PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION **RESOLUTION E-4463**
February 2, 2012

CONFIDENTIAL

R E S O L U T I O N

Resolution E-4463. Pacific Gas and Electric Company seeks approval of a power purchase agreement with North Sky River Energy, LLC.

PROPOSED OUTCOME: This Resolution approves cost recovery for the long-term renewable energy power purchase agreement between Pacific Gas and Electric Company and North Sky River Energy, LLC, a wholly-owned subsidiary of NextEra Energy Resources, LLC.

ESTIMATED COST: Actual costs are confidential at this time.

By Advice Letter 3885-E filed on August 5, 2011.

SUMMARY

Pacific Gas and Electric Company's renewable energy power purchase agreement with North Sky River Energy, LLC is approved without modification.

Pacific Gas and Electric Company ("PG&E") filed Advice Letter (AL) 3885-E on August 5, 2011 requesting approval of a 25-year Power Purchase Agreement ("PPA") with North Sky River Energy, LLC ("North Sky" or "Project"), a wholly-owned subsidiary of NextEra Energy Resources, LLC, which resulted from bilateral negotiations.

PG&E proposes that the 163.2 megawatt (MW) wind Project will interconnect directly into the California Independent System Operator (CAISO) balancing authority area at Southern California Edison's ("SCE") High Winds Substation. Annual deliveries, expected at 597 gigawatt-hours (GWh), will be received by PG&E at the CAISO designated PNode with an expected commercial operation date ("COD") of December 31, 2012.

This resolution approves the PPA without modification. PG&E's execution of this PPA is consistent with PG&E's 2009 and 2011 RPS Procurement Plan, including a moderate fit with its resource need, which the Commission approved in Decisions 09-06-018 and 11-04-030. Deliveries under the PPA are fully recoverable in rates over the life of the contract, subject to Commission review of PG&E's administration of the PPA.

The following table summarizes the Project-specific features of the agreement:

Generating Facility	Type	Term Years	MW Capacity	Annual Deliveries	Operation Date	Project Location
North Sky	Wind	25	163.2	597 GWh	12/31/2012	Tehachapi, Kern Co., CA

BACKGROUND

Overview of the Renewables Portfolio Standard (RPS) Program

The California RPS Program was established by Senate Bill (SB) 1078, and has been subsequently modified by SB 107, SB 1036 and SB 2 (1X).[1] The RPS program is codified in Public Utilities Code §§ 399.11-399.20.[2] Under SB 2 (1X), the RPS program administered by the Commission requires each retail seller to increase its total procurement of eligible renewable energy resources so that 33 percent of retail sales are served by eligible renewable energy resources no later than December 31, 2020.[3]

Additional background information about the Commission's RPS Program, including links to relevant laws and Commission decisions, is available at http://www.cpuc.ca.gov/PUC/energy/Renewables/overview.htm and http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm.

[1] SB 1078 (Sher, Chapter 516, Statutes of 2002); SB 107 (Simitian, Chapter 464, Statutes of 2006); SB 1036 (Perata, Chapter 685, Statutes of 2007); SB 2 (1X) (Simitian, Chapter 1, Statutes of 2011, First Extraordinary Session).

[2] All citations to sections (§) are to the Public Utilities Code of the state of California unless otherwise specified.

[3] § 399.15(b)(2)(B).

NOTICE

Notice of AL 3885-E was made by publication in the Commission's Daily Calendar. Pacific Gas and Electric Company states that a copy of the Advice Letter was mailed and distributed in accordance with Section 3.14 of General Order 96-B.

PROTESTS

Advice Letter AL 3885-E was not protested.

DISCUSSION

Pacific Gas & Electric Company requests Commission approval of a new renewable energy contract with North Sky River Energy, LLC.

