

Decision_____

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

David Davis,

Complainant,

vs.

Southern California Edison Company
(U338E),

Defendant.

Case 12-08-015
(Filed August 23, 2012)

And Related Matter.

Case 13-11-002

David Davis, for Complainant.

Gary Chen, and Matthew Dwyer,

Attorneys for Southern California Edison Company

MODIFIED PRESIDING OFFICER'S DECISION DENYING COMPLAINT

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MODIFIED PRESIDING OFFICERS DECISION DENYING COMPLAINT

Summary

This decision resolves an increasingly elaborate dispute brought by a utility customer who claimed that his proposed solar photovoltaic electric generating facilities were eligible to participate in the Net Energy Metering (NEM) program. This program is established by California Public Utilities Code Section 2827.¹ Previously, this customer had attempted to qualify for other programs. This decision finds that complainant David Davis (Complainant or Davis) has not met his burden of showing that the proposed facilities are eligible to be tariffed under NEM, given the unique facts present here. This decision finds that Complainant's proposed facilities were, in main part, designed to accomplish a number of purposes other than meeting utility customers' own electric requirements. There are other tariff options available for projects that are intended to generate energy in excess of that used on the premises.

This decision addresses complaints and claims raised at different times by Davis, all of which relate to disputes regarding Southern California Edison Company's application of size limits or other restrictions to Davis' proposed solar facilities. These claims include the original claims raised in the consolidated proceeding (Complaint (C.) 12-08-015 and C.13-11-002), and the additional "Part 2 Claims" added in June 2014. In particular, Complainant Davis focuses on what measure should be used to determine compliance with Section 2827's eligibility requirement that a NEM project must be intended primarily to offset the "customer's own electrical requirements." Davis contends that

¹ All section references are California Public Utilities Code, unless stated otherwise.

electrical requirements can be measured by either the customer's peak demand or the customer's annual load. Pursuant to the Scoping Memo, however, determination of the correct measure is reserved for Phase 2 of this proceeding. Phase 1 of this proceeding examined only whether the claims should be sustained or dismissed based on facts and law without considering the narrow issue of measurement. Because this proceeding is resolved on the facts and law scoped in Phase 1, it is not necessary to further consider which measurement of "own electrical requirements" is correct.

In his Appeal, Complainant Davis argues that his proposed solar facilities should be eligible for NEM because some of them, according to Davis, "might produce as little as 10%" more electricity than would be consumed by customers at the place where they are located.² Davis suggests that today's decision would not allow any NEM system to generate surplus energy. The Complainant is incorrect. Current law permits photovoltaic (PV) installations to generate surplus energy and still qualify for NEM. This decision does not change that.

This decision does, however, rest on the principle that NEM eligibility only extends to systems that are intended to offset a customer's own electrical requirements. In this case, Complainant did the reverse, presenting a unique and unusual fact pattern. Instead of bearing in mind the electrical requirements of customers when he designed a series of PV systems, Complainant purchased 18 pallets of PV panels and then attempted to come up with a use for them. When challenged, Complainant developed a series of justifications for the proposed PV

² David Davis Appeal of Presiding Officer's Decision (Appeal) at 1 (based on Davis' claim that removal of 15 - 50% of the panels in a PV system would result in a 10% decrease in energy generation.)

systems. Many of these justifications advanced legal theories, based on Complainant's reading of the NEM statute, other renewable resource statutes, and materials addressing a variety of different programs. Complainant also made factual claims, which ranged widely from proposing to base eligibility on subjective motivations, to aesthetic concerns, to the installation of a personal electric vehicle (EV) fast charger, or a network of such fast chargers. In an attempt to maximize the electrical requirements of customers where his PV systems are installed while this proceeding was ongoing, Complainant has taken such counter-intuitive steps as retaining inefficient air conditioning for tenants³ and developing a system design where an inefficient number of solar panels are hooked up to an inverter.⁴ Complainant also attempts to characterize the intent to offset legitimately imposed utility charges or to earn net surplus compensation by generating surplus energy as customer electrical requirements. The unique facts presented here, and Complainant's multiple, unusual, and sometimes changing justifications supporting his proposed PV system sizes lead this decision to infer that there is little, if any relationship between the size of the PV systems Davis claims SCE must connect to its grid under the NEM program and customers' own requirements at the locations involved.

Importantly, by stipulation, the parties agreed that it is not necessary for this proceeding to evaluate any load justification studies done for Davis' projects. A load justification study examines the difference between past use and Davis' own forecast of use based on changes such as new tenants, different weather

³ Davis intentionally calculated his electrical requirements using "non-Energy Star" air conditioners at some rental units. (Second Amended Complaint at 6.)

⁴ Inverter efficiency is a measure of the amount of solar energy that is converted to electrical energy. (See, e.g., RT at 102.)

assumptions, or increased use of appliances. For example, if Davis plans to acquire a new electrical vehicle, the load justification study would take this into account when determining “electrical requirements” for purposes of NEM. Both SCE and Davis agree that this detailed fine-tuning of anticipated load is best addressed outside of this proceeding. This decision does not foreclose Davis’ right to address small disparities, such as the 10% difference in estimated output referenced in Davis’ Appeal, through the load justification process. Should SCE and Davis not reach agreement on the load justification study, Davis can file a new complaint.

In addition, the Part 2 Claims that were added to this proceeding in June 2014 are dismissed.

Because of the unique facts of this case, the precedential value of this decision to other customers is limited. In particular, this decision should not be interpreted as a blanket prohibition on electric vehicle fast chargers in the residential setting, nor should it be interpreted to allow utilities to exclude anticipated use of an electrical vehicle charger from load studies.

This decision also denies Davis’ Motion Requesting Oral Argument.

1. Overview

This is a consolidated proceeding of Case (C.) 12-08-015 and C.13-11-002. Our decision closes both proceedings. Prior to consolidation, C.12-08-015 was dismissed with prejudice on purely legal grounds in Decision (D.) 13-04-002. In D.13-10-044 (Rehearing Order), the Commission granted rehearing of C.12-08-015 to develop a factual record. After C.12-08-015 was reopened, Davis filed another complaint, C.13-11-002, on both Net Energy Metering (NEM) and unrelated issues. The two complaint proceedings were then consolidated. Davis has also

litigated these or similar issues related to the same facts in other cases before the Commission, Superior Court, and Court of Appeal.

At the parties' request, C.12-08-015 addressed the NEM program size limit as a pure question of law. The Commission disagreed with this approach in its grant of rehearing. Consistent with the Rehearing Order, we must instead "develop a factual record that allows us to determine if Davis' proposed facilities meet the plainly stated eligibility criteria in Section 2827(b)(4) before conducting an in-depth analysis to determine what specific technical requirements need to be used to implement that code section correctly."⁵ This approach is warranted by the "highly unusual fact pattern"⁶ presented by Complainant's proposed generating facilities and the possibility that their size reflects "a merely idealistic preference."⁷

Davis proposed generating facilities can be summarized as follows:

- (1) At his residence, Davis states he will install an electric vehicle (EV) fast charger that could draw as much as 50 kilowatts (kW) at one time. He proposes to size his home solar generating facility at 95 kW – enough to power the 50 kW fast charger in early morning daylight without drawing from the grid. Davis argues that sizing his facility this way is allowed under the statute because the facility will be sized to offset potential peak load. Davis ordered two additional fast chargers but has not determined where he would install them.

- (2) At the apartments that he owns, Davis has installed, or intends to install, solar PV facilities that will generate more power than the apartments are expected to use. Davis argues that his desire for

⁵ Rehearing Order at 8.

⁶ *Id.* at 8.

⁷ *Id.* at 7.

these facilities to produce surplus energy, for which he will be compensated, is sufficient reason for these facilities to be eligible for NEM. Davis also argues that it does not matter whether the apartment PV facilities are sized larger than their potential use at a given point in time (peak demand) or larger than the amount of energy the apartments' are expected to use over the course of a year (annual load).

Complainant claims that the California regulated electric utility Southern California Edison Company (SCE) wrongfully refuses to interconnect his proposed generating facilities in violation of § 2827(c)(1). Davis contends that the NEM program's requirements should be interpreted to allow him to connect his proposed solar facilities, and argues that the fact his facilities will produce far more power than is consumed at his property is irrelevant. SCE answers that it cannot lawfully interconnect the facilities as proposed by Complainant because the NEM statute limits the size of NEM generating facilities to no larger than the associated premises' annual electricity consumption (annual load) as expressed in kilowatt-hours (kWh).

Davis plans to use the NEM tariff to sell or export – for compensation – a substantial amount of surplus electricity. NEM permits customers to export surplus electricity to the grid in exchange for net surplus compensation (NSC or Net Surplus Compensation), a monetary payment based on a formula established by the Commission. It is undisputed that Complainant's proposed generating facilities will produce a substantial surplus.⁸ Davis' intention is to size the generating facilities to offset the peak demand associated with powering a regional network of commercial-grade EV chargers known as "fast chargers."

⁸ "I'm asking to operate systems that I think everybody agrees will produce a surplus." (Reporter's Transcript (RT) at 5.)

Davis asserts that he intends to use this network of EV fast chargers as a workaround to extend the range of EVs, which he finds to be a poor match for the specific climate and geography in his region.

This decision addresses the NEM requirement that the customer's generating facility be "intended primarily to offset part or all of the customer's own electrical requirements." In resolving this matter, however, it is not necessary for the Commission to revisit the methodology used to measure electrical requirements for purposes of NEM. The unique facts associated with Davis' proposed generating facilities and his stated intention to size facilities based on the number of solar panels he purchased, rather than the electrical requirements of his premises (combined with other proposals, such as artificially increasing electricity consumption, or adopting unorthodox and potentially unsafe configurations for PV systems in order to change their generation measurements), make it plain that Complainant's proposals fall far outside what is contemplated by the NEM statute, and the law does not require the interconnection and operation of these unique facilities under the Commission's NEM program.

2. Procedural Matters

2.1. Summary of Dispute Prior to Filing of C.12-08-015

To best understand the context of the claims addressed in this decision, it is necessary to consider the timeline of complaints and other filings that Davis has made. Prior to filing C.12-08-015, Davis filed a Petition for Modification (PFM) of D.11-06-016.⁹ Davis has since filed complaints and amended

⁹ Petition of David Davis for Modification of Decision 11-06-016 (PFM), June 20, 2012, Application (A.) 10-03-001.

complaints, a request for rehearing, and a second PFM at the Commission. Davis also filed a case in civil court. All of these filings relate to Davis' assertion that his solar facilities are eligible for connection to the grid under specific special programs. For example, in his most recent PFM, Davis asserts that D.14-03-041 changed the eligibility requirements for NEM customers.

For reference, the table below summarizes Davis' filings and their current status.

	Davis Cases, Petitions, and Requests	Date Filed	Outcomes
1.	A.10-03-001 Petition to Modify D.11-06-016	June 20, 2012	Dismissed on Davis' own motion.
2.	C.12-08-015	August 23, 2012	Dismissed by D.13-04-002
3.	C.12-08-015 Request for Rehearing of D.13-04-002	May 2, 2013	Rehearing of D.13-04-002 granted.
4.	C.13-11-002 (consolidated with C.12-08-015) (complaint amended in January 2014 and June 2014)	November 12, 2013	Resolved by this decision.
5.	Davis v. So. Cal. Edison Co., EC061441	March 29, 2014 (minute order)	Dismissed without prejudice on SCE's demurrer. The court found that the allegations were within the Commission's jurisdiction.
6.	R.12-11-005 PFM of D.14-03-041	December 11, 2014	Still pending.
7.	Davis v. So. Cal. Edison Co., B256737	May 5, 2015	Published decision affirming dismissal by superior court in EC061441. Davis v. So. Cal. Edison Co., 236 Cal. App. 4th 619 (2015).

These legal and regulatory proceedings began with Davis' February 2012 Electric Rule 21 Generating Facility Interconnection Application (Rule 21 Application) submitted to SCE. Electric Rule 21 (Rule 21) sets forth the application process, timing and technical requirements for connecting a generating facility to SCE's grid. Davis' Rule 21 Application requested interconnection of a proposed solar generating facility that would sell energy to

SCE under the California Renewable Energy Small Tariff (CREST).

Approximately six weeks later, on or around March 30, 2012, this Rule 21 Application was deemed complete. However, SCE informed Davis that the proposed facility failed Initial Review because it sought to interconnect to the distribution system in the vicinity of SCE's Hi Desert substation. This portion of the distribution system, SCE alleged, did not have sufficient capacity to accommodate new generating facilities without substantial upgrades. Davis then withdrew his Rule 21 Application for CREST and instead filed a Rule 21 Application requesting interconnection of the same proposed facility under NEM.

Three months later, on or around May 18, 2012, SCE notified Davis that the NEM Rule 21 Application was denied because the project's forecasted generation significantly exceeded the forecasted load. Therefore, SCE stated, the project did not qualify for NEM. After further correspondence, SCE and Davis submitted the matter to voluntary mediation conducted by Administrative Law Judge (ALJ) Bemederfer on June 5, 2012.¹⁰ The parties disagree as to whether the mediation addressed all interconnection issues of all of the applications.¹¹

At roughly the same time, on June 20, 2012, Davis filed the PFM of D.11-06-016, which implemented Net Surplus Compensation for NEM customers. The PFM also addressed the question of maximum size raised in this

¹⁰ C.12-08-015 Complaint, August 23, 2012.

¹¹ See, Second Amended Complaint at Paragraph 5 ("For each of the generators described in this complaint, I followed the grievance procedure described in Rule 21.") and SCE Response to Second Amended Complaint at 15-16 (stating that dispute resolution only addressed three of the properties and that the complaint raises additional issues for which Rule 21 dispute resolution was not requested.)

proceeding. In July 2012, Davis and the major investor-owned electric utilities (SCE, Pacific Gas and Electric Company (PG&E), and San Diego Gas & Electric Company (SDG&E)) filed their briefs, and in January 2013 the PFM was dismissed.

The gravamen of the PFM was essentially the same as the central issue here: whether a NEM generating facility could produce more than the actual or reasonably anticipated annual load of the facility's associated premises. Davis argued in his PFM that the size limit was in fact based on the customer-generator's intent, including "secondary motivations," and their "requirements." Such purported requirements include: (1) "make up for past environmental sins;" (2) "get a little bit of extra income from Net Surplus Compensation;" (3) "make a uniform size array [of solar panels] that neatly meets his architectural / aesthetic goals;" and (4) "get a good deal on a pallet of solar panels (or a truck load) and want to size a system to use them."¹² Contrary to the arguments he raises in this proceeding, Davis acknowledged in the PFM that D.11-06-016 "reaffirmed prior rulings that generating systems larger than required to meet the 'historic demand' of the customer are not eligible for Net Metering."¹³ However, the PFM also challenged whether the Commission accurately interpreted the statute. Ultimately, the PFM was dismissed.

