PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION RESOLUTION E-5182

Agenda ID# 20244 February 10, 2022

RESOLUTION

Resolution E-5182. Approves with modifications the Self-Generation Incentive Program (SGIP) Jointly Filed Advice Letter Seeking Approval Of Modifications To Program Handbook Regarding Eligibility For California Manufacturer Adder.

PROPOSED OUTCOME:

 Approves with modifications the jointly filed Advice Letters of Southern California Gas (SoCalGas) Company 5455-G, Pacific Gas and Electric Company (PG&E) 4089-G/5524-E, Southern California Edison Company (SCE) 3989-E, and the Center for Sustainable Energy (CSE) 101-E.

SAFETY CONSIDERATIONS:

• There are no safety considerations associated with this resolution.

ESTIMATED COST:

• There are no costs associated with this resolution.

SUMMARY

This resolution adopts modifications to the Self-Generation Incentive Program (SGIP) Handbook setting forth eligibility standards for the California Manufacturer Adder. Decision (D.) 19-02-006 directed the SGIP Program Administrators (PAs) to jointly file an Advice Letter (AL) outlining eligibility for additional incentives for project equipment manufactured in California. On April 15, 2019, the PAs filed this joint AL seeking approval of their proposed revisions to the SGIP Handbook: SoCalGas AL 5455-G, PG&E AL 4089-G/5524-E, SCE AL 3989-E, and CSE AL 101-E (collectively, the "Joint SGIP PAs' AL").

The Joint SGIP PAs' AL is approved with modifications. This Resolution requires the SGIP PAs to determine eligibility for the California Manufacturer Adder by assessing the value of all eligible capital inputs into eligible SGIP battery modules as a cumulative whole.

BACKGROUND

Decision (D.)16-06-055 issued on July 1, 2016 modified the requirements for qualifying as a California supplier under the Self-Generation Incentive Program (SGIP) to align with clarifications included in Senate Bill (SB) 861 (Committee on Budget and Fiscal Review 2014).¹ SB 861's revised mandate regarding the SGIP California Manufacturer Adder (CMA) was codified in Public Utilities (PU) Code 379.6(j). D.16-06-055 determined that an SGIP project's "equipment will be deemed to be manufactured in California if 50 percent or more of its value is determined to have been added in a manufacturing process (or processes) located in California."² Projects with equipment possessing this specification would qualify for an additional 20 percent incentive, deemed at the time as the "California Manufacturer Adder" (CMA).

D.16-06-055 subsequently ordered the SGIP Program Administrators (PAs) to file a Tier 2 Advice Letter to effectuate this and other changes to the SGIP Handbook. Pursuant to D.16-06-055, the SGIP Handbook established a CMA methodology whereby "the entity supplying the largest amount of value of this capital equipment is the one whose California credentials will be considered in each project. If at least 50% of the value of that entity's capital equipment in that project is deemed to have been added in a California process, then that project should receive the 20% California manufacturer bonus."³

On October 21, 2016, the SGIP PAs jointly submitted Southern California Gas Company (SoCalGas) Advice Letter (AL) 5049, Pacific Gas and Electric Company (PG&E) AL 3773-G/4942-E, Southern California Edison (SCE) AL 3491-E, and Center for Sustainable Energy (CSE) AL 71 (hereafter SoCalGas AL 5049 *et al.*).

¹ SB 861 removed "California supplier" code requirements related to the business definition, the owner domicile, the location of the company headquarters, the length of manufacturing time, etc.

² D.16-06-055 at 41.

³ Ibid. footnote 30 at 41.

SoCalGas AL 5455-G, PG&E AL 4089-G/5524-E, SCE AL 3989-E, CSE AL 101-E/AE3

Resolution E-4824, issued on February 9, 2017, approved SoCalGas AL 5049 *et al.* and clarified the timing of the new California supplier rules going into effect.⁴

On October 17, 2018, the SGIP PAs submitted a Petition for Modification (PFM) of D.16-06-055 requesting approval for a proposed revision of the requirement for the 20 percent CMA. At the time the PFM was submitted, an SGIP project was eligible for the CMA if at least 50 percent of its capital equipment value was supplied by *one* California manufacturer. In their PFM, the PAs proposed to modify the eligibility requirement to allow eligibility for the CMA if at least 50 percent of a project's capital equipment value is supplied by *one or more* California manufacturers, where no single manufacturer provides the majority of the equipment value. The SGIP PAs argued that this rule change would better align with the California Public Utility Commission's (CPUC's) stated goal in D.16-06-055 to ensure a majority of a SGIP project's value creation occurs in California.⁵ The SGIP PAs further clarified that the request included in the PFM stemmed from a Program Modification Request⁶ from Solar Turbine Inc.⁷ to the SGIP Working Group on May 11, 2018.

