

Docket: R.20-11-003

Exhibit: _____

Witness: Paul Fukumoto

**OPENING TESTIMONY OF PAUL FUKUMOTO
ON BEHALF OF FUELCELL ENERGY, INC.**

September 1, 2021

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6 **I. Introduction and Summary of Recommendations**
7

8 On July 30, 2021, Governor Newsom signed an emergency proclamation (“Governor’s
9 Proclamation”) to “free up energy supply to meet demand during extreme heat events and
10 wildfires that are becoming more intense and to expedite deployment of clean energy resources
11 this year and next year.”¹ The Governor’s Proclamation instructed energy agencies to “act
12 immediately to achieve energy stability during this emergency” and instructed the California
13 Public Utilities Commission (“Commission”) to “exercise its powers to expedite Commission
14 actions, to the maximum extent necessary to meet the purposes and directives of this
15 proclamation, including by expanding and expediting approval of demand response programs
16 and storage and clean energy projects, to ensure that California has a safe and reliable electricity
17 supply through October 31, 2021, to reduce strain on the energy infrastructure, and to ensure
18 increased clean energy capacity by October 31, 2022.

19 On August 10, 2021, the Commission issued an Amended Scoping Memo and Ruling
20 revising the scope and schedule for this proceeding, in recognition that “[a]n expedited process is
21 essential to ensure there is adequate supply and demand management to achieve electrical system
22 reliability in 2022 and 2023.” An August 11, 2021 ALJ ruling issued Staff Guidance on the
23 Contents of All Program Proposals Submitted in Opening Testimony. The Staff Guidance
24 invited proposals that “may include new programs and policies as well as modifications to
25 existing programs and policies.” On August 16, 2021 the ALJ issued the “Energy Division

¹ <https://www.gov.ca.gov/wp-content/uploads/2021/07/Energy-Emergency-Proc-7-30-21.pdf>.

1 Concept Paper Proposals for Summer 2022 and 2023 Reliability Enhancements” describing
2 program and policy concepts that could be considered by the Commission, and encouraging
3 parties to provide comments on the staff concepts in testimony as well as their own “proposed
4 rule changes or program designs.”

5 FuelCell Energy, Inc. (“FCE”) appreciates this opportunity to provide two proposals that
6 could reduce demand and increase supply in summers 2022 and 2023, and in the future. First,
7 FCE proposes that the Commission extend the investor-owned utility (“IOU”) fuel cell net
8 energy metering (“FC-NEM”) tariffs or take other actions authorized under the Governor’s
9 Proclamation to enable installation of additional clean net metered fuel cell capacity in 2022 and
10 2023. This would address the short-term challenge posed by the pending sunset of the FC-NEM
11 program. Second, FCE proposes that the Commission revise the investor-owned utilities’ Base
12 Interruptible Program (“BIP”) tariffs to extend eligibility to customers that operate non-
13 renewable behind the meter generation, as long as the facility is a California Air Resources
14 Board (“CARB”) certified distributed generation (“DG”) resource, and allow FC-NEM resources
15 to participate in BIP. This would help address near-term supply shortages with clean, available
16 resources.

17 **II. Background and Witness Information**

18 FCE is a global leader in the stationary fuel cell market, providing affordable and clean
19 onsite energy, 24/7 at sites including wastewater treatment plants, hospitals, universities,
20 industrial facilities, and serving utilities including at substations. FCE has been a participant
21 for many years in California’s clean energy programs and has made meaningful contributions
22 to assisting California’s goals with respect to emissions reductions, microgrids, and biofuels.
23 FCE fuel cells are a clean, reliable “energy platform” that produce power and can deliver
24 solutions with additional features such as biogas clean-up, heat recovery for combined heat

1 and power, and vehicle quality hydrogen for zero-emissions fuel. FCE fuel cell platforms are
2 deployed throughout the state of California, including at sites located within disadvantaged
3 communities.