On August 5, 2011, Pacific Gas and Electric Company ("PG&E") filed Advice Letter ("AL") 3885-E. In AL 3885-E, PG&E requested Commission approval of a renewable energy contract with North Sky River Energy, LLC ("North Sky" or "Project"), a wholly-owned subsidiary of NextEra Energy Resources, LLC ("NextEra"), for generation from its proposed wind power facility in Kern County.

PG&E negotiated the Power Purchase Agreement ("PPA") on a bilateral basis because the offer was at a favorable price (below the 2009 MPR) with acceptable terms and conditions, and because of the high probability that deferring the project to the 2011 RPS Solicitation could significantly delay the project's online date. As a bilaterally negotiated contract coming online by 2013, the project can help PG&E attain its RPS targets on a risk-adjusted basis under the first compliance period of SB 2 (1X).

The Project will be located in Kern County, CA and will interconnect into the California Independent System Operator (CAISO) balancing authority area (BAA) at Southern California Edison's ("SCE") High Wind Susbstation, part of the Tehachapi Renewable Transmission Project. The North Sky project will deliver approximately 597 gigawatt-hours (GWh) per year of bundled RPS-eligible energy with a commercial operation date (COD) of December 31, 2012 for a term of 25 years. General Electric will provide the wind turbine technology for the Project.

PG&E requests that the Commission issue a resolution containing the following findings:

1. Approves the PPA in its entirety, including payments to be made by PG&E pursuant to the PPA, subject to the Commission's review of PG&E's administration of the PPA.
2. Finds that any procurement pursuant to the PPA is procurement from an eligible renewable energy resource for purposes of determining PG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.) ("RPS") Decision ("D.") 03-06-071 and D.06-10-050, or other applicable law.
3. Finds that all procurement and administrative costs, as provided by Public Utilities Code section 399.14(g), associated with the PPA shall be recovered in rates.
4. Adopts the following finding of fact and conclusion of law in support of CPUC Approval:
    a. The PPA is consistent with PG&E's 2009 RPS procurement plan.
    b. The terms of the PPA, including the price of delivered energy, are reasonable.
5. Adopts the following finding of fact and conclusion of law in support of cost recovery for the PPA:
    a. The utility's costs under the PPA shall be recovered through PG&E's Energy Resource Recovery Account.
    b. Any stranded costs that may arise from the PPA are subject to the provisions of D.04-12-048 that authorize recovery of stranded renewables procurement costs over the life of the contract. The implementation of the D.04-12-048 stranded cost recovery mechanism is addressed in D.08-09-012.
6. Adopts the following findings with respect to resource compliance with the Emissions Performance Standard ("EPS") adopted in R.06-04-009:
    a. The PPA is not covered procurement subject to the EPS because the generating facility has a forecast capacity factor of less than 60 percent and, therefore, is not baseload generation under paragraphs 1(a)(ii) and 3(2)(a) of the Adopted Interim EPS Rules.

Energy Division Evaluated the PPA on the Following Grounds:

- Consistency with Bilateral Contracting Rules
- Consistency with PG&E's 2009 and 2011 RPS Procurement Plans
- Consistency with RPS Standard Terms and Conditions (STCs)
- Consistency with PG&E's least-cost-best-fit (LCBF) requirements
- Cost Containment
- Price Reasonableness and Net Market Value
- Project Viability
- Portfolio Need
- Compliance with the Interim Greenhouse Gas Emissions Performance Standard
- Procurement Review Group (PRG) participation
- Independent Evaluator (IE) review
- Compliance with the Minimum Standard Conditions

Consistency with Bilateral Contracting Rules

PG&E and North Sky River Energy, LLC negotiated the North Sky PPA on a bilateral basis. PG&E entered into bilateral negotiations given the project's favorable price and terms. It also acknowledged that having North Sky bid the PPA into the 2011 RPS Solicitation could delay the COD and prevent the project from helping to close PG&E's net short during the first compliance period. Additionally, such a delay could result in the project being ineligible to receive the federal production tax credit, thus increasing the risk that the project would not get approved.