On November 11, 2018, the California Solar and Storage Alliance (CALSSA) submitted comments supporting the SGIP PAs' PFM and requested additional clarification on whether, under the SGIP CMA rules, an SGIP-incented battery would be considered made in California "if a substantial portion of the battery manufacturing occurs in the state, including the combining of battery cells into packs of cells that are used in the construction of the battery."⁸ According to CALSSA, lithium battery cell manufacturers left California and will not return due to SGIP. Instead, California manufacturers import battery cells as a "raw material" and "manufacture" them into packs of cells and combine them with other items into a single battery device. CALSSA further contends that that this manufacturing process contributes to job creation in California's manufacturing

⁴ Resolution E-4824 at 37.

⁵ California Manufacturer Adder PFM at 5.

⁶ SGIP's "Program Modification Guidelines" are found in Section 4.2.7 of the SGIP Handbook. A Program Modification Request is an avenue by which SGIP stakeholders may propose changes to the SGIP. This is an informal process that resides with the SGIP PAs and is specific to the SGIP program.

⁷ Solar Turbines Inc. is a manufacturer of mid-sized industrial gas turbines.

 $^{^{\}rm 8}$ CALSSA comments on PFM at 3.

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SoCalGas AL 5455-G, PG&E AL 4089-G/5524-E, SCE AL 3989-E, CSE AL 101-E/AE3

sector because it "takes place in a factory that employs manufacturing employees."⁹ Therefore, CALSSA recommended "that the manufacturing of battery cells into packs of cells and then battery devices should qualify for California supplier status."¹⁰

On February 21, 2019, D.19-02-006 approved the request in the SGIP PAs' PFM of D.16-06-055 to grant CMA eligibility to SGIP projects with multiple California manufacturers collectively supplying 50 percent or more of the value of the equipment. In addition, D.19-02-006 agreed with CALSSA's comments that the CPUC "intended in D.16-06-055 to allow payment of the CMA incentive for packs or modules of battery cells that are combined with other items into a battery unit, even if the individual battery cell is not manufactured in California."¹¹

Accordingly, the same decision directed the SGIP PAs to revise the definition of the term "Energy Storage Medium" (one of the three components of the energy storage system considered in determining eligibility for the CMA)¹² in the SGIP Handbook. The SGIP PAs were directed to expand the term to include not just battery cells, but also the wiring, racks, and other equipment that together form an operable battery unit. D.19-02-006 stated that "by defining 'Energy Storage Medium' in this way, a module that is manufactured in California, even if it includes a battery cell manufactured elsewhere, is eligible for the [CMA] incentive if the other incentive requirements are met."¹³ D.19-02-006 subsequently ordered the SGIP PAs to submit a Tier 1 Advice Letter, within 30 days of the decision's issuance, to update the SGIP Handbook to include the decision's revisions to the CMA eligibility requirement.

⁹ Ibid. at 3-4.

¹⁰ Ibid. at 4.

¹¹ D.19-02-006 at 7.

¹² The Energy Storage Medium along with the inverter and balance of system are the three components of the energy storage system considered when determining CMA eligibility. Balance of system is defined in the Joint SGIP PAs' AL's proposed Handbook revisions as "the additional equipment, i.e. enclosure or container, monitors and controls, thermal management, and fire suppression, required to operate the energy storage system safely and reliably," Attachment 1 at 26.

¹³ D.19-02-006 at 7.

SoCalGas AL 5455-G, PG&E AL 4089-G/5524-E, SCE AL 3989-E, CSE AL 101-E/AE3

On March 27, 2019, SoCalGas, on behalf of the SGIP PAs, in accordance with CPUC Rule of Practice and Procedure 16.6, submitted a joint request for a 14-day extension to comply with Ordering Paragraph (OP) 2 of D.19-02-006.

On March 29, 2019, the CPUC Executive Director granted the extension request and directed the SGIP PAs to submit a Tier 1 Advice Letter in accordance with D.19-02-006 by April 16, 2019.

