



**California Energy Commission
April 10, 2024 Business Meeting
Backup Materials for Agenda Item No :
Building Standards Branch (22-BSTD-04)**

The following backup materials for the above-referenced agenda item are available as described below:

1. Proposed Order, attached below.
2. Recommendation of the Executive Director on C Note Limited Partnership's Request for a Solar Photovoltaic (PV) Exemption Determination, attached below.
3. CEQA analysis, attached below.
4. C Note Limited Partnership's June 7, 2023, application, available at <https://efiling.energy.ca.gov/GetDocument.aspx?tn=250549&DocumentContentId=85327>
5. Staff Analysis, available at <https://efiling.energy.ca.gov/GetDocument.aspx?tn=254575&DocumentContentId=90149>

For the complete record, please visit: [California Energy Commission: Docket Log 22-BSTD-04](#).

To stay informed about this project and receive documents as they are filed, please subscribe to the proceeding Topic, which can be accessed here: [California Energy Commission: Docket Log 22-BSTD-04](#). The Topic sends out email notifications and direct links when documents are filed in the proceeding docket.

STATE OF CALIFORNIA
STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

IN THE MATTER OF:

***C Note Limited Partnership's June 7,
2023 Request for a Solar Photovoltaic
(PV) Exemption Determination***

Docket No.: 22-BSTD-04

PROPOSED ORDER

I. BACKGROUND

The Energy Code regulations establish the opportunity, in Section 10-109(k), to submit an application for the California Energy Commission (CEC) to determine if public agency rules cause the CEC's cost-effectiveness conclusions for solar photovoltaic (PV) systems to not hold for particular buildings and therefore not apply to those buildings. The regulations require that an applicant provide information regarding the differences between the public agency rules and the cost-effectiveness determinations that the CEC made in adopting the solar PV system requirements, including supplementary information requested by the CEC to enable a full review of the application.

On June 7, 2023, C Note Limited Partnership (C Note LP) submitted an application to the CEC requesting a determination of whether the solar PV system requirements should apply to the Benjamin Project, a 108-unit low-rise multifamily project located within the City of Lodi (San Joaquin County), permitted under the 2019 Energy Code.

Staff has performed a cost-effectiveness analysis based on 1) the public agency rules adopted by the City of Lodi, and 2) solar PV system costs estimated in bids from electrical and solar contractors to install the solar PV system designs that C Note LP developed to comply with the City of Lodi's solar PV and electrical system regulations.

II. EXECUTIVE DIRECTOR RECOMMENDATION

Based on the information reviewed and in accordance with Section 10-109(k) of the 2019 Energy Code, the Executive Director makes the following recommendations:

1. In accordance with Section 10-109(k) of the 2019 Energy Code, the CEC should determine that the Section 150.1(c)14 solar PV requirements of the 2019 Energy Code do not apply to the newly constructed low-rise multifamily buildings of the Benjamin Project within the City of Lodi; and
2. Due to the unusually challenging circumstances facing the Benjamin Project in

cost-effectively meeting the 2019 Energy Code solar PV system requirements, the CEC should find that this project is by no means representative of other multifamily projects in California.

III. CALIFORNIA ENERGY COMMISSION FINDINGS

The CEC makes the following findings:

- 1) C Note LP submitted their application to staff on June 7, 2023, requesting a determination under Section 10-109(k) of the 2019 Energy Code that the solar PV system requirements of Section 150.1(c)14 of the 2019 Energy Code not apply to the newly constructed low-rise multifamily buildings of the Benjamin Project within the City of Lodi.
- 2) Staff evaluated C Note LP's application and accompanying documentation, finding that C Note LP has met the requirements in Section 10-109(k) of the 2019 Energy Code.
- 3) Staff evaluated C Note LP's application and accompanying documentation finding that the cost-effectiveness determinations that the CEC made in adopting the solar PV system requirements in the 2019 Energy Code do not apply to the newly constructed low-rise multifamily buildings of the Benjamin Project within the City of Lodi due to 1) the public agency rules adopted by the City of Lodi, and 2) the solar PV system costs estimated in bids from electrical and solar contractors to install the solar PV system designs that C Note LP developed to comply with the City of Lodi's solar PV and electrical system regulations.
- 4) The Executive Director provided a copy of the staff evaluation to interested persons, provided an opportunity for public comment, and considered all public comments received in developing the Executive Director's recommendation.
- 5) The CEC concurs with the Executive Director's recommendation describing the review and validation of the C Note LP's Section 10-109(k) application by CEC staff and recommending approval of the determination made.