2.2. Procedural History of C.12-08-015 (consolidated)

While the PFM of D.11-06-016 was pending, Davis filed C.12-08-015 against SCE on August 23, 2012. Two months afterward, on October 12, SCE

¹² Petition for Modification, June 20, 2012 (PFM) at 6-7.

¹³ *Id.* at 2-3.

filed its answer and a motion to dismiss, and on October 23 Davis filed a response. SCE later filed a reply.

On November 13, 2012, at the first prehearing conference (PHC), the parties agreed on the following formulation of the issue:¹⁴

Section 2827(b)(4) says that to be an eligible customer-generator, the customer's facility must be "intended primarily to offset part or all of the customer's own electrical requirements." Davis's proposed solar facility is sized to supply sufficient generation for his anticipated peak demand, but the proposed solar facility would generate significantly more energy than his anticipated annual load. SCE bases "electrical requirements" on Davis's actual and reasonably projected annual load, not on anticipated peak demand. By refusing to allow Davis to interconnect his proposed solar facility under the NEM Tariff, did SCE violate Section 2827(c)(1)?

After the formulation of the issue, the parties agreed that there were no outstanding factual questions and that the complaint should be resolved as a matter of law. A factual determination of Davis' reasonably projected annual load or peak demand was to be determined after the Commission decided whether SCE's use of annual load was the correct measure of facility maximum size. The next week, on November 19, 2012, Complainant moved for summary judgment in C.12-08-015 and moved to dismiss his PFM of D.11-06-016.¹⁵

On April 4, 2013, D.13-04-002, Decision Granting Motion to Dismiss, was published. The decision concluded that the Commission should determine NEM eligibility under Section 2827(b)(4) with reference to the customer's projected

¹⁴ D.13-04-002 at 6-7.

¹⁵ The motion to dismiss was granted on January 24, 2013.

annual load.¹⁶ Complainant timely filed an application for rehearing of D.13-04-002. His application alleged error on several grounds. The Commission granted rehearing on October 17, 2013, in D.13-10-044, the Rehearing Order. The only issue submitted to the Commission in the original complaint proceeding was the narrow legal question of what methodology to use to measure the size of a proposed solar generation facility when determining if it the facility was “sized primarily to offset part or all of the customer’s annual energy usage.”¹⁷ As the Rehearing Order noted, SCE and Complainant chose to present only this legal question for resolution by agreeing there were no factual questions and instead stipulating that “a solar generation facility capable of powering one of Davis’ fast-chargers would produce significantly more excess electricity over the course of a year than would be consumed.” In ordering rehearing, however, the Commission found that a factual record needed to be developed.

A month after the Rehearing Ordered issued in C.12-08-015, on November 12, 2013, Davis filed C.13-11-002. At this point, there were two parallel proceedings concerning some of the same properties and proposed generating facilities owned by Davis. Davis indicated that he filed C.13-11-002 because a factual resolution of C.12-08-015 could not provide him the desired result. Specifically, Davis is seeking a Commission decision that adopts, as a matter of law, a general rule favorable to installing oversized generating facilities, which he can rely upon at other properties he owns.¹⁸

¹⁶ D.13-04-002 at 16 (Conclusion of Law 6).

¹⁷ D.13-10-044 at 1.

¹⁸ See Second Amended Complaint, filed June 24, 2013 (Second Amended Complaint), at 3; See generally, C.12-08-015 Complaint.

On January 13, 2014, another PHC was held. At the PHC, C.12-08-015 was consolidated with C.13-11-002. Davis was instructed to file an amended complaint to revise the prayer for relief and provide greater factual specificity where needed. On January 31, 2014, Davis filed his amended complaint.

On March 24, 2014, the parties filed a Joint Prehearing Conference Statement setting forth details of each of the proposed projects, including the date of the original NEM application.

On May 27, 2014, Davis informed the service list that a new complaint (tendered on April 10, 2014) had been rejected by the Docket Office. A day later, on May 28, the scoping memo for the consolidated proceeding was published. At the same time, Davis was granted leave to file a second amended complaint to add additional claims. However, the ALJ specified that the May 28 scoping memo would be observed unless and until such time as a new scoping memo was issued.

Additional claims (the Part 2 Claims) were introduced on June 19, when Davis filed his Second Amended Complaint. The Second Amended Complaint contained nine new claims, eight new requests for relief, and thirty pages of new allegations. Contemporaneous with this consolidated proceeding, Davis raised a variety of claims in superior court unrelated to NEM facility size, which claims were dismissed.¹⁹ Part Two of the Second Amended Complaint is “identical” to the complaint dismissed by the superior court, an action upheld in *Davis v. So. Cal. Edison Co.*, (2015) 236 Cal. App. 4th 619.

¹⁹ Second Amended Complaint at 1 (referencing Case EC061441, Superior Court of California, County of Los Angeles).

The Part 2 Claims relate to the same generating facilities currently at issue in this consolidated proceeding, but seek monetary damages. Davis also requests that, if the Commission does not have authority to award damages, then the Commission make findings that he could use in Superior Court to seek damages against SCE. On October 6, 2015, the ALJ issued the Amended Scoping Memo to address the claims and facts raised only in the Second Amended Complaint. The Amended Scoping Memo noted that:

The California Public Utilities Commission (Commission) can only hear claims that are within its jurisdiction. Where the Commission is not able to grant the relief sought, the case must be dismissed for failure to state a cause of action on which relief may be granted. . . . [I]t is well-settled law that the Commission does not have authority to award damages, and it is also well-settled that the Commission does not issue declaratory relief or advisory opinions except under extraordinary circumstances.²⁰

The Amended Scoping Memo therefore reopened the record and directed the parties to brief whether the Part 2 Claims should be dismissed. Opening briefs were filed on October 12, 2015 and reply briefs were filed on October 19, 2015. This case stands submitted as of the date the reply briefs were filed: October 19, 2015.

The statutory deadline for a decision has been extended three times in the consolidated proceeding. D.14-11-011, on November 6, 2014, extended the statutory deadline to June 19, 2015, D.15-05-052, on May 21, 2015, extended the deadline to December 19, 2015, and D.15-12-017 extended the deadline to June 19, 2016.

²⁰ Assigned Commissioner's and ALJ's Amended Scoping Memo and Ruling, October 6, 2015 at 3-4.

The Presiding Officer's Decision in this case was issued on December 1, 2015. Davis filed his Appeal on December 29, 2015. SCE filed a response to the Appeal on January 13, 2016. On January 14, 2016, Davis filed a Motion Requesting Oral Argument. SCE served a response on January 29, 2016 and Davis served a reply on February 5, 2016.

2.3. Jurisdiction and Category of Proceeding; Burden of Proof

The Commission exercises jurisdiction over the activities of public utilities,²¹ including electrical corporations.²² SCE is an investor-owned utility (IOU) providing electricity service within California. It is therefore a public utility "subject to the jurisdiction, control, and regulation" of the Commission.²³

This proceeding has been categorized as adjudicatory pursuant to Rule 7.1(c) without party objection.²⁴ Accordingly, the Commission only seeks to determine if Davis has demonstrated that SCE contravened the law.

Pursuant to Public Utilities Code section 1702, a complainant must prove an alleged violation of a statute, rule, or Commission order, or a tariff approved by the Commission. The complainant must meet its burden of proof by a preponderance of the evidence.²⁵ To prevail, Davis must communicate his allegations against SCE through his pleadings and provide sufficient proof to

²¹ § 216(a).

²² § 218 defines an electrical corporation as every corporation "owning, controlling, operating, or managing any electric plant" to sell electricity to the public.

²³ § 216(b).

²⁴ Scoping Memo at 17.

²⁵ D.12-02-029 at 4 (cited in Rehearing Order at 7).

support his allegations. If Complainant fails to meet his burden of proof, the case must be dismissed.

2.4. Issues before the Commission

2.4.1. Phases 1 and 2

The Rehearing Order instructed that a statutory construction of § 2827(b)(4) should be avoided until after the “highly unusual fact pattern” presented by this case had been developed through hearings and further testimony.²⁶ Accordingly, the Scoping Memo divided this proceeding into two phases.

Phase 1 was scoped to address only those issues that could be addressed through an adjudicatory proceeding.²⁷ Because clarifying or revising the language of the law regarding the proper measurement of a customer-generator’s “electrical requirements” would impact parties outside of this adjudicatory proceeding, this issue was reserved to Phase 2. The Scoping Memo suggested various approaches to Phase 2 to meet the different due process requirements, such as starting a new proceeding or re-categorizing this proceeding and inviting interested parties to participate.

The purpose of setting forth the issues included in the scope in a formal ruling is to allow the parties to fully understand what issues can be addressed and resolved in the proceeding. However, after fact-finding and briefing, it may be determined that some of the issues do not need to be addressed in order to resolve the complaint.

²⁶ See Rehearing Order at 8.

²⁷ Scoping Memo at 13.

The Scoping Memo set the following Phase 1 issues for legal briefing:

1. Must a generating facility be sized no greater than its associated premises' annual load to receive California Solar Initiative (CSI) incentives?
2. Can the annual estimated generation for purposes of NEM generating facility size requirements be calculated using the manufacturer's inverter efficiency rate for situations involving high panel to inverter ratios?
3. Can a load justification²⁸ be required for a proposed NEM generating facility if the system is smaller than 5 kW?
4. Is a solar PV facility located on residential property considered commercial in any of the following circumstances: (a) installed by a landlord to supply electricity to residential tenant; (b) supplies electricity to non-residents (including through EV charger) without payment from the non-resident for the electricity used; and (c) supplies electricity to non-residents and accepts payment for the electricity used?
5. Does status as a commercial customer, rather than residential customer, change eligibility under NEM, CSI, NSC or Rule 21?

Phase 1 posed the following issues for fact finding:

1. If Davis installs solar panels at properties he rents to tenants, resulting in electricity used not by Davis but by his tenants, does the installation still "offset customer's own electrical requirements" such that the project can qualify for NEM under § 2827(b)(4)?
2. If Davis installs a solar PV system at his home and allows non-residents to use the electricity generated by this PV system,

²⁸ A load justification is a study that looks at the customer's previous 12 months of usage and other load that the customer plans to add. This information is then used to set the approximate size permitted for a NEM or CSI installation. (See, RT at 109 - 110.)

does that use count as part of “customer’s own electrical requirements” for purposes of NEM eligibility?

3. Are any safety considerations raised by determination of whether a proposed solar PV system qualifies under NEM, CSI, or NSC? Are there any other safety considerations raised by these consolidated proceedings?

2.4.2. Part 2 Claims

The Amended Scoping Memo added the following issue:

Do the Part 2 Claims, as described by Davis, constitute an extreme circumstance or matter of widespread public concern such that this Commission should consider granting declaratory relief, or should the Part 2 Claims be dismissed for failure to state a cause of action on which relief can be granted?

3. Factual Background

3.1. Commission Programs Related to Proposed On-Site Solar Projects

3.1.1. NEM

NEM, a program established under § 2827, enables electric utility customers who own small renewable generating facilities to offset their consumption of electricity with their own generation.²⁹ The statute refers to these customers as “eligible customer-generators.” NEM is intended to incentivize customers to install onsite solar and other distributed generation.³⁰ When an “eligible customer-generator”³¹ has consumed more electricity than it has generated and exported, the customer’s bill is reduced based on a credit at the customer’s full retail rate for the amount of electricity exported. This credit

²⁹ § 2827(b)(6).

³⁰ D.02-03-057 at 2-3; D.13-04-002 at 4.

³¹ § 2827(b)(4)(A).

may be used to partially offset the customer's electricity bill over a 12-month period.³² If, however, an eligible customer exports more electricity than they consume over the course of a year, they may elect to receive financial compensation, known as "net surplus electricity compensation."³³

Participation in NEM confers additional benefits not available to other generators. A second key incentive is to allow customers to qualify for expedited interconnection under Rule 21, Section D.13.³⁴ With expedited interconnection, NEM customer-generators are not required to pay the interconnection fees and costs paid by non-NEM generators.³⁵ These costs are instead borne by all retail customers.³⁶ NEM projects may also qualify for the Fast Track Interconnection Review Process (Fast Track).³⁷ Fast Track is "a screen-based, streamlined review process for which NEM, non-export, and very small exporting facilities are eligible."³⁸ Expedited interconnection and Fast Track can provide a substantial benefit to the customer-generator, as alternative interconnection processes can be much more costly. Moreover, in localities where the distribution grid lacks the capacity to accommodate new generating facilities without expensive upgrades,

³² For details, see § 2827(h)(2).

³³ See § 2827(b)(9), (h)(3).

³⁴ D.13-04-002 at 4.

³⁵ NEM customer-generators are generally exempt from costs associated with interconnection studies, distribution system modifications, and application review fees. (See D.02-03-057 at 11.)

³⁶ *Id.* at 10.

³⁷ Rule 21, Section D.13 (Sheet 30, Revised Cal. PUC Sheet No. 54747-E, effective date July 9, 2014).

³⁸ D.13-04-002 at 5 quoting D.12-09-018 at 22.

NEM facilities may still be interconnected at no cost to the customer-generator.³⁹ These and other benefits, however, are only available to customers who meet the NEM program's eligibility criteria, mainly set forth in section 2827(b)(4)(A).

3.1.2. CSI

CSI is a separate program from NEM. CSI provides ratepayer-funded cash incentives for eligible solar generating facilities that are interconnected to the distribution grid of an investor-owned electric utility.⁴⁰ California Public Resources Code Section 25782(a)(2) establishes eligibility criteria for CSI. It provides that a solar generating facility cannot receive CSI incentives unless it is intended to "offset part of or all of the consumer's own electricity demand."⁴¹ CSI is implemented in accordance with, among other things, Commission decisions and the CSI Program Handbook. The CSI Program Handbook is subject to Commission review and approval and carries the force of law.⁴²

3.1.3. California Renewable Energy Small Tariff (CREST)

CREST was a separate program from both NEM and CSI. CREST, established by § 399.20, required that electric utilities make available a standardized power purchase agreement (PPA) for customer-generators. CREST

³⁹ SCE Answer to Second Amended Complaint July 10, 2014 at 3; D.13-04-002 at 6 citing § 2827(g).

⁴⁰ D.06-12-033 at 6 n.7; CSI Program Handbook at § 1.1.; D.06-08-028 at 8-10. Although the CSI Program Handbook has been updated periodically, this decision relies on the version cited by Davis in this proceeding: The California Public Utilities Commission California Solar Initiative Program Handbook September 2012 (Attachment B to Comments of David Davis on the Proposed Decision of ALJ McKinney (March 14, 2013)).

⁴¹ Cal. Pub. Res. Code § 25782.

⁴² D.07-06-015 at 7-8.

was designed to be "a simple and streamlined mechanism for [small renewable] generators to sell electricity to the utility without complex negotiations and delays."⁴³ The program was available to any renewable energy generating facility that did not exceed 1.5 megawatts (MWs) and utilized an eligible renewable energy source.⁴⁴ SCE entered into CREST PPAs on a first-come, first-served, take-it-or-leave-it basis by purchasing at predetermined, non-negotiable prices either: (i) the entire output of generating facility, or (ii) the excess energy not used onsite by the customer. Generating facilities participating in NEM or CSI were not eligible for CREST.⁴⁵ On July 24, 2013, the CREST program was closed.⁴⁶ It has been replaced by the Senate Bill 32 feed-in tariff program.

