
December 17, 2025

Advice Letter No. 5707-E

(Southern California Edison Company U 338-E)

Advice Letter No. 4770-E

(San Diego Gas & Electric Company U 902-M)

Advice Letter No. 7783-E

(Pacific Gas and Electric Company U 39-E/G/M)

Advice Letter No. 6570-G

(Southern California Gas Company U 904-G)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
ENERGY DIVISION

SUBJECT: Joint Investor-Owned Utilities (IOUs) Advice Letter to Propose
Region-Specific Heat Risk Protections

PURPOSE

Pursuant to Ordering Paragraph (OP) 4 of Decision (D.) 25-06-012, Southern California Edison Company (SCE), on behalf of itself, Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), (collectively, the Electric IOUs) and Southern California Gas Company (SoCalGas)¹ submits this Tier 3 Advice Letter (AL), to propose an approach for adjusting the temperature thresholds that require halting disconnections, taking into account relative heat risks.

BACKGROUND

In Phase I of the Disconnections OIR Rulemaking (R.) 18-07-005, the Commission adopted statewide extreme weather disconnection protections. On June 16, 2020, the Commission issued D.20-06-003, which established that residential electric customers may not be disconnected for non-payment when local temperatures above

¹ Although OP 4 of D.25-06-012 also names SoCalGas, as a gas utility SoCalGas is only subject to the current 32°F cold weather protection threshold under CoL 8 of D.20-06-003. For the same reason, the Electric IOUs are limiting this submission to electric Advice Letters only.

100°Fahrenheit (F) or below 32°F are forecast within a 72-hour look-ahead period.² This rule made permanent an interim moratorium on disconnections during extreme hot or cold weather from D.18-12-013, reflecting the Commission's recognition that loss of power during temperature extremes poses serious public health risks. Furthermore, the Commission permitted the IOUs to continue using their own internal weather monitoring systems to meet the requirement.³

On August 14, 2024, in light of increasing heat waves, The Utility Reform Network (TURN) filed an Emergency Motion in R.18-07-005, urging the Commission to strengthen disconnection protections during "extreme heat" events. TURN argued that the existing 100°F statewide threshold was too high and not tailored to local climate norms, leaving many customers unprotected during dangerous heat conditions.⁴ On October 14, 2024, the Commission issued a ruling denying TURN's emergency motion. The ruling acknowledged TURN's concerns but found that no emergency warranting immediate rule changes had been demonstrated.

On October 30, 2024, the Assigned Commissioner issued an Amended Phase 2 Scoping Memo and Ruling in R.18-07-005, expanding the proceeding's scope to include "disconnection protections under extreme weather conditions."⁵ The Amended Scoping Memo formally added TURN's extreme heat issues to Phase 2 and set forth a process to develop the record.

On June 12, 2025, the Commission issued D.25-06-012, addressing, among other topics, the extreme heat protection proposals. In D.25-06-012, rather than immediately adopting specific temperature thresholds or specific heat risk measures, the Commission set in motion a collaborative process to refine the protections. The decision acknowledges that additional disconnection safeguards are needed for extreme heat events and directs utilities to develop those measures in coordination with interested parties. Ordering Paragraph 4 of D.25-06-012 requires the IOUs to jointly submit a Tier 3 Advice Letter within six months of the decision proposing adjusted "heat-triggered" disconnection thresholds.

DISCUSSION

A. Current Extreme Weather Protections

D.20-06-003 prohibits energy utilities from shutting off residential electricity when temperatures are forecasted to exceed 100°F or drop below 32°F within a 72-hour window. Utilities are permitted to rely on their own internal weather prediction systems for this determination. These measures came into effect after the COVID-19 customer

² OP 1(f) of D.20-06-003.

³ *Id.*

⁴ TURN's Emergency Motion To Modify Weather-Related Disconnection Protections to Better Address "Extreme Heat" Health and Safety Risks, filed August 14, 2024.

⁵ Amended Scoping Memo, p. 4.

protections were lifted on July 1, 2021.⁶ Each of the IOUs implemented these weather protections according to their respective operational requirements and based on their own internal weather forecast systems and methodologies.

B. Working Group Process

The IOUs were directed to develop a proposal to lower the temperature or other relevant thresholds that trigger disconnections suspensions, in collaboration with the Public Advocates Office at the California Public Utilities Commission (Cal Advocates), TURN), Center for Accessible Technology (CforAT), and National Consumer Law Center (NCLC), and any other interested parties to the proceeding. Accordingly, three stakeholder working group meetings were held, facilitated by the IOUs. The IOUs shared multiple proposal options for consideration and received feedback from working group participants.

Event	Date
Working Group Meeting #1	8/28/2025
Working Group Meeting #2	10/10/2025
Working Group Meeting #3	11/12/2025

A detailed summary of the working group meetings and party positions can be found in Attachment A. Additionally, informal feedback and meeting materials submitted by the working group members have been included within Attachments B, C and D:

Party Feedback Received Following Working Group Meeting #2		Date Submitted
Attachment B-1	CalAdvocates Feedback on Extreme Heat Protections Proposals from the Second Working Group Meeting, October 10, 2025	10/20/25
Attachment B-2	CforAT & NCLC Feedback on Extreme Heat Proposals from Extreme Weather Protections Working Group Meeting 2 October 20, 2025	10/20/25
Attachment B-3	Informal Feedback of The Utility Reform Network on IOU Proposal for Extreme Heat Disconnections Protections	10/20/25

⁶ Per OP 1 of D.20-06-003, heat protections were required to be in place once the Covid-19 customer protections ended. Subsequently, Resolution M-4849 ordered the end of these protections was ordered as of July 1, 2021.

Attachment B-4	Informal Response of the Utility Consumers' Action Network on Modifying Existing Temperature Thresholds for Disconnections Including the IOUs' and TURN's Proposals	10/20/25
Attachment B-5	UCAN's Extreme Heat Protections Proposal	11/07/25

Party Feedback Received Following Working Group Meeting #3		Date Submitted
Attachment C-1	CforAT & NCLC Feedback on Extreme Heat Proposals from Extreme Weather Protections Working Group Meeting #3 November 17, 2025	11/17/25
Attachment C-2	TURN Informal Feedback on 11/12/25 Working Group Meeting	11/17/25
Attachment C-3	UCAN's Feedback to Working Group 3 Meeting	11/17/25

C. Evaluation of Relative Heat Risk Measures

The proposal must consider the relative heat-risk approach raised by TURN and “shall identify regions in each Large IOU’s territory that should have a lower temperature threshold to suspend disconnections [and] then propose region-specific thresholds.”⁷ Furthermore, the Commission provided guidance on seeking proposals that meet the following criteria: “[P]roposals that have a targeted focus on reducing customers’ relative heat exposure, that rely on data and tools that are proven and consistently available, and minimize cost and burden of implementation.”⁸ Finally, the Commission clarified that the proposal does not have to be a consensus among all parties and that the advice letter should identify areas of agreement and disagreement, and permit stakeholders to lay out their position.⁹

The Electric IOUs evaluated multiple measures of heat risk, including publicly available indices of heat risk and the option of creating an IOU internal measure. As described in Attachment A, the working group process initially focused on a heat protection calculation developed by the Electric IOUs and based on an approach using the 98th percentile of heat values. This approach would require daily calculations of the disconnection protection threshold. The IOUs developed this approach due to concerns regarding the reliability and accessibility of existing measures, specifically, the experimental nature of the National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS) HeatScore, which was not guaranteed to be available in the future, and the early development stage for the California-specific CalHeatScore.

⁷ D.25-06-012 at 35.

⁸ *Id.*

⁹ *Id.*

The NWS HeatScore was the tool proposed for use in TURN's original motion,¹⁰ but the IOUs' original concerns about HeatRisk's availability and reliability¹¹ have not been resolved.¹² For the CalHeatScore tool, the Electric IOUs confirmed that the tool will be permanently available with long-term funding provided as per Assembly Bill (AB) 2238. However, the CalHeatScore tool, having launched only in May 2025, does not have historical data available for assessment and has not yet developed a system for automated data exchange, complicating its near-term integration into IOU billing systems.

In addition, the Electric IOUs compared different aggregation levels for the region-specific thresholds. In general, larger geographic areas (e.g., forecast zones or counties) tend to under-protect hotter areas and over-protect more moderate areas due to mean-based bias in the protection threshold. However, at smaller aggregation levels, differences become less apparent. To inform the IOUs assessment of heat protection alternatives, SCE conducted a sample comparison of its current city-level approach with a zip-code level approach and found that the difference in customer-days protected was very close between both methods. Therefore, the Electric IOUs concluded that heat risk measures at smaller geographic areas of aggregation were preferable, but that the specific aggregation may not matter as much as the size of the area covered. The asymmetric protection due to the mean-bias appears to be sufficiently addressed at the zip code level, due to the stronger correlation among temperature points in close geographic proximity.

Finally, the Electric IOUs evaluated measures with regards to the cost and burden of implementation, which depends on the extent of change required for each IOU, compared to current system implementation and processes, as well as the complexity of internal calculations versus externally available 'ready-to-use' measures of heat risk.

D. Overview of the Joint Electric IOUs' proposal

1. The Joint Electric IOUs Propose the CalHeatScore as a Simple, Single-Measure Option for Relative Heat Risk Protection

With input from the Working Group, the Joint Electric IOUs evaluated multiple options for Relative Heat Risk Protections. Despite initial reservations about the newness and lack of a data interchange for CalHeatScore, the Joint Electric IOUs propose the adoption of CalHeatScore as the primary tool for heat protection to address the Commission's requirements for targeted and regionally tailored heat risk protections. The State of California has made a significant investment in the development of the CalHeatScore tool. Building on this foundation will ensure that the CalHeatScore

¹⁰ TURN's Emergency Motion at 10.

¹¹ Joint Response to TURN's Emergency Motion, filed August 29, 2025.

¹² As of December 2025, the NWS HeatRisk webpage continues to display a message describing the HeatRisk information as experimental, noting "This page is experimental to provide a period of time for customers to provide feedback to NWS." See <https://www.wpc.ncep.noaa.gov/heatrisk/>

delivers maximum value. It will enhance statewide resilience efforts, by aligning IOU disconnections protections with other heat protections efforts by local and state government agencies.

The tool is specific to California, using locally relevant data returning heat risk scores at the zip code aggregation level reflecting regional differences in heat risk. In addition, leveraging a third-party tool is cost-effective because it minimizes the need for internal data processing. The CalHeatScore tool therefore meets all technical requirements of D.25-06-012. It poses some challenges for timely implementation by the May 1, 2026 deadline,¹³ as there is not yet a fully deployed data interchange system. However, given the imminent implementation of such a system by summer 2026, the Joint Electric IOUs maintain that the advantages of adopting CalHeatScore outweigh the risk of a potential short delay in deployment.

CalHeatScore was developed pursuant to Assembly Bill (AB) 2238 by the California Office of Environmental Health Hazard Assessment (OEHHA) to provide a heat risk ranking system available to the public by January 1, 2025. The CalHeatScore index ranks heat risk by analyzing historical data that connects climate patterns to impacts on human health throughout California. This approach uses specific climate and health datasets to measure these relationships at the zip code level. Apparent temperature (heat index) ranges identified based on these relationships are then used to assign scores that reflect varying degrees of heat-related health risk.¹⁴

CalHeatScore is a metric that quantifies relative heat exposure across different regions, allowing for the establishment of region-specific thresholds for disconnection suspensions. CalHeatScore offers a simple, easily implementable index that summarizes heat risk for each California zip code into a single measure. CalHeatScore incorporates maximum apparent temperature, commonly known as heat index. This measure “quantifies how current temperature conditions feel to the human body”¹⁵ which are a function of both air temperature and humidity. CalHeatScore uses the NOAA NWS definition of apparent temperature.¹⁶ On the health data side, CalHeatScore employs data on emergency department visits due to heat related illness from the California Department of Health Care Access and Information (HCAI). The heat-health models underlying CalHeatScore link the highest apparent temperature recorded each day to the number of emergency department visits that occur on that day at the zip code level. Based on the model’s results, a Relative Risk value is determined, which indicates how the rate of emergency department visits for a specific day and zip code differs from the typical rate under average weather conditions.

The Electric IOUs propose halting disconnections when the 72h forecast CalHeatScore index reaches level 3 or higher, designating a “high” impact level. By implementing a

¹³ See D.25-06-012 at 35.

¹⁴ See CalHeatScore Methods Documentation, *available at* <https://calheatscore.calepa.ca.gov/sites/default/files/2025-02/methods02032025.pdf>

¹⁵ *Id.*, p. 2

¹⁶ *Id.*, p. 3

policy to protect customers from service disconnection whenever the CalHeatScore reaches a level 3 (“high impact”), the Electric IOUs can ensure that those most at risk from heat are prioritized, while also minimizing the cost and administrative burden associated with more complex or less reliable systems. Level 3 on the CalHeatScore scale is the appropriate trigger for disconnection protections because it reflects conditions that pose a significant health risk. Importantly, the 72-hour look-ahead period ensures that protections extend to adjacent days that likely register at Levels 2 or even 1, thereby providing additional coverage without lowering the threshold. Moving the trigger to Level 2 would result in excessive activations, capturing many “mild impact” days (Level 1) and creating operational and cost burdens as well as further arrears increases without a commensurate increase in public health benefit. Level 3 therefore strikes the right balance between robust customer protection and practical implementation.

Because CalHeatScore itself incorporates not just absolute temperature, but apparent temperature, CalHeatScore can be used as a single-measure index of heat risk. CalHeatScore on its own provides a comprehensive and reliable assessment of relative heat risk, effectively capturing the nuances of local climate and health impacts without the need to supplement it with separate absolute temperature thresholds or additional metrics. By relying exclusively on CalHeatScore, the proposal ensures that protection measures are both targeted and responsive to region-specific conditions, eliminating the complexity that could arise from layering multiple measures.

This approach streamlines implementation and creates differentiated protections for customers, as CalHeatScore is specifically designed to reflect varying degrees of heat-related health risk at the zip code level. Therefore, no further overlays or supplementary criteria are necessary; CalHeatScore alone is sufficient to guide regionally tailored heat risk protections. This approach aligns with the Commission’s guidance by leveraging an effective, data-driven tool that supports equitable and practical implementation across diverse service territories. Using CalHeatScore will generate a custom threshold tied to each zip code’s own climatological normals.

2. CalHeatScore Implementation Timeline and Considerations

While CalHeatScore offers a robust and equitable foundation for regionally tailored heat risk protections, it is important to note that the Application Programming Interface (API) for the tool may not be fully available or operational by the Commission’s required implementation date of May 1, 2026.¹⁷ On October 31, 2025, OEHHA informed SCE via email that it is developing an API and expects to make it available in summer 2026. On November 25, 2025, OEHHA informed SCE that it had published an initial draft, proof-of-concept API on the CA State Geoportal,¹⁸ with an official draft API to be released in early 2026.

¹⁷ See D.25-06-012 at 35.