IV. CONCLUSION AND ORDER

The CEC has considered staff analysis, the Executive Director's recommendation, all written comments submitted, oral comments made at today's business meeting, and CEC staff's responses to all comments on this matter.

Therefore, the CEC concludes the following in accordance with Sections 10-109(k) and 10-110 of the 2019 Energy Code:

1. Public agency rules that apply to the Benjamin Project result in the Commission's cost-effectiveness conclusions in the 2019 Energy Code to not hold for Benjamin Project buildings identified in C Note LP's application; and
2. The solar PV requirements of Section 150.1(c)14 of the 2019 Energy Code do

not apply to newly constructed low-rise multifamily buildings of the Benjamin Project within the City of Lodi, California, as identified in C Note LP's application; and

3. Approval of this application is not a project, as defined, subject to the California Environmental Quality Act (CEQA) and, alternatively, if it is a project, it is exempt pursuant to the common sense exemption under section 15061(b)(3) of the CEQA Guidelines; and
4. Due to the unusually challenging circumstances facing the Benjamin Project in cost effectively meeting the 2019 Energy Code solar PV system requirements, this project is not representative of other multifamily projects in California.

IT IS SO ORDERED.

CERTIFICATION

The undersigned Secretariat to the CEC does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the CEC held on April 10, 2024.

AYE:

NAY:

ABSENT:

ABSTAIN:

Dated:

Kristine Banaag
Secretariat



**State of California
California Energy Commission
Memorandum**

To: California Energy Commission

Date: April 10, 2024

From: Drew Bohan, Executive Director

Initial Determination and Recommendation of the Executive Director on C Note Limited Partnership's June 7, 2023, Request for a Solar Photovoltaic (PV) Exemption Determination

INTRODUCTION

Section 10-109(k) of the California Energy Code, contained in the California Code of Regulations, Title 24, Parts 1 and 6, establishes the opportunity for entities to submit an application for the California Energy Commission (CEC) to determine if public agency rules cause the CEC's cost-effectiveness conclusions for solar photovoltaic (PV) systems to not hold for particular buildings. If the CEC were to make such a finding, the regulations authorize the CEC to find that the otherwise mandatory solar PV requirements in the Energy Code do not apply to those buildings. The regulations require that an applicant provide information regarding the differences between the public agency rules and the cost-effectiveness determinations that the CEC made in adopting the solar PV systems requirements, including supplementary information requested by the CEC to enable a full review of the application.

On June 7, 2023, C Note Limited Partnership (C Note LP) submitted an application to the CEC requesting a determination of whether, due to a lack of cost-effectiveness, the solar PV system requirements should apply to the Benjamin Project, a 108-unit low-rise multifamily project located within the City of Lodi (San Joaquin County), permitted under the 2019 Energy Code.

Staff has performed a cost-effectiveness analysis based on 1) the public agency rules adopted by the City of Lodi, and 2) solar PV system costs estimated in bids from electrical and solar contractors to install the solar PV system designs that C Note LP developed to comply with the City of Lodi's solar PV and electrical system regulations. Based on that information and in accordance with Section 10-109(k) of the 2019 Energy Code, staff finds that the solar PV system requirements of the 2019 Energy Code are not cost-effective for the buildings referenced in the Benjamin Project within the City of Lodi. Therefore, staff recommends that the PV requirements in the 2019 Energy Code should not apply to the buildings referenced in C Note LP's application.