4 Given that FCE fuel cell systems generate continuous power and maintain the resiliency
5 and reliability of local grid operation, without combustion, criteria pollutants, and air toxics
6 emissions, these fuel cell systems should be a critical and preferred resource for California to
7 address power shutoffs and grid unreliability both in front of and behind the meter and as
8 microgrid resources. Additionally, it is important to note the disproportionate negative impact
9 that criteria air pollution, power shutoffs, and emissions from diesel generators have on
10 disadvantaged communities in this state—all harms that FCE’s fuel cells can directly mitigate.

11 This testimony is sponsored by Paul Fukumoto. Mr. Fukumoto has been employed by
12 FCE since 2017 and is currently FCE’s Director of Business Development. Mr. Fukumoto’s
13 responsibilities at FCE include originating and developing the California located projects for
14 combined heat and power, hydrogen, and carbon capture opportunities. Mr. Fukumoto is also
15 the Responsible Managing Employee for the FuelCell Energy California General Engineering
16 Contractor license. Prior to working at FCE, Mr. Fukumoto developed distributed power
17 generation projects for companies including Honeywell, Ingersoll-Rand and FlexEnergy.

18 **III. FCE’s Proposals for Reducing Demand or Increasing Supply In Summers 2022 and**
19 **2023.**

20
21 The August 11, 2021 Staff Guidance included an invitation to “[i]dentify any new policy
22 or modification to an existing policy that could reduce demand or increase supply at net peak (for
23 example a rule, regulation, incentive, penalty).” In response to this guidance, FCE offers two
24 proposals, outlined below.

1 **PROPOSAL ONE: Extend the FC-NEM tariff beyond its December 31, 2021**
2 **sunset as a direct response to the Governor’s July Emergency Proclamation or**
3 **take action to replace FC-NEM with a program that will provide a comparable**
4 **incentive for customer investment in distributed fuel cell systems.**

5 California faces a need for more reliable generation to supply the grid in a variety of
6 circumstances: in localized areas susceptible to public safety power shutoffs (“PSPS”) through
7 islanding or microgrids, in the evenings each day when evening demand spikes, and in seasonal
8 periods of extreme demand like during the increasingly frequent heat waves. Additionally, and
9 critically, the grid needs more in-state and local supply that is reliable in the evening hours
10 during the ramp up of net peak demand, particularly in July, August, and September, when out-
11 of-state resources are constrained by regional extreme weather. Assurance of reliable power is
12 a fundamental component of what has made California an economic power for so many years.
13 The challenges at the heart of this proceeding underpin how California will ensure its economy
14 remains strong into the future.

15 Over the last two years, the state has begun to address this supply shortfall by relaxing
16 clean energy policy requirements and standards – by allowing operation of diesel generation to
17 address energy supply shortages and waiving emissions requirements on relatively dirty forms
18 of combustion generation.² Such authorization of dirty emergency generation has been
19 rationalized as a temporary solution while other cleaner, more permanent measures can be
20 connected. However, at the same time, opposition by some parties to development of any form
21 of natural gas- or biomethane-based generation has had the effect of discouraging some

² See e.g., Extreme Heat Even Proclamation of State of Emergency (August 16, 2020) <https://www.gov.ca.gov/wp-content/uploads/2020/08/8.16.20-Extreme-Heat-Event-proclamation.pdf>; Guidelines during Declaration of State Emergency for Energy Reliability, South Coast Air Quality District, August 6, 2021. <http://www.aqmd.gov/docs/default-source/compliance/emergency-order-compliance-advisory-august-6-2021.pdf?sfvrsn=8>.

1 categories of DER projects, and has resulted in successive years of temporary stopgap measures
2 that result in nothing more than additional diesel power.

3 As one option for reducing the state’s reliance on diesel and dirty combustion power,
4 while also enabling new reliable baseload generation, FCE proposes that the Commission
5 exercise its regulatory authority under the Governor’s Proclamation to extend the availability of
6 the FC-NEM tariff program beyond its statutory sunset on December 31, 2021.³ Alternatively,
7 if the Commission determines that there is a policy or legal reason not to rely on the
8 Governor’s Proclamation to extend the statutory FC-NEM program, the Commission can and
9 should, under its inherent authority to regulate investor-owned utilities, establish a follow-on
10 program to go into effect on January 1, 2022 if the FC-NEM program has not been extended by
11 the California Legislature.