¹⁸ Available at <https://gis.data.ca.gov/datasets/OEHHA::california-zip-codes-7-day/about>

The Electric IOUs are currently assessing the draft API and plan to continue to collaborate with OEHHA to ensure that the integration process aligns with the technical requirements and timelines for each utility. This partnership aims to facilitate early access to test data, streamline system modifications, and address any operational challenges as they arise. By coordinating closely during the API's development and rollout phases, the Electric IOUs will be better positioned to update billing systems, validate data flows, and train staff for consistent and accurate implementation. Ultimately, this proactive approach supports a timely and effective transition to CalHeatScore-based heat protections, while accommodating the unique system needs of each IOU.

Once the API is fully available and ready for production, the development and integration of CalHeatScore into utility operations necessitates additional time for billing system updates deployment, validation and testing, and staff training to promote accurate and consistent application. Depending on each Electric IOU's system requirements and the specifics of the API, this will take variable amounts of time. More details can be found in the Section F. on Implementation.

If the API is not fully available at the time one or more of the Electric IOUs need it to meet the May 1, 2026 implementation timeline, the Electric IOUs intend to request an adjustment to the implementation schedule, by submitting an extension request to the Executive Director of the CPUC in accordance with General Order 96-B. Any extension would likely be a matter of months, providing sufficient time for CalHeatScore to be fully operational and for the benefits of this data-driven approach to be realized without compromising reliability or effectiveness.

While uncertainty remains regarding the timing of the API's availability, it is important to note that development of an internal Electric IOU methodology could likewise not commence until Advice Letter approval and would require substantially more effort than adopting an existing solution, thereby introducing its own delays. In practice, neither the internally developed 98th percentile approach nor the CalHeatScore solution is likely to meet the Commission's May 1 deadline, given that the start of development work is tied to the approval date of this Advice Letter.

Given the similar timelines, CalHeatScore is the better solution, as it is a simple, single measure index, ties in with other statewide heat protection measures, and avoids costly ongoing manual maintenance and control work for the Electric IOUs. Accordingly, the Commission could, through its Resolution, elect to modify the schedule so that implementation begins upon the latter of the CalHeatScore API becoming available or the approval of the Tier 3 Advice Letter, followed by the projected implementation period for each Electric IOU.

In a best case scenario, the Electric IOUs project the following feasible timeline:

February 2026	Commission issues proposed resolution
March 2026	Approval of Tier 3 Advice Letter
April 2026	IOUs begin shift to zip code approach and test the draft API, if available
May 2026	CalHeatScore API fully available
August 2026	Earliest date one or more IOUs could implement
November 2026	Latest date all IOUs implement (would shift if API and/or Commission decision on Tier 3 AL are delayed)

3. Additional features

As described above, CalHeatScore provides a single score with the forecasted extreme heat risk conditions between 0 (low) and 4 (severe) and given the incorporated weather and health data, can be used as a stand-alone method for implementing regionalized heat protections. However, there are a few additional features of the proposed heat protection method that are worth highlighting.

CalHeatScore provides look-ahead estimates of the score in upcoming days. As such, it enables the Electric IOUs to maintain the established 72-hour lookahead period currently in effect pursuant to D.20-06-03. The lookahead period stops residential disconnections before a heat wave to ensure customers have power during extreme heat. The Electric IOUs propose to maintain the 72-hour lookahead period, in compliance with OP 1(f) of D.20-06-003. In practice, this will mean that on a given day, disconnection protections will be in place in a zip code, if the CalHeatScore value for either the current day, or any of the next three days is at level 3 or above.

The Electric IOUs also considered the possibility that the CalHeatScore index may be temporarily unavailable due to unexpected circumstances. In that circumstance, the IOUs propose to keep the current maximum temperature threshold of 100° F in place as a fallback. In such circumstances, the Joint Electric IOUs should be considered to be compliant with heat protection rules.

E. Implementation

1. SCE

SCE's extreme weather protection process is currently not integrated into the automated billing system. Instead, it relies on executing daily scripts that identify eligible accounts based on protection criteria. These outputs are then fed into a semi-manual

workflow, where additional validation and processing steps are performed before removing the customers in protected areas from the population eligible for disconnection for that day. This approach ensures compliance but requires ongoing coordination between system operations and manual review teams.

Under SCE's current implementation of the heat protections, maximum heat and cold temperature limits are at the city level. Each morning, an automated process retrieves two NOAA forecast files that provide a seven-day weather outlook. Using a city's latitude and longitude, NOAA supplies the forecasted daily high and low temperatures. The data is then processed to extract these values by both city and day, and additional steps update the customer records with "no cut" dates.

The proposed modifications involve transitioning to CalHeatScore Level 3, setting a maximum temperature threshold of 100°F as a backstop, and maintaining cold-weather protection at 32°F. Since CalHeatScore functions at the ZIP code level, it is necessary to adjust the current cold-weather protocol to operate based on ZIP codes rather than cities. This change will unify heat and cold protections under a single aggregation level, thereby reducing complexity and minimizing risk by eliminating the need for separate processes.

To expedite the deployment of CalHeatScore, SCE plans to switch to a zip-code based approach for both extreme heat and cold protections once the Advice Letter is approved, in order to prepare for expedient implementation of the new heat protection method once the CalHeatScore API becomes available. The API is expected to streamline data ingestion compared to a percentile-based method and enable more accurate targeting of protective measures. Furthermore, temperature data falling below 32°F or exceeding 100°F will be consolidated into a single composite score to reduce product duplication and simplify reporting. During the initial phase, existing logic for the 100°F maximum temperature will remain in place as preparations are made for API-driven automation, with full automation to be implemented following finalization of the API specifications.

Special considerations for this initiative include an initial increase in manual work during the transition to ZIP code-level exclusions, as well as technological dependencies—with API readiness being critical and the project timeline reliant on CalHeatScore API availability. Integration with existing processes will necessitate re-engineering efforts.

The implementation timeline begins upon approval of the advice letter. Leveraging current NOAA data, development of the ZIP code-based process will commence upon approval of the AL, even if the API is not immediately available. This phase is expected to take about one to two months. Once the API is fully available, efforts will focus on the integration of CalHeatScore API, the finalization of the automation logic, system testing, and preparation for stakeholder training. Unless there are unexpected issues with API integration, SCE expects to be able to fully deploy the API-driven solution within 3 to 4 months of API availability, provided the advice letter is approved by the Commission by the time the API becomes available.

While it is challenging to provide a precise timeframe for full deployment prior to fully reviewing the APIs, implementing the CHS APIs is anticipated to be more straightforward than adopting a percentile-based approach, due to avoiding set-up, testing, and quality control of internal calculations. Budget projections show minimal incremental costs, as internal teams will manage process updates, and no significant IT expenditures are expected for SCE, due to the extreme weather protection process not being directly integrated into the automated billing system.

2. SDG&E

SDG&E's system currently sets maximum and minimum temperature thresholds for the 8 Area and 241 Sub-area regions. Each Sub-area is linked to the ZIP code GIS coordinates. The 241 sub areas in our territory covers a more granular area compared to the approximate 111 zip codes. Using a 72-hour forecast, SDG&E identifies potential disconnection moratoriums during extreme weather conditions (temperatures above 100°F or below 32°F). An internal weather report is reviewed daily to determine whether a moratorium should be applied for the relevant dates.

The proposed update would incorporate new data from CalHeatScore Level 3 and require enhancements to the back-end layout and format to support and validate the new dataset. Additional time will be needed to test the data to ensure input values produce the expected output. From an implementation standpoint, SDG&E estimates approximately six months from the time the CalHeatScore Level 3 data is production ready (i.e. the CalHeatScore API becomes available), to complete evaluation, testing and deployment. Budget projections reflect minimal incremental costs as SDG&E can utilize the existing sub-area and ZIP code GIS coordinates structure to code into the system.

Overall, one solution to lower temperature thresholds is recommended over multiple solutions as doing so minimizes duplicative costs and implementation.

3. PG&E

PG&E's current system sets maximum heat and cold temperature limits at the city level. Each morning, an automated process retrieves weather model forecast files that provide a seven-day temperature forecast. These forecast points are then translated to cities and populated into a Structured Query Language (SQL) table. This table feeds an internal web page that lists all of the cities forecasted to meet either a high equal to or greater than 100°F or a low equal to or less than 32°F. The operations teams then reference this webpage to understand where restrictions are in place, suspending disconnections accordingly.

The proposed modifications will require transitioning to CalHeatScore Level 3 as a new threshold, setting a maximum temperature threshold of 100°F as a backstop, and maintaining cold-weather protection at 32°F. Since CalHeatScore functions at the ZIP

code level, the zip codes for each city within PG&E territory will need to be identified. PG&E's system will then need to import zip code data (based on CalHeatScore forecasts through the CalHeatScore API when available), reference the CalHeatScore value within the SQL and web page, and identify locations where the forecasted CalHeatScore is 3 or greater to ensure appropriate protections are applied.

PG&E anticipates that there will be an increase in manual work for the development of connection and automation with the new CHS API, translating the cities to zip codes for the purpose of pulling CalHeatScore values, and work to rescheme SQL tables and the web site final product. All changes will need to be quality controlled and tested before being moved to production.

PG&E estimates that it will take up to 6 months after the CalHeatScore becomes available to implement the new heat protections.

COST RECOVERY

Pursuant to D.25-06-012, Conclusion of Law (COL) 9, the IOUs may record the incremental costs incurred to implement this decision to their disconnection memorandum accounts.

TIER DESIGNATION

Pursuant to GO 96-B, and OP 4 of D.25-06-012, SCE submits this advice letter with a Tier 3 designation.

EFFECTIVE DATE

Pursuant to General Order (GO) 96-B, this Tier 3 advice letter will become effective upon Commission Resolution.

NOTICE

Anyone wishing to protest this advice letter may do so only electronically. Protests must be received no later than 20 days after the date of this advice letter. Protests should be submitted to the CPUC Energy Division at:

E-mail: EDTariffUnit@cpuc.ca.gov

In addition, protests and all other correspondence regarding this advice letter should also be sent electronically to SCE, PG&E, SoCalGas and SDG&E on the same date it is emailed to the Commission to the attention of:

For SCE:

Connor Flanigan
Vice President, State Regulatory Operations
Southern California Edison Company
E-mail: AdviceTariffManager@sce.com

Adam Smith
Director, Regulatory Relations
Southern California Edison Company
c/o Karyn Gansecki
E-mail: Karyn.Gansecki@sce.com

For PG&E:

Attn: Sidney Bob Dietz II
Director, Regulatory Relations
c/o Megan Lawson
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In accordance with General Rule 4 of GO 96-B, SCE is serving copies of this advice letter to SCE's GO 96-B and R.18-07-005 service lists. Address change requests to the GO 96-B service list should be directed by electronic mail to AdviceTariffManager@sce.com or (626) 302-6838. For changes to all other service lists, please contact the Commission's Process Office at (415) 703-2021 or by electronic mail at Process_Office@cpuc.ca.gov.

To view other SCE advice letters submitted with the Commission, log on to SCE's web site at <https://www.sce.com/regulatory/regulatory-information/advice-letters>.

For questions, please contact Miriam Fischlein at (626) 302-0233 or by electronic mail at Miriam.Fischlein@sce.com.

Southern California Edison Company

/s/ Connor Flanigan
Connor Flanigan

CF:mf:lp



ADVICE LETTER SUMMARY

ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Southern California Edison Company (U 338-E)

Utility type:

☒ ELC ☒ GAS ☐ WATER
☐ PLC ☐ HEAT

Contact Person: Darrah Morgan

Phone #: (626) 302-2086

E-mail: AdviceTariffManager@sce.com

E-mail Disposition Notice to: AdviceTariffManager@sce.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 5707-E, 4770-E, 7783-E, 6570-G

Tier Designation: 3

Subject of AL: Joint Investor- Owned Utilities (IOUs) Advice Letter to Propose Region-Specific Heat Risk Protections

Keywords (choose from CPUC listing): Compliance

AL Type: ☐ Monthly ☐ Quarterly ☐ Annual ☒ One-Time ☐ Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:
Decision 25-06-012

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL:

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested? ☐ Yes ☒ No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? ☒ Yes ☐ No

Requested effective date:

No. of tariff sheets: -0-

Estimated system annual revenue effect (%):

Estimated system average rate effect (%):

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: None

Service affected and changes proposed¹:

Pending advice letters that revise the same tariff sheets: None

¹Discuss in AL if more space is needed.

Protests and correspondence regarding this AL are to be sent via email and are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

California Public Utilities Commission
Energy Division Tariff Unit Email:
EDTariffUnit@cpuc.ca.gov

Contact Name: Connor Flanigan
Title: Vice President, State Regulatory Operations
Utility/Entity Name: Southern California Edison Company

Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email: AdviceTariffManager@sce.com

Contact Name: Adam Smith c/o Karyn Gansecki
Title: Director, Regulatory Relations
Utility/Entity Name: Southern California Edison Company

Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email: karyn.gansecki@sce.com

CPUC
Energy Division Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Clear Form

ENERGY Advice Letter Keywords

Affiliate	Direct Access	Preliminary Statement
Agreements	Disconnect Service	Procurement
Agriculture	ECAC / Energy Cost Adjustment	Qualifying Facility
Avoided Cost	EOR / Enhanced Oil Recovery	Rebates
Balancing Account	Energy Charge	Refunds
Baseline	Energy Efficiency	Reliability
Bilingual	Establish Service	Re-MAT/Bio-MAT
Billings	Expand Service Area	Revenue Allocation
Bioenergy	Forms	Rule 21
Brokerage Fees	Franchise Fee / User Tax	Rules
CARE	G.O. 131-D	Section 851
CPUC Reimbursement Fee	GRC / General Rate Case	Self Generation
Capacity	Hazardous Waste	Service Area Map
Cogeneration	Increase Rates	Service Outage
Compliance	Interruptible Service	Solar
Conditions of Service	Interutility Transportation	Standby Service
Connection	LIEE / Low-Income Energy Efficiency	Storage
Conservation	LIRA / Low-Income Ratepayer Assistance	Street Lights
Consolidate Tariffs	Late Payment Charge	Surcharges
Contracts	Line Extensions	Tariffs
Core	Memorandum Account	Taxes
Credit	Metered Energy Efficiency	Text Changes
Curtailable Service	Metering	Transformer
Customer Charge	Mobile Home Parks	Transition Cost
Customer Owned Generation	Name Change	Transmission Lines
Decrease Rates	Non-Core	Transportation Electrification
Demand Charge	Non-firm Service Contracts	Transportation Rates
Demand Side Fund	Nuclear	Undergrounding
Demand Side Management	Oil Pipelines	Voltage Discount
Demand Side Response	PBR / Performance Based Ratemaking	Wind Power
Deposits	Portfolio	Withdrawal of Service
Depreciation	Power Lines	

Attachment A

Summary of Party Positions

Summary of Party Positions

Pursuant to D.25-06-012, the Joint Electric IOUs were directed to develop a proposal to lower the temperature or other relevant thresholds that trigger disconnections suspensions, in collaboration with CalAdvocates, TURN, CforAT, and NCLC, and any other interested parties to the proceeding. Accordingly, three stakeholder working group meetings were held, facilitated by PG&E and the IOUs. These meetings provided a forum through which IOUs shared multiple proposal options for consideration and received feedback from working group participants. Proposals submitted by TURN and UCAN were reviewed in addition to the Large IOUs’ proposals.