Staff released a report on this analysis and recommendation for public comment on February 20, 2024. Comments were received from three solar PV system design and installation firms that stated that they agree that the public agency rules in the City of Lodi result in solar PV system costs that are higher than would occur in other California locations, but they believe that would not preclude cost effective PV systems being possible for the Benjamin Project. C Note LP provided a response to those comments. CEC staff has reviewed the comments and C Note LP's response to those comments, and as discussed below, does not believe the comments warrant a change to staff's initial determination that the PV requirements are not cost-effective for the Benjamin Project and staff's initial recommendation that the PV requirements should not apply.

SUMMARY OF THE REQUEST

On June 7, 2023, C Note LP submitted an application, in accordance with Section 10-109(k,) to the CEC requesting a determination of whether, due to a lack of cost-effectiveness, the solar PV-system requirements of Section 150.1(c)14 of the 2019 Energy Code should apply to the Benjamin Project, a 108-unit low-rise multifamily project located within the City of Lodi (San Joaquin County).

SUMMARY OF EXECUTIVE DIRECTOR'S DETERMINATION AND RECOMMENDATION

In addition to the documents that comprise C Note LP's 10-109(k) application, staff has also reviewed the comments and C Note LP's responses as discussed in the Discussion section below. Despite there being some potential that if C Note LP sought new bids for the project today, the Section 150.1(c)14 solar PV requirement of the 2019 Energy Code may be cost effective for the Benjamin Project, based on the record the Executive Director makes the following recommendations:

1. Based on C Note LP's application, additional documentation in the docket, and staff's analysis, the Commission should find that public agency rules that apply to the Benjamin Project result in the Commission's cost-effectiveness conclusions in the 2019 Energy Code to not hold for buildings at the Benjamin Project specified in the application; and
2. In accordance with Section 10-109(k) of the 2019 Energy Code, the CEC should determine that Section 150.1(c)14 solar PV requirements of the 2019 Energy Code does not apply to the newly constructed low-rise multifamily buildings of the Benjamin Project located in the City of Lodi; and
3. Due to the unusually challenging circumstances facing the Benjamin Project in cost effectively meeting the 2019 Energy Code solar PV system requirements, the CEC should find that this project is not representative of other multifamily projects in California.

DISCUSSION

The staff report released to the public on February 20, 2024, found that the 2019 Energy Code solar PV system requirements are not cost-effective for the Benjamin Project due to the following:

- Roof material and solar PV system design for the buildings.
- High installation costs resulting from the inability to use virtual net energy metering (VNEM) under the Lodi Electric Utility rules.
- Unique electrical system requirements by the City of Lodi.
- Lower compensation for generation exports under Lodi Energy Utility's tariffs.
- High bids received for the project.

Staff received comments following the posting of the respective staff report from three solar PV system design and installation firms during the comment period for the Staff Analysis – SunPower Corporation, BPi, and Powertree Services Inc. C Note LP submitted responses to these comments after the comment period. Discussion of the comments and C Note LP's response is summarized below.

SunPower Corporation

SunPower Corporation raised three key issues in response to the staff report:

1. Bids were received between November 2022 and May 2023, at a time of particularly high materials cost, interest rates, and inflation. The Benjamin Project bids would have been particularly impacted by the high material costs of the wiring required to meet the interconnection requirements established by the authority having jurisdiction.
2. Restrictive electrical and interconnection rules established by the City of Lodi and Lodi Electric Utility (LEU) further increase solar PV system installation costs.
3. The Operations & Maintenance cost adder used by C Note LP to evaluate project cost-effectiveness likely would be duplicative with product warranties offered by contractors bidding on the project.

BPi

BPi raised the following issues in response to the staff report:

1. The Benjamin Project is considered a very small commercial solar PV system, that would be unappealing to many commercial installers.
2. The complexity of the interconnection requirements increases the cost of the system.
3. The interconnection and permitting fees for the Benjamin Project are higher than typical.
4. Different choices during the construction process could reduce installation costs.
5. BPi believes that a project like this one can be made viable with appropriate planning for a solar system.

Powertree Services Inc.

Powertree Services Inc. raised several issues in response to the staff report, summarized as follows:

1. A project developer is not required to use the local utility for all of their electrical supply. Instead, projects may generate energy and use that energy for its own use or for its tenants' use through a behind the meter energy allocation system. Such a system would likely render this project cost effective.
2. Cost-benefit analysis should include the equity value of the solar photovoltaic system on the property value, as well as the additional benefits of concurrent installation of EV charging.