On April 15, 2019, SoCalGas, on behalf of the SGIP PAs, filed SoCalGas AL 5455-G, PG&E AL 4089-G/5524-E, SCE AL 3989-E, and CSE AL 101-E (hereafter, the Joint SGIP PAs' AL) and the subject of this Resolution.

Pursuant to D.19-02-006, the Joint SGIP PAs' AL proposed to allow CMA eligibility if at least 50 percent of a project's capital equipment value is supplied by one or more California manufacturers, where no single manufacturer provides the majority of the equipment value. In addition, the Joint SGIP PAs' AL detailed how CMA eligibility will be determined based on the sourcing and costs of the energy storage medium sub-equipment categories as outlined in sections 3.1.3.2 and 3.1.3.3 of the redlined SGIP Handbook.¹⁴

NOTICE

Notice of: SoCalGas 5455-G, PG&E AL 4089-G/5524-E, SCE AL 3989-E, CSE AL 101-E (Joint SGIP PAs' AL) was made by publication in the CPUC's Daily Calendar. The SGIP PAs state that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

PROTESTS

On May 6, 2019, Romeo Power Technology (Romeo Power) and the California Solar and Storage Association (CALSSA) timely filed protests and the California Energy Storage Alliance (CESA) timely filed a response to the Joint SGIP PAs' AL.

¹⁴ Joint PA Advice Letter Attachment at p. 26.

SoCalGas AL 5455-G, PG&E AL 4089-G/5524-E, SCE AL 3989-E, CSE AL 101-E/AE3

On May 13, 2019, SoCalGas, on behalf of itself, PG&E, and SCE, filed a reply to the protests and response to the Joint SGIP PAs' AL. CSE filed a separate reply on the same day.

In their protests of the Joint SGIP PAs' AL, Romeo Power and CALSSA contend that the SGIP PAs' methodology for determining the eligibility of the Energy Storage Medium for the CMA is inconsistent with the directive in D.19-02-006. Specifically, Romeo Power and CALSSA request removal of the stipulation in the Joint SGIP PAs' AL that for projects "where the battery cells are manufactured elsewhere and imported into California, the cost of such battery cells cannot exceed 50 percent of the total costs for the Energy Storage Medium for this category to be considered for the California Manufacturer incentive adder."¹⁵ CALSSA and Romeo Power argue that this is an added limitation imposed by the SGIP PAs and does not align with language in D.19-02-006 where the CPUC clarified that the intention of D.16-06-055 was:

to allow payment of the California Manufacturer Adder incentive for packs or modules of battery cells that are combined with other items into a battery unit, even if the individual battery cell is not manufactured in California.... By defining "Energy Storage Medium" in this way, a module that is manufactured in California, even if it includes a battery cell manufactured elsewhere, is eligible for the incentive if the other incentive requirements are met.¹⁶

The protestors go on to argue that D.19-02-006 does not stipulate a 50 percent limitation on the cost of the battery cell relative to the total cost of the Energy Storage Medium. The protests argue that the introduction of such a requirement is counter to the CPUC's intention to expand eligibility for the CMA to California manufacturers. According to CALSSA's protest, "using battery cells to create a cell pack is inherently a manufacturing process."¹⁷ But as there is no production of lithium battery cells in California, all lithium-based battery manufacturers in the

¹⁵ Ibid.

¹⁶ Romeo Power protest at 3 citing D.19-02-006 at 7.

¹⁷ CALSSA protest at 2.

state must import battery cells, "with the cells being a key input in the manufacturing process."¹⁸

Romeo Power asserts that battery cells are material inputs in the manufacturing of the Energy Storage Medium, which like the various parts of the inverter or balance of system equipment that may also be imported, should not be considered separately when calculating overall CMA eligibility. Romeo Power's protest also states that the manufacturing value and job creation benefits created by the production of the Energy Storage Medium should outweigh the fact that the battery cells must be imported. In its own case, specifically, Romeo Power provides a list of value-add processes that it undertakes to manufacture its battery storage equipment:

- Cell testing including voltage, atmospheric, extended cycling, and fire propagation,
- Chemical adhesion bonding,
- Installation of circuit boards and sensing equipment,
- Laser welding of cells into battery modules,
- Battery Management System (BMS), firmware, and thermal systems design and production,
- Module testing including mechanical shock temperature ingress, and extended cycling. Includes UL certification testing,
- Research and development for ongoing battery technology innovation.¹⁹

In its response to the Joint SGIP PAs' AL, CESA makes the same request as the protestors by recommending the removal of the 50 percent limit on the cost of battery cells relative to the Energy Storage Medium. According to CESA, D.19-02-006 aimed to establish a "total sum approach" in which the SGIP should:

[Recognize] the value of all of the various components that go into an energy storage project, even if the individual battery cell is not manufactured in California. In other words, there is no reason to place

¹⁸ Romeo Power protest at 3.

