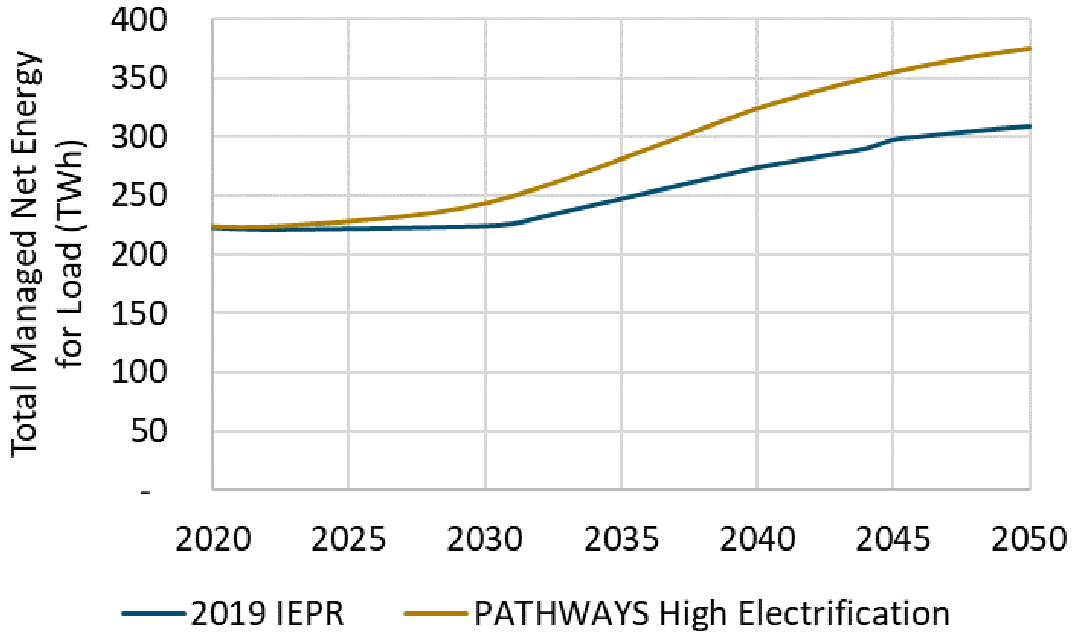
Nominal Size	A		H		R	M	T	
	Head Diameter		Head Height		Head Radius	Recess Diameter	Recess Gaging Depth	
	Max.	Min.	Max.	Min.	Min.	Ref.	Max.	Min.
#0	0.116	0.104	0.044	0.036	0.005	0.060	0.032	0.014
#1	0.142	0.130	0.053	0.044	0.005	0.067	0.040	0.022
#2	0.167	0.155	0.062	0.053	0.010	0.097	0.052	0.034
#3	0.193	0.180	0.071	0.062	0.010	0.105	0.061	0.043
#4	0.219	0.205	0.080	0.070	0.010	0.115	0.071	0.053
#5	0.245	0.231	0.089	0.079	0.015	0.152	0.072	0.046
#6	0.270	0.256	0.097	0.087	0.015	0.159	0.080	0.055
#8	0.322	0.306	0.115	0.105	0.015	0.175	0.097	0.071

- Machine screws are manufactured such that the dimensions of each relevant characteristic fall within a specific tolerance range.
- You can walk into any hardware store and expect that a #8 screw you purchase will work with any device that is threaded for a #8 screw.
- You can start a screw manufacturing plant and expect that if you can make a screw that meets the specifications at a competitive price, there is a market.
- Counterexample: BART uses 5’6” rails, most other rail systems use 4’8.5” rails.