Event	Date
Working Group Meeting #1	8/28/2025
Working Group Meeting #2	10/10/2025
Working Group Meeting #3	11/12/2025

The decision notes that consensus among all stakeholders is not necessary, however issues on which parties disagree are to be captured within the Advice Letter along with explanations to support differing opinions.¹ The Joint IOUs summarize the working group discussions and party positions below.

Working Group 1

On August 28, 2025, a working group comprised of Joint Utilities and interested parties to the proceeding met to discuss potential proposals that would address the relative heat risks as identified in TURN’s motion filed August 14, 2024. The IOUs reviewed the proposal guidelines from D.25-06-012 and provided an overview of 4 potential options for consideration, sharing the pros and cons of each.

Proposal	Pros	Cons
Lowering the heat threshold to <100 degrees	Leverages existing IOU processes, quicker to implement, can be easily modified should future changes be adopted	Not region specific; Does not incorporate non-temperature related impacts
Lowering the heat threshold to <100 degrees, with regional differences	Leverages some existing IOU processes, quicker to implement, can be easily modified should future changes be adopted	Does not incorporate non-temperature related impacts

¹ D.25-06-012, p.35

Utilizing HeatRisk Tool	Would not require IOUs to conduct additional calculations	Still experimental, unclear whether tool will be available long term as funding is uncertain
Utilizing CalHeatScore Tool	Local to California, would not require IOUs to conduct additional calculations, likely to be more reliable due to long term funding	Still in development, website does not have a data feed yet, which would make for difficult implementation

Option 1 proposed lowering the existing temperature threshold to a value less than 100°, an approach that could be easily implemented by leveraging processes already in place. While the least costly and quickest to implement, the IOUs acknowledged that this approach fails to meet the regionalization requirement.

Option 2 proposed lowering the existing temperature thresholds by calculating 98th percentile temperatures by region, an approach that would not require extensive data, while still meeting the proposal guidelines. The IOUs identified however, multiple gaps including the need to define the appropriate areal basis as well as the need for more recent climatology.²

Option 3 proposed utilization of the National Weather Service HeatRisk product, which identifies periods of unusual heat for a particular location. While IOUs felt the tool was easy to use and accessible, met the regionalization requirements, and was scientifically sound, there was concern that the tool is still experimental and not guaranteed to remain operational long term.

Option 4 proposed utilization of CalHeatScore, which identifies periods of unusual heat for a particular zip code that may lead to elevated visits to emergency departments. While the IOUs felt the tool was scientifically sound and met the regionalization requirements, the IOUs expressed concern with poor accessibility for use in automation as no API exists for this product (OEHHA informed the IOUs later that the development of a data warehouse, as well as an API, is underway and is anticipated to be available in the summer of 2026).

Stakeholders such as TURN commented that it would be helpful if the IOUs performed analysis comparing the different tools. UCAN asked the IOUs to lower the temperature threshold from the IOUs' current 100°, stating a threshold of 100° will not provide adequate extreme-heat protections. Additionally, parties requested consideration of other factors beyond temperature, such as humidity, and asked IOUs to consider combining multiple measures to best protect customers from heat impacts. Lastly, parties expressed interest in learning the cost of each option, asking the IOUs to provide cost

² Cal Adapt uses observations from 1961-1990 to define the 98th percentile temperatures that were provided in TURN's motion

information in future meetings. They noted that without knowing the cost difference between options, it is impossible to consider implementation costs during decision making.

Working Group 2

On October 10, 2025 the extreme weather protections working group reconvened for a second meeting, with the IOUs focusing more closely on the 98th percentile approach previously discussed. The IOUs determined after additional analysis that this approach was the best permanent option to meet the regional variation and low cost objectives, in the absence of readily available, fully reliable heat impact metrics. Additionally, based on preliminary analysis performed, utilization of 98th percentile temperature thresholds would expand protections in more moderate climate zones. Background information and methodology for the 98th percentile proposed approach was shared, followed by SCE region specific illustrative examples of what the thresholds would look like at a city level. Based on the preliminary findings, the IOUs noted that geographical differences across the state could result in the 98th percentile temperature exceeding the existing 100° threshold. Moreover, in areas with colder climates, the 98th percentile temperatures calculated fell well below temperatures that would pose heat related risks. For this reason, IOUs proposed maintaining a ceiling and a floor. Should the 98th percentile temperature fall above 100°, the ceiling would remain at the current threshold of 100°. Should the 98th percentile calculation result in moderate temperatures, these areas would adopt a floor threshold of 85°.

UCAN stated that the IOUs' 100° F ceiling temperature is too high, noting that other states that limit disconnections due to high temperature considerations use lower temperature thresholds. UCAN noted that Illinois uses a 90° F threshold. UCAN also stated that California daycare facilities are limited to a maximum indoor temperature of 85° F.

Prior to the second meeting, parties were encouraged to prepare proposals for joint discussion. TURN presented an alternative proposal with added criteria for consideration to expand protections. Firstly, they recommended a maximum threshold of 95° instead of the IOUs' proposed 100°. They also recommended establishing additional criteria to trigger suspensions, such as humidity and nighttime cooling. TURN also proposed suspending disconnections on any day when the NWS issues a heat advisory, extreme heat watch, or extreme heat warning for a given area. Lastly, TURN recommended suspension of disconnections on any day when the CalHeatScore reaches level 3 or greater, once the data is available for integration.

In response to the proposals presented, other working group members such as UCAN expressed support for integration of other criteria other than temperatures, such as humidity, encouraging IOUs to benchmark against other states' policies. Parties also shared concerns around geographic granularity, stating that county level analysis may be too broad given the variation within counties. Parties were supportive of a zip code based approach as it would acknowledge the geographic scope of some of California's larger cities.

Summary of Written Stakeholder Feedback Following the Second Working Group Meeting

CforAT & NCLC, UCAN, TURN, and CalAdvocates submitted written feedback following the second working group meeting. All parties supported the incorporation of other factors such as humidity and overnight cooling into the proposal, as well as having a 95° ceiling, or lower, as part of the 98th percentile approach. Most parties were supportive of having an interim solution until a long term solution becomes available, with some parties recommending alternative tools such as NWS alerts and HeatRisk. Parties also aligned on incorporating indoor temperature considerations and requests for IOUs to provide additional data. CforAT and NCLC recommended that discussions among the IOUs and parties continue to improve the proposal, including ongoing consideration of the best data sources to use to support a secondary standard (other than simple temperature) as well as the best level of granularity for temperature-based restrictions.

Informal feedback submitted by the working group members has been included as attachments:

Party Feedback Received Following Working Group Meeting #2	
Attachment B-1	CalAdvocates Feedback on Extreme Heat Protections Proposals from the Second Working Group Meeting, October 10, 2025
Attachment B-2	CforAT & NCLC Feedback on Extreme Heat Proposals from Extreme Weather Protections Working Group Meeting 2 October 20, 2025
Attachment B-3	Informal Feedback of The Utility Reform Network on IOU Proposal for Extreme Heat Disconnections Protections
Attachment B-4	Informal Response of the Utility Consumers' Action Network on Modifying Existing Temperature Thresholds for Disconnections Including the IOUS' and TURN's Proposals
Attachment B-5	UCAN's Extreme Heat Protections Proposal

Working Group 3

On November 12, 2025 the extreme weather protections working group met for a third and final meeting. The working group discussed feedback received by parties, summarized below:

WORKING GROUP FEEDBACK 10/20												
	95 ° Ceiling	85 ° Floor	Incorporate Other Factors (Humidity & Overnight Cooling)	Supportive of an interim solution until long term solution is available	Zip Codes or NWS forecast zones	96th Percentile	Moratorium June 1 - October 15	NWS Alerts	CalHeatSc ore	HeatRisk	Indoor Temperature Considerations	Requested Data
CforAT & NCLC	X	X	X	X					X			
UCAN	X*		X		X	X	X				X	
TURN	X	X	X	X	X			X	X**	X	X	X
Cal Advocates	X		X	X						X	X (82 °)	X
*90 ° is preferred ** CHS value of three or higher												

Following the summary of feedback received, UCAN’s proposal recommending lowering the existing temperature threshold to 90° (submitted on 11/7/25) was presented to the working group for consideration. UCAN noted that their proposal would be easy to implement and enables year round disconnections, helping to minimize ratepayer costs. UCAN’s proposal provides citations for lower-temperature California thresholds including CalOSHA’s 82° threshold and California daycare facilities’ maximum indoor temperature requirements of 85°. UCAN also noted that its proposed threshold temperature is higher than the “85-degree floor temperature proposed by the Joint IOUs, which appears to be the Joint IOUs’ proposed safe temperature at any humidity (see Joint IOUs’ October 10, 2025 proposal, p. 9).” UCAN’s proposal is included below as Attachment C-5 and provides citations for the various temperature thresholds.

To account for humidity and overnight cooling concerns raised by stakeholders, the IOUs shared a modified 98th percentile approach with the working group. The updated methodology, which uses daily average temperature percentiles captures an understanding of the temperature over the entirety of the day, and would indirectly account for humidity by accounting for overnight lows, which are typically elevated during more humid summer days.

Cal Advocates asked how the 98th percentile reflects risk in 2025 and if the IOUs had done any analysis on the 96th percentile that was brought up in the second working group meeting. The IOUs could not provide reasoning to support the continued use of the 98th percentile or any additional analysis on the 96th percentile. Cal Advocates asked what the justification was for using a 100-degree ceiling under the 98th percentile approach when that is the current threshold and customers will face risk at well below 100 degrees. The IOUs did not provide any additional evidence of how a 100-degree ceiling mitigates risk under the 98th percentile approach. However, the IOUs had provided background and references

supporting the 98th percentile approach as the appropriate cut-off for when heat becomes dangerous as compared to local climate normals (see slide 8 of the WG 2 deck). In particular, it is important to understand that the CalAdapt 98th percentile approach is based on historical climate normals, so as temperatures continue to rise, the number of 98th percentile days compared to historical norms would also increase. Therefore, the approach is adaptive to future changes in climate conditions. The IOUs therefore disagree with the characterization that the 98th percentile approach requires an additional lowering of the ceiling. The regionalization approach ensures that each community is protected when its local conditions become truly extreme relative to its historically normal climate. This approach inherently accounts for acclimatization and baseline differences.

The meeting agenda also included an IOU update regarding the availability of CalHeatScore as a newly viable option beginning in the summer of 2026. Utilization of CalHeatScore as a tool used to trigger disconnections suspensions was previously ruled out due to the inability to access data for streamlined operationalization. OEHHA informed the IOUs that the development of a data warehouse, as well as an API was underway and anticipated to be available sometime in the summer of 2026. CforAT asked if the utilities can expedite their rollout of implementation of CalHeatScore by coordinating with the CalHeatScore team in advance, and a utility representative confirmed that coordination efforts would help to speed the process.

Because the desired outcomes of the proposal include expansion of heat protections to reduce heat risk, keeping implementation costs low, and minimizing ratepayer impacts, the discussion was centered around determining which option(s) best struck this balance. IOUs expressed a preference for a single-phase implementation, as a multi-phased approach such as adoption of a 98th percentile approach during the interim, followed by full integration of CalHeatScore once available, would be the most costly. UCAN noted on multiple occasions that just changing the temperature threshold would enable a near-zero implementation cost. Cal Advocates asked the IOUs what the basis was for the choice of 98 degrees as the new statewide temperature threshold, pending the utilization of CalHeatScore. The IOUs could not provide an explanation of how the 98° proposal was reached or how it empirically reflects risk. Cal Advocates and other parties previously provided citations for lower temperature thresholds that reflect risk and are more current than the studies or data presented in the working group meetings. In turn, the IOUs had provided background and references supporting the 98th percentile approach by itself as the appropriate cut-off for when heat becomes dangerous as compared to local climate normal (see slide 8 of the WG 2 deck), but indicated a willingness to slightly lower the ceiling to 98°.

Summary of Written Stakeholder Feedback Following the Third Working Group Meeting

CforAT & NCLC, TURN and UCAN submitted written feedback following the third and final working group meeting. All parties were supportive of a multi-phased approach in order to meet the May 2026 implementation timeline as outlined in the decision. CforAT and NCLC support lowering existing temperature thresholds as an interim solution, advocating for 95° or lower as they noted that even 95° may pose heat risk for some individuals. CforAT and NCLC recommended that utilities coordinate with CalHeatScore and specify a “drop dead” date, representing the latest time at which they could receive the necessary CalHeatScore data in order to implement this approach for summer 2026. If this date passes and CalHeatScore is not available, the utilities should move beyond the interim solution and implement the 98 percentile approach. TURN and UCAN both support 90° as an interim threshold until CalHeatScore becomes available. All parties indicated the need for more information and analysis from the utilities in conjunction with their ongoing work and proposals.

UCAN noted that if CalHeatScore (“CHS”) is implemented, the disconnection protections should be triggered at a CHS value of 2 instead of the IOUs’ proposed value of 3 because even a CHS value of 2 results in a significant increase in emergency department visits of up to 66%, demonstrating high heat-induced health risks. UCAN also requested that the IOUs’ advice letter include for the Commission an analysis of the percentage of customers protected during each day of summer for each proposal (Joint IOUs, TURN, and UCAN) and for each large-IOU service territory.

Informal feedback submitted by the working group members has been included as attachments:

Party Feedback Received Following Working Group Meeting #3	
Attachment C-1	CforAT & NCLC Feedback on Extreme Heat Proposals from Extreme Weather Protections Working Group Meeting #3 November 17, 2025
Attachment C-2	TURN Informal Feedback on 11/12/25 Working Group Meeting
Attachment C-3	UCAN's Feedback to Working Group 3 Meeting

Attachment B-1

**CalAdvocates Feedback on Extreme Heat Protections Proposals from the Second
Working Group Meeting**

October 10, 2025

Comments on IOU Proposals to Change Thresholds for Disconnections Moratoriums

Overview of Cal Advocates Feedback

Cal Advocates supports lowering the temperature thresholds that are used to trigger disconnections moratoriums to protect consumers from disconnections during extreme heat. The most comprehensive measure of risk, and the simplest to implement, comes from the NWS Heat Risk Tool, as proposed by TURN. Alternatively, the modified Cal Adapt framework proposed by the IOUS generates regionally specific temperature thresholds that may be safer than the current 100-degree outdoor temperature benchmark. However, Cal Advocates has concerns with the basis for the thresholds proposed. In particular, the current proposals do not rely on recent research, are not substantiated with relevant data, and are not linked to any appropriate measures of safety. Moreover, the recommended solution should avoid elaborate, and likely expensive, procedural changes to implement the new thresholds or criteria. Finally, the IOUs should also provide additional information to stakeholders to better justify their proposals.

