

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

Order Instituting Rulemaking Regarding Policies,
Procedures and Rules for the California Solar
Initiative, the Self-Generation Incentive Program
and Other Distributed Generation Issues.

RULEMAKING 12-11-005
(Filed November 8, 2012)

**OPENING COMMENTS OF RECOLTE ENERGY ON THE ASSIGNED
COMMISSIONER'S RULING REGARDING THE ESTABLISHMENT OF A NET
ENERGY METERING TRANSITION PERIOD**

RECOLTE ENERGY

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I. BACKGROUND ON RECOLTE ENERGY

Récolte Energy (Récolte) is a Napa Valley based energy consulting firm. Since 2002, Récolte has been helping its clients reduce their energy bills, primarily by developing net metered solar photovoltaic (*PV*) projects. Its clients are *wineries* including Chateau Montelena, Far Niente, and Sutter Home; *non-profits* including The Gasser Foundation, Del Mesa Carmel, Napa Supportive Housing, and United Cerebral Palsy of the North Bay; *school districts* in Napa, Sonoma, and Contra Costa counties; and *local government agencies* like the Napa Sanitation District.

As a vendor-, technology-, and financing- neutral owner’s representative, Récolte is hired by its clients to provide independent advice about the risks and rewards of PV project development related to technology, vendor, site, financial, regulatory, legal, and other matters.

II. BACKGROUND FOR RECOLTE'S RESPONSES TO THE ACR'S QUESTIONS

The economic case for developing a PV project is typically presented in the form of a cash flow statement and clients make their objective “go-no go” decisions after validating the assumptions in the cash flow statements and evaluating the returns.

The assumptions include:

- Installation costs
- Project life
- ability to use tax credits and accelerated depreciation
- current utility rate tariffs
- expected escalation rates of current utility tariffs
- proposed utility rate tariffs with net metering
- the amount of CSI/SGIP rebates
- financing method and terms

The cash flow statement usually covers 25 years. This number is used because it is a *justifiable* number. It is one that a client usually accepts as being reasonable, because it represents the warranted life of the most expensive part of a PV system.

In the financial analysis for a project, its payback period is considered. It is a necessary, but not sufficient, measure of financial performance. The other, more meaningful measures include cumulative savings, net present value of these savings, return on investment, and profitability index. Financial returns cannot be standardized for all PV customers, because the assumptions and appetites for risk vary from project

to project and customer to customer.

An investment in a PV project is quite substantial. Customers have to justify their investment decisions not only to current management, boards, oversight committees, local citizens, and/or bond holders, but also to future management and boards who will judge previously made investment decisions. So every assumption is closely questioned, every viable financing option evaluated, every risk mitigation strategy considered, every option that reduces the payback period considered, and every option that improves the return on investment considered.

The risk of a PV installer going out of business is mitigated by the fact that another installation company can take over operations and maintenance of an installed system. The risk of a PV module manufacturer going out of business is mitigated by the stability of the product itself – no moving parts – and by selecting the modules of only “Tier-1”, “bankable” manufacturers.

The risk of rate tariff fluctuations are considered and deemed to be an acceptable risk because the reality of electricity being more expensive during on-peak periods relative to part-peak and off-peak periods in California is expected to continue.

However, the possibility that the NEM tariff, required by law until the utilities met their 5% NEM caps, could change was never considered. The NEM tariff was simply assumed to be a constant for the lifetime of the PV project. Had the NEM tariff also been thought to be variable, customers would have made different decisions. They would have built smaller systems, if at all.

A PV system may fail before or after the 25-year term on a cash flow statement, before or after its expected life, or before or after its payback period. None of these evaluation periods are relevant. **The only relevant and meaningful term is the PV system's actual life.** The risk of the PV system failing prematurely is assumed to be the customer's. The reward as a result of it continuing to produce after the payback period, warranted life, or expected life, is also assumed to be the customer's.

III. RECOLTE ENERGY'S RESPONSES TO THE ACR'S QUESTIONS REGARDING NEM TRANSITION PERIOD

Based on the above background, Récolte responses to Commissioner Peevey's questions from his ruling dated November 27, 2013, are provided in bold immediately following each set of questions:

- How long should customers who take service under a NEM tariff prior to the earlier of July 1, 2017, or the attainment of their respective utility's NEM cap, be guaranteed to receive the NEM tariff currently in place? Is this proposed transition period related to a reasonable expected payback period, expected system life, or some other factor?
 - **For the actual life of the renewable energy system.**
 - **The proposed transition period should be for the actual system life. No other term is meaningful.**
- Should calculation of the reasonable expected life of a system be based on the warranty of ten years as required by California Publ. Util. Code §387.5(d)(4), or should other factors, such as the Original Equipment Manufacturer's warranty, be taken into account?
 - **These periods, whether 10, 25, or 30 years, are all irrelevant. The only meaningful period is actual system life.**
- Should the reasonable expected life of a system begin on the date of interconnection or some other project milestone?

- **Interconnection Date.**
- What is a “reasonable expected payback period?” Does a reasonable expected payback period for customer-owned systems differ by customer sector such as residential, commercial, or school and other government host sites? Does the expected payback period vary with system size or other factors?
 - **There is no such thing as a reasonable expected payback period. It differs from customer to customer and project to project.**
 - **Payback period is a necessary, but not sufficient, measure of financial performance of a PV project.**
- Should the addition of solar panels or other modifications to an existing renewable electrical generation facility that increase its generating capacity occurring on or after July 1, 2017, be eligible for the NEM transition program? If not, how should such modifications be treated?
 - **Repairs or modifications to an existing system that do not increase system size should remain under the current NEM tariff. If the system is expanded, i.e., if system size increases, before the earlier of July 1, 2017 and the NEM cap being reached, the expanded system should also be included under the current NEM tariff. Any increase in system size on or after the earlier of July 1, 2017 or the NEM cap being reached, should be interconnected as a separate system and subject to the new NEM tariff.**

III. CONCLUSION

Any change to the current NEM tariff would harm the very customers who responded to the call by the state of California to invest in renewable energy generation. Any change will also deter future investments and make irrelevant discussions about a new NEM tariff. How meaningful would it be to develop a new NEM tariff if a tariff can be changed at will?

Récolte recommends that

- the current NEM tariff be kept unchanged for all projects that were/are interconnected before the earlier of July 1, 2017 and the net metering cap being reached, for the duration of the actual life of the project. Not expected life, not payback period, not 25 years, not 30 years, but the actual life of the system.
- a customer with a project interconnected under the current NEM tariff be given the option, but not be required, to transition to the new NEM tariff when it becomes available.