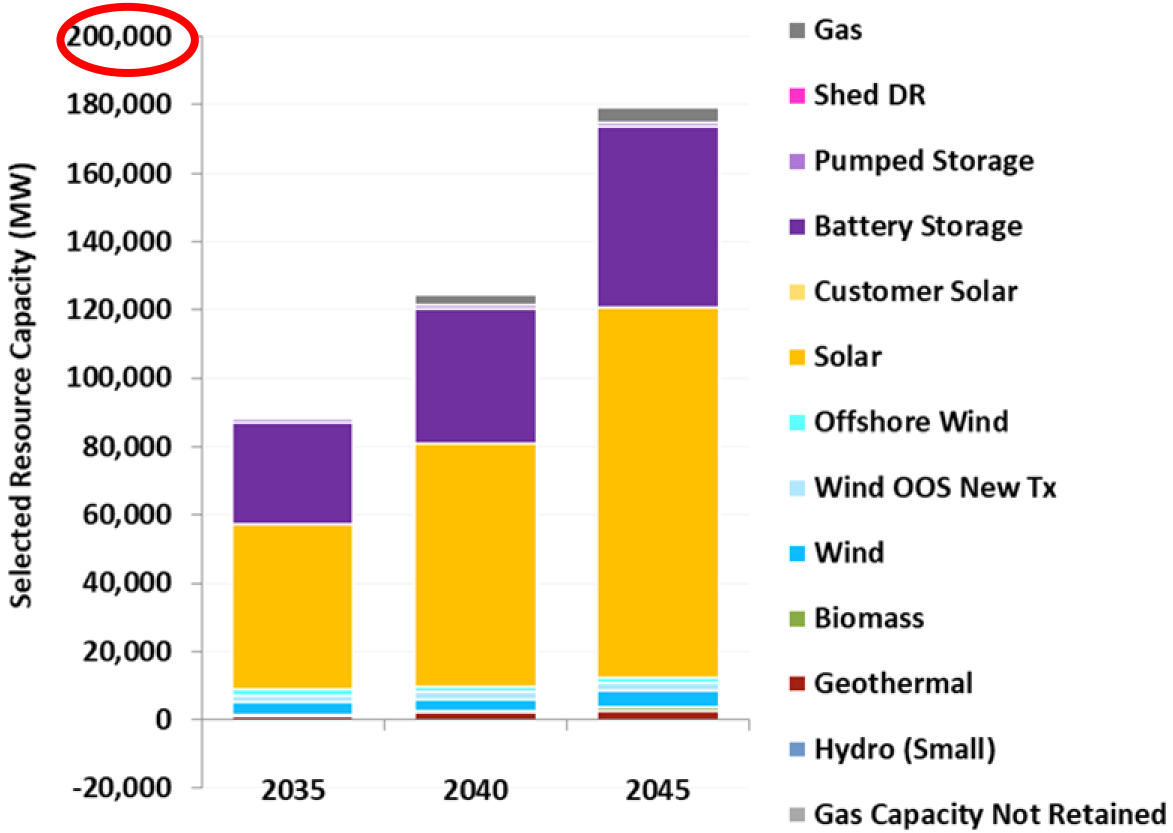
Source: Siddhgiri Tubes

Electrification is Necessary for Decarbonization

Comparison of 2020 CPUC PATHWAYS High Electrification and 2019 IEPR Mid



New Build for High Electrification Scenario



Source: [CPUC 2021 Proposed Preferred System Plan]

Local Resources Can Reduce System Impacts of Electrification

Transportation electrification supported by local storage + solar PV

Source: [Clean Technica]

DER Action Plan 2.0
Track Two: Grid Infrastructure

Vision Element 2A	Vision Element 2B	Vision Element 2C	Vision Element 2D
Utility infrastructure business processes, including planning, all-source resource acquisition, and operations, are transparent, responsive to local conditions and community needs, and seamlessly integrate cost-effective distributed energy resources.	Utility operations continuously improve interconnection performance, leading to greater transparency, speed, and cost certainty.	Utilities implement standards for data communications and advanced inverters that facilitate visibility, operational control, provision of grid services, and interoperability of distributed energy resources and are consistent with best practices for ensuring cybersecurity.	Utilities integrate the anticipated impacts of electrification into distribution planning to maximize public benefits and minimize costs and to optimize deployment of complimentary and supporting infrastructure and distributed energy resources.
8 Action Elements	5 Action Elements	4 Action Elements	2 Action Elements