Part Two of Davis' Second Amended Complaint, in C.13-11-002, concerns his CREST applications. He alleges that SCE unlawfully precluded him from interconnecting under CREST by requiring the performance of expensive feasibility studies.

3.1.4. Tariffs; Demand Charges

NEM is not a standalone rate schedule. Rather, it modifies billing under the customer-generator's underlying rate schedule, referred to as the Otherwise Applicable Tariff (OAT). Service under NEM does not change a customer's

⁴³ See D.07-07-027 at 1.

⁴⁴ See generally D.08-08-028; see also CSI Program Handbook at 29 (Renewables Portfolio Standard).

⁴⁵ D.07-07-027 at 28.

⁴⁶ See D.13-05-034 at 69, 94 (Conclusion of Law 49); SCE Advice Letter 2916-E; <http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/feedintariffs.htm>

OAT.⁴⁷ For purposes of this decision, there are two categories of OAT that are relevant: commercial tariffs and residential tariffs. The NEM rate schedule can be an overlay on either a commercial or a residential tariff.

Although there are available tariffs for residential EV charging, at the time of his initial complaint it was anticipated that Davis would receive electrical service through a commercial tariff.⁴⁸ Davis' proposed provision of fast charging to non-residents would substantially alter his load characteristics and therefore, under Electric Rule 1, he would be precluded from using a residential tariff.

The commercial tariffs available to Davis include demand charges – charges calculated to reflect the individual customer's peak electrical use (measured in 15 minute intervals) for the month. Demand charges “compensate the utility for the cost of keeping the capacity available to provide a big burst of power when needed, such as when an EV charger turns on.”⁴⁹ According to Davis, charging an EV once will incur a demand charge that exceeds \$1,700.⁵⁰

According to SCE, whether Davis is liable for any demand charges is contingent on his decision to “both: (a) make the electric service he receives publically available, and (b) use an EV fast charger whose peak demand exceeds the demand threshold identified in the applicable rate schedule to trigger a charge.”⁵¹

⁴⁷ SCE Opening Brief on Legal Issues (OB Leg. Issues) at 9.

⁴⁸ Davis Response to SCE Mot. Dismiss, 3, 5 (Davis stating “intention to use the proposed generating system to offset all or part of the ‘demand charges’ for an EV charger under [commercial] tariff TOU-EV-4 or GS-2.”); SCE Reply Brief Phase 1 at 10.

⁴⁹ C.12-08-015 Complaint at 3.

⁵⁰ *Id.*

⁵¹ SCE Reply Brief Phase 1 at 11.

3.1.5. Electric Vehicle Fast Chargers

It is well established that California, and the Commission, have multiple policies and programs to encourage EVs as a greenhouse gas (GHG) reduction strategy. Currently, the Commission continues to examine strategies to encourage EV use, including cost-effective programs to expand EV charging infrastructure.⁵² Davis has elected not to participate in Commission proceedings directly addressing EV issues. Davis' stated plan to use commercial grade EV fast chargers is at the heart of C.12-08-015 and Part One of C.13-11-002. For this reason it is necessary to understand the current status of EV charging technology and its distribution in the state.

Generally, plug-in hybrid and battery-only EVs have an on-board charger that converts alternating current (AC) from an electrical outlet into direct current (DC). The time required to recharge an EV depends on the power available, as expressed in kW. Davis has proposed to install a 95 kW generating facility at his home in order to power a 50 kW EV fast charger, and states that he plans to install a total of three fast chargers.⁵³ Whether installation of three EV fast chargers constitutes an electricity "requirement" for purposes of sizing on-site solar generation is a key issue in this case.

The specific type of charger Davis has installed and intends to continue installing is pertinent. There are three general types of EV charger. Typically found in a residential setting are Level 1 and Level 2 chargers. Level 1 is

⁵² See, e.g., R.13-11-007 Order Instituting Rulemaking to Consider Alternative-Fueled Vehicle Programs, Tariffs and Policies; A.14-10-014 Application of SCE for Approval of its Charge Ready and Market Education Programs.

⁵³ Davis Opening Brief for Phase 1 (OB Phase 1) at 8; RT at 16:9-15; RT at 73 ("nobody besides myself has tried to install a fast charger" in a residential setting.)

provided by an ordinary electrical receptacle at 120 volts and 1.4 kW. A Level 2 charger requires special equipment but is found in residential settings and generally provides 240 volts and draws 3.3 to 19.2 kW.⁵⁴ This proceeding, however, concerns Level 3 chargers.

Installation of EV chargers is governed by Electric Rules 15 and 16. Rules 15 and 16 are intended to properly allocate the costs for distribution upgrades required to support newly installed chargers.⁵⁵ In determining the appropriate allocation, the Commission considered whether the upgrade costs should be paid by the individual customer, or by ratepayers as a whole. As a result, for Level 1 and Level 2 chargers, installed at the residential level, there are exemptions for the EV owner that reduce or eliminate the cost of upgrades. The Commission determined that these costs should be covered by ratepayers as a whole. For fast chargers, however, the exemptions are not available. The Commission's currently open EV proceeding is the appropriate place to consider whether Rules 15 and 16 should be changed.

Fast chargers rely on very high voltages and very high currents, typically over 480 volts.⁵⁶ This high energy usage necessitates electrical service upgrades that can be complex and expensive. The local distribution grid, especially in residential areas, may not be able to provide enough power, as EV fast chargers "place a considerably higher kW demand on the electric system than even the

⁵⁴ R.09-08-009 Order Instituting Rulemaking to Consider Alternative-Fueled Vehicle Tariffs, Infrastructure and Policies to Meet Greenhouse Gas Emissions Reduction Goals.

⁵⁵ Specifically, Rule 15 (Distribution Line Extensions) pertains to grid equipment used by multiple customers such as a transformer serving multiple homes. Rule 16 (Service Line Extensions) pertains to network equipment used by just one customer. (D.11-07-029 at 51-52.)

⁵⁶ D.11-07-029 at 9.

fastest Level 1 or Level 2 charging.”⁵⁷ For this reason, the costs of upgrades to support fast chargers can be significant and the allocation of this cost to customers must be done in accordance with law.

EV fast chargers are intended to rapidly recharge an EV, to as much as 80 percent capacity in half an hour.⁵⁸ Accordingly, the Commission has anticipated that EV fast charging would be available “at non-residential sites or EV service provider charging spots and will function similarly to a gasoline filling station.”⁵⁹ Although EVs and EV charging technology continues to evolve, and adoption is becoming more widespread, to date the Commission has not indicated a change in its understanding of EV fast chargers as primarily a commercial-grade means of charging EVs.

Fast chargers may also be subject to “demand charges,” described in Section 3.1.4 above, which compensate the utility for the cost of maintaining the capacity to provide the bursts of power needed by fast chargers. Regarding the appropriate tariffs for fast chargers, the Commission specifically examined non-residential fast charging in D.11-07-029 and found that existing commercial tariffs were adequate to cover fast charging. To date, the Commission has not found it necessary to examine whether fast chargers in the residential setting should be subject to a separate tariff rule.⁶⁰

⁵⁷ D.11-07-029 at 77. (Finding of Fact 8)

⁵⁸ D.11-07-029 at 29.

⁵⁹ *See*, D.11-07-029 at 29.

⁶⁰ D.11-07-029 at 30.

For NEM, EV chargers (including plans to purchase an EV charger) are generally included in the load evaluation when the size of installation is approved.

3.2. Complainant's Equipment and Proposed Use of Equipment

Complainant is a residential customer of SCE and a residential landlord. Complainant obtained a large number of solar PV panels at a discount sometime in 2011 and intends to interconnect all of them in order to maximize the output of his solar generating facilities.⁶¹ In 2012, Davis proposed to install solar generating facilities at the rental apartments he owns in San Bernardino County.⁶² Although his positions have varied, he based his original complaint on a proposal to offer EV charging to the public, presumably under a commercial tariff.⁶³ The record is not clear as to whether any of his properties are currently on commercial tariffs.

⁶¹ Exh. D-5 at 169 (January 14, 2012, letter stating Davis had 125 kW of panels “on hand”); PFM at 7 (“A person might get a good deal on a pallet of solar panels (or a truck load)”); Second Amended Complaint at 3 (“I obtained economy of scale by having two truck loads of 18 pallets of 30 solar panels each warehoused about an hour from my properties.”); Second Amended Complaint at 11 (“I wanted maximum sized systems so that I could enjoy advantages of scale, easier transport of the panels, . . . and hopefully earn a bit of Net Surplus Compensation”); Exh. D-5 at 178 (“I intend to interconnect regardless of [tariff]”).

⁶² Davis submitted 20 applications. 19 applications were for his rental properties at 65911 Twenty-nine Palms Highway (8 units), 60215 and 60219 Alta Loma (4 units), 6804 Park Boulevard (5 units), 6807 Park Boulevard, and 6815 Park Boulevard. He also submitted an application to increase the size of the solar generating facility at his home, 61736 Onaga Trail. See Appendix 1 to this decision for a list of proposed installations. While Onaga Trail property was the only property specified as the subject of the original complaint, which is before this Commission on rehearing, that complaint stated that Davis proposed to develop an EV fast charging network, installing similar facilities at his other properties, from which it is inferred that Davis seeks to install large-scale facilities on at least some of those properties.

⁶³ Davis Response to SCE Mot. Dismiss, 3, 5 (confirming his “intention to use the proposed generating system to offset all or part of the ‘demand charges’ for an electric vehicle charger under [commercial] tariff TOU-EV-4 or GS-2.”).

A central fact key to Davis' original complaint was his intention to install EV fast chargers at several of his rental properties. Complainant proposed to make these chargers freely available to his tenants and the general public. By doing so, Davis hoped to entice other area residents to purchase EVs. Complainant stated an intent to eventually charge others money for using his EV fast chargers once "people are lining up to use them."⁶⁴ SCE asserts that Davis does not own three EV fast chargers and has not indicated where the remaining two fast chargers would be located.⁶⁵ In his Appeal, Davis made unverified factual claims asserting that only one of his properties has an EV fast charger, and that charger is currently operating in isolated mode (not connected to the grid).

Complainant's business plan is based on other unique facts that he lays out in his pleadings: the rental properties in this proceeding are geographically remote, EVs currently lack the range necessary to travel such distances in the High Desert region of California, and his properties are "conveniently located to make perfect fast charging locations."⁶⁶ Many of Davis' tenants "must commute far," traveling "140 miles round trip from [the region's] largest employer" or to the "nearest regional shopping mall."⁶⁷

In December 2011, Complainant started to reserve CSI incentives for installing solar generating facilities under the CSI program. Two months later, in February, Davis submitted interconnection applications for CREST for

⁶⁴ Revised Joint PHC Statement, March 24, 2014, at App'x B-3. RT at 73.

⁶⁵ SCE RB on Phase 1 at 11-13.

⁶⁶ C.12-08-015 Complaint at 2.

⁶⁷ C.12-08-015 Complaint at 2.

12 properties.⁶⁸ SCE rejected the CREST application for one location, Davis' home at 61736 Onaga Trail (Onaga Trail) because Complainant sought to interconnect the Onaga Trail facility to a portion of SCE's distribution grid that lacked the capacity to accommodate a new generating facility.⁶⁹ Based on the similarity between the Onaga Trail application and the other 11 applications, SCE advised Davis that all applications would fail. Complainant objected and, from this point onward, Davis and SCE exchanged a large amount of correspondence.

Davis subsequently met with representatives of various SCE departments, but no agreement was reached. Both parties then engaged in informal dispute resolution, and in June, participated in mediation before ALJ Karl Bemederfer. Following the mediation, Davis withdrew his CREST applications.

However, while Davis and SCE were still negotiating over his CREST interconnection applications, he filed the first of what would become 20 NEM applications in March, 2012. Complainant continued to file NEM applications for various properties until September, 2012, at which point separate NEM applications had been filed for each of 20 properties owned by him. For most of these, Davis also originally submitted a NEM application for a generating facility significantly larger than onsite load.⁷⁰

⁶⁸ 65911 Twenty Nine Palms #1-#8, 6804 Park Rear, 60219A Alta Loma, 60215A Alta Loma, and 61736 Onaga Trail. *See* Revised Joint PHC Statement at 7-18.

⁶⁹ Answer to Second Amended Complaint at 7 & n.8 (stating that the application "failed Screen 4 because the aggregate Generating Facility capacity on the Line Section was less than fifteen percent of Line Section peak load.")

⁷⁰ *See* Appendix 1 to this decision contains a summary table of facility sizes.

In August 2012, Davis filed C.12-08-015, alleging that SCE violated § 2827(c)(1) by rejecting a NEM application for a proposed 95 kW generating facility at Onaga Trail. SCE states that it denied this NEM application because it concluded that the proposed generating facility would produce more than the actual or reasonably anticipated annual load of the premises.⁷¹ This determination rested on SCE's understanding of the size limits provided in § 2827 and D.11-06-016. The parties have stipulated that Complainant's proposed system at Onaga Trail would produce an amount of electricity "substantially" in excess of the expected onsite annual load.⁷²

However, Davis argues that "customer's own electrical requirements" refers to the customer-generator's subjective intentions, not the actual generating capacity of the facility.⁷³ He states that systems may be sized up to "200 percent of the peak demand of the premises or 200 percent of the premises' annual load or up to 10 kW without regard to the premises' load."⁷⁴ Complainant has stated an intent to size his system sufficiently large that it may entirely offset the demand charges incurred by his use of an EV fast charger under a commercial tariff.

After working with SCE to determine the reasonably anticipated annual load of the relevant properties, Complainant received permission to interconnect the remaining facilities under the NEM program. As of March 24, 2014, PV facilities had been interconnected to SCE's distribution system at all of 20 of the

⁷¹ Revised Joint PHC Statement at 6.

⁷² Revised Joint PHC Statement at 6.

⁷³ Revised Joint PHC Statement at 4.

⁷⁴ *Id.*

sites. However, some of the facilities were sized smaller than the facilities proposed by Davis, and SCE has sought reduction in the size of some of the installed facilities. The 95 kW system had not been interconnected, but a smaller system is interconnected at the Onaga Trail site. A list of the facilities can be found in Appendix 1. Complainant proposed sizing ranges from 60% (NEM proposal) to 210% (CREST proposal) above the size of the systems currently approved for interconnection at the 29 Palms Highway locations. The proposed sizing is 17.25% higher than the approved sizing at Park Boulevard locations. At Alta Loma, the currently interconnected size is the size for which Complainant sought approval.