Recommendation 1: Any new temperature threshold should be justified by empirical evidence of heat risk.

Any temperature threshold, or other criteria for assessing extreme heat risk, adopted by the Commission should be supported by evidence of what is safe for people. By contrast, the elements of the Cal Adapt framework are not empirically connected to heat risk or supported by current research. If a threshold is not based on scientific facts, then it does not account for real risk to customers.

For many years the maximum tolerable external wet bulb temperature, which reflects the heat and humidity at which bodies evaporative cooling (sweating) stops working, for the human body was considered 95 degrees. More recently, a 2022 study in the Journal of Applied Physiology found that the critical wet bulb temperature for young healthy adults was 77-82.4 degrees in hot and dry environments and 86-87.8 degrees in warm and humid environments (<https://pubmed.ncbi.nlm.nih.gov/34913738/>). Temperature thresholds can also be linked to mortality and morbidity. A 2025 study in the journal Science Advances used data on all cause emergency department visits, hospitalizations, and mortality from all non-federal hospitals in California from 2006-2017 (<https://www.science.org/doi/10.1126/sciadv.adr3070>). The research showed that mortality and hospitalizations increase on anomalously hot and cold days, and a linear relationship between emergency department visits and daily temperatures, which reflects illness and mortality both caused by heat and exacerbated by heat. The study also found that

between certain thresholds, emergency department visits increase specifically on warm days, 71.6-86 degrees, and hot days, 86-93.2+ degrees, and mortality increases at temperatures above 93.2 degrees. As pointed out by TURN's extreme heat motion, there are other populations that are even more sensitive to heat exposure, such as older adults, infants and children, pregnant people, and people with chronic health conditions

(<https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=537783590>). Another 2024 study established that critical environmental core temperature thresholds decline with age in both dry hot and wet humid environments (<https://pubmed.ncbi.nlm.nih.gov/38813613/>). A 2023 study in the journal Communications Earth and Environment found that older adults reach their critical environmental limits at lower combinations of dry bulb temperature and humidity than younger adults during minimal activity (<https://www.nature.com/articles/s43247-023-01159-9>). This would suggest that for middle aged adults, older adults, and people with chronic health conditions, the threshold is even lower than that for healthy adults.

Recommendation 2: Temperature thresholds should be based on what is safe for people indoors, not only outdoor temperatures.

The IOUs and TURN both cited CalOSHA's Heat Illness Prevention Standards in their presentations at the second working group meeting to support their recommended temperature ceiling and floor values. However, the 85-degree floor for disconnections is not found in the indoor or outdoor CalOSHA standards cited. And the 95-degree threshold to trigger high heat protections referenced, California Code of Regulations, Title 8 section 3395e, is for outdoor workplaces (<https://www.dir.ca.gov/title8/3395.html>). CalOSHA actually requires outdoor cool down procedures to come into effect when the temperature exceeds 80 degrees. Moreover, indoor temperatures can be higher than outdoor temperatures; this study of housing with mixed characteristics in Detroit found that the average maximum indoor temperature was substantially higher than the maximum average outdoor temperature in the homes studied (<https://pmc.ncbi.nlm.nih.gov/articles/PMC4352572/>). A 2023 study in the journal Environment International found that there is a positive relationship between outdoor and indoor temperature and a high level of interpretability of outdoor to indoor temperature in residential buildings in which the range of latitudes that California fall (<https://www.sciencedirect.com/science/article/pii/S0160412023004476>). According to the California Code of Regulations, Title 8 section 3396a, temperature control measures for indoor workplaces are triggered by whenever the temperature, or heat index, reaches 87 degrees and 3396d requires indoor cool down spaces to be maintained at less than 82 degrees (<https://www.dir.ca.gov/title8/3396.html>). In, 2025 the California Department of Housing and Urban Development recommended a maximum safe indoor temperature of 82 degrees (<https://www.hcd.ca.gov/plans-and-reports/ab-209-2022>). Therefore, temperature thresholds

chosen by the IOUs should reflect what indoor temperatures are safe, since people generally spend the majority of their time indoors.

Recommendation 3: The proposal should be low cost to implement and avoid unnecessary complexity.

Cal Advocates is not opposed to options for adjusting the threshold for disconnections moratoriums that utilize the NWS Heat Risk Tool or Cal Adapt framework, but a chief concern is implementation costs and complexity. (Cal Advocates is also not opposed to utilizing CalHeatScore, as proposed by the IOUs, when it becomes available.) It is important to have implementation that is effective and low cost because disconnections are routine and should be designed in a way that is easy to manage. Disconnections are frequently triggered during extreme heat seasons, so implementation must avoid operational complexity that increases risk of customers not receiving timely disconnection protections during dangerous heat events. Implementation that is effective and low-cost aligns with the Commission's mandate to protect consumers while maintaining just and reasonable rates. Overly complex systems that require continuous data modeling or expensive proprietary software can lead to unnecessary spending without a reasonable increase in data accuracy or consumer protections. An effective implementation design for this working group should be something that is flexible to evolving data sources without requiring major procedural overhauls. The most administratively simple solution would be to lower the heat threshold to below 100 degrees with regional variations based on considerations of heat risk supported by recent studies.

Cal Advocates is in support of lowering the threshold for disconnections moratoriums to a safer temperature, but this must be balanced with the cost impacts to ratepayers. The impact on customer arrearages should be considered as part of any decision on what changes to make to the disconnections moratorium. Based on preliminary research by Cal Advocates evaluating past temperatures across a subset of climate zones, changing the temperature threshold from 100 degrees to 95 degrees may result in 15 more days on average falling above the threshold. This increase could exacerbate arrearages for the impacted customers and increase the costs borne by all ratepayers.

Recommendation 4: The IOUs should provide further information to stakeholders.

Cal Advocates provides some follow-up guidance below on how to better inform stakeholders on the proposals:

1. The IOUs should clearly identify the data sources they will use to construct the 1991-2020 data for the CalAdapt tool.
2. The IOUs should make updates to CalAdapt data and analysis and provide them to the working group before submitting the Tier 3 Advice Letter.

3. To ensure methodological transparency, the IOUs should specify what data will be used to support the different aggregation levels, such as County, CEC Climate Zone, NWS Forecast Zone, or City.
4. Given the trend of rising global temperatures, continued reliance on the 98th percentile in the CalAdapt framework requires justification and may not reflect current climate realities.
 - The IOUs should explain why the decade-old study supporting the 98th percentile remains more appropriate than newer research cited in recent peer-reviewed studies, if that is their position.
5. Disconnection protections should be clearly defined, specifying whether they will be triggered based on a 72-hour look-ahead period (as under current rules) or on a daily temperature measurement.
 - The basis for triggering disconnection protections should be explicitly stated to ensure consistent and enforceable application across service territories.
6. The IOUs should quantify how their proposal changes the number of days in which disconnections are prohibited when compared to the current threshold.
7. Similarly, the IOUs should quantify how TURN's proposal would change the number of days in which disconnections are prohibited compared to the current threshold.
8. Because other states have successfully implemented a lower ceiling, the IOUs should identify any specific barriers or challenges to implementing a similar standard in California.
9. The IOUs had a slide for Working Group 1 noting that lowering the heat threshold to below 100 degrees, with regional differences, would be low-cost to implement. Please describe the additional costs of implementing multiple criteria, such as:
 - Humidity thresholds
 - Overnight minimum temperature thresholds
 - Real-time temperature forecast revisions
 - Accounting for regional microclimates
 - Incorporating indoor temperature thresholds

Thank you

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Attachment B-2

**CforAT & NCLC Feedback on Extreme Heat Proposals from Extreme Weather
Protections Working Group Meeting 2**

October 20, 2025

CforAT & NCLC Feedback on Extreme Heat Proposals from Extreme Weather Protections Working Group Meeting 2 October 20, 2025

CforAT and NCLC both attended the Working Group Meeting held on October 10, 2025 to discuss proposals to lower thresholds that trigger extreme heat disconnections. We appreciate the work that went into the IOU proposal as well as the work that went into the alternative proposal from TURN and the input of other parties.

The IOUs have proposed to reduce the temperature threshold to be used with a 3-day look ahead period based on a 98th percentile temperature history, with a ceiling of 100°F and a floor of 85°F. While the presentation by the IOUs looked at temperature histories based on counties, looking at data from 1961-1990, the IOUs expressed an intent to recalculate thresholds using more recent data and expressed willingness to consider alternatives to the use of counties as the appropriate level of granularity. Options discussed at the workshop include city-level temperatures and zip code-level temperatures.

TURN proposed lowering the threshold “ceiling” to 95°F and adding additional criteria to trigger disconnection suspension based on factors other than simple temperature, including humidity and nighttime cooling. TURN noted several potential options for use as the secondary criteria, including an option that relies on alerts distributed by the National Weather Service (heat advisories, extreme heat watches or extreme heat warnings), or the more local CalHeatScore tool. The CalHeatScore option may best be considered as a longer-term proposal, as it does not yet provide data in a format that can be integrated with IOU systems.

Additional concepts suggested at the workshop included direct use of the National Weather Service heat index to trigger disconnection suspensions based on a threshold “felt temperature,” (proffered by NCLC) and use of the 96th percentile temperature rather than a 98th percentile for establishing a ceiling (proffered by UCAN).

At this time, CforAT and NCLC support changes in the existing extreme heat protections that incorporate the following:

- Set a maximum high temperature cutoff of 95°F. This is consistent with the existing ceiling in Arizona, a location where the vast majority of residents can be expected to be acclimated to high temperatures. It is also consistent with CalOSHA guidelines that trigger high heat protections for outdoor workers. The IOUs cite these guidelines in support of their proposed 85°F floor; they should also be considered in setting a ceiling.
- Adopt the IOUs’ proposed floor for restrictions at 85°F.
- Include an additional standard that accounts for factors other than temperature alone.

The IOUs are required to file a joint Tier 3 Advice Letter on or before December 17, 2025. CforAT and NCLC recommend that discussions continue to allow ongoing consideration of the best data sources to use to support a secondary standard (other than simple temperature) as well as the best level of granularity for temperature-based restrictions. We understand that consideration of alternatives will need to consider availability and ease of adoption, as well as cost. It is possible that the parties may jointly determine that the best short-term option should be reconsidered in the future and suggest a timeline or trigger for such reconsideration (e.g. the availability of the CalHeatScore data with a usable tool for integration with the IOU systems).

Ideally, the parties will be able to achieve consensus. If that is not possible, additional discussions will allow for greater clarity of party positions for inclusion in the upcoming T3 Advice Letter process.

Attachment B-3

**Informal Feedback of The Utility Reform Network on IOU Proposal for Extreme
Heat Disconnections Protections**

October 20, 2025

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF
CALIFORNIA**

Order Instituting Rulemaking to Consider New Approaches to
Disconnections and Reconnections to Improve Energy
Access and Contain Costs.

R.18-07-005
(Filed July 12, 2018)

**INFORMAL FEEDBACK OF THE UTILITY REFORM NETWORK ON IOU
PROPOSAL FOR EXTREME HEAT DISCONNECTIONS PROTECTIONS**



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sashford@turn.org October 20, 2025

INFORMAL FEEDBACK OF THE UTILITY REFORM NETWORK ON IOU PROPOSAL FOR EXTREME HEAT DISCONNECTIONS PROTECTIONS

TURN offers the following feedback on the IOU proposal for extreme heat thresholds to suspend disconnections as presented at the October 10, 2025 working group meeting. TURN attended the meeting and presented an alternative proposal. Presentation slides were shared with the working group mailing list. In summary, TURN supports establishing temperature thresholds with regional variation as one criteria for suspending disconnections, as proposed by the IOUs. However, these temperatures should have a ‘ceiling’ of no more than 95 degrees and vary on a granular regional basis. The IOUs should also implement additional criteria for protection which account for other components of extreme heat besides temperature, such as National Weather Service (NWS) heat alerts and the CalHeatScore tool.

1. Regional temperature thresholds for protections should not exceed 95 degrees.

The IOUs propose using the 98th percentile historic temperature as a threshold for suspending disconnections with regional variation (Cal Adapt), which was originally suggested by TURN as an interim basis for protections. The IOUs also proposed a floor of 85 degrees and a ceiling of 100 degrees for these thresholds, which would replace the threshold in areas with a 98th percentile historic temperature below 85 or above 100 degrees.

TURN supports regional temperature thresholds as one criteria for disconnections protections but recommends a lower absolute maximum threshold than 100 degrees. In the meeting, TURN proposed a ceiling of 95 degrees because that is currently the extreme heat threshold in Arizona, which has hotter statewide average temperatures than California.¹ In addition, the IOUs point to CalOSHA’s guidelines as the basis for an 85 degree floor, and

¹ “Final Package of Termination of Service Rules Approved,” Arizona Residential Utility Consumer Office, accessed October 20, 2025. <https://ruco.az.gov/hot-topics/disconnection-rules>

CalOSHA identifies 95 degrees as an outdoor temperature to trigger “high heat procedures.”²

TURN would also be supportive of a maximum threshold lower than 95 degrees. As UCAN noted during the meeting, extreme heat protections at California daycares take effect when indoor temperatures exceed 85 degrees. Other states already suspend disconnections at temperatures lower than 95 degrees. Illinois has a moratorium on disconnections when temperatures exceed 90 degrees,³ and Virginia 92 degrees.⁴ The 100-degree ceiling proposed by the IOUs has no apparent public health basis and is far too high to offer meaningful protection.

TURN is also concerned that stakeholders in the working group will not have sufficient opportunity to review the dataset and proposed regional breakdown before the IOUs finalize their proposal. The IOUs indicated that the 98th percentile thresholds would be based on an updated historic dataset, which has not yet been compiled, and that they would be implemented for geographic areas, which have not yet been defined. The IOUs should share this updated dataset and all details on their methodology, as requested by Cal Advocates. TURN also supports UCAN’s recommendation to establish regional temperature thresholds on a more granular basis than counties, such as Zip codes or National Weather Service (NWS) forecast zones. As discussed in TURN’s August 14, 2024 Motion: “it is important to keep in mind that local extreme heat thresholds can and do vary widely in some counties, particularly those with coastal and inland communities, so the county-level thresholds cannot be relied upon in determining how best to protect public health.”⁵

² “Cal/OSHA Heat Illness Prevention Guidance and Resources,” California DIR, accessed October 20, 2025. <https://www.dir.ca.gov/dosh/heatillnessinfo.html>

³ 220 ILCS 5/8-205, accessed October 20, 2025. <https://www.ilga.gov/Documents/legislation/ilcs/documents/022000050K8-205.htm> ⁴ Code of Virginia, § 56-245.1:3., accessed October 20, 2025.