DER Action Plan 2.0
Track Two: Action Elements

Vision Element 2A: Integration and Local Responsiveness	
1. Starting in 2021 (concluding in 2022), utilities implement the systems and processes needed to ensure the export of accurate, current, and comprehensive system-wide distribution system planning data to the CPUC and CEC on a semi-annual basis (at minimum).	**High DERs**
2. By 2022, CPUC staff documents all existing Distribution Investment Deferral Framework requirements into a formal Guidelines document to be updated annually or as reforms are implemented.	**High DERs**
3. By 2022, utilities refine their Integration Capacity Analysis (ICA) tools to provide reliable, accurate, and useful data to developers and consumers seeking to integrate distributed energy resources including generation and load.	**High DERs**
4. By 2023, utilities establish data portals that provide Tribal and local governments with information useful for the coordinated development of resilient energy infrastructure and emergency response processes to best address community needs and reduce social burdens stemming from large-scale disruptions.	**Microgrids & High DERs**
5. By 2023, CPUC staff completes a technical report on Distribution Resources Planning Data Portals improvements and conducts a stakeholder process to identify and explore potential updates and additional data to host, with the goal of increasing portal usability and usefulness for DER integration.	**High DERs**
6. By 2024, the CPUC considers proposals to develop a formal Distribution Planning Process Guidelines document designed to enhance DER integration onto the grid, increase community engagement, and ensure state electrification initiatives are achievable while maintaining cost effectiveness. Supersede the Distribution Investment Deferral Guidelines with the new Distribution Planning Process Guidelines.	**High DERs**
7. By 2025, utilities will update their Distribution Planning Process and Distribution Investment Deferral Framework process and filings according to the adopted Distribution Planning Process Guidelines.	**High DERs**
8. By 2025, utilities routinely conduct distribution planning meetings with communities to coordinate planned infrastructure investments with local DER initiatives and ensure investments are resilient, serving to reduce the social burden of outages.	**High DERs & Microgrids**

DER Action Plan 2.0
Track Two: Action Elements

Vision Element 2B: Interconnection	
1. Starting late 2021, utilities pilot a notification-only interconnection process and collect data to determine practicality, safety, and associated costs. Advice Letters due in late 2023 will recommend the parameters under which this approach may be extended to other interconnection use cases.	**Interconnection**
2. By 2022, utilities use a transparent technical review process to approve, after determining that safety and reliability requirements have been met, the use of technologies or products that can reduce the cost of DER implementation or optimize the performance of DER (e.g., lower cost relays, multi-port utility revenue meters).	**Microgrids**
3. Starting late 2022, utilities use IEEE 2030.5 servers to pilot the control of inverters for operational flexibility and telemetry.	**Interconnection**
4. By 2022, utilities begin tracking the installation of both AC-coupled and DC-coupled vehicle-to-grid interconnections to better understand the potential capacity available from electric vehicles to meet grid needs.	**Interconnection**
5. Starting in 2022, the CPUC revisits interconnection fees and the cost allocation for distribution network upgrades, with a goal of reaching a decision on these topics by Q42022.	**Interconnection**

DER Action Plan 2.0
Track Two: Action Elements

Vision Element 2C: Interoperability and Cybersecurity	
1. By 2022, the CPUC convenes a Smart Inverter Operationalization Working Group and, by 2023, oversees completion of a working group report, staff proposal, and stakeholder process to develop use cases, guidelines, and an implementation plan.	**High DER**
2. Starting in 2024, utilities update the grid modernization plans filed with their general rate cases to ensure grid investments and capabilities adequately support priority smart inverter operationalization use cases.	**General Rate Cases**
3. By 2022, utilities identify foundational industry or national standards for communications (e.g., IEEE 2030.5-2018 - IEEE Standard for Smart Energy Profile Application Protocol, SunSpec Alliance standards) and best practices for cybersecurity to guide development of DERs that maximize the likelihood of interoperability with the evolving distribution grid.	
4. By 2023, utilities conduct a gap analysis to identify any standards or best practices that need to be developed to facilitate development of DERs that will be interoperable with the evolving distribution grid.	