12 As of today, it is unclear whether the California Legislature will extend the existing
13 legislation for FC-NEM beyond its current sunset date. FCE and others are actively engaged at
14 the Legislature to encourage prompt action to extend the program. However, there are many
15 distractions and competing priorities at play in Sacramento, so as a means of supporting
16 continued investments in this high capacity factor technology we are proposing the
17 Commission direct its continuation or replacement.

18 The FC-NEM program incentivizes customers to install clean, reliable behind-the-meter
19 baseload generation. Customers using FCE fuel cell systems under the FC-NEM tariff have
20 invested in reliable power that emits virtually no NOx, SOx or particulate contaminants. The
21 FC-NEM tariff also requires participants to reduce emissions each year relative to an estimation

³ See Cal. Pub. Util. Code § 2827.10.

1 of marginal California grid emissions studied and calculated by CARB that declines annually.⁴
2 Despite the fact that this grid emissions estimation is significantly outdated relative to the
3 actual emissions produced by reliance on older, dirty generation technologies to the utility
4 power mix during the last two years, the FC-NEM program promises emissions reductions over
5 time—something that emergency procurements of imported natural gas, coal, or diesel
6 generation cannot guarantee. The power generated by FC-NEM fuel cells is not intermittent, is
7 available during daily net peak hours, and can be used to power a single customer microgrid
8 should the customer need to island from the broader grid during PSPS or other outages.
9 Extending the availability of this program would allow additional megawatts to be added
10 behind the meter, alleviating demand on the grid, and reducing the amount of marginal high
11 emissions power that utilities would have to procure to cover shortfalls during net peak times.
12 Every megawatt installed under FC-NEM is a megawatt of power that will not be needed from
13 other sources, avoiding significant emissions and criteria air pollution with a local behind the
14 meter resource.

15 In addition to the environmental advantages of the installed capacity under the program,
16 the FC-NEM tariff is an existing program that the Commission and California Air Resources
17 Board have experience managing and administering. As the Commission seeks options for
18 increasing supply, using existing programs will also reduce administrative time and cost as
19 compared to building new organizational capacity for wholly new programs or procurements.
20 FCE proposes the Commission use the proposed text in Attachment 1, which FCE understands
21 is legislative text currently under consideration, as the underlying policy for the emergency
22 extension of the program.

⁴ Staff Proposal to Implement NEMFC GHG Standards (April 6, 2021) p.1.

1 The attached language includes additions to the FC-NEM grid emission calculations in
2 order to ensure that an accurate accounting of actual grid emissions forms the basis for the
3 declining annual greenhouse gas (“GHG”) thresholds FC-NEM customers must meet. Should
4 the Commission find the re-evaluation of realistic grid emissions numbers not feasible in this
5 emergency effort, simply freezing and applying the 2022 annual GHG threshold to FC-NEM
6 installations installed for the duration of the program extension until 2026 could be appropriate,
7 considering the increased operations of high emissions sources to support net peak periods.⁵
8 All generation that comes online under this program will report fuel consumption and
9 emissions numbers annually to the Commission. These fuel cell resources that alleviate
10 demand from the broader grid will provide data that is not always reliably supplied to the
11 Commission for diesel generation operating on a standby or permanent basis.

12 The attached language also makes clear that FC-NEM customers may meet annual
13 GHG thresholds by blending biogas, recovering waste heat in CHP systems, and capturing
14 carbon dioxide for use or sequestration. Adding these specific tools for reducing emissions will
15 provide important certainty in the regulatory environment around FC-NEM. Certainty that
16 these tools are acceptable methods for compliance creates the opportunity for FC-NEM
17 customers to invest in ways to use waste heat or carbon dioxide in their operations, improving
18 operational efficiency and reducing overall installation cost. Customers often choose this tariff
19 program to increase certainty in their long-term energy costs, to avoid fluctuations in utility
20 rates or intermittency of utility power supply, and/or to capitalize on benefits that onsite
21 generation can provide, like waste heat recovery or carbon capture and use. Reliable power,

⁵ See Staff Proposal to Implement NEMFC GHG Standards (April 6, 2021) p.1.