The complaint in C.13-11-002 contains two parts. Part One expressly addresses the NEM applications for generating facilities at Complainant's properties. Part Two consists of the claims Davis first raised in superior court and which pertain to the same properties as Part One.⁷⁵ Part Two includes allegations that SCE violated provisions of its Electric Rules 16 and 21 as well as its CREST tariff. These alleged violations range from failure to observe interconnection timeframes to fraud. The Part Two Claims seek damages and for the Commission to either issue an advisory opinion or render a declaratory judgment, which Davis could then use to pursue damages in superior court.⁷⁶

Claims for properties other than the original Onaga Trail location address PV systems for rental properties inhabited by Davis' tenants.⁷⁷ It can be inferred

⁷⁵ Second Amended Complaint at 1-2.

⁷⁶ *Id.* at 41-44.

⁷⁷ In its Reply Brief, SCE asserts that these properties are all under residential tariffs. (SCE RB Phase 1 at 18.) (1) 6804 Park Blvd. 1-4 and Rear; (2) 6807 Park Blvd.; (3) 6815 Park Blvd.; (4) 65911 Twenty Nine Palms Highway 1-8; and (5) Alta Loma 60215A, 60215B, 60219A, and

Footnote continued on next page

that some of these systems are those Complainant proposed to use for this fast-charger network. Complainant admits these systems, too, are “maximum sized” with the goal of earning Net Surplus Compensation.⁷⁸ Davis also intends to “enjoy advantages of scale, easier transport of the panels, [and] a more aesthetic roof appearance.”⁷⁹ Complainant argues that the proposed systems are “intended primarily to offset [his] own electrical requirements” because they are “separately metered to each resident,” are “rooftop or yard mounted on the residences,” and are “arguably” within the CSI size limit.⁸⁰ It is not clear what size Complainant would adopt for these PV systems if he was not constrained by NEM’s eligibility requirements. Complainant’s requested facilities sizes under NEM are 50% less and 67% less than the originally requested sizes under CREST, as noted in Appendix 1. Complainant also proposes to attach currently unused solar PV panels to his existing generating facilities “in hopes of earning some Net Surplus Compensation.”⁸¹

4. Discussion of Phase 1 Issues

4.1. Can Complainant’s Proposed Facilities Qualify for NEM?

As directed by the Rehearing Order, this decision examines whether the facts regarding the facilities as proposed by Complainant satisfy the legal

60219B. Onaga is also discussed, but not with respect to any particular generating facility on the premises. (See Second Amended Complaint at 16-21.)

⁷⁸ Second Amended Complaint at 9.

⁷⁹ Second Amended Complaint at 11.

⁸⁰ Second Amended Complaint at 11.

⁸¹ Second Amended Complaint at 11. This proposed configuration will increase the DC current handled by the computerized electrical inverters Complainant already has installed but will avoid the cost of purchasing more inverters. This configuration will result in a “high panel-to-inverter ratio” discussed in Section 4.2.2.2 below.

requirements to qualify for the NEM program. Complainant has the burden of proving it was improper for SCE to determine that his proposed PV systems were not eligible for NEM. As noted previously, a determination of what measure should be used to set the maximum size of a facility for a customer's own electrical requirements is reserved to Phase 2. The core question that must be answered to resolve this case is whether the electricity Complainant alleges he needs is indeed his or his tenants' "own electrical requirements." That is: Has Complainant shown that the proposed design of the PV facilities is intended to meet customer requirements and not achieve extraneous objectives, as the Commission asked in D.13-10-044?

This decision determines that a requirement is something necessary, in contrast to something extraneous, or a mere preference, aspiration or wish.⁸² The NEM statute refers to a customer's "own electrical requirements," not the requirements of neighbors, society at large, or of potential future customers. The statute also refers to electrical requirements, not questions of design, ease of construction, or system pricing. After reviewing the record, we conclude that the reasons Complainant provides to justify his proposed PV system designs do not describe electricity requirements that are not necessary or indispensable to customers, and therefore do not qualify for the NEM program. Instead, the reasons Complainant provides have varied to include: aesthetic considerations; proposals to reduce to costs of PV by buying in bulk; a desire to implement tax

⁸² See, e.g., Random House Webster's Unabridged Dictionary, retrieved October 2, 2015, from <http://dictionary.reference.com/browse/requirement> ("Requirement, requisite refers to that which is necessary. A requirement is some quality or performance demanded of a person in accordance with certain fixed regulations . . . A requisite is not imposed from outside; it is a factor which is judged necessary according to the nature of things.").

reduction strategies; his utopian vision of improving society at large, including using solar power – alone – to power EVs, despite challenging circumstances of his particular geographic region; and an unusual plan to make the export of electricity (either to offset legitimately imposed demand charges or to earn Net Surplus Compensation) a main feature of his NEM facilities. Many of these goals are extraneous to the electrical requirements of an SCE customer, and other goals are outside the realm of the reasonable and practical, and amount to preferences and aspirations, not requirements.⁸³ The details of this analysis are set forth below.

4.1.1. Nothing in the Statutory Language Supports Complainant’s Interpretation of the NEM Statute

Consistent with the Rehearing Order and in light of the complete evidentiary record, we consider whether Complainant’s proposed facilities can meet the statutory requirement that a NEM facility be “intended primarily to offset part or all of a customer’s own electrical requirements.” This is consistent with the principle that the “first step in statutory interpretation is to examine the actual language of the statute.”⁸⁴ If the Legislature’s intent is reflected by the text, “we presume that the Legislature meant what it said, and the plain meaning of the statute controls.”

Accordingly, under the NEM program, Complainant’s PV facilities must be primarily intended to generate electricity in order to meet the requirements of the customers at the relevant premises. A PV facility that is designed from the outset to produce additional amounts – especially the substantial amounts

⁸³ See Rehearing Order at 7.

⁸⁴ D.12-08-028 at 7 cited in Rehearing Order at 6.

proposed at times here – is not intended to meet a customer’s electrical requirements. Moreover, if a PV system was designed so additional electricity was being generated for extraneous reasons, to meet an aspirational goal, to test or develop a business model, to maximize revenues from surplus generation, or to advance an idiosyncratic preference, it cannot be considered to be a requirement. “Requirements” cannot, for example, mean, as Davis argues, “the requisite power to run [a] device” of his own choosing.⁸⁵ The word “requirements” is never understood to mean ideals, desires, or personal inclinations.

4.1.3. Complainant Admits the Proposed Generating Facilities were not Primarily Intended to Offset a Customer’s Own Electrical Requirements

4.1.3.1 EV Fast Chargers

The record shows that Complainant sought to install excess generation for a variety of reasons that do not constitute a customer’s own electrical requirements. Complainant has stated that his initial proposal for oversized facilities would “produce a lot of excess.” The excess generation could be as much as twenty times the amount of electricity used by Davis or his tenants.⁸⁶ This excess electricity does not become necessary simply because Complainant describes an idealistic or business scenario that includes fast charging to promote use of EVs. Davis states that at this time “there is little demand for” electric vehicles and if “no one has [electric vehicles],” then “[t]here’s no need for

⁸⁵ Complaint at 5.

⁸⁶ Davis estimates “something like 20,000 [kWh] per month.” However, this amount would be reduced if there was a greater demand for the EV fast charger. *See* Second Amended Complaint at 16-17.

charging facilities.” Indeed, not only do Davis’ tenants not own EVs, but the two EVs owned by Davis himself likely represent half of the EVs in his area.⁸⁷

This current lack of demand for the electricity that Davis’ facilities will generate is one of the defects of his proposal. Encouraging local residents to purchase EVs will not increase Complainant’s “own electrical requirements” or his tenants’.⁸⁸

4.1.3.2 Avoiding Demand Charges is not a “Requirement”

As explained above, given the type of fast chargers purchased by Complainant, far more power must be available on demand than for most residential customers. This uncommonly high but sporadic need for power, combined with the intention to make charging available to the public, would normally require that the fast chargers be served under commercial tariffs that include a demand charge. Demand charges compensate the utility for the cost of maintaining the capacity to provide sustained bursts of power. The higher the peak demand, the greater the demand charge.

Davis describes the problem of demand charges this way:

Under the current NEM guidelines, a relatively small generating system operating 8 hours a day average year round would provide plenty of electricity to met [sic] the anticipated “usage” of a fast charger . . . However, the Net Metering program does not offset “demand charges.” . . . To offset demand charges, one must actually meet the demand itself. . . . Clearly it would appear that the word [sic] “meet customer electrical requirements”

⁸⁷ RT at 19:10-11 (“Right now there are only two electric vehicles that I know of in my area”); RT at 21:14-27 (Davis clarifying he owns two of the four EVs in area).

⁸⁸ In his Appeal, Davis notes that currently his EV fast charger is being used primarily by visitors to Joshua Tree National Park. (Appeal at 21.)

should allow for meeting “peak demand” as well as historic usage.⁸⁹

Complainant argues that he is entitled to size his system to both operate the fast chargers and to avoid demand charges. Davis describes two possible solutions that will allow him to avoid the cost of demand charges. One, Complainant argues that if the NEM statute permitted him to size his generating facilities large enough he could generate sufficient revenue through Net Surplus Compensation to offset the monetary amount of his anticipated demand charges. Two, he argues that he should be permitted to size his PV facility large enough to reduce his peak demand to reduce demand charges to a minimum. Neither of these assertions is true.

For the first approach, Complainant would define his electrical requirements based on the amount of electricity he must sell back to SCE to financially offset his demand charges. The NEM statute has an express prohibition on using Net Surplus Compensation to offset fees. This prohibition includes demand charges. Complainant has acknowledged this, stating, “NEM does not offset demand fees. To offset the demand fee, I need to have actual sufficient PV in place to handle the demand. With morning, afternoon and Winter PV production low, that means I need to install systems that are at least 100KW.”⁹⁰

This leads to the second approach: defining electrical requirements based on the amount of self-generation needed to supply peak electric use and thus avoid incurring high demand charges.

⁸⁹ PFM at 8-9.

⁹⁰ Exh. D-5 at 181 (March 5, 2012 Letter to Kelly Chen at SCE).

The NEM statute cannot be reconciled with Complainant's assertion that offsetting or avoiding a demand charge is necessary within the meaning of "requirement" in § 2827(b)(4)(A). Demand charges exist to compensate utilities for the expense of ensuring that sufficient transmission, distribution, and generation capacity is available so that high demand customers can draw the large amounts of power they need without risk to the electricity distribution system. These are legitimate cost recovery mechanisms, approved by this Commission, and a scheme to avoid a properly considered and adopted rate design is not a customer requirement.

4.1.3.3 Systems Designed to Produce Excess Electricity for Export, or to Secure Tax Advantages

During this proceeding, Complainant has, in addition to describing his EV fast-charging proposal, repeatedly asserted the Commission should allow him to "connect extra panels . . . in hopes of earning some Net Surplus Compensation," because it is "very attractive" and because Complainant wants "a little bit of extra income." At the Evidentiary Hearing, Davis was equally clear that his proposed facilities "will produce a surplus significantly over what [are] the actual needs of the apartments. So I will be producing surplus electricity that I believe I should be able to sell under NEM."⁹¹ Complainant's desire to become a for-profit generator of electricity while nevertheless remaining under the auspices of the NEM program were revealed when he described a 16.5 MW solar farm as his "only viable competitor."

Correspondence with SCE also confirms that Davis intended to install far more generating capacity than he could possibly use at the Onaga Trail location.

⁹¹ RT 8:23-9:2; Exh. D-5 at 180, March 5, 2012 letter to Kelly Chen at SCE.

Even though he acknowledged that “[u]nder the current NEM guidelines, a relatively small generating system operating 8 hours a day average year round would provide plenty of electricity to [meet] the anticipate ‘usage’ of a fast charger,” Complainant nevertheless proposed to install much larger facility, even though he knew this amount far exceeded the power generated by the average residential solar PV system in California, which typically has a capacity of 5 kW:⁹²

I have 125 KW of solar panels on hand ready to install today and intend install ½ megawatt before year end. . . . I have enough land/roof for 2 megawatts.⁹³

The fact that the NEM Statute authorizes compensation does not imply that all excess generation is eligible for Net Surplus Compensation.

Section 2827(b)(4)(A) plainly limits program eligibility to those generating facilities that are primarily intended to produce electricity to meet a customer’s own requirements. When the main consideration in the design of a proposed facility is to produce excess generation solely for the purpose of exporting electricity, that facility is not “intended primarily to offset part or all of the customer’s own electrical requirements.”

Complainant’s own testimony also allows the inference that the design of his proposed facilities is not tied to customer consumption, but to his desire to connect a specific number of panels for business or tax reasons. For example, in pre-litigation correspondence with SCE, Davis explained that he did not prefer

⁹² Davis OB Leg. Issues at 10 (quoting CSI Program Handbook).

⁹³ Exh. D-5 at 169, January 14, 2012 letter to Shannon Fillion at SCE.

NEM or CREST, but that his primary goal at the time was to quickly install 500 kW of PV for income tax reasons.

For me, the big money issue is taxes. I must get these systems installed and operating by year end. All this squabbling over [tariffs] should be saved for after I have to interconnect. . . .⁹⁴

Similarly, Complainant admitted he bought PV panels by the truckload and designed systems to take advantage of this large scale purchase.⁹⁵ Tax planning and good discounts for a large number of panels may be a part of Davis' investment considerations, but seeking to take advantage of these strategies is not a customer electrical requirement.

4.1.4. Complainant's Proposed Subjective Intent Standard is Unworkable

Complainant argues that the phrase "intended primarily" in Section 2827 turns NEM eligibility questions into an inquiry regarding the customer's motivation. Davis asserts that NEM eligibility should be an inquiry about the customer's "intention"⁹⁶ that contemplates "the possibility of secondary motivations."⁹⁷ Complainant also argues that "intended always implies a state of mind, not an actual outcome." As an example, Complainant asserts: "I want to use a fast charger, and my 'customer electrical requirement' is to have the

⁹⁴ Exh. D-5 at 180, March 5, 2012 letter to Kelly Chen at SCE.

⁹⁵ Second Amended Complaint at 3, 11..

⁹⁶ Davis Rebuttal Brief on Phase 1 at 5.

⁹⁷ PFM at 6.

requisite power to run that device. The statute is clear that Net Metering allows me.”⁹⁸

As formulated by Complainant, this subjective intent test would allow NEM facilities to be sized large enough for any extraneous or aspirational use, including financial compensation, for which the applicant expresses a desire. It would include such extraneous considerations such as aesthetic considerations and tax strategy. This subjective intent test is unworkable in the context of the NEM program. As a practical matter it would remove any limit on the size of NEM installations. NEM confers a specific bundle of benefits on customers who meet the eligibility criteria. Reading the statute to grant eligibility to any customer whose state of mind is to use the electricity generated by a facility of any size reads the eligibility standards out of the statute. As a matter of fact, the primary motivations that Complainant gives to justify the size of his facilities are extraneous and do not constitute electrical requirements.

4.1.5. Implementation of the NEM Statute Through Decisions and Tariffs

Complainant incorporates into his claims the fact that the state has specific policies to encourage the use EVs and solar PV as means to reduce GHG. Complainant argues that his proposed facilities would support both goals. However, the state has also taken specific steps to implement these GHG reduction goals, and Davis’ facilities must comply with that implementation.