DER Action Plan 2.0
Track Two: Action Elements

Vision Element 2D: Electrification	
1. By 2023, CPUC staff completes a comprehensive, data-driven electrification impacts study to estimate the scope of distribution grid buildout and identify opportunities to mitigate costs.	**High DERs**
2. By 2025, utilities update their distribution planning processes and Distribution Investment Deferral Framework process and filings to fully account for, and report on, the scope and costs of ongoing electrification impacts.	**High DERs**

DER Action Plan 2.0
Track Three: Market Integration

The Market Integration Track is focused on:

The efficient integration of BTM and FTM DERs into wholesale markets to support renewable integration, GHG reduction, and grid reliability. This track addresses how market integrated DERs connected to the customer, distribution, and transmission grid "domains" can be harnessed and compensated to produce multiple streams of benefits. The Vision Elements are grouped into four primary themes.

Primary Themes:

1. Big Picture and Wholesale Market Integration of Both BTM & FTM DERs
2. Multiple Use Applications (MUA) aka "Value Stacking"
3. Wholesale Market Integration of Exporting BTM DERs
4. Wholesale Market Integration of FTM DERs

DER Action Plan 2.0

Track Three: Market Integration

Vision Element 3A	Vision Element 3B	Vision Element 3C	Vision Element 3D	Vision Element 3E
Resource Adequacy DER participation in wholesale markets supports efficient grid operation focused on integration of renewable energy, reduction in system cost, grid reliability, and reduction in GHG emissions.	Resource Adequacy DERs receive fair compensation when providing multiple unique services to the wholesale market, distribution grid, and end-users ("value stacking"). Rules and procedures are in place governing how DERs may participate in the wholesale market while providing distribution capacity and other services to distribution utilities, including clear prioritization in case of reliability events. Rules include appropriate safeguards to avoid cross subsidies between retail and wholesale jurisdiction.	Rule 21 interconnection tariffs are reviewed to address barriers and resolve questions of whether, and if so how, BTM DERs can export to the wholesale grid, and the CPUC, CAISO, and CEC resolve questions of whether and how exporting DERs should receive compensation and participate in wholesale markets.	CAISO and distribution utilities under CPUC oversight resolve questions of whether and how Resource Adequacy Distributed Energy Resource Aggregations (DERAs) can and should participate in CAISO markets, and work to remove barriers, as appropriate, to achieve this vision.	Wholesale Distribution Tariffs (WDTs) for interconnection of DERs to the wholesale grid allow for reasonable cost recovery from DERs seeking interconnection based on cost causation principles while providing those resources with full access to wholesale markets.
7 Action Elements	2 Action Elements	None Defined	1 Action Element	1 Action Element
Theme #1	Theme #2	Theme # 3	Theme # 3	Theme #4

DER Action Plan 2.0

Track Three: Market Integration Action Elements

Big Picture and Wholesale Market Integration of Both BTM & FTM DERs	
Vision Element 3A**: Resource Adequacy DER participation in wholesale markets supports efficient grid operation focused on integration of renewable energy, reduction in system cost, grid reliability, and reduction in GHG emissions.**	**Potential Proceeding / Initiative**
Action Element 1: CPUC reviews rules and tariffs to address barriers and resolve questions of whether, and if so, how exporting BTM DERs can more effectively participate in wholesale markets and qualify for Resource Adequacy (RA).	Resource Adequacy
Action Element 2: In consultation with CAISO, the CEC, and distribution utilities under CPUC oversight, RA rules, demand forecasting methods, and CAISO market rules are reviewed to address barriers and resolve questions of whether, and if so, how Distributed Energy Resource Aggregations and exporting BTM DERs can more effectively participate in wholesale markets and qualify for RA.	Resource Adequacy, IEPR, CAISO
Action Element 3: By 2022, CPUC staff completes an evaluation of energy storage procurement and operational performance measuring achievement of energy storage policy goals and identifying changes that can improve the future operation and procurement of energy storage.	Storage Evaluation Study & Future Storage/DR OIR
Action Element 4: By 2022, CPUC staff issues a report with the results of its inaugural energy storage procurement study. The study scope includes a review of actual wholesale market participation, identification of potential wholesale market-related barriers, a review of policy and market design practices in other jurisdictions, and consideration of shifts in future wholesale market value streams. Study recommendations include market enhancements that could increase opportunities for energy storage resources to participate in wholesale markets in a competitive and efficient manner.	Storage Evaluation Study & Future Storage/DR OIR
Action Element 5: By 2022, the CPUC will hold two public workshops for the energy storage procurement study in which stakeholders can comment on the study's draft findings.	Storage Evaluation Study
Action Element 6: By 2023, the CPUC should consider the findings of the energy storage procurement study in one or more relevant proceedings.	TBD
Action Element 7: By 2026, CPUC staff completes the 2nd evaluation of energy storage procurement as required by CPUC Decision.	TBD