¹⁹ Ibid. at 4.

greater weight to battery cell manufacturing in California compared to the manufacturing of wiring, racks, inverters, controllers, thermal management systems, or other equipment within California.²⁰

CESA's response argues that should the majority of a project's value come from equipment manufactured in California, the project should still qualify for the CMA, which in turn supports greater in-state manufacturing.

SGIP PAs' Replies

In their joint reply to the protests and response, SoCalGas, PG&E, and SCE (hereafter "joint reply") argue that the revisions to the Joint SGIP PAs' AL advocated by Romeo Power, CALSSA, and CESA "conflict with D.16-06-055 and the intent of the [Joint SGIP PAs' AL]...and therefore should be rejected."²¹ The joint reply further states that "the intent of the [SGIP PAs'] PFM [of D.16.06-055] was to allow SGIP projects to receive the [CMA] if the majority of equipment value is provided by multiple California manufacturers where no single manufacturer provides the majority of the equipment value."²² The joint reply argues that the PFM did not, however, aim to change the underlying intent of D.16-06-055 to ensure that the majority of value creation in SGIP energy storage projects receiving the CMA occurs in California. Therefore, the joint reply asserts that CALSSA and Romeo Power are essentially proposing to modify D.16-06-055's "underlying effort" to ensure the majority of an SGIP energy storage project's value creation occurs in California.²³

In addition, the joint reply expresses concern that the revisions Romeo Power and CALSSA's protests request would lead to an increased SGIP incentive rate for nearly all energy storage projects. The joint reply points to CALSSA's and Romeo Power's statements in their protests that the cost of battery cells consistently averages well above 50 percent of a battery unit and that currently there are no lithium battery cell manufacturers in California. The joint reply posits that this

²⁰ CESA protest at 3.

²¹ Joint SGIP PAs' Reply at 3.

²² Ibid.

²³ Ibid.

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SoCalGas AL 5455-G, PG&E AL 4089-G/5524-E, SCE AL 3989-E, CSE AL 101-E/AE3

means all California manufacturers of battery energy storage use imported battery cells. The joint reply argues that by using the methodology proposed by Romeo Power and CALSSA, most battery storage manufacturers would qualify for the CMA, thus effectively increasing the SGIP incentive rate outside the scope of the SGIP proceeding.

CSE opted to file a separate reply to the protests and response. After considering the comments put forth by Romeo Power, CALSSA, and CESA, CSE's reply contends that the original CMA methodology proposed in the Joint SGIP PAs' AL may be too "restrictive."²⁴ Instead, CSE supports a similar approach to CESA's suggested "total sum" methodology, "whereby all components of the battery are considered together when determining whether the equipment is eligible for the [CMA]."²⁵ CSE states that this approach is more aligned with the eligibility scheme in D.19-02-006, which authorized the CMA for energy storage projects with "at least 50 percent of the value of the eligible equipment...deemed to have been added in a California process."²⁶

CSE's reply argues that if the CMA methodology proposed in the Joint SGIP PAs' AL prohibits eligibility for all California battery storage manufacturers, then the CMA is "rendered meaningless."²⁷ CSE continues stating that "this was neither the intent of Lawmakers nor the [CPUC] when crafting PUC Section 379.6(j) and issuing D.19-02-006, respectively."²⁸ Therefore, in its reply, CSE expresses support for adopting the recommendations proposed by Romeo Power, CALSSA, and CESA.

DISCUSSION

In assessing the merits of the arguments presented by the parties and SGIP PAs above, we reviewed the underlying statutory and policy context governing the SGIP CMA.

²⁴ CSE reply at 3.

²⁵ Ibid. at 4.

²⁶ D.19-02-006 at 7.

 $^{^{27}}$ CSE reply at 4.

²⁸ Ibid.