The Commission developed guidelines pursuant to which utilities may enter into bilateral RPS contracts. In D.03-06-071, the Commission authorized entry into bilateral RPS contracts provided that such contracts did not require Public Goods Charge funds and that they were "prudent." In D.06-10-019, the Commission established rules pursuant to which the IOUs could enter into bilateral RPS contracts. PG&E adhered to these bilateral contracting rules because the PPA is longer than one month in duration, the PPA was filed by advice letter, the above market costs will not be applied to PG&E's RPS cost limitation and the contracts are reasonably priced, as discussed in more detail below.

In D.09-06-050, the Commission determined that bilateral agreements should be reviewed according to the same processes and standards as projects that come through a solicitation. Accordingly, as described below, the North Sky PPA was compared to other RPS offers received in PG&E's 2011 RPS solicitation; the proposed agreement was reviewed by PG&E's Procurement Review Group; and an independent evaluator oversaw the project evaluation and PPA negotiation.

The North Sky PPA is consistent with the bilateral contracting guidelines established in D.06-10-019 and D.09-06-050.

Consistency with PG&E's 2009 and 2011 RPS procurement plans

California's RPS statute requires the Commission to direct each utility to prepare an annual RPS Procurement Plan (Plan) and then review and accept, modify, or reject the Plan prior to the commencement of a utility's annual RPS solicitation.[4] The Commission must then accept or reject proposed PPAs based on their consistency with the utility's approved Plan. During the time that this PPA was negotiated, PG&E was operating under its 2009 RPS Procurement Plan; this PPA conforms to that plan. Additionally, PG&E's stated preferences in its 2011 Plan include 1) projects that allow it to address both its near-term 20% mandate under the first compliance period and its longer-term 33% mandate under the third compliance period, and 2) projects with higher viability. The North Sky project can help PG&E meet its short-term compliance needs in 2011-13 and help it to attain its needs in the third compliance period beginning in 2017. Additionally, the North Sky project is highly viable given the extensive experience of its project developer and utilization of mature technology; secure control of the development site; on-schedule permitting approval; and, on-schedule progress on transmission upgrades.

The PPA is consistent with PG&E's 2009 and 2011 RPS Procurement Plans approved by D.09-06-018 and D.11-04-030.

Consistency with RPS Standard Terms and Conditions (STCs)

The Commission adopted a set of standard terms and conditions (STCs) required in RPS contracts, four of which are considered "non-modifiable." The STCs were compiled in D.08-04-009 and subsequently amended in D.08-08-028. More recently in D.10-03-021, as modified by D.11-01-025, the Commission further

[4] §399.14.

refined these STCs. The non-modifiable terms in the North Sky PPA conform exactly to the "non-modifiable" terms set forth in D.08-04-009, D.08-08-028, D.10-03-021, and D.11-01-025.

The terms in the North Sky PPA that correspond to the "modifiable" standard terms and conditions drafted in D.07-11-025 and D.08-04-009 have been slightly modified by the parties based upon mutual agreement reached during negotiations. For an overview of all terms of the PPA, refer to Confidential Appendix B.

The PPA includes the Commission-adopted RPS "non-modifiable" standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025.

Consistency with PG&E's Least-Cost Best-Fit (LCBF) Requirements

In D.04-07-029, the Commission directs the utilities to use certain criteria in their LCBF selection of renewable resources.[5] The decision offers guidance regarding the process by which the utility ranks bids in order to select or "shortlist" the bids with which it will commence negotiations. As described in its 2009 and 2011 RPS Procurement Plans, PG&E's LCBF bid evaluation includes a quantitative analysis and qualitative criteria. PG&E's quantitative analysis or market valuation includes evaluation of price, time of delivery factors, transmission costs, congestion costs, and resource adequacy. PG&E's qualitative analysis focuses on comparing similar bids across numerous factors, such as location, benefits to minority and low income areas, and resource diversity.