DER Action Plan 2.0

Track Three: Market Integration Action Elements

Multiple Use Applications (MUA) aka "Value Stacking"	
Vision 3B**:** Resource Adequacy DERs receive fair compensation when providing multiple unique services to the wholesale market, distribution grid, and end-users ("value stacking"). Rules and procedures are in place governing how DERs may participate in the wholesale market while providing distribution capacity and other services to distribution utilities, including clear prioritization in case of reliability events. Rules include appropriate safeguards to avoid cross subsidies between retail and wholesale jurisdiction	**Potential Proceeding / Initiative**
Action Element 1. By 2023, the CPUC should determine in a proceeding, in consultation with the CAISO, the priority MUA policy issues that should be resolved to further the MUA framework.	Future Storage/DR OIR, CAISO Initiatives and TBD
Action Element 2. By 2024, the CPUC and CAISO should identify key DER services and prioritization for those services based on reliability implications. The CPUC should identify any modifications or amendments needed to enable DER value stacking.	FutureStorage/DR OIR, CAISO initiatives and TBD

DER Action Plan 2.0
Track Three: Market Integration Action Elements

Wholesale Market Integration of Exporting BTM DERs	
Vision 3C: Rule 21 interconnection tariffs are reviewed to address barriers and resolve questions of whether, and if so how, BTM DERs can export to the wholesale grid, and the CPUC, CAISO, and CEC resolve questions of whether and how exporting DERs should receive compensation and participate in wholesale markets.	**Potential Proceeding / Initiative**
Action Element 1. To be defined.	TBD

Questions to address for Vision Element 3C and 3D:

- What the overlapping jurisdictional issues
- Can/should individual BTM market facing resources go through Rule 21 or Wholesale Distribution Tariff for interconnection?
- What are the primary barriers to interconneciton of exporting DERs?

DER Action Plan 2.0

Track Three: Market Integration Action Elements

Wholesale Market Integration of Exporting BTM DERs	
Vision 3D: CAISO and distribution utilities under CPUC oversight resolve questions of whether and how Resource Adequacy Distributed Energy Resource Aggregations (DERAs) can and should participate in CAISO markets, and work to remove barriers, as appropriate, to achieve this vision.	**Potential Proceeding / Initiative**
Action Element 1. Market rules and market access tariffs are structured to facilitate BTM DERs to efficiently participate in wholesale markets, and to fulfill all requirements of that participation, including the DERA participation model.	Resource Adequacy, Rule 21, and CAISO

DER Action Plan 2.0

Track Three: Market Integration Action Elements

Wholesale Market Integration of FTM DERs	
Vision Element 3E: Wholesale Distribution Tariffs (WDTs) for interconnection of DERs to the wholesale grid allow for reasonable cost recovery from DERs seeking interconnection based on cost causation principles while providing those resources with full access to wholesale markets.	**Potential Proceeding / Initiative**
Action Element 1: The CPUC participates in FERC proceedings and rulemakings related to WDTs for interconnection of DERs to the wholesale grid to represent the interests of California rate-payers and state energy and climate goals affected by FERC policy.	FERC Proceedings

DER Action Plan 2.0
Track Four: DER Customer Programs

The DER Customer Programs track is focused on:

Improving coordination, planning and developing consistent metrics across DER proceedings related to customer programs to maximize their contributions to GHG reductions and other state energy goals.

The goal of the DER Customer Programs track is to:

Enable all customers to effectively manage their energy usage in a manner that ensures equitable participation and distribution of benefits, alignment with evolving rate design and load flexibility, alignment with distribution planning objectives, and alignment with integrated resource planning objectives.