1 like that which FC-NEM resources supply, is fundamental to the ongoing successful operations
2 of industrial, commercial, and agricultural businesses in California’s economy.

3 FC-NEM customers use CARB-DG certified generation technologies. This means that
4 in addition to the existing reporting requirements to maintain eligibility, these fuel cells have
5 been tested, inspected, and studied by the California Air Resources Board to ensure the
6 accuracy of manufacturer guarantees around performance and emissions. In contrast to
7 imported power, CARB-DG technologies have known performance and emissions profiles,
8 including criteria air emissions, that enable a more accurate understanding of the environmental
9 impact and benefits when they operate. FC-NEM projects are also often located much closer to
10 loads, and so enable avoidance of transformation and transmission losses, particularly when
11 compared to imported power. Lastly, extending the FC-NEM tariff also ensures that fuel cells
12 remain “NEM eligible” technologies and therefore able to connect under the requirements
13 applicable to the IOU microgrid tariffs authorized in R.19-09-009.⁶ Extending or replacing the
14 FC-NEM program according to the proposed language would contribute to supply, demand
15 reduction, and grid reliability, while ensuring emission reductions compared to the use of
16 combustion generation technologies that have been and will continue to be called on for supply
17 in the near term.

18 **PROPOSAL TWO: Allow customers enrolled in the BIP to operate non-renewable**
19 **behind the meter generation that is CARB-DG certified without making those**
20 **customers ineligible for the BIP, and allow FC-NEM resources to enroll in the BIP.**
21

22 The Base Interruptible Program, or BIP, is an emergency demand response program
23 offered by the large investor-owned utilities. BIP is tariff-based and activated by the IOUs in

⁶ D.21-01-018 Decision Adopting Rates, Tariffs, and Rules Facilitating the Commercialization of Microgrids Pursuant to Senate Bill 1339 and Resiliency Strategies, pp.49-50.

1 the event of a California Independent System Operator (“CAISO”) or local system emergency.
2 Participants receive incentive payments in return for their obligation to reduce electricity usage
3 to a specified level when BIP events are announced. BIP customers typically have larger
4 industrial/commercial loads and may also have (or be interested in installing) on-site generation
5 facilities. Unfortunately, the BIP tariffs include a prohibition against use of “Prohibited
6 Resources” (including fuel cells using natural gas).⁷ As a result, some otherwise eligible
7 customers are currently barred from participation in BIP solely because they operate non-
8 renewable distributed generation facilities behind the meter, and some BIP customers may be
9 deterred from installing on-site generation because it would result in disqualification for BIP.
10 The August 16 Staff Concept Paper includes discussion of revisions to the Emergency Load
11 Reduction Program affecting BIP participants, but does not address the Prohibited Resources
12 issue.⁸

13 If heat storms and emergency periods of exceptional electrical demand remain likely
14 recurrences in the coming years, FCE believes it is unreasonable to allow, even temporarily, the
15 use of dirty diesel back-up generators (“BUGs”) while removing incentives for customers to
16 install permanent generation that might help soften those high demand periods. Specifically,
17 the BIP tariffs should not exclude customers that run onsite California Air Resources Board
18 certified distributed generation facilities during a BIP event. The BIP rate incorporates the
19 value of the risk that customers take in knowing that power might be curtailed in an emergency.

⁷ See Schedule TOU-BIP Time-Of-Use-General Service Base-Interruptible-Program, Southern California Edison Company, p.8. https://library.sce.com/content/dam/sce-doclib/public/regulatory/tariff/electric/schedules/general-service-&-industrial-rates/ELECTRIC_SCHEDULES_TOU-BIP.pdf; Schedule BIP: Base Interruptible Program, San Diego Gas & Electric Company, p.1 http://regarchive.sdge.com/tm2/pdf/ELEC_ELEC-SCHEDS_BIP.pdf. Electric Schedule E-BIP: Base Interruptible Program, Pacific Gas and Electric Company, p.3 https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC_SCHEDULES_E-BIP.pdf.