<https://law.lis.virginia.gov/vacode/title56/chapter10/section56-245.1:3/>

⁵ For instance, in San Luis Obispo County, the extreme heat threshold is 85 degrees in Morro Bay and 103.3 degrees in Paso Robles. Likewise, in Humboldt County, the extreme heat threshold is 76.9 degrees in Eureka and 97.8 degrees in Garberville. <https://caladapt.org/tools/extreme-heat>.

2. The IOUs should establish additional criteria for disconnections protections which reflect other extreme heat factors besides temperature.

D.25-06-012 directs the IOUs to collaborate with parties to develop: “a proposal to lower the temperature or other relevant threshold that trigger disconnections suspensions in light of the relative heat risks identified in TURN’s Motion of August 14, 2024.” TURN’s Motion initially recommended that the Commission prohibit disconnection of residential electric service on either a temperature basis, or when the NWS “HeatRisk” tool was forecast to reach a significant risk level.⁶ The “HeatRisk” tool reflects not only temperature, but the impacts of humidity and nighttime cooling on extreme heat and public health outcomes.

TURN maintains that it is critically important to implement an additional criteria for protections which reflects these other components of extreme heat. As detailed in TURN’s Motion, temperature alone does not capture extreme heat risks, particularly for vulnerable populations. Besides the NWS HeatRisk tool, TURN presented two viable options for this additional threshold at the working group meeting: NWS heat alerts and the CalHeatScore tool. NWS heat alerts (advisories, watches, and warnings) are based on the NWS “Heat Index”⁷ which reflects felt temperature based on temperature and humidity. These alerts are issued regionally, based on thresholds set at the local level, and can also be informed by the Wet Bulb Globe Temperature and Heat Risk tools.⁸ Multiple states have established NWS heat alerts as a criteria for suspending disconnections, including Illinois,⁹ Washington,¹⁰ and Georgia.¹¹

⁶ TURN Emergency Motion, R.18-07-005, August 14, 2024.

<https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M537/K783/537783590.PDF>

⁷ NWS Heat Index, accessed October 20, 2025. <https://www.weather.gov/ama/heatindex>

⁸ “Heat Forecast Tools,” NWS, accessed October 20, 2025. <https://www.weather.gov/safety/heat-tools>

⁹ 220 ILCS 5/8-205, accessed October 20, 2025.

<https://www.ilga.gov/Documents/legislation/ilcs/documents/022000050K8-205.htm> ¹⁰

RCW 54.16.285, Washington State Legislature, accessed October 20, 2025.

<https://app.leg.wa.gov/RCW/default.aspx?cite=54.16.285>

¹¹ “Residential Electric Utility Service Disconnection,” State of Georgia Public Service Commission, accessed October 20, 2025. <https://psc.ga.gov/about-the-psc/consumer-corner/electric/consumer-rights/electric-disconnection/>

Another viable criteria for suspending disconnections is a risk value of three or higher according to the CalHeatScore tool. CalHeatScore calculates the risk of public health impacts (emergency room visits) from extreme heat based on the heat index at the Zip code level.¹² While the IOUs noted that this tool cannot provide data in the necessary format at this time, they indicated that the product has sustained funding and data is expected to be available in the future. TURN suggested that this tool could be implemented as an additional criteria for protections once the data is available for integration.

3. The IOUs should share additional information on customer impacts and costs.

At the past two working group meetings, TURN has requested additional details on customer impacts (in terms of days disconnected) and implementation costs for each proposed approach. TURN supports Cal Advocates' request for these details in their informal comments (recommendation #4). The IOUs should share this information to better inform stakeholders and allow for meaningful consideration of alternatives.

Respectfully submitted,

SYLVIE ASHFORD

_____/S/____

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Dated: October 20, 2025

¹² "What is CalHeatScore," CalEPA, accessed October 20, 2025. <https://calheatscore.calepa.ca.gov/>

Attachment B-4

**Informal Response to the Utility Consumers' Action Network on Modifying Existing
Temperature Thresholds for Disconnections Including the IOUS' and TURN's Proposals**

October 20, 2025

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF
CALIFORNIA**

Order Instituting Rulemaking to
Consider New Approaches to Disconnections
and Reconnections to Improve Energy Access
and Contain Costs.

Rulemaking. 18-07-005
(Filed July 12, 2018)

**INFORMAL RESPONSE OF THE UTILITY CONSUMERS' ACTION NETWORK ON
MODIFYING EXISTING TEMPERATURE THRESHOLDS FOR DISCONNECTIONS
INCLUDING THE IOUS' AND TURN'S PROPOSALS**



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Dated: October 20, 2025

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to
Consider New Approaches to Disconnections
and Reconnections to Improve Energy Access
and Contain Costs.

Rulemaking. 18-07-005
(Filed July 12, 2018)

**INFORMAL RESPONSE OF THE UTILITY CONSUMERS' ACTION NETWORK ON
MODIFYING EXISTING TEMPERATURE THRESHOLDS FOR DISCONNECTIONS
INCLUDING THE IOUS' AND TURN'S PROPOSALS**

As per the schedule proposed by the investor-owned utilities ("IOUs") during the October 10, 2025 meeting, the Utility Consumers' Action Network submits its response to the proposals of the IOUs and TURN regarding possible revisions to California's existing rules concerning when utilities can disconnect customers (with outstanding unpaid bills) during periods of extreme heat.

UCAN views the IOU's CalAdapt-based 98% threshold as an inadequate response to the significant health risks associated with prolonged heat waves, urban heat island effects, and the debilitating effects of high overnight temperatures. While the CalAdapt- based modification would be relatively easy for the IOUs to implement, it is an insufficient response to the genuine peril extreme heat poses to human health. In addition, UCAN is particularly concerned about the IOU proposal to use widely dispersed geographic areas as guideposts for threshold temperatures, e.g., the notion of using either city or county boundaries to define temperature thresholds.

County based thresholds are particularly unreasonable given the wide range of size and climatological conditions within some of California's larger counties such as Riverside, San Bernardino, and Los Angeles, along with counties such as Tulare, Madera, El Dorado, and Placer that include areas within the central valley as well as the Sierra Nevada Mountains. San Bernardino County alone includes urban nodes such as the City of San Bernardino, mountain

communities in the San Bernardino Mountains, and vast expanses of desert that extend to the State of Nevada. The same can be said of Riverside County, which extends from exurban Los Angeles to the Arizona border but also includes mountain communities. Even city-based proposals would be similarly problematic for large jurisdictions such as the cities of San Diego and Chula Vista whose boundaries include coastal as well as inland areas that have higher ambient summer and fall temperatures.

Rather than rely on huge geographic areas to define thresholds UCAN recommends using zip codes, or by using National Weather Service forecast zones. Zip codes and National Weather Service forecast zones have long been used by the IOUs, have reliable temperature records, and would be easy to implement. Using California's long-established baseline climate zones would ensure that temperature cutoff levels reflect local conditions. Extensive climate data is already available for these regions of the state.

TURN has proposed a modification of the IOU's proposal that would use the 98th percentile figure but would lower the maximum ambient temperature from 100 F to 95 F. TURN's recommendation is partly based on CalOSHA's Heat Index Prevention standard, and it aligns with some other states including Arizona. TURN also proposes that establishing other criteria to trigger the suspension of disconnections should be pursued including possibly one incorporating relative humidity and the presence or absence of nighttime cooling. While most of California does not experience high levels of humidity during summer and fall, inland areas of Southern California see high humidity during summer monsoon periods. TURN's proposal is far superior to the IOUs' proposal because it protects customers from multiple weather-related health impacts, not just temperature. UCAN views TURN's proposal as the minimum level required to protect California ratepayers. However, below, UCAN proposes revisions to

temperature thresholds (i.e., temperature and percentile thresholds). Additionally, UCAN recommends the parties and the Commission consider implementing a disconnection moratorium during the hottest portion of each year to simplify heat protections for California ratepayers.

During the October 10, 2025, working group meeting UCAN expressed the view that the IOU's 100 F ceiling temperature is too high, noting that other states with limitations on the ability of utilities to unilaterally disconnect customers use lower temperatures such as Illinois, that uses 90 F. California daycare facilities are limited to an indoor temperature of 85 F (or in extreme heat, the temperature must be 20 degrees lower than the outdoor temperature).¹ The applicable rules provide that day care licensees must ensure a comfortable temperature is maintained and defines comfort as being between 68 degrees and 85 degrees F.²

During the working group meeting, an IOU representative stated that lower temperature thresholds are typically implemented in states with a higher average relative humidity than is found in California. UCAN acknowledges that on average, the relative humidity in California is lower than the average in the U.S. However, several locations in California typically experience mid- to high-humidity during summer months. Because the IOUs' proposal lists a signal "ceiling" temperature for the state, the ceiling temperature should protect all people in the state, not just people living in low-humidity areas. The recent change in Illinois to a 90 F temperature threshold preventing utility disconnections was intended to address the impact of high humidity in some areas of the state.

The IOU's citation to the 98th percentile heat threshold is not supported by one of their citations:

(Gasparrini et al., 2015) states that, "We further separated these components into

¹ California Daycare Temperature Regulations, Title 22, Div 12, Chap 1, Art 7 - Child Care Centers, (https://www.cdss.ca.gov/Portals/9/Regs/Man/CCL/6cccman.docx?ver=powRm_gxe17oLCEwgOCxNQ%3d%3d). ² *Ibid.*

moderate and extreme contributions by defining extreme cold and heat as temperatures lower than the 2.5th location-specific percentile (extreme cold) and higher than the 97.5th location-specific percentile (extreme heat). These cutoffs are consistent with previous definitions of extreme weather, such as heatwaves. We defined moderate temperatures as the ranges between the optimum temperatures and these cutoffs. We defined other ranges using cutoffs at the 10th, 25th, 50th, 75th, and 90th percentiles.”³

Considering Gasparrini’s research and the practices of other states, UCAN recommends a 96th percentile heat threshold for banning disconnections to ensure at least a minimum margin for safety.

The following is a summary of other states’ temperature disconnections bans thresholds. ⁴

- Illinois: As of 2024, utility companies are barred from disconnections if the forecast for the next 24 hours is 90 F or above. The ban also applies when a National Weather Service excessive heat watch, heat advisory, or excessive heat warning is in effect.
- Missouri: The “Hot Weather Law” is in effect from June 1 to September 30. It prohibits disconnections when the National Weather Service predicts a temperature over 95 F or a heat index above 105 F.
- Virginia: Effective July 2024, state law prohibits disconnections when the outside temperature is 92 F or higher.
- Arizona: Some regulated utilities will not disconnect residential customers from June 1 to October 15, or when the forecasted temperature exceeds 95 F. (Note Arizona is the second least humid state in the U.S. California, while generally not known for humidity, still has a significant number of days when the heat index will exceed 105 F in inland locations.)

³ Mortality risk attributable to high and low ambient temperature: a multicountry observational study
Gasparrini, Antonio et al. The Lancet, Volume 386, Issue 9991, 369 – 375,
[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(14\)62114-0/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)62114-0/fulltext).

⁴ Note many of these states have bans for extreme cold weather periods as well.

- Louisiana: Utilities are prohibited from disconnecting service during extreme heat, which includes when the National Weather Service issues a heat advisory (often when temperatures reach 103 F or the heat index reaches 108 F).
- Texas: The Texas PUC bans disconnections by their IOUs during a heat advisory. Some individual utilities, such as Austin Energy, set their own stricter rules, banning disconnections when the heat index is forecasted to be 102 F or above.

One other approach to the disconnections problem would be to simply ban disconnections altogether during the summer and early fall months. For example, California could simply ban disconnections from June 1 through October 15. Utility regulators in Arizona provide this option to regulated utilities in that state and three utilities have opted for this disconnection moratorium during days that could experience heat waves.⁵ This would protect customers from health- threatening disconnections during the months when California experiences its most extreme summer temperatures. A calendar-based approach has several advantages including being easy and low-cost to implement and would not require the collection of location-based temperature data. Further, the IOUs would still be allowed to disconnect customers for non-payment during the shoulder seasons when temperature-related danger from disconnections is extremely low. The shoulder seasons include much of the year.

/s/ Jason Zeller

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Dated: October 20, 2025

⁵ Arizona Corporation Commission, ACC Reminds Ratepayers of Utility Disconnection Ban During Extreme Heat (June 3, 2024), <https://azcc.gov/news/home/2024/06/03/acc-reminds-ratepayers-of-utility-disconnection-ban-during-extreme-heat>.

Attachment B-5

UCAN's Extreme Heat Protection Proposal

November 7, 2025

Utility Consumers' Action Network (UCAN)

Proposal: Disconnection-Related Extreme Heat Protections

Date: November 7, 2025

UCAN Proposal: Ban disconnections when the National Weather Service (NSW) forecasts a temperature of 90 degrees or higher for any time during the following 72-hours.

- Proposal details:
 - Ban disconnections when NWS forecasts =>90 degrees within the following 72-hours.
 - Forecast zones: IOUs to use the same zones as used in their current disconnection threshold system.
- Benefits:
 - Protects Californians from negative health impacts of extreme summer heat
 - Near-zero cost to implement
 - Easy to implement
 - Requires updating the current 100-degree temperature threshold to 90 degrees
 - Significantly easier to implement than any other proposal
 - Simple to understand (important for customer education)
 - Provides protection during dangerous conditions not covered at the current threshold.
 - Enables year-round disconnections, which are important for minimizing ratepayer costs. Year-round disconnections also appear to be important to the Joint IOUs.
- Drawbacks:
 - A 90-degree threshold results in a 106-degree heat index at 70% relative humidity.³
 - Threshold temperature is significantly higher than the 82-degree trigger for Cal OSHA indoor temperature standards.⁴
 - Threshold temperature is higher than the 85-degree maximum indoor air temperature for California daycare facilities.⁵
 - Threshold temperature is higher than the 85-degree floor temperature proposed by the Joint IOUs, which appears to be the Joint IOUs' proposed safe temperature at any humidity (see Joint IOUs' October 10, 2025 proposal, p. 9).
 - Allows disconnections during short-term cool spells even though hot temperatures are forecast to resume.
- Additional Information:
 - To provide better protection during high humidity events, the proposed temperature is lower than the current 100-degree cap.
 - UCAN does not propose the NWS heat index as the threshold metric because the heat index is not available for 72 hours ahead.
 - The 90-degree threshold aligns with Illinois's temperature threshold, which is one of Illinois's heat protection thresholds.⁶ Illinois lowered the threshold from 95 degrees to 90 degrees, in part, to address the increased health risks on high humidity/high temperature days. High levels of humidity in California can be found in areas affected by summer monsoons in Southern California such as Imperial, San Diego, Riverside, and San Bernardino Counties.

³ NOAA Heat Index Chart, https://www.noaa.gov/sites/default/files/2022-05/heatindex_chart_rh.pdf

⁴ CalOSHA, ("On June 20, 2024, the Occupational Safety and Health Standards Board approved California Code of Regulations, Title 8, section 3396, "Heat Illness Prevention in Indoor Places of Employment". This standard applies to most workplaces where the indoor temperature reaches 82°F. It establishes required safety measures for indoor workplaces to prevent worker exposure to risk of heat illness. This standard went into effect on July 23, 2024."), <https://www.dir.ca.gov/dosh/heat-illness/indoor-faq.html>.