The NEM statute is the first step in implementation. Complainant attributes great significance to the words of the NEM statute, but disregards the

⁹⁸ Davis also made this argument at length in his Petition for Modification of D.11-06-016. PFM at 6-7.

relevant Commission decisions and tariffs. This approach ignores the fact that the statute contemplates that the NEM program will be implemented by the Commission and utilities through the tariff mechanism. The language of the NEM statute is implemented through the Commission's decisions and advice letters approving the tariffs, electric rules, and program handbooks.

Davis has either misinterpreted or disregarded these decisions. For example, in his Appeal, Davis repeatedly cites Commission decisions out of context, resulting in the impression that the Commission has previously interpreted the language of the NEM statute in a specific way that supports Davis' position. In fact, the decisions cited, such as D.07-05-034⁹⁹ and D.07-07-027,¹⁰⁰ are not about NEM eligibility. These cases are not relevant to the Phase 1 issues resolved by this decision. The case law cited by Complainant would only become relevant if this case could not be resolved without consideration of the Phase 2 issue.

4.1.6 Burden of Proof Not Met

To prevail in a complaint case, the Complainant must prove by a preponderance of the evidence that a utility has violated a statute, rule, or Commission order, or a tariff approved by the Commission. Here, Complainant alleges that SCE should approve interconnection of his proposed generating facilities, without showing that the proposed facilities would qualify for

⁹⁹ D.07-05-034 concerns Net Surplus Compensation. It did not address or change NEM eligibility requirements.

¹⁰⁰ D.07-07-027 concerns renewable generators under specific contracts that are part of the Renewable Portfolio Standard. These contracts allow a generator to generate and use power onsite, and to size facilities large enough to generate excess power for sale to the grid under a standard form contract with the utility. These generators are not eligible for the NEM program.

interconnection through the NEM program. Complainant focused his arguments on his interpretation of various statutes and Commission programs but failed to show that his unusual facilities met the specific NEM eligibility criterion this Commission had determined to consider as a threshold question: that they were primarily intended to offset customers' own electrical requirements. As a result, the arguments in Complainant's pleadings that attempt to justify the unusual facts surrounding his proposed solar generating facilities are not sufficient to demonstrate that the facilities would qualify for NEM.

In fact, one of the reasons the consolidated complaints do not meet their burden of proof is because Complainant sought to establish as a matter of legal principle that Complainant was permitted to interconnect facilities of certain sizes, without making a persuasive showing that the specific proposed PV systems at issue here were designed to offset customer requirements, as required to be eligible for NEM.¹⁰¹ Another reason Complainant has not met his burden of proof is because his factual claims describing his proposed facilities have shifted, as have the number of properties and proposed PV systems brought to this Commission for consideration. These claims began with the assertion that a very large PV system that could power EV fast chargers under minimal or challenging daylight conditions was eligible for NEM, but ended with the Appeal's significantly different claim that this proceeding should mainly be concerned with systems designed so that some of them "might" allegedly produce only 10% surplus power. Because of the shifting nature of Complainant's claims, and the

¹⁰¹ Many of these legal arguments prove, on analysis, to be without merit, but those issues are also, as noted elsewhere, not properly before the Commission in a complaint proceeding with only two parties, when they involve matters of broad application of concern to many other parties.

heavily qualified assertion that some proposed PV systems are not of significant size, little weight should be given to the factual characterizations made in the Appeal.¹⁰² This decision finds that Complainant's varied and changing descriptions of the uses that customers will have for the power generated by his proposed PV systems could well be after-the-fact rationalizations developed to excuse facilities the design of which was primarily intended to make full use of a bulk order of PV panels and achieve the maximum size possible, without regard to any customer's own electrical requirements. For these and other reasons, Complainant has failed meet his burden of showing that his proposed facilities are eligible for interconnection under SCE's NEM tariff.

4.1.7. Other Considerations

The proposed use of Davis' generating facilities is expensive. He seeks to use compensation provided by the NEM program to make it technically feasible for him to use EVs in the desert. To accomplish this, he would install fast chargers that would place unique strains on SCE's distribution system because of their high demand. Davis' complaint amounts to a request that all SCE ratepayers subsidize the costs associated with interconnecting and deploying electric generation for his personal, commercial gain.

We noted in D.13-04-002 that Davis has other tariff options.¹⁰³ SCE pointed this out as well.¹⁰⁴ Indeed, Davis himself stated that he has "multiple options" to

¹⁰² An appeal is also not the place to present new facts as it is the previously established record the Commission looks to. A party seeking to change the underlying record must seek to re-open a proceeding, especially at the end of a proceeding, after a Presiding Officer's Decision has been written and issued to the parties.

¹⁰³ D.13-04-002 at 13-14.

¹⁰⁴ SCE RB Phase 1 at 6-7.

interconnect and generate electricity under a Commission-approved tariff: “NEM, [Renewable Auction Mechanism (ReMAT)], or simply parallel operation with SCE standby service under the applicable OAT. There may even be future tariffs more advantageous.”¹⁰⁵ Similarly, there are multiple ways Davis could power his EV fast chargers. He may power a fast charger in isolated mode, where neither the generating facility nor the EV fast charger operates in parallel with SCE’s grid. He may also decline to provide charging to the public and elect a rate schedule without demand charges. More importantly, as Davis noted, he could export electricity under tariffs that would permit him to earn compensation. For example, he could apply for the Re-MAT feed-in tariff (the successor to CREST), or enter into a Qualifying Facility power purchase agreement with SCE.

4.2. Remaining Phase 1 Issues

The scoping memo set out specific briefing and fact finding questions in order to be sure that all issues raised by Davis’ complaints and SCE’s answers were identified and clearly articulated. This was of particular importance given that this is a consolidated proceeding with specific rehearing directions. Some of these issues constitute additional claims for which relief is sought, and others are tangential to the main inquiry into NEM qualification.

4.2.1. Additional Claims and Relief

4.2.1.1. CSI Payments for Oversized Facilities

The Commission has previously held that generating facilities are eligible for CSI incentives only if sized no greater than the associated premises’ annual

¹⁰⁵ Exh. D-5 at 178, March 5, 2012 letter to Kelly Chen at SCE.

load.¹⁰⁶ Complainant asserts that a system sized larger than required to offset annual load should still be entitled to CSI incentives up to the amount of kW that would have qualified for NEM. Complainant would like to expand some of his currently interconnected generating facilities beyond the size necessary to offset annual load while preserving CSI cash incentives. He argues that CSI is available for systems sized up to 200 percent of annual consumption or 200 percent of peak load.¹⁰⁷ In the alternative, he argues that CSI is available for the portion of a generating facility under 1 MW.¹⁰⁸

When CSI was originally adopted, systems were permitted to be sized up to 200 percent of peak load. Then, in D.06-01-024, the Commission “reduced the size of solar facilities eligible to receive incentives through the [Self-Generation Incentive Program] and CSI.”¹⁰⁹ Among its concerns, the Commission “wanted to avoid paying incentives to over-sized systems.”¹¹⁰ The eligible system size was therefore reduced to 100 percent of historic peak load.

Shortly thereafter, in D.06-07-028, the Commission acknowledged that the reduced size limit adopted in D.06-01-024 was “negatively impacting” the solar PV market.¹¹¹ The new size limit also unintentionally penalized some customer-generators “by reducing net energy metering credits on an annual

¹⁰⁶ See D.06-07-028 at 8-9 (Ordering Paragraph 1 and Conclusions of Law 2); CSI Program Handbook, §§ 2.2.4-2.2.5 & n.10).

¹⁰⁷ Second Amended Complaint at 11.

¹⁰⁸ Davis OB Leg. Issues at 2.

¹⁰⁹ D.06-07-028 at 2.

¹¹⁰ *Id.*

¹¹¹ D.06-07-028 at 1.

basis.”¹¹² The Commission therefore revised the maximum eligible system size again, this time to “100 percent of annual historical usage, based on the previous 12 months customer usage.”¹¹³ By basing it on annual usage, the new size limit “allows customer’s greater flexibility in sizing their [distributed generation] facilities, reflects the sites’ actual usage, and still prevents potential over-sizing of systems relative to annual energy use.”¹¹⁴ Davis’ assertion that the Commission has “always” permitted systems sized to either “200 percent of annual consumption or 200 percent of peak load”¹¹⁵ is simply incorrect.

Complainant fails to present any legal authority that supports his position. He nevertheless claims that a few months after the annual usage rule was adopted, D.06-12-033 impliedly modified the rule by holding that “solar projects may be sized up to five MW [but] may receive incentives only up to the first MW.”¹¹⁶ According to Complainant, this single sentence created an implied rule that systems may receive CSI incentives but only on the portion of a facility that offsets the premises’ annual load. Davis further contends that his interpretation is supported by the legislative history of AB 920. A legislative analysis of that bill stated that customers “can receive the rebates under the [CSI program] . . . but only for the portion of the system that meets a customer’s demand.”¹¹⁷

¹¹² *Id.* at 2.

¹¹³ *Id.* at 8 (Conclusions of Law 2) (emphasis added).

¹¹⁴ *Id.* at 3.

¹¹⁵ Second Amended Complaint at 11.

¹¹⁶ Davis OB Leg. Issues at 2.

¹¹⁷ *Id.* at 3.

D.06-12-033 does not create an implied rule. It does not mention or allude to 100 percent annual historical usage, it does not discuss systems under one MW, and it does not address any policy concerns about oversized systems. There is simply nothing in D.06-12-033 to suggest that the Commission intended to revise the annual load size limit. To the contrary, D.06-12-033 orders that the Commission “should continue CSI implementation as set forth in D.06-07-028, except as [expressly] modified in this order.”¹¹⁸ It is implausible that, despite preserving the status quo set by D.06-07-028, the Commission would change the size rule without ever explicitly addressing it.

The legislative history likewise fails to support Complainant. As a threshold matter, AB 920 did not concern CSI; it modified only the NEM program. In any case, a single legislative analysis of a bill that applies to a different and independent incentive program provides little authority, if any. Furthermore, the same legislative analysis contradicts Complainant. As Davis himself expressly noted in his own complaint, the legislative analysis states that to “be eligible for CSI rebates the system must still be sized to actual or projected load of the customer-generator . . . This means that customers cannot intentionally oversize a solar energy system and receive a CSI rebate.”¹¹⁹

Additionally, the Commission’s holding is consistent with the CSI Program Handbook. The CSI Program Handbook specifies that the estimated annual production “may not be higher than the previous 12-month energy usage”¹²⁰ and that “[n]o solar energy systems that exceed a customer’s onsite

¹¹⁸ D.06-12-033 at 36 (Conclusions of Law ¶ 2).

¹¹⁹ C.12-08-015 at 9-10 (citing September 4, 2009 bill analysis in the Assembly).

¹²⁰ CSI Program Handbook § 2.2.4, cited by SCE Reply Brief on Leg. Issues at 3.

load will receive a CSI incentive.”¹²¹ Although Complainant cites the CSI Program Handbook for the proposition that Commission policy is to permit CSI incentives up to the first MW of generation, the CSI Program Handbook’s actual language regarding system size and oversizing is unambiguous.

Accordingly, this decision finds that to be eligible for CSI incentives a generating facility must be sized based on the associated premises’ expected annual load.

**4.2.2. Davis’ Alternative Arguments
for Determining Size for
NEM Purposes**

**4.2.2.1. Can SCE Require a Load Justification
Analysis for a Facility Under 5 kW?**

Complainant asserts that SCE may not require load justification studies for facilities sized under 5 kW. Generally, SCE treats 5 kW systems as typical and therefore does not always perform a closer load justification analysis. Nonetheless, SCE may require a load justification for Davis’ proposed NEM generating facilities, even if those systems are smaller than 5 kW.

Although the CSI Program Handbook states that systems between 1 kW and 5 kW “shall be assumed to primarily offset the customer’s annual electricity needs,”¹²² this language is not controlling. The mere existence of agency language that arguably supports a party’s position, but pertains to a different program, does not have a conclusive legal effect. If the Commission found that the CSI presumption of compliance prevented SCE from demanding a load justification, the Legislative mandate to size to annual load would be rendered

¹²¹ CSI Program Handbook § 2.2.5.

¹²² Davis OB Leg. Issues at 10 (citing CSI Program Handbook § 2.2.5).

toothless in many cases. Instead, the presumption of compliance for under-5 kW systems is best seen as a rule of administrative convenience. Systems less than 5 kW may be assumed to comply only where the assumption would not otherwise defeat the size limit. SCE may therefore require a load justification from Davis.

However, SCE fails to persuade us that it “must require a load justification for every proposed generating facility, regardless of system size.”¹²³ The Commission finds no statutory or decisional language that imposes such a burden, nor has the Commission found any such requirement in SCE’s Rule 21 tariff, Schedule NEM, or NEM Handbook. Nor has SCE provided any evidence that such a rule is necessary. To the contrary, a policy of requiring load justifications for all proposed systems seems wasteful and likely to have a disparate impact on smaller customer-generators.

Accordingly, this decision holds that SCE may require a load justification for Davis’ generating facilities in connection with evaluating interconnection under NEM.

4.2.2.2. Efficiency Rating for Measuring Generator Output

The efficiency rating of an NEM-qualified system must be calculated using a method approved by the California Energy Commission (CEC). Complainant argues that the size of his facility should be measured by the inverter rating, not the panels connected to the inverter. The inverter is the device that converts the DC power generated by the solar PV panels into AC power for the purposes of serving on-site loads and exporting to the grid. The inverter’s efficiency rating is

¹²³ SCE OB Leg. Issues at 9 (emphasis added).

a ratio of input to output power that indicates how much power is lost in the conversion.

Complainant proposes a configuration where significantly more power would be generated in DC than the inverter could output in AC. Complainant proposes to connect a large number of panels to the inverter so that the amount of solar generated will remain more constant as the sun crosses over and activates different panels.¹²⁴ Complainant's idea is that the system could be configured to never exceed the inverter maximum output. However, this approach does not meet the requirements for efficiency ratings pursuant to the CEC. Inverters are certified to operate safely and reliably up to a certain capacity, and Complainant's proposed configuration has not been studied.

SCE's NEM Handbook provides the method for calculating generating facility capacity. The SCE NEM Handbook method is based on the formula required by the CEC to calculate a "CEC-AC Nameplate" rating, which is used to determine certain solar PV incentives.¹²⁵ The CEC-AC formula applies a schedule of inverter efficiencies experimentally determined by a Nationally Recognized Test Laboratory (NRTL). These inverter efficiency values are static and are applied universally to different solar PV systems. The CEC-AC inverter efficiencies assume an approximate parity between an inverter's maximum energy input from PV panels and its maximum rated energy output. Davis asserts that this assumption of approximate parity can lead to "absurd" results.¹²⁶

¹²⁴ See RT at 38-39 describing panel vertical and horizontal orientation to the sun.

¹²⁵ SCE RB Leg. Issues at 3-4.