C Note LP primary responses to the above comments

1. C Note LP agrees that the solar PV installation at the Benjamin Project in Lodi, California has unique issues at play and is not generally representative of other multi-family projects across California.

2. The timing of the bids had little impact with continuing cost escalations. Select materials have lowered in cost; but overhead, transportation, and labor costs are trending higher, netting higher costs overall.
3. C Note LP identifies that there are factors that were left out of the Operation and Maintenance cost that they added to each bid, which would make the Operation and Maintenance cost higher than they originally estimated.

ANALYSIS

Elevated Cost Environment

Staff agrees with SunPower that the Benjamin Project was developed at a time of unusually unfavorable construction costs, and with all commenters and C Note LP that overall costs were further exacerbated by City of Lodi's restrictive electrical and interconnection rules that are rare in the state. While CEC staff agree with SunPower that there is some likelihood that if this project was being developed in the current economic environment, that the costs might be lower, there is not enough evidence based on the information received in the record to date to justify a change in the determination.

Restrictive Installation Requirements

Staff understands that the City of Lodi's requirement for each point of interconnection for a solar PV system to have a consumption meter, a production meter, and an individual bladed disconnect is challenging. Staff agrees with all commenters and C Note LP that these requirements are rare in the state of California.

Operations and Maintenance Costs

Based on SunPower's comments and C Note LP's response, staff finds that there is uncertainty in the operations and maintenance costs used in the Benjamin Project application. Based on the information in the record, there is not enough evidence to conclusively determine that revising the operations and maintenance costs would justify a change in the determination.

CONCLUSION

Accordingly, based on the foregoing analysis and in response to the C Note LP's June 7, 2023, application in accordance with Sections 10-109(k) and 10-110 of the 2019 Energy Code, the Executive Director recommends that the Commission adopt an order with the following findings:

1. Public agency rules that apply to the Benjamin Project result in the Commission's cost-effectiveness conclusions in the 2019 Energy Code to not hold for Benjamin Project buildings identified in C Note LP's application; and
2. The solar PV requirements of Section 150.1(c)14 of the 2019 Energy Code do not apply to newly constructed low-rise multifamily buildings of the Benjamin Project within the City of Lodi, California, as identified in C Note LP's application; and
3. Due to the unusually challenging circumstances facing the Benjamin Project in cost effectively meeting the 2019 Energy Code solar PV system requirements, this project is not

representative of other multifamily projects in California.

Memorandum

To: California Energy Commission

From: Muhammad Saeed
Senior Electrical Engineer
Efficiency Division
California Energy Commission
715 P Street
Sacramento, California 95814

Date: April 10, 2024

Subject: Basis for Determination that the 2019 Energy Code Solar PV System Requirements do not apply to the Benjamin Project and that this Determination is either not a Project for Purposes of, or is Exempt under, the California Environmental Quality Act

I. CEQA.

The California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.; see also CEQA Guidelines, Cal. Code Regs., tit. 14, § 15000 et seq.) requires that state agencies consider the environmental impact of their discretionary decisions. However, discretionary approvals that do not fit the definition of a “project” are not subject to CEQA. Additionally, CEQA designates certain projects exempt from its requirements. Of relevance here, and discussed further below, is the definition of a project (Cal. Code Regs., tit. 14, § 15378 and the common sense exemption (Cal. Code Regs., tit. 14, §15061(b)(3)).

II. The CEC’s 2019 Building Energy Efficiency Standards

On May 18, 2018, the California Energy Commission (CEC) adopted the 2019 Building Energy Efficiency Standards (California Code of Regulations, Title 24, Part 1, Chapter 10, and Part 6; also known as the California Energy Code), which went into effect January 1, 2020. Section 150.1(c)14 of the 2019 Energy Code requires the installation of solar photovoltaic systems on newly constructed low-rise multifamily buildings. Section 10-109(k) Photovoltaic System Requirement Determination, states, “The Commission may, upon written application or its own motion, determine that the photovoltaic requirements in Section 150.1(c)14 shall not apply, if the Commission finds that the implementation of public agency rules regarding utility system costs and revenue requirements, compensation for customer-owned generation, or interconnection fees, causes the Commission’s cost-effectiveness conclusions, made pursuant to Public Resources Code 25402(b)(3), to not hold for particular buildings.”