⁵ California Daycare Temperature Regulations, Title 22, Div 12, Chap 1, Art 7 - Child Care Centers, (https://www.cdss.ca.gov/Portals/9/Regs/Man/CCL/6cccman.docx?ver=powRm_gxe17oLCEwgOCxNQ%3d%3d).

⁶ The Illinois threshold protection is supplemented by NWS excessive heat watch, heat advisory, or excessive heat warning, <https://www.ilga.gov/documents/legislation/103/HB/10300HB1541eng.htm>

Attachment C-1

**Cfor AT & NCLC Feedback on Extreme Heat Proposals from Extreme Weather
Protections Working Grooup Meeting #3**

November 17, 2025

**CforAT & NCLC Feedback on Extreme Heat Proposals from Extreme Weather
Protections Working Group Meeting #3
November 17, 2025**

Following the October 10, 2025 Working Group Meeting and submission of feedback, the Joint IOUs informed stakeholders that they would consider the feedback in developing their final IOUs' proposal and that they would include a summary of party positions in their December 17, 2025 Advice Letter filing. In order to make additional efforts to develop a consensus proposal or to further narrow differences among the parties ahead of the Advice Letter filing, CforAT and other Working Group participants requested an additional Working Group Meeting. The goal of this meeting was for the IOUs to provide additional information discussed at the previous meeting, to address parties' substantive questions, and to work towards refining and reaching greater consensus on a proposal to implement extreme heat protections. The IOUs agreed and held Working Group Meeting #3 on November 12, 2025, which CforAT and NCLC attended. We appreciate the work that went into developing the updated IOU proposal based on a 98th percentile approach and in presenting three options for extreme heat protections for parties' consideration.

The IOUs shared three potential options for expanding disconnection protections to reduce heat risk. The first option is an interim solution of lowering the existing temperature threshold. While this approach does not meet the D.25-06-012 requirements of region-specific thresholds or consider criteria beyond temperature, the IOUs stated that it is easy and low-cost to implement.

As stated in our prior feedback, to the extent that any proposal incorporates short-term temperature adjustments based on the existing system, CforAT and NCLC believe that the threshold should not exceed 95°F and would oppose the IOUs' proposed threshold of 98°F. The 95°F threshold is consistent with disconnection rules in Arizona, which is generally hotter than California and whose population is presumably better acclimated to heat. As discussed in prior meetings and feedback, the 98°F threshold does not appear to have any empirical basis or consistency with other heat standards. Even 95°F may pose heat risk for some individuals, including vulnerable populations such as people with medical needs or disabilities. The IOUs should set the threshold at no higher than 95°F and prioritize expanding protections, particularly for a potential interim solution that would only be in place until a more refined approach can be implemented.

The second option proposed by the IOUs is an updated 98th percentile approach, which uses a daily average temperature percentile methodology for locations expected to fall between an 85 floor and 100 ceiling and incorporates consideration of temperature over the course of a day and indirectly accounts for humidity. The IOUs conveyed that this approach would expand disconnection protections and add approximately 7 disconnection-restricted days. CforAT and

NCLC's understanding is that the spatial level for this approach differs across IOUs with zip codes for PG&E and SCE and subregions for SDG&E. The IOUs characterized the cost of implementation as "medium," with the complexity of the implementation process varying across IOUs.

The third option proposed by the IOUs would utilize CalHeatScore analysis and apply disconnection protections by zip code when the CalHeatScore value is 3 or higher. The IOUs stated that an API tool for CalHeatScore is expected to be available sometime in summer 2026. However, the timing is uncertain, and implementation will require additional time once data is available, with the complexity of this process varying across IOUs. The IOUs also noted that they have been given a deadline in May of 2026 to increase protections, and that there is no possibility that the tool will be developed in time to meet this deadline.

The IOUs stated that the cost of implementation of this proposal would be relatively high. In response to questions from CforAT, the IOUs conveyed that they can potentially speed up the implementation process by making preparations in advance of receiving the data and coordinating with the CalHeatScore team.

The IOUs stated that they could adopt an interim solution and then transition to the CalHeatScore option when it becomes available, but they opposed adoption of the updated 98th percentile approach as an interim solution. Instead, they proposed using options 1 and 3 in order to avoid the higher combined implementation costs that would come with the adoption of both option 2 and option 3. CforAT and NCLC recognize the need to implement a solution for the May 2026 deadline, as well as the need to adopt a refined approach that considers multiple criteria and regional differences. We believe that the IOUs should determine their approach based on the availability of API from CalHeatScore.

At this time, CforAT and NCLC propose the following approach to expanding existing extreme heat protections:

- The IOUs should specify a "drop-dead date," representing the latest possible date at which the IOUs could receive the API from CalHeatScore and be prepared to implement use of this tool for summer 2027. The IOUs should coordinate with CalHeatScore to determine the implementation process and how IOUs can best-position themselves to quickly launch once tool is available.
- Begin by implementing the first option of lowering the existing temperature threshold as an interim solution to meet May 2026 deadline and expand heat protections in the near-term. The new temperature threshold should be set at 95°F or lower.
- Implement the third option of CalHeatScore if the required API becomes available before or by the "drop-dead date." The IOUs should provide more information to determine the appropriate value for triggering disconnection restrictions.

- Implement the second option of the 98th percentile approach if the API from CalHeatScore is not available by the “drop-dead date” (or if the IOUs learn earlier that it will not be available for summer 2027 implementation). This is an appropriate plan to move beyond the interim solution in the event that CalHeatScore is not ready for use for multiple summers.

CforAT and NCLC appreciate the opportunity to provide these comments. We request that the IOUs incorporate parties’ feedback to adopt a more expansive and comprehensive extreme heat approach and continue to collaborate with parties by addressing substantive questions and providing updated information as it develops.

Attachment C-2

TURN Informal Feedback on 11/12/25 Working Group Meeting

November 17, 2025

TURN Informal Feedback on 11/12/25 Working Group Meeting

R.18-07-005 (Extreme Heat Disconnections Protections Working Group)

TURN appreciates the IOUs convening an additional meeting and expanding their proposal to consider other factors besides temperature which impact extreme heat, as recommended by TURN's proposal and parties' comments to the working group.

TURN supports (1) adopting a lower temperature threshold, and (2) implementing the CalHeatScore as an additional threshold when the API is available. Thereafter, TURN disagrees with the IOU proposal to phase out the temperature threshold. TURN supports maintaining both a temperature threshold and CalHeatScore threshold simultaneously, in line with other states which have multiple independent criteria for protections. This will also offer sustained protections in the event that there are future funding or technological changes affecting the CalHeatScore tool.

For (1) the reduced temperature threshold, TURN strongly opposes the IOUs' proposal to only lower the temperature threshold to 98 degrees statewide. The IOUs have not provided any data or standards to support this cut-off point, while parties including TURN have presented facts supporting a lower threshold at 90 degrees, in line with Illinois, or 95 degrees, in line with Arizona. TURN recommends that this threshold be set at 90 degrees statewide, as proposed by UCAN, or vary regionally (at the Zip Code/NWS forecast zone level) based on historical temperatures up to a ceiling of 95 degrees. The IOUs have not provided any support for their claim that establishing regional temperature thresholds is too complex or expensive to implement in combination with the CalHeatScore approach.

For (2) the CalHeatScore approach, TURN supports implementing the tool when the API is available. In the joint advice letter, TURN requests that the IOUs present additional information on the implications of suspending disconnections at different risk levels to determine whether a 3+ risk score is the appropriate cut-off, as opposed to a lower score. Parties have not had an opportunity to review this data closely prior to this point.

TURN also requests that the IOUs provide additional details and analysis in their advice letter on each of the proposed alternatives. The IOUs have not presented any cost estimates besides "low, medium, and high." The IOUs have also not provided information to analyze the change in protected days for any of the proposed approaches besides the 98th percentile historic temperatures, although even this analysis uses a time window and geographic granularity which the IOUs propose modifying.

Attachment C-3

UCAN's Feedback to Working Group 3 Meeting

November 17, 2025

UCAN was unable to attend WG meeting #3 due to scheduling conflicts. After reviewing the slides for meeting #3, UCAN provides the following feedback:

- UCAN's one-page proposal should be viewed as UCAN's current position on the optimal implementation for a disconnection ban during extreme heat events. UCAN believes its proposal minimizes costs and ensures customer safety.
- Meeting #3, slide 4 states "IOUs are supportive of deferring implementation until CalHeatScore becomes available, at which point IOUs propose applying protections when the CHS value is 3 or higher signifying high impact level."
 - UCAN opposes deferred implementation unless UCAN's 90 degree threshold is used prior to implementation of CalHeatScore.
 - UCAN opposes a threshold corresponding to a CHS value of 3. A CHS value of 3 does not sufficiently protect Californians. If CalHeat Score is used, the value should not exceed CHS value 2. Even under CHS value 2, the emergency

department visits can increase 33% to 66% compared to "average conditions," which is a significant increase in emergency department visits.

- When the IOUs file their advice letter proposing extreme heat protections, UCAN requests that the IOUs provide an analysis showing the percentage of customers that would have been protected from disconnections during the 2024 peak summer months (June-September) for each day and for each IOU service territory corresponding to three of the parties' proposals: UCAN, TURN, and the Joint IOUs.

Thank you,

Tyson Siegele

Principal Consultant, Clean Energy

Strategies 917-771-2222

Attachment D

Working Group Meeting Materials

Working Group Meeting #1

PROPOSAL ADJUSTING TEMPERATURE THRESHOLDS THAT TRIGGER DISCONNECTIONS SUSPENSIONS

August 28, 2025

AGENDA

- Introductions
- Background
- Proposal Guidelines
- Overview of Potential Proposal Options
- Discussion
- Next Steps

BACKGROUND

- ▶ On August 14, 2024, The Utility Reform Network (TURN) filed an *Emergency Motion to Modify Weather-Related Disconnections Protections to Better Address "Extreme Heat" Health and Safety Risks*, which was denied on procedural grounds by the assigned Commissioner's ruling on October 14, 2024
- ▶ D.25-06-012 directed the Large IOUs to develop, in collaboration with Cal Advocates, TURN, CforAT, and NCLC, and any other interested parties to the proceeding, a proposal to lower the temperature or other relevant thresholds that trigger disconnections suspension in light of the relative heat risks identified in TURN's motion

PROPOSAL GUIDELINES

- ▶ The proposal shall identify regions in each Large IOU's territory that should have a lower temperature threshold to suspend disconnections then propose region specific thresholds
- ▶ The Large IOUs must jointly file the proposal via a Tier 3 Advice Letter within six months of the issuance date of the decision, which will be on or before 12/17/25
- ▶ The approved proposal must then be implemented before May 1, 2026
- ▶ The proposal need not be a consensus among all stakeholders; the Advice Letter should identify major issues where stakeholders disagree and allow each stakeholder to succinctly explain their position
- ▶ The Commission will seek proposals that have a targeted focus on reducing customers' relative heat exposure, that rely on data and tools that are proven and consistently available, and minimize cost and burden of implementation

POTENTIAL OPTIONS FOR PROPOSAL

PROPOSAL	PROS	CONS
Lowering the heat threshold to <100 degrees	Leverages existing IOU processes, quicker to implement, can be easily modified should future changes be adopted	Not region specific; Does not incorporate non-temperature related impacts
Lowering the heat threshold to <100 degrees, with regional differences	Leverages some existing IOU processes, quicker to implement, can be easily modified should future changes be adopted	Does not incorporate non-temperature related impacts
Utilizing HeatRisk Tool	Would not require IOUs to conduct additional calculations	Still experimental, unclear whether tool will be available long term as funding is uncertain
Utilizing CalHeatScore Tool	Local to California, would not require IOUs to conduct additional calculations, likely to be more reliable due to long term funding	Still in development, website does not have a data feed yet, which would make for difficult implementation

OVERVIEW OF PUBLICLY AVAILABLE TOOLS MEASURING HEAT RELATED RISKS

NWS Heat Risk Product

The NWS HeatRisk is designed to:

- Identify periods of unusual heat for a particular location, which would potentially lead to negative impacts including heat stress and heat illness.
- Forecast heat risk out daily to a full week horizon.

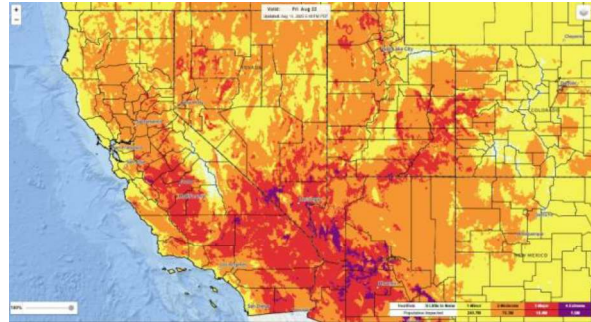
The data used are:

- National Weather Service temperature forecasts
- Temperature climatology
- CDC modeled heat health thresholds (varies regionally)

Resolution is primarily a function of weather forecast (top right).

Benefit: Easy to use, good accessibility, regional basis, scientifically sound.

Limitation: Not guaranteed to remain operational.



HeatRisk Values	Risk of Heat Effects	Levels of Heat Concern
When HeatRisk is this value:	...the risk of heat effects are:	...as symbolized by this color:
0	Little to None	Green
1	Minor	Yellow
2	Moderate	Orange
3	Major	Red
4	Extreme	Magenta

CalHeatScore Product

The CalHeatScore Product is designed to:

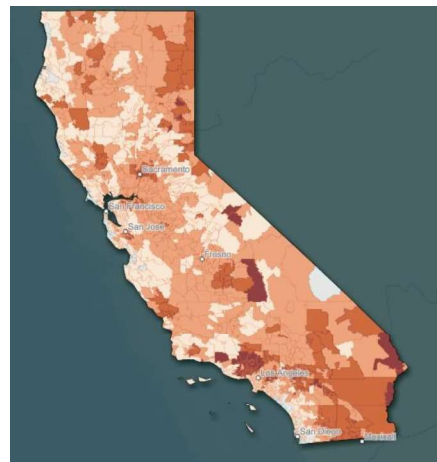
- Identify periods of unusual heat for a particular zip code that may lead to elevated visits to Emergency Departments (ED).
- Forecast heat risk out daily to a full week horizon.

Data/Basis:

- Weather forecast output is used to calculate forecast Relative Risk (RR) representing the relative change in ED visit rates for a given day and zip code compared to average conditions.
 - $RR = 1$, no change from normal
 - $RR > 1$, increased chances of ED visit
 - $RR < 1$, decreased chances of ED visit
- Correlated to past ED visit rates
- Forecast data used is from the National Weather Service and extends daily out to seven days.