Public Utilities (PU) Code 379.6(j) requires the CPUC to "provide an additional incentive of 20 percent from existing program funds for the installation of [SGIP]-eligible distributed generation resources manufactured in California."²⁹ Accordingly, the CPUC issued D.16-06-055, which emphasizes its goal is to "ensure that the majority of value creation occurs in California."³⁰ To accomplish this, "equipment will be deemed to be manufactured in California if 50 percent or more of its value is determined to have been added in a manufacturing process (or processes) located in California."³¹ D.16-06-055 then establishes a methodology for determining eligibility for the CMA:

The entity supplying the largest amount of value of this capital equipment is the one whose California credentials will be considered in each project. If at least 50 percent of the value of that entity's capital equipment in that project is deemed to have been added in a California process, then that project should receive the 20 percent California manufacturer bonus.³²

As discussed earlier, the SGIP PAs PFM of D.16-06-055 sought to revise this methodology to allow CMA eligibility for SGIP projects with the majority of equipment value provided by more than one California manufacturer and no single manufacturer providing more than 50 percent of the equipment value. In response, D.19-02-006 notes that PU Code 379.6(j) does not restrict CMA eligibility to projects with just one California supplier providing at least 50 percent of the project value. Therefore, D.19-02-006 clarified that the request sought in the SGIP PAs' PFM did not conflict with statute and that "such project[s] [are] worthy of receiving [the CMA] since [they], like project[s] with one California-manufactured equipment component, [advance] the goal of increasing California manufacturing to serve the green economy."³³

- ³¹ Ibid.
- ³² *Ibid* at footnote 30.

²⁹ PU Code 379.6(j) orders the establishment of the CMA for SGIP-eligible distributed generation resources only, as, in the program's earlier years, the list of eligible technologies under SGIP included only distributed generation. The CPUC, in its implementation of the SGIP, expanded eligibility to energy storage once the technology was incorporated into the program.

¹³⁰ D.16-06-055 at 41.

³³ D.19-02-006 at 6.

D.19-02-006 goes further than the SGIP PAs' PFM to address comments filed by CALSSA in response to the January 16, 2019 proposed decision (PD) addressing the SGIP PAs' PFM of D.16-06-055. In D.19-02-006 includes the following statement:

"We also agree with CALSSA that we intended in D.16-06-055 to allow payment of the California Manufacturer Adder incentive for packs or modules of battery cells that are combined with other items into a battery unit, even if the individual battery cell is not manufactured in California. To effectuate this clarification, we direct the SGIP PAs to define the term "Energy Storage Medium" (one of the three components of the energy storage system considered when determining eligibility for the California Manufacturer Adder incentive) in the SGIP Handbook as including not just battery cells, but also the wiring, racks, and other equipment that together form an operable battery unit. By defining "Energy Storage Medium" in this way, a module that is manufactured in California, even if it includes a battery cell manufactured elsewhere, is eligible for the incentive if the other incentive requirements are met."³⁴

However, the intent of this statement is unclear, and we believe this is where the confusion and disagreement surrounding the SGIP PAs' AL originates. One interpretation of the above, proposed by the SGIP PAs' AL is that counting the value of an Energy Storage Medium that includes imported battery cells toward CMA eligibility contradicts the underlying intent in D.16-06-055 that the majority (more than 50%) of an energy storage project's capital equipment value creation takes place in California.

Conversely, according to CALSSA, Romeo Power, and CESA the above passage from D.19-02-006 supports their argument that the value of imported battery cells should be considered as part of an in-state manufacturing process when determining CMA eligibility as long as the battery cells were combined in California.

³⁴ D.19-02-006 at 7.

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SoCalGas AL 5455-G, PG&E AL 4089-G/5524-E, SCE AL 3989-E, CSE AL 101-E/AE3

In this Resolution, we clarify that neither D.16-06-055 nor D.19-02-006 provide explicit policy directives for the treatment of using imported battery cells in a energy storage unit assembled in California. However, we recognize that PU Code 379.6 (j) broadly provides a 20% incentive adder for equipment manufactured in California, which we interpret as including the processes involved in producing a fully operable energy storage unit, without prescribing any requirements for the origin of the various equipment components. This interpretation is consistent with the methodology in place for the other major energy storage components (the inverter and balance of systems) as well as the generation technologies eligible to receive SGIP incentives.³⁵