⁸ Staff Concept Paper, pp.6-8.

1 The tariff should not also explicitly prohibit what generation that same customer may operate
2 onsite during an emergency event, as it does now. After all, the BIP is about reducing load on
3 the grid, and should not be about micromanaging the onsite generation behavior of an electric
4 customer.

5 SCE stated in opening comments filed in this proceeding on November 30, 2020 that it
6 “supports changes to the BIP, as well as its AP-I program, that would make them more effective,
7 such as revising current interruptible tariffs to exempt BIP and AP-I customers from the
8 Prohibited Resources (PR) provisions during the emergency circumstances contemplated in this
9 rulemaking.”⁹ FCE agreed then and still agrees with SCE. FCE urges the Commission to
10 consider such a revision to the tariffs. If the Commission does not agree that a full repeal of the
11 prohibitions is prudent, then certainly a relaxing of the restrictions to allow CARB-DG certified
12 technologies to be used would be reasonable. Certified technologies will give the Commission
13 confidence and assurance that the onsite generation has been vetted and the emissions profiles
14 are understood by CARB. Given that many customers enrolled in the BIP program hope it will
15 help lower their annual cost of electricity, it is reasonable to allow those customers the flexibility
16 to make their own business decisions about the need for onsite generation during the recurring
17 grid emergency events that are expected to continue each summer until the grid reliability
18 challenge is solved.

19 Additionally, the Commission should require utilities to modify the parameters of the BIP
20 to explicitly allow a customer with NEM resources, including a FC-NEM generating facility, to
21 enroll in BIP. Customers in California that choose to invest in onsite behind the meter

⁹ Southern California Edison Company, Opening Comments in Rulemaking 20-11-003 (November 30, 2020) p.22.

1 generation under the NEM tariff should have the added flexibility to power-down excess load
2 and benefit from the BIP. If and when the state finds itself in a future situation of hyper-demand
3 and a supply shortfall, it would be regrettable to have denied this option to customers. This is
4 especially true for customers with large electrical loads that could reduce demand while
5 maintaining some operations to mitigate the direct economic impact resulting from grid
6 instability. Recognizing that the BIP enumerates clear conditions for enrollment, FCE proposes
7 the Commission require an explicit provision allowing for the simultaneous use of behind the
8 meter NEM resources and enrollment in the BIP.

9 **IV. Certification**

10 I, Paul Fukumoto, hereby certify under penalty of perjury that this testimony was
11 prepared by me or at my direction, and that this testimony is true and correct, to the best my
12 knowledge.

13 DATED: September 1, 2021

/s/

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19

ATTACHMENT 1

An act to amend Section 2827.10 of the Public Utilities Code, relating to electricity.



THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 2827.10 of the Public Utilities Code is amended to read:
2827.10. (a) As used in this section, the following terms have the following meanings:

(1) "Electrical corporation" means an electrical corporation, as defined in Section 218.

(2) "Eligible fuel cell electrical generating facility" means a facility that includes the following:

(A) Integrated powerplant systems containing a stack, tubular array, or other functionally similar configuration used to electrochemically convert fuel to electricity.

(B) An inverter and fuel processing system where necessary.

(C) Other plant equipment, including heat recovery equipment, necessary to support the plant's operation or its energy conversion.

(3) (A) "Eligible fuel cell customer-generator" means a customer of an electrical corporation that meets all the following criteria:

(i) Uses ~~a~~ an eligible fuel cell electrical generating facility with a generating capacity of not more than five megawatts that is located on or adjacent to the customer's owned, leased, or rented premises, is interconnected and operates in parallel with the electrical grid while the grid is operational or in a grid independent mode when the grid is nonoperational, and is sized to offset part or all of the eligible fuel cell customer-generator's own electrical requirements.

(ii) Is the recipient of local, state, or federal funds, or who self-finances projects designed to encourage the development of eligible fuel cell electrical generating facilities.

(iii) Uses technology the commission has determined will achieve reductions in emissions of greenhouse gases pursuant to subdivision (b).