¹²⁶ Davis OB Leg. Issues at 7.

Complainant argues that the results should be ignored because there is no legislative or regulatory mandate to employ those inverter efficiencies for NEM purposes. However, Complainant fails to provide legal authority to support his own contentions – he merely asserts that it is legally possible to apply the manufacturer’s inverter efficiency rating instead of the CEC efficiency rating. This issue, then, is essentially a policy matter.

Policy concerns such as grid reliability, administrative efficiency and safety, militate in favor of CEC-AC ratings. From a grid reliability perspective, the utility must be able to have clear and consistent understanding of the burdens imposed on the distribution grid by distributed generation facilities. From an administrative perspective, using non-standardized calculations of inverter efficiency would be wasteful and make oversight more challenging. CEC-AC ratings facilitate administrative convenience by being consistent with state policy, as the CSI program requires the use of CEC-AC ratings for any renewable generation that will receive incentives from state funds. From a safety standpoint, it makes little sense to require compliance with the safety standards and NRTL testing only to then use unverified manufacturer ratings for particular NEM applications.¹²⁷

In addition, the configurations proposed by Davis are inefficient, in the sense that they will result in a poor conversion of DC to AC power.

Davis complains that using the same inverter efficiency ratio that is applied to all other SCE customers – the CEC-AC rating – will result in

¹²⁷ See NEM Handbook at 7. Citations to the NEM Handbook are to SCE NEM Interconnection Handbook Version 5.0 (Appendix B to Exhibit SCE-1-A).

“absurdly”¹²⁸ large estimates of the power generated by his proposed facilities. This is not an indication that the formula is incorrect, but rather that Complainant’s design exceeds a reasonable capacity amount for a PV system connected at the distribution grid level. The CEC-AC formula returns an “absurdly” high estimate only because Complainant seeks to connect a greatly oversized amount of PV capacity to an undersized inverter. Davis cannot be excused from applying the same formula as other applicants. In any case, given the policy and equitable considerations just discussed, an adjudicatory proceeding is not an appropriate forum to modify a generally applicable rule.

This decision therefore declines to order or authorize the use of an alternative efficiency rating for Complainant’s CEC-approved equipment.

4.2.2.3. Safety

In addition, Complainant’s proposed panel and inverter configuration raises significant safety considerations. Complainant’s discussion of safety is reproduced here in its entirety:

Phase I deals with program eligibility, not electrical issues. Regardless of how we estimate annual production, SCE will still conduct AC side safety checks under Rule 21, and the County Department of Building and Safety will still be checking the customer side (relevantly the DC side) which SCE does not get involved with.¹²⁹

In contrast, SCE states that safety and reliability concerns “are raised every time an interconnection applicant submits a request to interconnect.” It argues that Davis’ high panel-to-inverter ratio systems are deviations from the

¹²⁸ See, e.g., Davis OB Leg. Issues at 5-9.

¹²⁹ Davis OB Phase 1 at 4-5.

requirements of the CSI and NEM Handbooks and should be approved only after a change in policy accomplished through a “public proceeding.”

In support of its argument, SCE emphasizes the unprecedented and unexamined nature of Complainant’s proposal. Specifically, SCE claims: the power output from the PV panels would substantially exceed the inverter’s maximum input power; it has “never encountered” this high panel-to-inverter ratio; it has not reviewed the proposed panel and inverter configurations; it lacks expertise in the proposed behind-the-meter, DC-side equipment; the proposal was not reviewed by a licensed electrical contractor, a licensed electrician, or a licensed engineer;¹³⁰ Davis did not introduce any reliable safety testimony; the safety of Complainant’s proposed configuration was not evaluated by a licensed electrician or engineer;¹³¹ Complainant was unable to provide anything more than “an educated guess” about the meaning of the “maximum generator input power” of the inverters; and even Davis himself admitted the high panel-to-inverter configuration had never been used.¹³²

The Commission shares SCE’s concerns. Industry custom is to limit inverter overloading to 1.25:1,¹³³ and SCE indicates that the highest ratio it has ever interconnected under the NEM program is 1.05:1.¹³⁴ Complainant intends to overload his inverters beyond what is customary: at one apartment complex, his

¹³⁰ RT at 48:16-49:20.

¹³¹ RT at 49.

¹³² RT at 67:14-19.

¹³³ RT at 54:23-55:12.

¹³⁴ RT at 136:7. Davis, however, claims he has interconnected systems with a ratio of 1.5:1. RT at 68:7-8.

proposed configuration has an aggregate DC-to-AC (input to output) ratio as high as 2.5:1.¹³⁵ Overloading an inverter presents the risks of fire, injury, and property damage. While Davis appears to suggest that circuit breakers provide adequate safeguards, his testimony alone is an inadequate basis to support a finding that his proposed PV panel configurations are safe. If a fire were to occur, it would not only place Davis in harm's way, but also his tenants and responding firefighters, and possibly others.¹³⁶ Compounding this uncertainty, Davis failed to provide a single example of another generating facility using a similar configuration.

SCE is responsible for safety of the grid. Generally, the safety of behind the meter systems is determined by the local jurisdiction that issues the building permit and performs the related inspections. Where SCE has identified a safety concern, as it did in briefs in this proceeding, the utility cannot simply ignore the problem. The burden is on Davis to demonstrate that his non-standard configuration is safe, and he must do so in accordance with Commission-approved tariffs.

4.2.2.4. Does NEM Eligibility Differ for Residential and Commercial Customers?

All of Davis' proposed facilities are located at residential properties, but all have a commercial component: the Onaga Trail property would have a fast charger for use by other persons, possibly on a monetary basis. In his original complaint, Davis stated he intended to install two other fast chargers for use by

¹³⁵ In the aggregate, Davis discusses feeding as much as 100 kW DC to inverters that will produce 40 kW AC. The ratio between input and output is therefore 2.5:1. RT at 26:2-16.

¹³⁶ Potential risks include DC electrical arcs and the inability to easily de-energize major DC conduits.

other persons, presumably at the apartment buildings. The PV systems at the apartment buildings would supply tenants and thus reduce their electricity bills. In light of the unusualness of Davis' EV fast charger proposal, and the commercial nature of rental property, the parties were asked to brief whether this commercial aspect of the electricity use would change the analysis of NEM eligibility.

The parties agreed that this issue had no impact on the analysis of this case, and declined to brief this issue further. Based on our findings above regarding "own electrical requirements," further discussion of this issue is not necessary to resolve this proceeding.

5. Part Two Claims

Part 2 of the Second Amended Complaint included additional claims related to Complainant's proposed solar PV installations. The Part 2 Claims focus primarily on interconnection of the facilities and monetary damages.¹³⁷ Complainant originally brought the Part 2 Claims in superior court, but the case was dismissed without prejudice after SCE filed a demurrer on the grounds that the Commission has exclusive jurisdiction over the claims. The trial court's opinion was affirmed by the appellate court.¹³⁸

The Part 2 Claims fall into three categories.

First, Complainant asks that the Commission "make findings" that will enable the Superior Court to "award damages without infringing on the CPUC's regulatory authority."¹³⁹ Complainant has eight specific findings that he would

¹³⁷ Second Amended Complaint at 1.

¹³⁸ *Davis v. SCE*, 236 Cal. App. 4th 619, April 7, 2015, 2d Appellate District.

¹³⁹ Second Amended Complaint at 43.

like the Commission to make. As discussed in detail below, because the Commission disfavors advisory opinions, it cannot grant the relief requested.

Second, Complainant asks the Commission to order “SCE to refund charges for electricity which I was forced to purchase because of SCE’s delays in granting permission to operate.” Because Complainant seeks compensation for electricity he actually used, the requested relief constitutes monetary damages not a refund. The Commission does not have authority to order damages and therefore cannot grant the relief requested.

Third, Complainant asks that the Commission grant specific injunctive relief as a remedy for various interconnection disputes under Rule 21. Complainant asks that the Commission order SCE to make CREST available to him and to refund charges related to certain conductor upgrades. Although the Commission does have jurisdiction over CREST and cost allocation for conductor upgrades, disputes regarding CREST interconnection must first be made through the Rule 21 alternative dispute resolution process. Therefore, the Commission cannot grant the relief requested.

Complainant’s allegations through his pleadings and the evidence proffered by Complainant are not sufficient to meet his burden of proof for the Part 2 Claims.

The Commission can only hear claims that are within its jurisdiction. Where the Commission is not able to grant the relief sought, the case must be dismissed for failure to state a cause of action on which relief may be granted.¹⁴⁰ Regarding the Part 2 Claims, it is well-settled law that the Commission does not

¹⁴⁰ See, e.g., D.79930 (*Packard v. Pacific Telephone*); D.13-01-001 (*Cinderella v. Verizon*) ordering paragraph 1.

have authority to award damages,¹⁴¹ and it is also well-settled that the Commission does not issue declaratory relief or advisory opinions except under extraordinary circumstances.

Complainant continues to have alternative remedies, and may be able to file a new complaint after following the required Rule 21 alternative dispute resolution procedure.

5.1. Advisory Opinions Disfavored

The Commission disfavors advisory opinions and requests for declaratory relief. Davis asks the Commission to make a series of findings that will allow him to seek damages in Superior Court. The California Code of Civil Procedure defines declaratory relief as “an action for a declaration of rights or duties under a written instrument or with respect to property.”¹⁴² By asking for a decision that makes findings regarding tariff interpretation for use in Superior Court, Complainant is requesting declaratory relief.¹⁴³

Generally, the Commission “disfavors issuing a decision in response to a request for declaratory relief or for an advisory opinion, unless extraordinary circumstances exist or if the matter is of widespread public concern.”¹⁴⁴ One reason the Commission is reluctant to grant these types of relief is that it is not an efficient use of the Commission’s limited judicial resources.¹⁴⁵ Thus, the

¹⁴¹ The Commission may award “reparations” for refund of overbilled amounts.

¹⁴² California Code of Civil Procedure Section 10602.

¹⁴³ See, e.g., D.03-09-015 (finding that an application requesting clarification of a Commission resolution for use in a civil court case constituted declaratory relief).

¹⁴⁴ *Id.* at 2.

¹⁴⁵ D.95-01-014. See, e.g., *Carlin Communications, Inc. v. Pacific Bell*, D.87-12-017 (“In general, in order to conserve our scarce judicial resources, we do not favor issuing advisory opinions.”)

Commission requires a compelling reason to utilize its scarce judicial resources to grant these types of relief.

The Commission may grant declaratory relief only if there are extreme circumstances or the matter is of widespread public concern.¹⁴⁶ For example, in 1995, the Commission granted an advisory opinion in a water case affecting all former customers of the Santa Margarita Water District. In that case, the Commission recognized that a matter of widespread public interest was at stake because all former customers were affected.¹⁴⁷

The Commission has discretion to determine if an extraordinary circumstance exists.¹⁴⁸ In briefs, the parties identified only two Commission cases in which the Commission found an extraordinary circumstance.

In 2013, in a rehearing order, the Commission found that “an extreme water shortage, and a newly developing technology” qualified as “extraordinary.”¹⁴⁹

In 2003, the Commission found an extraordinary circumstance existed where the issue would impact the rights and obligations of significant number of customers responsible for buying a large portion of an energy commodity from utilities regulated by the Commission. In December 2000, during a period of unprecedented high natural gas prices, the Commission issued a resolution that set a cutoff date to prevent a large number of customers from switching to a

¹⁴⁶ D.03-09-015 at 26.

¹⁴⁷ D.95-01-014.

¹⁴⁸ D1307048 (Finding that prior Commission decisions did not limit Commission’s discretion to determine whether or not to issue an advisory opinion.)

¹⁴⁹ D.13-07-048.

lower priced tariff. Tenby, a natural gas customer of Southern California Gas Company, asserted that it was eligible for the lower priced tariff. At the end of December, Southern California Gas Company did not let Tenby switch and Tenby sued Southern California Gas Company in superior court for the cost of substitute natural gas it obtained from a third party. Southern California Gas Company filed an application with the Commission seeking clarification of the resolution. Southern California Gas Company argued that, even though it sought declaratory relief, the Commission should decide the case because of the widespread public interest or extraordinary circumstances existed. The Commission agreed that, because a large portion of its gas customers would be impacted if Tenby was permitted to switch, widespread public interest or extraordinary circumstances existed.¹⁵⁰

Complainant argues that his case is similar to *Tenby* because it involves interpretation of a tariff provision. Complainant asserts that this tariff provision impacts a large number of customers.

SCE argues that, unlike *Tenby*, the tariff interpretations sought by Complainant will not impact a large number of customers. SCE points out that Complainant's Part 2 Claims relate only to Complainant's own interconnection applications, and these applications involve Complainant's specific PV facilities.

The Commission agrees with SCE that Complainant's Part 2 Claims are unique to Davis and thus do not have widespread public interest and do not constitute extraordinary circumstances. Because of this, the Commission finds

¹⁵⁰ D.03-09-015. (*Tenby v. SCE*)

that these Part 2 Claims must be dismissed for failure to state a claim on which relief can be granted by the Commission.

5.2 Damages

The Commission can order reparations where a customer has been overbilled. For example, if a customer was incorrectly charged because of inaccurate meter readings, or because SCE applied the wrong tariff, the Commission can order a bill credit. The Commission does not have jurisdiction to award other damages.¹⁵¹ In this instance, Complainant used the electricity in question and there are no allegations that he was charged under the wrong tariff. The only argument to support Complainant's claim is that he would not have needed to use SCE's electricity *but for* the fact he had not yet installed solar PV. Complainant has described consequential damages which are not within the Commission's jurisdiction.

5.3 Rule 21 Alternative Dispute Resolution (ADR) Process

Rule 21 is a complex and detailed regulation governing the requirements for generators when interconnecting to the grid. Rule 21 addresses generating facility design and operation and sets forth technical requirements and standards for voltage, islanding, and many other technical matters. Rule 21 also addresses the application process for grid interconnection.

Because of the complexity of Rule 21, the Commission established a specific process for dispute resolution under Rule 21. Any dispute under Rule 21 must follow the procedures set forth in Rule 21 Section G before a complaint can

¹⁵¹ See, e.g., D.04-12-034 (Commission does not have jurisdiction to award damages for torts); D.97-12-014 (Commission does not have jurisdiction to award damages for burned out fax machine); D.92-01-020 ("The Commission cannot award reparations by changing a lawful rate or charge . . .")

be filed with the Commission.¹⁵² The required steps include a dispute letter setting forth the specific dispute and the relief sought. The parties are required to meet and confer to try to resolve the dispute on their own. The Commission has an ADR program and can provide alternative dispute resolution services at no cost for any dispute under Rule 21.

This dispute resolution process is intended to make the procedure easier for the customer and more efficient for SCE, and to reduce the number of disputes that must be resolved using the Commission's limited judicial resources. In this case, Davis did use the Rule 21 ADR process in connection with his initial CREST applications. Davis then withdrew the applications. Any new dispute related to interconnection under Rule 21, including for the CREST program, must begin with a dispute letter. The parties must then meet and confer. If the parties do not reach resolution within 45 days, the parties can request to use the Commission's mediation process. Only after attempts to resolve the dispute through the meet and confer process can a complaint be filed.