III. The Proposed Action

The CEC Executive Director recommends that the CEC approve C Note Limited Partnership’s (C Note LP) application to the CEC for a determination, pursuant to the California Code of

Regulations, Title 24, Part 1, Section 10-109(k). In their application, C Note LP concludes that the CEC's solar PV requirements for the Benjamin Project under the 2019 Energy Code are not cost effective, and therefore are not applicable to the Benjamin Project buildings specified in the application. Staff has performed a cost-effectiveness analysis based on the public agency rules adopted by the City of Lodi and recommends approval of this application.

IV. The proposed determination is not a project within the meaning of CEQA.

A “project” is defined as the “whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment...” (Cal. Code Regs., tit. 14, § 15378(a).) The CEC has considered the application of CEQA to this proposed determination and concluded that approval of C Note LP's June 7, 2023, application does not meet CEQA's definition of a “project” as it is not an activity that may cause a direct or reasonably foreseeable indirect physical change to the environment. The only two possible outcomes of this action are either (1) rejection of C Note LP's June 7, 2023, application, which does not change existing conditions, or (2) approval of the application, which would result in solar PV systems not being required for the Benjamin Project's low rise multifamily buildings in Lodi, California. The proposed determination does not require C Note LP to undertake any specific action should their application be approved by the Commission. Consequently, neither potential outcome has the possibility of causing a direct or reasonably foreseeable indirect physical change to the environment. Therefore, the proposed determination is not a “project” within the meaning of Section 15378. (Cal. Code Regs., tit. 14, § 15378(a).)

V. Even if the proposed determination is a project under CEQA, it is subject to the Common Sense Exemption.

Even if it is found that the proposed determination is a “project” within the meaning of Section 15378, the proposed determination would still be exempt from CEQA under the common sense exemption. CEQA only applies to projects that have the potential for causing a significant effect on the environment. (Cal. Code Regs., tit. 14, § 15061(b)(3).) A “significant effect on the environment” is defined as a substantial, or a potentially substantial, adverse change in the environment, and does not include an economic change by itself. (Pub. Resources Code, § 21068; Cal. Code Regs., tit. 14, § 15382.) Staff reviewed C Note LP's June 7, 2023, application and performed a life-cycle cost-effectiveness analysis to determine if the City of Lodi's public agency rules would cause solar PV systems to not be cost effective, specifically as applied to the Benjamin Project which is located within their jurisdiction. Staff concluded that Lodi Electric Utility's residential rates and its net energy metering rules, as well as electrical interconnection and installation rules required by the City of Lodi resulted in solar PV not being cost effective as applied to the Benjamin Project buildings.

Even if this determination is to be considered a “project” under CEQA, the common sense exemption would apply, as it can be seen with certainty that there is no possibility that this determination will have a significant effect on the environment. As discussed above, C Note LP's June 7, 2023, application will either result in no action being taken by the Commission, or not requiring the CEC's 2019 Energy Code solar PV system requirements for the Benjamin Project. (Cal. Code Regs., tit. 14, § 15061(b)(3).) In the latter situation, any impact to the

environment would be limited to emissions that might be associated with energy generation that would make up for the energy that would have been generated from PV systems operating at the Benjamin Project. However, the potential additional emissions resulting from the approval of the application are uncertain, attenuated from the action, and insignificant compared to the overall emissions from the energy generation sector. For these reasons, CEC's determination regarding the application of the 2019 Energy Code's solar PV requirements to the Benjamin Project buildings specified in their application would not be subject to CEQA under the common sense exemption of section 15061(b)(3).

VI. Conclusion.

As provided above, the proposed determination would have no significant effect on the environment. It can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment. Therefore, this action is not a "project" or, alternatively, exempt pursuant to the common sense exemption under section 15061(b)(3) of the CEQA Guidelines.