Benefit: Scientifically sound, regional basis

Limitation: Poor accessibility for use in automation (no API), less resolution than NWS Heat Risk.



CalHeatScore (CHS) Rank	Corresponding RR ranges
CHS 0	$0 < RR \leq 1$
CHS 1	$1 < RR \leq 1.333$
CHS 2	$1.333 < RR \leq 1.667$
CHS 3	$1.667 < RR \leq 2$
CHS 4	$2 < RR$

98th Percentile Temperature as a threshold (Cal Adapt)

- Cal Adapt defines an extreme heat day as when the 98th percentile maximum climatological temperature is exceeded
- Cal Adapt uses observations from 1961 – 1990 to define the 98th percentile temperatures provided in TURN's response (August 2024, right).
- Most counties in California have a 98th percentile temperature below 100F, which is the current threshold for disconnection.
- The 98th percentile for a local area could be used as the new disconnection threshold, with the areal basis up for further discussion.
 - County
 - California Energy Commission Climate zones
 - National Weather Service forecast zones (granular microclimates)

Benefit: Would not require extensive external data, regionally based, accepted extreme heat measure, linked to increased ED visits in San Francisco

Limitation: Need to define an aggregation, more up to date climatology may need to be defined (e.g. 1991-2020)

County	Extreme Heat Threshold (°F)	County	Extreme Heat Threshold (°F)
Alameda County	92.7	Orange County	93.4
Alpine County	82.3	Placer County	93.3
Amador County	96.8	Plumas County	90.6
Butte County	100.1	Riverside County	106.0
Calaveras County	98.3	Sacramento County	102.6
Colusa County	101.9	San Benito County	94.7
Contra Costa County	96.6	San Bernardino County	105.7
Del Norte County	76.8	San Diego County	96.1
El Dorado County	92.4	San Francisco County	85.2
Fresno County	94.3	San Joaquin County	101.6
Glenn County	100.9	San Luis Obispo County	90.3
Humboldt County	83.2	San Mateo County	85.7
Imperial County	111.2	Santa Barbara County	87.5
Inyo County	100.8	Santa Clara County	92.7
Kern County	100.8	Santa Cruz County	90.0
Kings County	104.4	Shasta County	97.4
Lake County	97.1	Sierra County	88.9
Lassen County	91.9	Siskiyou County	91.4
Los Angeles County	94.4	Solano County	100.2
Madera County	96.1	Sonoma County	93.9
Martin County	94.4	Stanislaus County	101.2
Mariposa County	94.7	Sutter County	104.2
Merced County	90.0	Tehama County	92.2
Merced County	101.8	Trinity County	93.9
Madera County	92.4	Tulare County	92.9
Mono County	84.4	Tuolumne County	88.6
Monterey County	92.5	Ventura County	88.8
Napa County	98.6	Yolo County	103.2
Nevada County	92.2	Yuba County	101.2

DISCUSSION

Operational Concerns:

What are the potential challenges in implementing different proposals for new weather protections by the May 1, 2026 deadline?

Are certain proposals more robust/less prone to fail (e.g., data availability issues)?

In the case of data availability issues, should a fallback temperature threshold be used?

Cost and Burden:

What are the potential costs associated with implementing the new temperature thresholds, and how can they be minimized?

How can we balance the need to reduce customers' heat exposure with the goal of minimizing the cost?

Additional Considerations:

Which geographic areas should underly the regional variations in thresholds?

Are there any other factors or data points that should be considered when determining the temperature thresholds for disconnection suspensions?

NEXT STEPS

- Schedule WG Meeting #2
- Follow up items from WG Meeting #1
- IOUs to begin drafting Tier 3 Advice Letter

Working Group Meeting #2

Proposal Adjusting Temperature Thresholds that Trigger Disconnections Suspensions

Working Group
Meeting #2
October 10, 2025

Agenda

- Working Group Meeting #1 Recap
- IOU Proposal – 98th Percentile
- Other Party Proposals
- Discussion
- Next Steps

2

Heat Protections Proposal Options from Working Group Meeting #1

PROPOSAL	PROS	CONS	TIMELY IMPLEMENTATION	COST TO IMPLEMENT
Lowering the heat threshold to <100 degrees	Leverages existing IOU processes, quicker to implement, can be easily modified should future changes be adopted	Not region specific; Does not incorporate non-temperature related impacts	Yes	Low
Lowering the heat threshold to <100 degrees, with regional differences	Leverages some existing IOU processes, quicker to implement, can be easily modified should future changes be adopted	Does not incorporate non-temperature related impacts	Yes	Low
Utilizing HeatRisk Tool	Would not require IOUs to conduct additional calculations	Still experimental, unclear whether tool will be available long term as funding is uncertain	Yes	Moderate to High
Utilizing CalHeatScore Tool	Local to California, would not require IOUs to conduct additional calculations, likely to be more reliable due to long term funding	Still in development, website does not have a data feed yet, which would make for difficult implementation	No	Moderate to High

3

TURN's Motion

- Extreme heat risks arise when temperatures are much higher than normal for a specific location
 - Cal-Adapt Extreme Heat tool measures extreme heat days and nights at the 98th percentile of historical temperatures (1961 -1990).
- Extreme heat definitions all tie extreme heat to historical local average temperatures
 - Human bodies are generally acclimated to temperatures to which they are accustomed and need time to safely acclimatize to significant temperature increases
- The current heat threshold does not sufficiently address extreme heat risks in parts of the state where extreme heat events occur below 100 °F

4

The IOUs propose to use the 98th Percentile Temperature as a threshold (Cal Adapt)

- TURN proposed this as an interim protection method
- IOUs investigated this method and determined that it is the best permanent option in the absence of readily available, fully reliable heat impact metrics
- Meets decision requirements of regional variation + low cost
 - “This proposal shall identify regions in each Large IOU’s territory that should have a lower temperature threshold to suspend disconnections then propose region specific thresholds” (D.2506-012, p.35)
 - “The Commission will seek proposals that have a targeted focus on reducing customers’ relative heat exposure, that rely on data and tools that are proven and consistently available, and minimize cost and burden of implementation” (D.2506-012, p.35)
- Impacts:
 - Greatly expands protections in more moderate climate zones
 - Ties in with existing IOU processes for heat protections, enabling rapid implementation by May 1, 2026
 - Can be combined with existing 3day look ahead period and 100°F absolute limit for enhanced protections

5

Background and Method Overview: 98th Percentile Temperature

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98th Percentile Temperature as a threshold (Cal Adapt)

- Cal Adapt defines an extreme heat day as when the 98th percentile maximum climatological temperature is exceeded ([Cal-Adapt](#))
- Cal Adapt uses observations from 1961 – 1990 to define the 98th percentile temperatures provided in TURN's response (August 2024, right).
- Most counties in California have a 98th percentile temperature below 100F, which is the current threshold for disconnection.
- The 98th percentile of a local area could be used as the new disconnection threshold, with the areal basis up for further discussion.
 - County
 - California Energy Commission (CEC) Climate zones
 - National Weather Service (NWS) forecast zones (granular microclimates)

Benefit: Easy to implement, regionally based, accepted extreme heat measure, linked to increased ED visits in San Francisco

Limitation: Need to define an aggregation, more up to date climatology may need to be defined (e.g. 1991-2020)

County	Extreme Heat Threshold (°F)	County	Extreme Heat Threshold (°F)
Alameda County	92.7	Orange County	93.4
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Lassen County	91.9	Siskiyou County	91.4
Los Angeles County	94.4	Solano County	100.2
Madera County	96.1	Sonoma County	93.9
Marin County	94.4	Stanislaus County	101.2
Mariposa County	94.7	Sutter County	104.2
Mendocino County	90.0	Tehama County	99.2
Merced County	101.8	Trinity County	93.9
Modoc County	92.4	Tulare County	92.9
Mono County	84.4	Tuolumne County	88.6
Monterey County	92.5	Ventura County	88.8
Napa County	98.6	Yolo County	103.2
Nevada County	92.2	Yuba County	101.2

98th Percentile Temperature as a threshold (Cal Adapt)

- This method stems from several studies regarding heat waves and their impact on health (sf.gov, 2023).
- A 2006 California heat wave was found to increase heat related emergency department visits throughout most of the Bay Area ([Knowlton et al., 2008](#)).
- Another study looking at worldwide heat waves found that mortality increases around the 99th percentile, with illness impacts beginning around the 97th - 98th percentile ([Gasparrini et al., 2015](#)).
- Cal-Adapt's approach was developed in 2017, which is why they use the 1961 – 1990 climatology ([Cal-Adapt, 2017](#)).
- The 98th percentile is similar to statistical downscaling techniques used by climate models and provides a clear benchmark encompassing all areas at risk ([Cal-Adapt, 2017](#)).



IOU proposal for enhancements to the 98th percentile method

- Updating data - The historical data from the Cal-Adapt Extreme Heat tool is dated, from 1961-1990. Thresholds will be recalculated using more recent climatology data
- Implementing a ceiling - For hotter regions, where the 98th percentile is higher than the existing threshold of 100°F, the threshold will remain at 100°F pursuant to D.20-06-003
- Implementing a floor - For colder regions, where the 98th percentile may not constitute increased heat risk (e.g. high elevations, coasts), a floor threshold of 85°F shall be utilized to avoid unnecessary restrictions on disconnections in moderate climate zones
 - Based on CalOSHA's Heat Illness Prevention standards
- Spatial aggregation – IOUs are still discussing the appropriate level of granularity (e.g., by city, zip code)

Illustrative Example:

City Level 98th Percentile Temperatures Method for the SCE territory

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Methods

- Used a downscaled climatological dataset (2km resolution) over SCE territory
 - Variables: Daily Mean Max Temperature at 2m Above Ground OR Daily Max Temperature at 2m Above Ground
 - Pulled years 1991 – 2020 to find the most recent climatology
 - Found the 98th percentile at various aggregation levels
 - County (Daily Mean Max Temp)
 - CEC Climate Zone (Daily Mean Max Temp)
 - NWS Forecast Zone (Daily Mean Max Temp)
 - City (Daily Max Temp)
 - Pulled years 2021 – 2024 to create a backcast with the following results:
 - Number of days meeting or exceeding 98th percentile threshold
 - Number of days meeting or exceeding 100F
 - Percentage increase
 - The illustrative analysis is shown at the "city" level, which is the current aggregation level for heat protections in SCE's billing system

City Level 98th Percentile Max Temps and Backcast 2021 - 2024

City	98 th Percentile Max Temp (degF)	No. Days >= 98 th Percentile (degF)	No. Days >= 100F (degF)
Acton	98	58	24
Adelanto	102 Exceeds Ceiling	60	95
Agoura	99	33	30
Agoura Hills	99	30	23
Agua Dulce	98	55	20
Aguanga	100	37	36
Alhambra	98	22	15
Aliso Viejo	92	23	4
Alta Loma	100	36	36
Altadena	98	28	17
Amboy	112 Exceeds Ceiling	55	371
Anaheim	96	21	9
Angelus Oaks	88	67	0
Anza	97	49	12
Apple Valley	100 Exceeds Ceiling	61	67
Arcadia	101 Exceeds Ceiling	24	27
Armona	106 Exceeds Ceiling	55	199
Arrowbear Lake	79 Under Floor	8 days using 85F floor	0
Artesia	95	17	9
Atwood	97	22	11
Auberry	97	59	30

For illustrative purposes only, subject to change

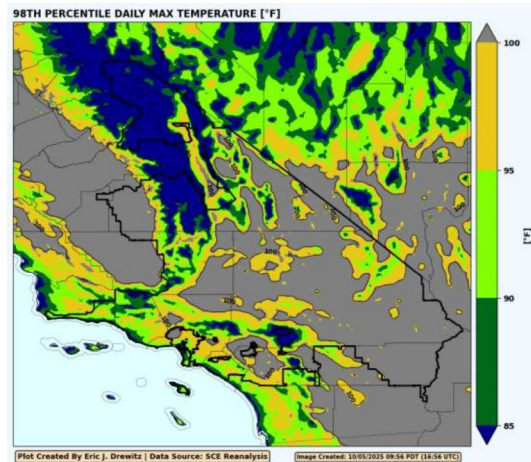
- Coastal and cooler valley areas see a significant rise in days with protections
- Many hot inland valleys and desert areas maintain the ceiling of 100F and remain the same level of protection
 - Ex: In Amboy, 112F is the new threshold, but this decreases the days under protection and anything above 100F is still considered to have heat risk
- Mountain and coastal areas also see a rise in days with protections, but with the floor value of 85F, these rises are not as significant
- The sample size for days is 1461 days (4 years), so to obtain average annual protections, divide the number by 4
- Gray highlights represent locations exceeding the 100F ceiling, blue highlights represent locations under the 85F floor
- 41% of SCE cities are above the 100F ceiling
- 10% of SCE cities are below the 85F floor

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12

City Level 98th Percentile Max Temps and Backcast 2021 - 2024

City	98 th Percentile Max Temp (degF)	No. Days >= 98 th Percentile (degF)	No. Days >= 100F (degF)
Avalon	88	16	4
Azusa	101 Exceeds Ceiling	23	29
Baker	111 Exceeds Ceiling	55	357
Bakersfield	106 Exceeds Ceiling	62	226
Balboa	80 Under Floor	8 days using 85F floor	0
Baldwin Hills	100 Exceeds Ceiling	20	22
Banning	100 Exceeds Ceiling	52	61
Barstow	105 Exceeds Ceiling	59	210
Bear Valley	87	76	0
Beaumont	100 Exceeds Ceiling	57	60
Bell	96	19	10
Bell Canyon	100 Exceeds Ceiling	36	36
Bell Gardens	97	19	11
Bellflower	96	17	10
Benton	92	55	0
Beverly Hills	92	19	7
Big Bear City	80 Under Floor	14 days using 85F floor	0
Big Bear Lake	80 Under Floor	3 days using 85F floor	0
Big Creek	84 Under Floor	54 days using 85F floor	0
Big Pine	99	63	36
Bishop	99	60	43



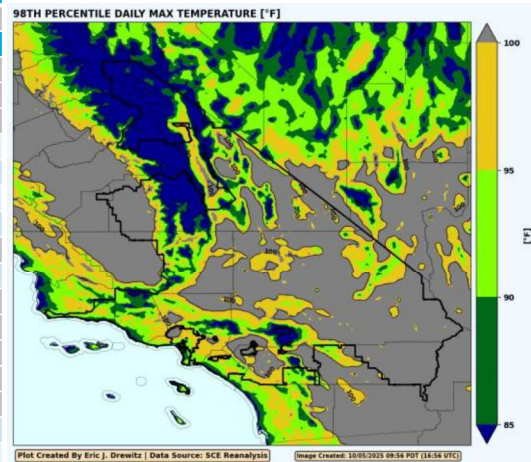
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13