In this instance, Davis has not provided any evidence or assertion that these required procedures have been followed.¹⁵³ Although one ADR session was held, the record shows that many of Davis' Part 2 Claims relate to events that happened after that original Rule 21 ADR session and thus could not have

¹⁵² At the time the dispute began, this language contained in Rule 21, Section G (Sheet 23, Revised Cal PUC Sheet No. 48172-E, effective date June 23, 2011). The current version of Rule 21 includes a similar provision (Rule 21, Section K (Sheets 148-48, Revised Cal PUC Sheet No. 56150-E and 56151-E, effective date January 25, 2015).

¹⁵³ Davis stated in his complaint that the procedures were followed for all applications, but SCE denied this in its response. No testimony was offered by either party on this issue, and therefore we must find that Davis has failed to meet his burden of proof to show that the prerequisite was met.

been included. For this reason, the Commission cannot provide the relief requested. Instead, the Commission must dismiss the claims. However, Davis is not restricted from filing a new complaint based on these claims once he has followed the procedure set forth in Rule 21.

6. Conclusion

Complainant's claims related to NEM qualification for his residence and his apartment buildings must be denied. NEM eligibility requires that the PV facilities be primarily intended to offset the customer's "own electrical requirements." As discussed above, this case involves an unusual fact pattern where the proposed PV facilities are substantially larger than the customer's "own electrical requirements" because their sizing is based on multiple factors that are unrelated to customer electrical requirements. As noted in the original decision, policies and cost-allocation for EV fast chargers are being addressed in an ongoing Rulemaking proceeding. If Complainant is seeking modifications of the cost allocation for distribution upgrades related to EV fast chargers, there are several proceedings currently before the Commission that touch directly on this issue.¹⁵⁴

Davis' Part 2 Claims must also be dismissed. A complaint must allege a violation of a specific standard contained in a statute, rule or order of the Commission, or a Commission-approved tariff. The claim must be one on which the Commission can grant relief. The Part 2 Claims do not meet these requirements. Therefore, the Part 2 Claims must be dismissed, without prejudice

¹⁵⁴ See, e.g., R.13-11-007 Order Instituting Rulemaking to Consider Alternative-Fueled Vehicle Programs, Tariffs and Policies; A.14-10-014 Application of SCE for Approval of its Charge Ready and Market Education Programs.

as to the claims for which Rule 21 ADR procedure is required, and with prejudice as to the remaining claims.

The findings in this decision are specific to the very unique fact pattern presented by Complainant. Therefore, the findings have limited precedential value. In particular, this decision shall not be used as the basis for denying use of a fast charger by a residential customer or excluding a fast charger from a load study performed to establish maximum eligible size under NEM.

7. Appeal; Motion for Oral Argument

7.1 Appeal

Complainant timely filed an Appeal of the Presiding Officer's Decision (Appeal). Complainant asserts three legal errors, which he characterizes as "Questions Presented."

- (1) If the Commission defines specific statutory language in a ratemaking proceeding, can it give the opposite meaning to the same language in an adjudication?¹⁵⁵

This argument rests on Complainant's assertion that this decision gives a different meaning to statutory language that was previously interpreted by the Commission (or other agencies). This assertion is not correct. The interpretation in this decision does not differ or contradict prior Commission decisions or other applicable law.

- (2) Can a statute that requires payment for surplus electricity be interpreted as precluding all systems sized to produce such surplus?¹⁵⁶

¹⁵⁵ Appeal at (i).

¹⁵⁶ *Id.*

Complainant implies that this decision holds that NEM systems are not allowed to produce a surplus. As Complainant indicates, that would contradict the intent of the Net Surplus Compensation program. Contrary to Complainant's implied assertion, this decision does not preclude systems from producing a surplus. For example, systems may still produce a surplus under different weather conditions and when residents conserve energy.

The Commission has determined not to have this complaint case resolved by looking at abstract legal principles and ignoring the unusual and unique fact pattern presented here. The body of this order finds that Complainant designed his facilities to, alternatively, power an EV fast charger under challenging daylight conditions, power publicly available fast chargers or networks of fast chargers, utilize a bulk order of PV panels, satisfy esthetic preferences, and/or produce power for export, among other things. These facts suggest shows that Complainant's main concerns were unrelated to offsetting customers' use of electricity and therefore Complainant's proposed systems, including systems designed for the specific purpose of producing a surplus, are not eligible for NEM.

(3) If a complaint could be amended to correct defects, can the Commission dismiss it with prejudice?¹⁵⁷

This argument rests on Davis assertion that he could easily amend the Part 2 Claims to correct defects. We disagree. The decision specifically states that Davis may continue to pursue some of the Part 2 Claims by following the Rule 21 ADR process. If the required ADR process fails, Davis then may file a

¹⁵⁷ *Id.*

new complaint. Other claims, such as tort damages, must be brought in civil court.

The requirement to start with the Rule 21 required ADR process should not be used to limit Davis' ability to ultimately bring a new complaint if the situation warrants. To address Davis' concerns that deadlines for the Rule 21 dispute claims may have passed, or may soon pass, we direct that any deadlines within our jurisdiction are to be treated as tolled during the time when this proceeding is open. This includes the time period, if any, that this proceeding is open for consideration of a rehearing request or appeal.

Complainant describes SCE's instructions to him to reduce the number of panels at certain existing and proposed facilities as being the focus of his second complaint, C.13-11-002. In his Appeal, Davis indicates that the reductions directed by SCE could be as small as 10 percent.¹⁵⁸ This type of small discrepancy between an applicant's estimate of permissible facility size and the utility's estimate of production should be addressed in a load justification study. In fact, the parties specifically stipulated that the assumptions, details, and inputs for load justification studies should not be part of this litigation. Instead, for purposes of this proceeding, the parties stipulated to the annual consumption of each premise at which a PV facility was to be sited. The purpose of this stipulation was to allow the proceeding to focus on whether the facilities proposed by Davis are NEM-qualified. Load justification studies include assumptions regarding weather conditions and appliance use. The parties did

¹⁵⁸ Appeal at 1; 5-6.

not want the proceeding to focus on these details.¹⁵⁹ The parties agreed that if the facilities were found to be NEM-eligible, then they could, on their own, consider the details and assumptions in the load justification studies. The assumptions, accuracy, and inputs of the load justifications are not part of the scope of this proceeding.

The reason for denying these complaints is not that one of Complainant's facilities has now been alleged to generate 10 percent surplus, but rather that his facilities are were designed without regard for customer requirements and instead were designed for a variety of reasons, including producing surplus power for export. The discussion portion of this order has been revised to make this and other elements of this decisions analysis clear.¹⁶⁰ However, for clarity, we now expressly direct SCE to work with Davis in good faith on any specific disagreements arising from the load justification studies. If the parties fail to reach resolution, a disagreement over the load justification studies must first be addressed through the Rule 21 dispute resolution process.

Complainant's appeal includes a lengthy summary of how Davis views state law and policies regarding solar installations and electric vehicles. But the issue in this case is not whether state policies support electric vehicles and solar energy; there is no disagreement that state policy favors both of these greenhouse gas reducing technologies. Complainant seeks to imply that these policies, and

¹⁵⁹ For example, at the start of evidentiary hearings, Davis stated that "I don't believe that load calculations are terribly relevant to this proceeding." (RT at 5.)

¹⁶⁰ For example, the Burden of Proof section has been revised to take Davis' role as complainant into account more explicitly, with corresponding changes in the other discussion sections. These changes also highlight the nature of this decision's fact-based analysis in response to claims made in the Appeal. Revisions were also made to shorten or reorganize the discussion and findings, and to avoid addressing topics outside this decisions main focus.

some of the laws and programs implementing them, require a finding that that the size of customer's "electrical requirements" for purposes of NEM and Net Surplus Compensation can be either 100% of annual load or 200% of peak demand. As this decision states repeatedly, the question of how size is measured for purposes of determined NEM-eligibility is not within the scope of this decision.

Even though it is outside the scope of this decision, we briefly highlight some of the weaknesses in Complainant's arguments. First, he cites agency and utility guidebooks that do not have the force of law. Second, he cites cases without regard to context. For example, he cites D.07-07-027 for the proposition that NEM generating facilities can be intentionally sized to produce a surplus. Although D.07-07-027 deals with on-site generation, it does not concern NEM. Rather, it implements a state law that encourages waste-water and other facilities to sell energy to the investor-owned utilities, and uses different language to establish eligibility, contrary to Davis' claim its provisions are "identical" to the NEM statute.¹⁶¹

¹⁶¹ D.07-07-027 adopts tariffs and standard contracts for public water, wastewater and other customers to sell electricity generated from "RPS-Eligible" renewable resources to electrical corporations under former Section 399.20. (See Stats. 2006, ch. 731, § 2, p. 5894.) The provision that Davis refers to, former section 399.20(b)(3) requires eligible companies to have generation facilities "sized to offset part of all of the electricity demand of the public water or wastewater agency." Only the generic phrase "all or part of" uses the same words as the NEM eligibility standard. (Cf., Appeal, p. 12 (table).) This program is also noticeably different from NEM because, among other things, it controls the location of the facilities (current Pub. Util. Code, § 399.20(b)(3)) and applies to RPS-Eligible generation. RPS stands for the Renewable Portfolio Standard, which applies very specific provisions regarding renewable energy credits. This Commission relied on these and other considerations specific to the program established by section 399.29 in D.07-07-027, and that decision does not contain holdings that are pertinent here.

Davis also cites D.07-05-034, but fails to mention that D.07-05-034 is primarily concerned with how NEM credits should be applied when a customer has both a NEM-eligible generating facility and a non-eligible fossil-fueled generating facility. Davis also relies on this decision to support his argument that the main issue before the Commission in this complaint proceeding is the generic question of how the NEM statute's surplus compensation provisions should be interpreted. However, as this order explains, that question is one of general application that cannot be resolved in a case where only Davis and SCE are parties, and is not necessary for this Commission to reach in order to resolve Davis' specific dispute with SCE. Moreover, Davis' interpretation of this order, which relies heavily on extrapolation from pleadings submitted, and not on the Commission's actual holdings, is unpersuasive.

7.2 Motion for Oral Argument

On January 14, 2016, in accordance with the Commission's Rules of Practice and Procedure (Rules), Davis filed a Motion Requesting Final Argument. Although the Rules allow an opportunity for final oral argument in ratesetting and quasi-legislative proceedings (Rule 13.13, and in adjudicatory proceedings where rehearing is granted (Rule 13.12), there is no explicit rule regarding final oral arguments on appeals of a Presiding Officer's Decision. Generally, the Commission disfavors oral argument in adjudicatory proceedings. Moreover, we find that, the motion should be denied for the following reasons.

First, Davis' request stems from his concern that "the Commission may be unaware that the Presiding Officer's Decision departs from precedent in a way that will limit the ability of NEM 2.0 customers to size their systems to offset on-site electrical in the new late-afternoon peak Time-of-Use rate structure being considered." Davis asserts that today's decision would contravene D.16-01-044

(Decision Adopting Successor to Net Energy Metering Tariff). We disagree. Today's decision does not change the incentives and solar configurations available under the new time-of-use rate structure contained in D.16-01-044.

Net energy metering is currently an overlay tariff applied on top of the default tariff or other tariff chosen by the NEM customer. The amount of energy exported to the grid and the amount of energy drawn from the grid are netted on an annual basis. This NEM overlay structure encourages solar generation, but not at the times when it is needed most by the grid. D.16-01-044 begins a shift to require NEM customers to use a time-of-use rate structure designed to encourage generation when the grid needs it. Under the old rate structure, a customer could configure a system to generate more solar energy using fewer solar panels by using south-facing panels. The new rate structure should encourage customers to configure systems that generate more energy in the late afternoon, using west-facing panels.

Second, the arguments raised in Davis' motion would not change the outcome of this case. The D.16-01-044 change in rate structure for NEM customers does not affect today's decision. Davis must still meet the same eligibility requirements for NEM regardless of the rate structure.

Third, as SCE points out, it is procedurally improper to have an oral argument in this proceeding on matters that are the subject of a separate decision in a separate proceeding.

8. Assignment of Proceeding

Liane M. Randolph is the assigned Commissioner and Jeanne M. McKinney is the assigned ALJ in this proceeding.

Findings of Fact

1. Complainant Davis owns a number of properties and is a residential customer of SCE and a residential landlord. The record does not clarify whether the properties Davis owns are on a residential tariff.

2. Complainant acquired a large number of solar PV panels in 2011.

3. In December 2011 Davis began to reserve incentives under the CSI subsidy program, and then began to make applications under the CREST subsidy program.

4. SCE rejected one of those CREST applications and advised Davis that his other applications were similar, and would also fail. This action led to a dispute, which entered mediation.

5. The CREST program was closed on July 24, 2013. Before then it allowed SCE to enter into agreements with power generators on a first-come, first-served basis, as described in the discussion portion of this order.

6. Between March and September 2012, Davis filed 20 NEM applications for various properties. Most of those applications involved a generating facility significantly larger than onsite load.

7. Complainant initially sought to qualify a PV solar system to be installed at his residence for the NEM program and stated the size of this system was based on his anticipated use of electricity to power a commercial grade EV fast charger under challenging daylight conditions and to obtain Net Surplus Compensation from SCE.

8. In 2012, Complainant proposed to install solar generating facilities at the rental apartments he owns in San Bernardino County. The PV facilities Complainant has installed or proposes to install at his various properties are summarized in the table in Appendix 1.

9. Complainant provided many different explanations in support of the size of the PV systems he sought to install.

10. Complainant stated he sought to install solar generating facilities, in part, to support his plan (alternatively described as entrepreneurial or altruistic) of creating a network of EV fast chargers for use by either his tenants or the general public.

11. Complainant's plan to create a network of EV fast chargers is a scheme of his own design for the purpose of overcoming the inherent range limitations of current EVs.

12. The facility Complainant described in his initial complaint was large-scale. For example, Complainant proposed to size his home solar generating facility, at 95 kW – enough to power a 50 kW fast charger in early morning daylight without drawing from the grid.

13. Complainant admits that the size and purpose of his facilities makes it inevitable that they will produce excess power.

14. The sizes Complainant has chosen for his solar generating facilities are dictated, in part, by the amount of solar panels he was able to acquire, not the amount of solar power he needs to generate to offset customer electrical requirements.

15. The sizes Davis has chosen for his solar generating facilities are, in part, the result of his entrepreneurial aspiration to start a commercial EV fast charging network.

16. The sizes Davis has chosen for his solar generating facilities are, in part, the result of his desire to earn rebates or subsidies out of context, that is, without regard to the nature of the programs in which he seeks to participate.

17. Complainant has chosen to seek to interconnect his solar generating facilities under the NEM tariff, in part, to avoid engineering studies, and fees or charges that would normally be required of customers operating large-size facilities.