(iv) Complies with the emissions standards adopted by the State Air Resources Board pursuant to the distributed generation certification program requirements of Section 94203 of Title 17 of the California Code of Regulations, or any successor regulation.

(B) For purposes of this paragraph, a person or entity is a customer of the electrical corporation if the customer is physically located within the service territory of the electrical corporation and receives bundled service, distribution service, or transmission service from the electrical corporation.

(4) "Net energy metering" means measuring the difference between the electricity supplied through the electrical grid and ~~the difference between~~ the electricity generated by an eligible fuel cell electrical generating facility and fed back to the electrical grid over a 12-month period as described in subdivision (e). Net energy metering shall be accomplished using a time-of-use meter capable of registering the flow of electricity in two directions. If the existing electrical meter of an eligible fuel cell customer-generator is not capable of measuring the flow of electricity in two directions, the eligible fuel cell customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is able to measure electricity flow in two directions. If an additional meter or meters are installed, the net energy metering calculation shall yield a result identical to that of a time-of-use meter.

(b) (1) Not later than March 31, 2017, the State Air Resources Board, in consultation with the Energy Commission, shall establish a schedule of annual greenhouse gas emissions reduction standards for ~~a an eligible~~ fuel cell electrical ~~generation resource~~ generating facility for purposes of clause (iii) of subparagraph (A) of paragraph (3) of subdivision (a) and shall update the schedule every three years with applicable standards for each intervening year.

(2) The greenhouse gas emissions reduction standards shall ensure that each eligible fuel cell electrical-generation resource, generating facility, for purposes of clause (iii) of subparagraph (A) of paragraph (3) of subdivision (a), reduces greenhouse gas emissions compared to the electrical grid resources, including renewable resources, grid imports, backup diesel generation, combined heat and power plants, and thermal powerplants, that the eligible fuel cell electrical-generation resource generating facility displaces, accounting for ~~both all~~ procurement and for the operation of the electrical grid.

(3) For purposes of complying with the schedule of annual greenhouse gas emissions reduction standards for an eligible fuel cell electrical generating facility, the following may be used to reduce carbon dioxide emissions:

(A) Blending renewable biomethane.

(B) Capture and use of carbon dioxide, including the capture and sale of carbon dioxide for commercial use within the state by a third party.

(C) Exhaust heat capture and utilization for cogeneration in accordance with Section 216.6.

(c) (1) Every electrical corporation, not later than March 1, 2004, shall file with the commission a standard tariff providing for net energy metering for eligible fuel cell customer-generators, consistent with this section. Subject to the limitation in subdivision (g), every electrical corporation shall make this tariff available to eligible fuel cell customer-generators upon request, on a first-come-first-served basis, until the total cumulative rated generating capacity of the eligible fuel cell electrical generating facilities receiving service pursuant to the tariff, in addition to the installed capacity as of January 1, 2017, reaches a level equal to its proportionate share of a statewide limitation of 500 megawatts cumulative rated generation capacity served under this section. The proportionate share shall be calculated based on the ratio of the electrical corporation's peak demand compared to the total statewide peak demand.

(2) To continue the growth of the market for onsite electrical generation using fuel cells, the commission may review and incrementally raise the limitation established in paragraph (1) on the total cumulative rated generating capacity of the eligible fuel cell electrical generating facilities receiving service pursuant to the tariff in paragraph (1).

(d) In determining the eligibility for the cumulative rated generating capacity within an electrical corporation's service territory, preference shall be given to facilities that, at the time of installation, are located in a community with significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, or both, based on the ambient air quality standards established pursuant to Division 26 (commencing with Section 39000) of the Health and Safety Code.

(e) (1) Each net energy metering contract or tariff shall be identical, with respect to rate structure, all retail rate components, and any monthly charges, to the contract

or tariff to which the customer would be assigned if the customer was not an eligible fuel cell customer-generator. Any new or additional demand charge, standby charge, customer charge, minimum monthly charge, interconnection charge, or other charge that would increase an eligible fuel cell customer-generator's costs beyond those of other customers in the rate class to which the eligible fuel cell customer-generator would otherwise be assigned are contrary to the intent of the Legislature in enacting this section, and shall not form a part of net energy metering tariffs.