DER Action Plan 2.0

Track Four: DER Customer Programs

Vision Element 4A	Vision Element 4B	Vision Element 4C	Vision Element 4D	Vision Element 4E	Vision Element 4F
Coordinated DER potential studies and other resource- and technology-specific research provides the data needed for full incorporation of DERs into Integrated Resource Planning.	CPUC decisions on budgets and priorities for all ratepayer funded DER programs are informed by metrics and guidelines for cost-effectiveness, program impact, marketing, and other criteria that are consistent across programs and proceedings. Any variation occurs because of necessary differences inherent in technology.	Understanding the impact of DER programs on low- and middle-income ratepayers, DACs, and ESJ communities becomes an inherent part of program design and management.	DER activities in disadvantaged communities are coordinated across proceedings and with the ESJ Action Plan, as well as with other Commission-wide and state-wide efforts.	Data from smart meters and other ratepayer-funded “smart” devices is available for research purposes while retaining privacy protections and is used to improve program design and marketing.	End-of-life management programs are in place to ensure the effective collection, safe transport, and environmentally responsible recycling or re-use of DERs at end of life.

DER Action Plan 2.0
Track Four: DER Customer Programs

Vision Element 4A
Coordinated DER potential studies and other resource- and technology-specific research provides the data needed for full incorporation of DERs into Integrated Resource Planning.

Action Elements 4 A
1. By 2022, the CPUC should prioritize which DER technology types should be studied as candidate resources for Integrated Resource Planning. For behind-the-meter DERs, the CPUC will coordinate with the CEC to ensure appropriate alignment with the demand forecast.
2. By 2023, the CPUC should develop a plan for additional combined or individual resource studies to provide DER data needed for IRP.

DER Action Plan 2.0

Track Four: DER Customer Programs

Vision Element 4B
CPUC decisions on budgets and priorities for all ratepayer funded DER programs are informed by metrics and guidelines for cost-effectiveness, program impact, marketing, and other criteria that are consistent across programs and proceedings. Any variation occurs because of necessary differences inherent in technology.

Action Elements 4B
1.By 2022, the CPUC should consider whether and how to best conduct a programmatic review of all DER customer programs. The objective of the review is to assess, categorize, and compare DER programs and recommend programmatic changes to further align and achieve state goals and maximize ratepayer benefits.
2. By 2023, the CPUC should adopt DER cost-effectiveness protocols, similar to the existing Demand Response Cost-Effectiveness Protocols, that apply to all DER programs.
3. During 2023 and 2024, the CPUC should use the results of a programmatic review to develop other common metrics and guidelines in addition to cost-effectiveness.
4.During 2023 and 2024, the CPUC should use the results of a programmatic review to determine whether changes are needed to the portfolio of ratepayer funded DER programs to achieve state goals and maximize ratepayer benefits. Such changes could include combining complementary programs or prioritizing based on integrated resource planning results.

DER Action Plan 2.0

Track Four: DER Customer Programs

Vision Element 4C
Understanding the impact of DER programs on low- and middle-income ratepayers, DACs, and ESJ communities becomes an inherent part of program design and management.

Action Element 4C
1. By 2023, the CPUC should consider whether to develop guidelines and metrics that can be used across DER programs to understand and evaluate the impact of all DER programs, whether or not they intentionally target DACs, or low- and middle-income ratepayers, to be done before program approval and as part of program evaluation

DER Action Plan 2.0

Track Four: DER Customer Programs

Vision Element 4D
DER activities in disadvantaged communities are coordinated across proceedings and with the ESJ Action Plan, as well as with other Commission-wide and state-wide efforts.

Action Elements 4D
1. By 2023, the CPUC should consider a framework for mutual eligibility between programs that have similar eligibility criteria and/or are seeking to expand access to similar technologies, with the goal of creating mutual eligibility or auto enrollment in all programs that focus on disadvantaged communities.
2. By 2023, the CPUC should consider issuing rules for standardized data collection for all DAC programs.
3. During 2023 and 2024, the CPUC should use the results of a programmatic review to improve program design and organization across all DER customer programs, possibly combining similar programs.