18. A facility which is designed to meet aspirational goals or a perceived need of society is not designed to meet a customer's requirements. Complainant proposes such facilities.

19. A facility which is designed to make full use of a bulk order of solar PV is not designed to meet a customer's own requirements.

20. Sizing a solar facility in order to offset long-past use of non-solar energy, or to have those panels line up in neat arrays to meet the owner's aesthetic requirements is done for moral or aesthetic reasons, not to meet electrical requirements.

21. A facility designed to avoid cost responsibility for tariffed charges that are not normally capable of being offset or reduced as a result of participation in the NEM program (e.g., demand charges) improperly seeks to alter a customer's underlying tariff mechanism and is not designed to meet a customer's own electrical requirements.

22. A facility that is installed at a certain size for the purpose of utilizing a large number of PV panels during a certain time frame for tax reasons is not designed to meet a customer's own electrical requirements.

23. The number of different reasons Complainant has provided in support of his proposed PV systems, and the way these proposals differ over time, lead to the inference that Complainant may be providing rationalizations to support a pre-conceived scheme to install PV systems of a certain size, which size is

unrelated to the customer electrical requirements at the locations where those systems would be installed.

24. The changing nature of the explanations provided and the fanciful or aspirational nature of some of them leads to the inference that Complainant intended to utilize all of the PV panels he bought at a discount and to secure tax advantages and that these considerations were more important than offsetting customer electrical requirements.

25. SCE denied one of these NEM applications, for the Onaga Trail location, in August 2012, leading Davis to file this complaint. The facility at Onaga Trail would have produced power substantially in excess of onsite load.

26. Some, but not all, of Complainant's proposed solar PV facilities have been installed.

27. Currently, all but one of the proposed facilities has been interconnected with SCE's distribution system, but some facilities are sized smaller than Complainant proposes and SCE is seeking reductions in the size of other facilities.

28. The CSI program provides cash incentives for certain solar generating facilities, and is implemented in accordance with, among other things, the CSI Program Handbook.

29. The NEM program, often referred to as net-metering, applies to customers who take electricity from a providing utility but also generate power themselves using a renewable facility "intended primarily to offset part or all of the customer's own electrical requirements."

30. Under the NEM program, if a customer produces more electricity than it can use at a given time, the excess electricity is exported to the grid. At the end of a 12-month period, the customer's bill is reduced based on a credit at the

customer's full retail rate for the amount exported. NEM also has provisions that allow for net surplus compensation, in the event that a customer exports more electricity than it consumes over the course of a year.

31. The NEM program operates as an overlay to an otherwise applicable tariff, which can be either commercial or residential. At the time of his initial complaint, Davis intended to receive service under a commercial tariff, since the load profile resulting from the provision of fast charger service to the public precludes the use of a residential tariff.

32. Commercial tariffs include demand charges, which will be triggered by EV fast chargers.

33. This Commission's past decisions recognize three types of EV chargers: Level 1 (using ordinary 120V plugs and wiring), Level 2 (using 240V plugs that are possible in a residential setting) and Level 3 or "fast chargers." Past decisions categorize those chargers that operate at very high currents, typically over 480V as fast chargers.

34. Fast chargers use a large amount of power for a short period of time, and the amount of power used by a fast charger is often a deviation from a customer's normal power usage.

35. Past Commission decisions recognize and account for the fact that fast chargers can require complex and expensive electrical service upgrades at the location where they are installed, because fast chargers are intended to rapidly recharge an EV, reaching up to 80% power in half an hour.

36. Fast chargers are in a different category from, and have significantly greater electrical requirements than, Level 1 and Level 2 chargers.

37. Fast chargers are treated as commercial grade equipment by this Commission, and the distribution grid, especially in residential areas, may not be

able to provide enough power for a fast charger. The cost of upgrades to a utility's electric distribution system to support fast chargers can be significant, and an established allocation mechanism for those costs exists.

38. The CEC-AC Nameplate rating is a method for calculating generating facility capacity and is the source of this Commission's method to calculate capacity for facilities under the NEM program. The CEC-AC formula applies a schedule of inverter efficiencies experimentally determined by the NRTL.

39. The CEC-AC Nameplate rating uses inverter efficiency values that are static and applied universally to different solar PV systems.

40. It is good policy and reasonable to use a clear and consistent standard for efficiency ratings.

41. Davis seeks to connect a large amount of PV capacity to an inverter that is undersize for such capacity, which results in a large estimate for the amount of power generated. The fact that Davis is not pleased with the result of calculations made for his facilities does not make the standard technically incorrect or "absurd."

42. SCE has never encountered facilities using the high panel-to-inverter ratios Davis proposes to interconnect. SCE states Davis' proposed configuration of equipment was not reviewed by a licensed electrical contractor, licensed electrician or licensed engineer and Davis himself did not and could not provide reliable testimony on electrical safety issues.

43. SCE has proven that there are safety concerns that must be resolved before Davis' proposed facilities, or any unusually configured facilities, can be connected to the grid.

44. The facts of this case are highly unusual because of the non-standard configuration of the facilities Davis is proposing.

45. Rule 21 is a complex regulation governing generation interconnection and has its own dispute resolution mechanism.

46. The parties stipulated that the details of any load justification studies should not be included in this proceeding. Testimony and evidentiary hearings did not address minor discrepancies in customer load forecasts that would be covered under a load justification study.

47. Davis' reasons for oral argument are not sufficient to support his motion for oral argument.

48. Oral argument before the full Commission is generally disfavored in adjudicatory cases.

Conclusions of Law

1. SCE is an investor-owned utility subject to the jurisdiction of this Commission and is the defendant in this complaint case brought by a customer.

2. Davis, the complaining party, bears the burden of proof in this proceeding.

3. The Commission is required to implement many different programs set forth in statute with the goal of reducing greenhouse gas emissions, including programs for EVs, and programs like NEM and CSI which concern renewable generation by utility customers.

4. The Commission has issued numerous decisions and resolutions implementing the NEM program, CSI, and the state's EV program.

5. Clarifying the meaning of the law, or revising the Commission's own decisions regarding the proper measurement of a customer-generator's electrical requirements would involve parties outside this adjudicatory proceeding.

6. D.11-07-029 determined that EV fast chargers are not eligible for the same residential customer subsidies as regular EV chargers.

7. Section 2827(c)(1) provides that a utility's NEM tariff is only available to eligible customer-generators.

8. To qualify as eligible, a customer-generator must use a renewable electrical generation facility that is, among other things, intended primarily to offset part or all of that customers own electrical requirements.

9. When a customer-generator is eligible for the NEM program, that customer-generator may receive service under the NEM tariff, which allows any customer-generated electricity that is not consumed at the time it is generated to be exported to the grid, and for the customer to receive a bill credit for the amount of the electricity exported. This credit mechanism offsets charges for electricity that the eligible customer-generator draws from the grid at a time when they are consuming more power than their renewable facilities are generating.

10. Eligible customer-generators also qualify for other program benefits. These customers qualify for net surplus compensation, and for expedited interconnection under Electric Rule 21, free of charges and fees applicable to customers who are not eligible for NEM.

11. CSI is a separate program from NEM. Public Resources Code Section 25782(a)(2) establishes eligibility criteria for CSI, as does this Commission's decisions and the CSI Program Handbook.

12. Under SCE's tariffed Electric Rule 1, provision of fast-charging service to non-residents by a customer precludes that customer from using a residential tariff.

13. Commercial tariffs available to Complainant Davis include demand charges.

14. The eligibility criteria in the NEM statute require a customer-generator to use facilities that will primarily offset their “own” electrical requirements, not the requirements of neighbors, society at large, or potential future customers.

15. The eligibility criteria in the NEM statute require a customer-generator to use facilities that will primarily offset electrical requirements, not to meet aspirational goals or achieve extraneous objectives.

16. “Requirements” within the meaning of § 2827(b)(4)(A) encompasses only those electric uses that are necessary to the customer; it does not include uses that are nonessential or extra.

17. Neither a utopian vision for improving society at large by encouraging EV use, nor an entrepreneurial plan to launch a business providing fast charging services, constitute an electrical requirement of a utility customer.

18. The desire to earn additional income by generating surplus electricity does not constitute an electrical requirement of a utility customer.

19. Neither aesthetic preferences regarding the design of solar arrays, nor moral considerations, such as a desire to make up for past use of non-renewable power, constitute an electrical requirement of a utility customer.

20. Changing or improving the ordinary range of mass-produced electric vehicles does not constitute an electrical requirement of a utility customer.

21. The desire to install and use all of the solar panels obtained as a result of a discounted, bulk purchase does not constitute an electrical requirement of a utility customer, nor does the desire to obtain tax advantages.

22. As a matter of common sense, the desire or hope to accomplish the objectives described in Conclusions 18, 19, 20, and 21 above, is outside the realm of the reasonable or practical, and consists of preferences or aspirations, not requirements.

23. Complainant Davis has not met his burden of proof of showing that his proposed renewable electric generation facilities are configured in a way that would allow him to qualify as an eligible customer-generator under NEM.

24. A generating facility must be sized based on the associated premises' annual load to qualify for CSI incentives.

25. The assumption that systems under 5kW in size are designed to offset annual consumption is a rule of administrative convenience and does not prevent SCE from seeking a load justification in circumstances where that assumption appears to be questionable.

26. Advisory opinions are disfavored, and this Commission grants declaratory relief, in its discretion, only if there are extreme circumstances or the matter is of widespread public concern.

27. This Commission can order reparations when a customer has been overbilled but it cannot award damages.

28. Except as to the Part 2 Claims related to Rule 21, the complaint should be dismissed with prejudice.

29. The Part 2 Claims related to Rule 21 should be dismissed without prejudice.

30. Because of the unique facts of this case, the precedential value of this decision to other customers should be limited. This case holds that Davis did not meet his burden of proving that SCE acted contrary to any law or rule when it determined that Davis' proposed facilities did not qualify for NEM. This decision should not be read to establish this Commission's views on the use of EV fast chargers in the residential setting, nor should it be interpreted to allow utilities to exclude anticipated use of an electrical vehicle charger from load studies.

31. Oral argument is not necessary and Davis' motion for oral argument should be denied.

32. This decision does not address the specifics of any load justification studies or other determinations made by SCE as to forecast load at any of Davis' premises.

33. Because of the extended time necessary to resolve this proceeding, the time limits to request alternative dispute resolution under Rule 21, or to file a new complaint in the event Rule 21 dispute resolution fails, should be tolled until final resolution of this proceeding.

O R D E R

IT IS ORDERED that:

1. The relief requested by David Davis in the Second Amended Complaint is denied.
2. David Davis' Motion Requesting Oral Argument is denied.
3. All outstanding motions and requests in this proceeding that are not specifically addressed in this decision are denied.
4. Except as to the claims filed in June 2014 (Part 2 Claims) that relate to Electric Rule 21, the claims contained in the Second Amended Complaint dated June 19, 2014 and the claims contained in Case (C.) 12-08-015 and C.13-11-002 are dismissed with prejudice.
5. The claims filed in June 2014 (Part 2 Claims) that relate to Electric Rule 21 in David Davis' Second Amended Complaint dated June 19, 2014, are dismissed without prejudice.
6. Southern California Edison Company is directed to participate in Electric Rule 21 alternative dispute resolution requested by David Davis related to the

June 2014 (Part 2 Claims) that relate to Electric Rule 21. Any time limits for commencing such alternative dispute resolution process are tolled until final resolution of this proceeding, but must begin promptly if initiated by David Davis prior to final resolution of this proceeding.

7. Southern California Edison Company (SCE) is directed to work with David Davis to resolve any disputes regarding load justification studies for the projects at issue in this proceeding and to cooperate with Rule 21 dispute resolution process in the event SCE and David Davis do not agree on the load justification study results.

8. The time limit for filing a new claim after completion of the Rule 21 dispute resolution process is tolled until final resolution of this proceeding.

9. Decision 13-04-002 is vacated.

10. Case (C.) 12-08-015 and C.13-11-002 are closed.

This order is effective today.

Dated _____, at San Francisco, California.

C.12-08-015, C.13-11-002 ALJ/JMO/MOD-POD/lil

APPENDIX 1

APPENDIX 1

SUMMARY OF FACILITY SIZES								
Revised JHPC at 6-19, Ans. SAC at 6-7, 67								
Property	CREST Requested Facility Size	NEM Requested Facility Size	CSI Application Declared Facility Size	CSI Infractio n Issued to Davis?	Sized to Match CSI Reservati on?	Load Justificatio n Submitted?	Sized to Match Annual Load as Determined by SCE?	Currently Interconnect ed Facility Size
61736 Onaga Trail (C.12-08-015)	95 kW	95 kW	N/A ^T					Not interconnect ed
61736 Onaga Trail (C.13-11-002)	NEM pre-existing: 5.995 kW NEM increase: 11.6 kW		5.87 kW			Yes	Yes	17.3 kW
65911 TwentyNine Palms Hwy #1	18 kW	9.3 kW	4.739 kW				Yes	5.8 kW
65911 TwentyNine Palms Hwy #2	18 kW	9.3 kW	4.849 kW				Yes	
65911 TwentyNine Palms Hwy #3	18 kW	9.3 kW	4.849 kW				Yes	5.8 kW
65911 TwentyNine Palms Hwy #4	18 kW	9.3 kW	4.849 kW				Yes	5.8 kW
65911 TwentyNine Palms Hwy #5	18 kW	9.3 kW	4.849 kW				Yes	5.8 kW
65911 TwentyNine Palms Hwy #6	18 kW	9.3 kW	4.849 kW				Yes	5.8 kW
65911 TwentyNine Palms Hwy #7	18 kW	9.3 kW	4.849 kW				Yes	5.8 kW
65911 TwentyNine Palms Hwy #8	18 kW	9.3 kW	4.849 kW				Yes	5.8 kW
6804 Park Rear	18 kW	5.8 kW	4.849 kW	Yes	Yes			4.8 kW
6804 Park Blvd #1	-	5.8 kW	4.849 kW	Yes	Yes			4.8 kW
6804 Park Blvd #2	-	5.8 kW	4.849 kW	Yes	Yes			4.8 kW
6804 Park Blvd #3	-	5.8 kW	4.849 kW	Yes	Yes			4.8 kW
6804 Park Blvd #4	-	5.8 kW	4.849 kW	Yes	Yes			4.8 kW
6807 Park Blvd	-	5.8 kW	4.849 kW	Yes	Yes			4.8 kW
6815 Park Blvd	-	5.8 kW	4.849 kW		Yes			4.8 kW

60219A Alta Loma	18 kW	5.8 kW	4.849 kW			Yes	Yes	5.8 kW
60219B Alta Loma	-	5.8 kW	4.849 kW			Yes	Yes	5.8 kW
60215A Alta Loma	18 kW	5.8 kW	4.849 kW			Yes	Yes	5.8 kW
60215B Alta Loma	-	5.8 kW	4.849 kW			Yes	Yes	5.8 kW

[†] See Revised JPHC at 6, 18-19.

(END OF APPENDIX 1)