Therefore, we direct the SGIP PAs to revise their proposed CMA methodology to include equipment manufactured in California via assembly and other manufacturing processes that may or may not use imported parts. However, to qualify as assembled within California, the work performed must be a substantial portion of the final assembly of the product. If the majority of the assembly takes place outside of the state with only a minor or nominal final component or manufacturing process added within California, that product would not qualify for the CMA. To this end, we adopt the illustrative list of manufacturing processes provided by Romeo Power and authorize the PAs to propose additional items to this list:

- Cell testing including voltage, atmospheric, extended cycling, and fire propagation,
- Chemical adhesion bonding,
- Installation of circuit boards and sensing equipment,
- Laser welding of cells into battery modules,
- Battery Management System (BMS), firmware, and thermal systems design and production,
- Module testing including mechanical shock temperature ingress, and extended cycling. Includes UL certification testing.³⁶

³⁵ In fact, PU Code 379.6 (j) only requires a 20% incentive adder for SGIP distributed generation technologies. This bonus is made available to storage technologies as an extension of the spirit of the statute to offer an additional incentive to promote manufacturing of all SGIP-eligible equipment in California.

³⁶ We do not adopt research and development for ongoing battery technology innovation as a qualifying factor in determining whether equipment is manufactured in California.

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SoCalGas AL 5455-G, PG&E AL 4089-G/5524-E, SCE AL 3989-E, CSE AL 101-E/AE3

In addition, we authorize the PAs to determine whether a majority of the manufacturing process has taken place in California, on a case-by-case basis. Any disputes to the PAs' determination of a project's CMA eligibility shall be resolved through the established SGIP dispute resolution scheme outlined in Section 8 of the SGIP Handbook.

Therefore, we approve the Joint SGIP PAs' AL with the modifications directed in this Resolution. The SGIP PAs shall file a joint supplemental Tier 2 advice letter to propose SGIP Handbook revisions based on the above discussion and in accordance with Appendix A within 30 days of the effective date of this Resolution.

COMMENTS

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review. Please note that comments are due 20 days from the mailing date of this resolution. Section 311(g)(2) provides that this 30-day review period and 20-day comment period may be reduced or waived upon the stipulation of all parties in the proceeding. The 30-day review and 20-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the CPUC's agenda no earlier than 30 days from today.

FINDINGS

- 1. Public Utilities Code 379.6(j) authorizes a 20 percent incentive for instillation of SGIP eligible resources that are manufactured in California.
- 2. D.19-02-006 OP 2 directs the SGIP PAs to submit a Tier 1 AL updating the SGIP Handbook to reflect that decision's revisions to eligibility requirements for the subsidy of SGIP-eligible resources manufactured in California, known as the CMA.
- 3. The Joint SGIP PAs filed an AL with proposed changes to the SGIP Handbook setting forth eligibility criteria for the CMA on April 15, 2019.
- 4. Romeo Power Technology and the CALSSA filed protests and CESA filed timely a response to the Joint SGIP PAs' AL on May 6, 2019,

- 5. SoCalGas, on behalf of itself, PG&E, and SCE, filed a reply to parties' protests and response on May 13, 2019.
- 6. CSE filed a reply to the protest on May 13, 2019.
- 7. The Joint SGIP PAs' AL proposes to determine eligibility for the CMA by separately assessing the value of the three major components of energy storage units.
- 8. SGIP PAs are required to determine eligibility for the CMA by assessing the value of all eligible capital inputs into the energy storage unit as a cumulative whole.
- 9. The CPUC did not intend to disqualify battery units that contain battery cells manufactured outside California from eligibility for the CMA, as long as those energy storage units meet all CMA eligibility criteria.
- 10. It is reasonable to approve the Joint SGIP PAs' proposed Handbook revisions with modification.

THEREFORE IT IS ORDERED THAT:

- The revisions to the SGIP handbook proposed in Southern California Gas Company 5455-G, Pacific Gas and Electric Company 4089-G/5524-E, Southern California Edison Company 3989-E, and the Center for Sustainable Energy 101-E are approved with the modifications detailed in Appendix A to this resolution.
- 2. The SGIP PAs shall file a Tier 2 joint supplemental advice letter to propose SGIP Handbook revisions based on the above discussion and in compliance with this Resolution's Appendix A within 30 days of the effective date of this Resolution. The protest period for these supplemental Advice Letters shall be reopened for seven days following their submittal. Any new protests shall be limited to substance of the supplement or additional information.