DER Action Plan 2.0

Track Four: DER Customer Programs

Vision Element 4E
Data from smart meters and other ratepayer-funded “smart” devices is available for research purposes while retaining privacy protections and is used to improve program design and marketing.

Action Elements 4E
1. Starting in 2021, in coordination with the Grid Infrastructure track, CPUC and CEC staff will coordinate data collection, storage, and analytical efforts related to smart meter data.
2. By 2022, the CPUC should consider updating existing rules and requirements for the release of smart meter data, and best practices for use of this data to improve customer adoption of DERs.
3. By 2022, the CPUC should consider adopting similar rules and requirements for the release of data from smart devices that receive incentives from ratepayer funds.

DER Action Plan 2.0
Track Four: DER Customer Programs

Vision Element 4F
End-of-life management programs are in place to ensure the effective collection, safe transport, and environmentally responsible recycling or re-use of DERs at end of life.

Action Elements 4F
1. By 2024, the CPUC should consider whether to adopt measures to ensure photovoltaic panels deployed through CPUC-overseen programs are effectively and responsibly recycled or re-used at end-of-life, considering recommendations made by the interagency working group paper *Addressing End-of-Life Management of Photovoltaic Panels*.
2. By 2024, the CPUC should consider whether to adopt measures to ensure electric vehicle and energy storage batteries deployed through CPUC-overseen programs are effectively and responsibly recycled or re-used at end-of-life, considering recommendations made by the interagency working group paper *Addressing End-of-Life Management of Electric Vehicle and Energy Storage Batteries*.
3. [Placeholder for potential action element regarding working with CARB to improve the end-of-life disposal of devices such as heat pumps that use refrigerants or other high global warming potential gases.]

Order Instituting Rulemaking to Modernize the Electric Grid for a High Distributed Energy Resources Future

Tribal Consultation Workshop | September 16, 2021

Rob Peterson, Energy Division

California Public Utilities Commission

We Anticipate a High-Penetration DER Future

"This OIR anticipates a high-penetration DER future and seeks to determine how to optimize the integration of millions of DERs within the distribution grid while ensuring affordable rates."

– High DER OIR at p. 9

"This OIR neither seeks to set policy on the overall number of DERs nor does it seek to increase or decrease the desired level of DERs. This OIR focuses on preparing the grid to accommodate what is expected to be a high DER future and capture as much value as possible from DERs as well as mitigate any unintended negative impacts."

– High DER OIR at p. 10

DRP and IDER Proceeding Successor (R.21-06-017)

The new proceeding will:

- Address unresolved and ongoing issues from the Distribution Resources Plans (DRP) proceeding (R.14-08-013) and Integrated Distributed Energy Resources (IDER) proceeding (R.14-10-003)
  - Note: Unresolved issues associated with the IDER Avoided Cost Calculator are expected to be scoped into a separate proceeding.

In addition, the new proceeding intends to:

- Enable swift evolution of grid capabilities and operations to integrate solar, storage, EVs/EVSE and other DERs to meet the State's 100 percent clean energy goals;
- Improve distribution planning, including charging infrastructure forecasting to support cost effective and widespread TE; and
- Optimize grid infrastructure investments by facilitating community input about planned developments, DER siting plans, and resiliency needs.

2021 Milestones

- July: OIR issued, opening proceeding R.21-06-017
- Aug: Opening comments due and Prehearing Conference
- Sept (9/22): Energy Division Workshop with CEC
  - Proceeding scope and schedule refinement and agency coordination plans
- Sept: Consultant selected (proposals were submitted 7/30)
- Oct (10/7): Reply comments due
- Nov: Scoping Memo (scope and schedule finalized)
- Nov: Final Work Plan for new consultant

Organized Under Three Tracks

1

Distribution System Operator (DSO) Roles and Responsibilities

- Long-term grid vision
- Grid architecture
- Investigation of DSO models

2

Distribution Planning, Data Portals, Community Engagement, and DER Integration

- IOU Distribution Planning Processes
- Data Sharing and Transparency
- Distribution Investment Deferral Framework (DIDF)