City Level 98th Percentile Max Temps and Backcast 2021 - 2024

City	98 th Percentile Max Temp (degF)	No. Days >= 98 th Percentile (degF)	No. Days >= 100F (degF)
Bloomington	103 Exceeds Ceiling	35	106
Blue Jay	84 Under Floor	42 days using 85F floor	0
Blythe	113 Exceeds Ceiling	43	398
Bodfish	100 Exceeds Ceiling	67	80
Boron	103 Exceeds Ceiling	62	137
Bradbury	100	25	22
Brea	97	19	12
Brea Canyon	97	22	14
Bridgeport	86	57	0
Bryn Mawr	103 Exceeds Ceiling	49	106
Buena Park	96	20	10
Cabazon	105 Exceeds Ceiling	54	181
Cadiz	111 Exceeds Ceiling	51	355
Calabasas	102 Exceeds Ceiling	26	75
Caliente	101 Exceeds Ceiling	70	101
California City	103 Exceeds Ceiling	59	134
Calimesa	100	55	52
Camarillo	93	21	3
Camp Nelson	85	66	0
Canoga Park	103 Exceeds Ceiling	35	95
Cantil	105 Exceeds Ceiling	61	224



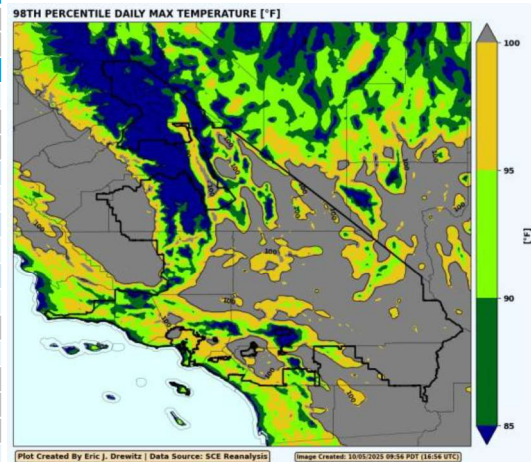
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14

City Level 98th Percentile Max Temps and Backcast 2021 - 2024

City	98 th Percentile Max Temp (degF)	No. Days >= 98 th Percentile (degF)	No. Days >= 100F (degF)
Canyon Country	102 Exceeds Ceiling	41	79
Canyon Lake	103 Exceeds Ceiling	53	104
Carpinteria	80 Under Floor	14 days using 85F floor	0
Carson	92	18	4
Castaic	101 Exceeds Ceiling	39	63
Cathedral City	112 Exceeds Ceiling	42	386
Cedar Glen	86	64	0
Cedar Pines	87	59	0
Century City	91	19	4
Cerritos	96	19	9
Chalfant	98	63	29
Chalfant Valley	93	63	1
Chatsworth	102 Exceeds Ceiling	21	68
Cherry Valley	98	57	27
China Lake	105 Exceeds Ceiling	62	205
Chino	102 Exceeds Ceiling	26	57
Chino Hills	100 Exceeds Ceiling	23	26
Cima	95	57	16
City of Commerce	97	20	12
City of Industry	100	22	21
Claremont	100	32	25



For illustrative purposes only, subject to change

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15

Other Party Proposals

TURN Proposal for Heat Thresholds Triggering Disconnections Suspensions

R.18-07-005: Extreme Heat Disconnections Suspensions
Working Group Meeting #2
October 10, 2025



TURN believes we can and should live in a society where power, broadband,
and phone service are treated as basic human rights for all families.

Background

- D. 25-06-012 directs the IOUs to collaborate with parties to develop: “a proposal to lower the temperature or other relevant threshold that trigger disconnections suspensions in light of the **relative heat risks** identified in TURN’s Motion of August 14, 2024.”
- In addition to a temperature threshold, TURN’s Motion proposed adopting the National Weather Service (NWS) **Heat Risk** score of 3+ as a second criteria to trigger disconnections suspensions.
 - Reflects **regional variation**
 - Factors in **humidity, nighttime cooling, and heat-health** thresholds



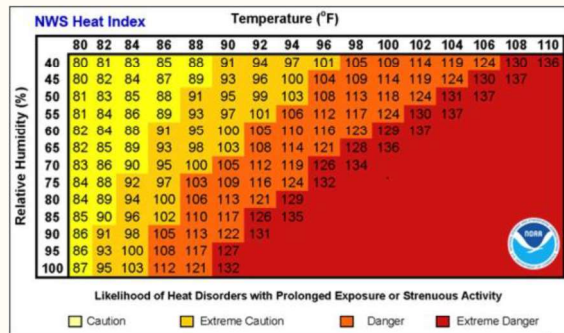
TURN Proposal

- (1) Support IOU proposal to establish regional temperature thresholds as **one criteria** to trigger suspensions based on historic data.
- Recommend a maximum threshold of 95°, instead of IOUs’ proposed 100°.
 - Aligns with CalOSHA’s Heat Illness Prevention standards
 - Aligns with other states including Arizona
- Recommend establishing **additional criteria** to trigger suspensions which reflect other factors besides temperature, including humidity and nighttime cooling, which impact health outcomes.



TURN Proposal

- (2) Suspend disconnections on any day when the NWS issues a heat advisory, extreme heat watch, or extreme heat warning for a given area.
 - Criteria vary regionally based on the heat index, which reflects humidity, and nighttime cooling
 - Heat Advisory: High heat index (e.g. mid-90s to mid-100s)
 - Extreme Heat Watch/Warning: Forecast/active extreme heat index (e.g. 105+ for 2+ days)
 - Aligns with other states including WA, MN, GA, IL



TURN
THE UTILITY RESILIENCE NETWORK

TURN Proposal

- (3) Suspend disconnections on any day when the CalHeatScore reaches level 3+, once the data is available for integration.
 - Based on heat index, which reflects humidity, and the risk of rising emergency room visits at the Zip Code level.
 - California-specific tool with future funding and development plans.

Recommended Criteria	IOU Proposal	TURN Proposal
The suspension threshold should vary regionally to reflect the relative impact of high temperatures	✓	✓
The suspension threshold should reflect other factors besides temperature, such as humidity and nighttime cooling , which impact 'apparent temperature' and health outcomes	✗	✓

TURN
THE UTILITY RESILIENCE NETWORK

Summary

- Recommend multiple implementable criteria to expand protections.
 - IOUs agree regional temperature thresholds are implementable, with a maximum threshold. 95° ceiling is implemented in other states.
 - NWS alerts implemented as a threshold in other states.
 - Future availability of the CalHeatScore tool.
- Next steps: Request discussion of this proposal, including implementation details and cost estimates, by IOUs.

Thank You

Discussion

17

Next Steps

- All parties review IOU proposal and provide feedback by 10/20/25
- IOUs to begin drafting Tier 3 Advice Letter
- IOUs to summarize party comments from Working Group Meetings and share with WG members for review

18

Appendix

19

Background

- ▶ On August 14, 2024, The Utility Reform Network (TURN) filed an *Emergency Motion to Modify Weather -Related Disconnections Protections to Better Address "Extreme Heat" Health and Safety Risks*, which was denied on procedural grounds by the assigned Commissioner's ruling on October 14, 2024
- ▶ D.25-06-012 directed the Large IOUs to develop, in collaboration with Cal Advocates, TURN, CforAT, and NCLC, and any other interested parties to the proceeding, a proposal to lower the temperature or other relevant thresholds that trigger disconnections suspension in light of the relative heat risks identified in TURN's motion

20

Proposal guidelines

- ▶ The proposal shall identify regions in each Large IOU's territory that should have a lower temperature threshold to suspend disconnections then propose region specific thresholds
- ▶ The Large IOUs must jointly file the proposal via a Tier 3 Advice Letter within six months of the issuance date of the decision, which will be on or before 12/17/25
- ▶ The approved proposal must then be implemented before May 1, 2026
- ▶ The proposal need not be a consensus among all stakeholders; the Advice Letter should identify major issues where stakeholders disagree and allow each stakeholder to succinctly explain their position
- ▶ The Commission will seek proposals that have a targeted focus on reducing customers' relative heat exposure, that rely on data and tools that are proven and consistently available, and minimize cost and burden of implementation

21

Thank
you

PROPOSAL ADJUSTING TEMPERATURE THRESHOLDS THAT TRIGGER DISCONNECTIONS SUSPENSIONS

Working Group Meeting #3

November 12, 2025

WORKING GROUP FEEDBACK 10/20

	95° Ceiling	85° Floor	Incorporate Other Factors (Humidity & Overnight Cooling)	Supportive of an interim solution until long term solution is available	Zip Codes or NWS forecast zones	96th Percentile	Moratorium June 1- October 15	NWS Alerts	CalHeatScore	HeatRisk	Indoor Temperature Considerations	Requested Data
CforAT & NCLC	X	X	X	X					X			
UCAN	X*		X		X	X	X				X	
TURN	X	X	X	X	X			X	X**	X	X	X
Cal Advocates	X		X	X						X	X (82°)	X

*90° is preferred

** CHS value of three or higher

UCAN's Proposal Submitted 11/7/25

- Ban disconnections when the National Weather Service (NWS) forecasts a temperature of 90 ° or higher during a 72-hour lookahead period
- Easy to implement, IOUs to use existing forecast zones in place for current 100 ° mandate
- Enables year -round disconnections, which help minimize ratepayer costs

Availability of CalHeatScore Summer 2026

- IOUs have been informed by OEHHA that development of a data warehouse for CalHeatScore as well as an API is underway, and should be available sometime next summer
- IOUs are supportive of deferring implementation until CalHeatScore becomes available, at which point IOUs propose applying protections when the CHS value is 3 or higher signifying high impact level
- With uncertainty around timing, IOUs are exploring several solutions
 - *Lower existing threshold*
 - *The 98th percentile method*
 - *CalHeatScore , when available*

UPDATED IOU PROPOSAL 98TH PERCENTILE APPROACH

Updated Methodology

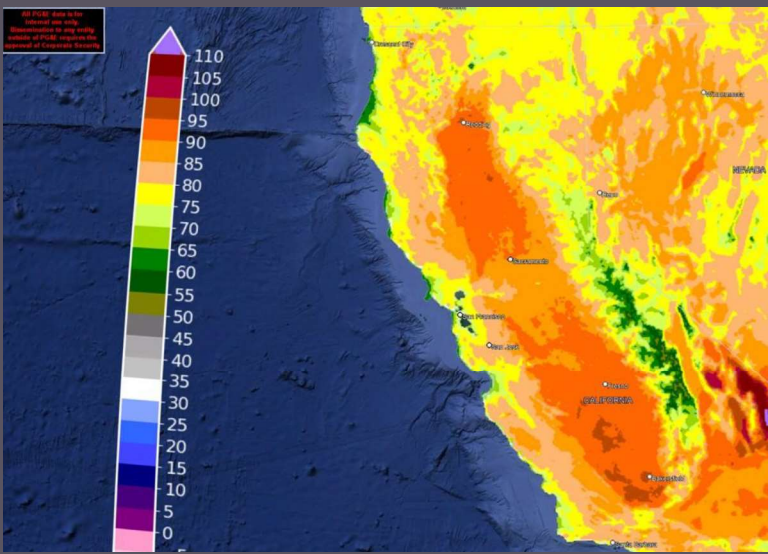
To address concerns related to humidity and overnight cooling, the IOUs have modified the previous 98th percentile approach as outlined below:

- Use of a **daily average temperature percentile methodology** for locations that are expected to fall between the bracketed temperatures (85° floor and 100° ceiling)
 - Average the high and low temperature either hourly, or 3 hourly temperatures to compute 98th percentile values for entire service territories

Why this works?

- Captures an understanding of the temperature over the entirety of the day
- Indirectly accounts for humidity by accounting for overnight lows, which are typically elevated during more humid summer days

98th percentile temperature plot for Northern and Central California using hourly temperatures to calculate the daily average



Desired Outcomes

- Expanded protections to reduce heat risk
- Low implementation costs
- Minimize ratepayer impacts

		Meets Requirements	Ease of Implementation	Cost of Implementation
Option 1*	Lowering the existing threshold	No	Very easy	Little to no cost
Option 2	98th percentile	Yes	Complexity varies across IOUs	Medium
Option 3**	CalHeatScore	Yes	Complexity varies across IOUs	High

*Option 1 is an interim solution and proposed for immediate implementation until CalHeatScore is available.
**Option 3 will require additional time to implement once the data is available for testing and deployment.

Proposal Timeline & Next Steps

Date	Milestone
6/17/2025	Decision Issuance
8/28/2025	Working Group Meeting #1
10/10/2025	Working Group Meeting #2
11/12/2025	Working Group Meeting #3
11/24/2025	Finalize Summary of Party Positions
12/17/2025	Tier 3 Advice Letter Filing
5/1/2026	Proposal Implementation

QUESTIONS?

**PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV**

AT&T	Ellison Schneider & Harris LLP	Pacific Gas and Electric Company
Albion Power Company		Peninsula Clean Energy
Alta Power Group, LLC	Electrical Power Systems, Inc. Fresno	Pioneer Community Energy
Anderson & Poole	Engie North America	Public Advocates Office
BART	Engineers and Scientists of California	Redwood Coast Energy Authority
Ava Community Energy		Regulatory & Cogeneration Service, Inc.
BART		Resource Innovations
Buchalter	GenOn Energy, Inc.	Rockpoint Gas Storage
Barkovich & Yap, Inc.	Green Power Institute	
Biering & Brown LLP		
Braun Blaising Smith Wynne, P.C.	Hanna & Morton LLP	San Diego Gas & Electric Company
		San Jose Clean Energy
		SPURR
California Community Choice Association	ICF consulting	
California Cotton Ginners & Growers Association	iCommLaw	Sempra Utilities
California Energy Commission	International Power Technology	Sierra Telephone Company, Inc.
California Hub for Energy Efficiency	Intertie	Southern California Edison Company
California Alternative Energy and Advanced Transportation Financing Authority	Intestate Gas Services, Inc.	Southern California Gas Company
California Public Utilities Commission		Spark Energy
Calpine	Kaplan Kirsch LLP	Sun Light & Power
Cameron-Daniel, P.C.	Kelly Group	Sunshine Design
Casner, Steve	Ken Bohn Consulting	Stoel Rives LLP
Center for Biological Diversity	Keyes & Fox LLP	
Chevron Pipeline and Power	Leviton Manufacturing Co., Inc.	Tecogen, Inc.
	Los Angeles County Integrated	TerraVerde Renewable Partners
		Tiger Natural Gas, Inc.
Clean Power Research	Waste Management Task Force	
Coast Economic Consulting		
Commercial Energy	MRW & Associates	Utility Cost Management
Crossborder Energy	Manatt Phelps Phillips	
Crown Road Energy, LLC	Marin Energy Authority	Water and Energy Consulting
	McClintock IP	
	McKenzie & Associates	
Davis Wright Tremaine LLP	Modesto Irrigation District	
Day Carter Murphy	NLine Energy Inc.	Yep Energy
Dept of General Services	NOSSAMAN LLP	
Douglass & Liddell	NRG Energy Inc.	
Downey Brand LLP		
	OnGrid Solar	