SoCalGas AL 5455-G, PG&E AL 4089-G/5524-E, SCE AL 3989-E, CSE AL 101-E/AE3

This Resolution is effective today.

I hereby certify that this Resolution was adopted by the California Public Utilities Commission at its regular meeting on January 27, 2022. The following Commissioners approved it:

> Rachel Peterson Executive Director

Directed SGIP Handbook Changes

3.1.3.1 California Manufacturer Eligibility Criteria and Verification

All California Manufacturers will be required to submit an application for California Manufacturer Status and proof to support each criterion below.

California Manufacturers must meet the following requirements:

- Operate a manufacturing facility in California
- Licensed to conduct business in California
- Registered with a primary or secondary Manufacturing NAICS code

In addition, lithium battery manufacturers must show they are responsible for a substantial portion of the manufacturing and assembly of the fully operational energy storage unit. Lithium battery manufacturing processes include:

- Cell testing including voltage, atmospheric, extended cycling, and fire propagation,
- *Chemical adhesion bonding,*
- Installation of circuit boards and sensing equipment,
- Laser welding of cells into battery modules,
- Battery Management System (BMS), firmware, and thermal systems design and production,
- Module testing including mechanical shock temperature ingress, and extended cycling. Includes UL certification testing.

3.1.3.3. How to Determine Value

Value is based on the capital cost of a single equipment type as listed above. The California Manufacturer supplying capital equipment component(s) with the largest cost percentage is the one whose California credentials will be considered. The largest cost percentage is the total value of the eligible capital equipment.

The total value of the capital equipment for a project with be the sum of all equipment types as listed above. The combined total amount of equipment show to be supplied by California Manufacturer(s) in a California manufacturing process will be considered in calculating the appropriate percentage in the total value of capital equipment.³⁷

Example 1:

An energy storage project requests the California Manufacturer incentive adder. The project provides the following cost breakdown:

Equipment Type	Company	Cost	Location	Approved California
	Manufacturer ³⁸		Manufactured	Manufacturer
Advanced lithium	ABC Company		111 Fake Street	Yes
ion batteries		\$12,000		

³⁷ SGIP PAs reserve the right to request for a third-party auditing firm to verify the eligibility of relevant projects costs, at cost to the manufacturer adder applicant.

³⁸ Manufacturer must be the entity responsible for the assembly and manufacturing of a substantial portion of the assembly of the final product, as described in Section 3.1.3.1.

Energy Storage Medium			Los Angeles, <i>CA</i> 90011	
Bidirectional AC- DC Inverter	Lizard Inverters	\$3,000	333 Jon Street Phoenix, AZ 81234 San Diego, CA	Yes
Operating Controller Balance of System	Nick Controllers	\$2,000	South Korea	No

- Total system cost=\$17,000
- Cost percentage of equipment components manufactured in California=88%
- Battery cost percentage = 71%
- Inverter cost percentage = 18%
- Controller cost percentage = 11%

Result: The project is eligible to receive the California Manufacturer Adder.

Example 2:

An energy storage project requests the California Manufacturer incentive adder. The project provides the following cost breakdown:

Equipment Type	Manufacturer ³⁹	Cost	Manufacturing Location	Approved California Manufacturer
Energy Storage Medium	XYZ Company	\$16,000	Philadelphia, PA	No
Inverter	Lizard Inverters Company	\$3,000	San Diego, CA	Yes
Balance of System	Golden Gate Systems Company	\$11,000	San Francisco, CA	Yes

- Total system cost=\$29,000
- Cost percentage of equipment components manufactured in California=48%

Result: The project is ineligible to receive the California Manufacturer Adder.

The capital equipment with the highest percentage cost is the battery. Since the battery was made by an SGIP approved California manufacturer, this project will be eligible to receive the 20% adder.

Beginning June 23, 2017, Program Administrators will deny requests for California Manufacturer status for manufacturers that have not met the above requirements, including suppliers which were previously approved. Also, beginning June 23, 2017, projects will receive the adder only when using equipment from an approved California Manufacturer under the above requirements. New projects that apply before June 23, 2017 with a previously approved "California Supplier" may retain the adder only if that manufacturer is pre-approved under the above requirements by the Incentive Claim stage.

³⁹ Manufacturer must be the entity responsible for the assembly and manufacturing of a substantial portion of the assembly of the final product, as described in Section 3.1.3.1.