3

Smart Inverter Operationalization, Grid Modernization, and General Rate Case Alignment

- Business Use Cases for Smart Inverters
- DER Dispatchability
- Smart Grid Investment Planning

Consultant Reports and Staff Proposals by Track

T1: White Paper for Future Grid Study

T2: Distribution Investment Deferral Framework (DIDF) Guidelines

a. documenting existing DIDF requirements)

T2: Phases 1 and 2 Electrification Impacts on Distribution Planning Reports

T3: Smart Inverter Operationalization Working Group Report

T3: Smart Inverter Operationalization Staff Proposal

T3: Grid Modernization Plan Improvement and GRC Alignment Staff Proposal

T2: Data Portal Improvement Technical Report

T2: DPP Guidelines Staff Proposal

a. Supersede DIDF Guidelines
b. Establish Electric Utility Distribution Planning Process improvements
c. Memorialize electrification impacts and data portal improvement report findings as relevant to distribution planning process development

T1: Future Grid Study and En Banc

Note: Most proceeding deliverables would include workshops. One En Banc is anticipated (2024).

Proceeding Tracks and Overview Schedule (36 Months), OIR Dates

	2022				2023				2024			
	2022-Q1	2022-Q2	2022-Q3	2022-Q4	2023-Q1	2023-Q2	2023-Q3	2023-Q4	2024-Q1	2024-Q2	2024-Q3	2024-Q4
T1	White Paper and Workshop										Consultant Report and En Banc	**Proposed Decision**
T2		DIDF Guidelines circulated for comment	Phase 1 Electrification Impacts Report and Workshop	DPP Improvement Workshop	Phase 2 Electrification Impacts Report and Staff Proposal with Workshop			DRP Data Portals Improvement Report and Workshop	DPP Staff Proposal and Workshop	**Proposed Decision**		
T3	SIO Working Group Starts (one year)					SIO Working Group Report SIO Staff Proposal and Workshop	Grid Mod and GRC Alignment Staff Proposal and Workshop	**Proposed Decision**				

RFP for Distribution Planning and DER Technical Services

- Consultant will complete data-driven analyses to provide actionable findings that inform policy relevant to decision making with respect to improving IOU distribution planning outcomes
- CEC coordination and data sharing expectations are built into the RFP
- For more information about the list of anticipated reports and staff proposals described on the previous slide, refer to the detailed Request for Proposals (RFP) document for RFP #20NS1109 at Cal eProcure: https://caleprocure.ca.gov/event/8660/0000019832

For more information:

- **Supervisor:** Gabriel.Petlin@cpuc.ca.gov
- **High DER Proceeding and Consultant Support:** Rob.Peterson@cpuc.ca.gov
- **DIDF, Data Portals, DER Action Plan:** Keishaa.Austin@cpuc.ca.gov

Break

Until 10:45

Panel of Tribal Representatives

Moderated by Mary Claire Brown – Advisor to Commissioner Houck

Panelists:

Jana Ganion, Blue Lake Rancheria Tribe

Linnea Jackson, Hoopa Tribe

Pilar Thomas, Partner at Quarles & Brady LLP

Michael Gerace, Yurok Tribe

Open Discussion

- What DER-related issues or challenges does your tribe face?
- Do you feel your tribe's energy needs and planned developments are adequately integrated into utility distribution system planning? If not, how would you improve integration?
- Do you have any preliminary input on the DER Action Plan or High DER Rulemaking?

Future opportunities to provide feedback on DER Action Plan and High DER Rulemaking

DER Action Plan 2.0

- October 8, 2021: Deadline for submission of informal written comments on the draft DER Action Plan 2.0 (15 page maximum)
- December 2021 (tentative): Commission endorsement of the final plan

High DER Proceeding

- September 22, 2021: High DER Scoping Workshop (details available on the CPUC Daily Calendar)
- October 7, 2021: Deadline for parties to submit formal reply comments
  - Members of the public may submit informal comments at any time at this link: https://apps.cpuc.ca.gov/apex/f?p=401:65:0::NO:::
- November 2021 (tentative): Comr Houck issues Scoping Memo finalizing scope and schedule

THANK YOU!