(2) The commission shall authorize an electrical corporation to charge a fuel cell customer-generator a fee based on the cost to the utility associated with providing interconnection inspection services for that fuel cell customer-generator.

(f) The net metering calculation shall be made by measuring the difference between the electricity supplied to the eligible fuel cell customer-generator and the electricity generated by the eligible fuel cell customer-generator and fed back to the electrical grid over a 12-month period. The following rules shall apply to the annualized metering calculation:

(1) The eligible fuel cell customer-generator shall, at the end of each 12-month period following the date of final interconnection of the eligible fuel cell electrical generating facility with an electrical corporation, and at each anniversary date thereafter, be billed for electricity used during that period. The electrical corporation shall determine if the eligible fuel cell customer-generator was a net consumer or a net producer of electricity during that period. For purposes of determining if the eligible fuel cell customer-generator was a net consumer or a net producer of electricity during that period, the electrical corporation shall aggregate the electrical load of the meters located on the property where the eligible fuel cell electrical generating facility is located and on all property adjacent or contiguous to the property on which the facility is located, if those properties are solely owned, leased, or rented by the eligible fuel cell customer-generator. Each aggregated account shall be billed and measured according to a time-of-use rate schedule.

(2) At the end of each 12-month period, where the electricity supplied during the period by the electrical corporation exceeds the electricity generated by the eligible fuel cell customer-generator during that same period, the eligible fuel cell customer-generator is a net electricity consumer and the electrical corporation shall be owed compensation for the eligible fuel cell customer-generator's net kilowatt-hour consumption over that same period. The compensation owed for the eligible fuel cell customer-generator's consumption shall be calculated as follows:

(A) The generation charges for any net monthly consumption of electricity shall be calculated according to the terms of the tariff to which that the same customer would be assigned to or be eligible for if the customer was not an eligible fuel cell customer-generator. When the eligible fuel cell customer-generator is a net generator during any discrete time-of-use period, the net kilowatt-hours produced shall be valued at the same price per kilowatt-hour as the electrical corporation would charge for retail kilowatt-hour sales for generation, exclusive of any surcharges, during that same time-of-use period. If the eligible fuel cell customer-generator's time-of-use electrical meter is unable to measure the flow of electricity in two directions, paragraph (4) of subdivision (a) shall apply. All other charges, other than generation charges, shall be calculated in accordance with the eligible fuel cell customer-generator's applicable tariff and based on the total kilowatt-hours delivered by the electrical corporation to

the eligible fuel cell customer-generator. To the extent that charges for transmission and distribution services are recovered through demand charges in any particular month, no standby reservation charges shall apply in that monthly billing cycle.

(B) The net balance of moneys owed shall be paid in accordance with the electrical corporation's normal billing cycle.

(3) At the end of each 12-month period, where the electricity generated by the eligible fuel cell customer-generator during the 12-month period exceeds the electricity supplied by the electrical corporation during that same period, the eligible fuel cell customer-generator is a net electricity producer and the electrical corporation shall retain any excess kilowatthours generated during the prior 12-month period. The eligible fuel cell customer-generator shall not be owed any compensation for those excess kilowatthours.

(4) If an eligible fuel cell customer-generator terminates service with the electrical corporation, the electrical corporation shall reconcile the eligible fuel cell customer-generator's consumption and production of electricity during any 12-month period.

(g) A fuel cell electrical generating facility shall not be eligible for the tariff unless it commences operation on or before December 31, ~~2021~~, 2026, unless a later enacted statute, that is chaptered on or before December 31, ~~2021~~, 2026, extends this eligibility commencement date. The tariff shall remain in effect for an eligible fuel cell electrical generating facility that commences operation pursuant to the tariff on or before December 31, ~~2021~~, 2026. A fuel cell customer-generator is eligible for the tariff established pursuant to this section only for the operating life of the eligible fuel cell electrical generating facility.

SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.