PG&E negotiated the North Sky PPA bilaterally and therefore it did not compete directly with other RPS projects. In AL 3885-E, PG&E explains that it evaluated the bilateral agreement using the same LCBF evaluation methodology it employs for evaluating bids from solicitations. Thus, PG&E used its LCBF methodology to evaluate the North Sky PPA. See the "Cost Reasonableness" section of this Resolution for a discussion of how the Project compares to PG&E's 2011 RPS solicitation. In addition, see Confidential Appendix A for PG&E's LCBF evaluation of the project.

[5] *See* §399.14(a)(2)(B)

The North Sky PPA was evaluated consistent with the LCBF methodology identified in PG&E's RPS Procurement Plan.

Cost Containment

At the time PG&E executed the North Sky PPA and submitted AL 3885-E, RPS cost containment was set out in §399.15(c) (SB 107) and based on a market price referent (MPR) to assess whether a proposed RPS contract has above-market costs. Energy Division staff evaluated the North Sky contract consistent with the Commission's rules in effect when AL 3885-E was submitted.[6]

Based on the North Sky project's commercial operation date, PG&E estimates that the price of the PPA is below the applicable 2009 Market Price Referent[7].

Price Reasonableness and Net Market Value

The North Sky project was negotiated as a bilateral contract in 2010 and executed in July 2011, concurrent to the 2011 RPS Solicitation. Therefore, the proper contracts against which the North Sky PPA should be measured are those contracts shortlisted by PG&E from its 2011 RPS Solicitation. The price and net market value of the PPA are reasonable and competitive. See Confidential Appendix A for a discussion on the price reasonableness and value of the North Sky PPA.

The Commission finds that the price and net market value of the North Sky PPA are reasonable and competitive with the contracts on PG&E's 2011 RPS Shortlist.

Project Viability

Having over twenty years of industry experience, NextEra Energy is the largest generator in North America of wind and solar power with approximately 115 facilities in operation claiming more than 18,850 MW of nameplate generating capacity. The Project will utilize 1.6 MW General Electric wind turbines that have demonstrated reliability in commercial operation worldwide.

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[6] SB 2 (1X) became effective on December 10, 2011. Pursuant to SB 2 (1X), the PUC is implementing a new cost containment framework in Rulemaking 11-05-005.

[7] *See* Resolution E-4298.

Additionally, the developer has acquired full site control with final permitting clearance expected by February 2012. Moreover, the project will interconnect within the CAISO BAA at Southern California Edison's High Winds Substation, which is already permitted by SCE under the Tehachapi Renewable Transmission Project. As a result, no incremental network upgrades are required for the North Sky project.

The North Sky project is highly viable given the developer's experience, the utilization of mature technology, and the fact that permitting and transmission are on target for the December 2012 COD. See Confidential Appendix A for a discussion on the viability of the North Sky project.

Portfolio Need

As a resource with commercial deliveries beginning in 2013, this project represents a moderately good fit with PG&E's renewable procurement needs on a risk-adjusted basis under SB 2 (1X). Future RPS compliance obligations are generally defined in SB 2 (1X) as follows: PG&E must procure RPS-eligible resources equivalent to an average of 20% of retail sales for 2011-2013; 25% of retail sales by the end of 2016; and 33% of retail sales by 2020 and for each year thereafter.

When adjusting its RPS portfolio to account for a certain amount of project failure, PG&E's primary need for new renewable generation falls in the second half of this decade during the third compliance period of SB 2 (1X). Additionally, PG&E also has a marginal immediate need in the first compliance period (2011-13) that is addressed by near-term deliveries from North Sky.

Projected generation from the North Sky project meets the need requirements of PG&E's RPS portfolio. See Confidential Appendix A for a discussion on PG&E's need requirements and portfolio fit.

Compliance with the Interim Greenhouse Gas Emissions Performance Standard (EPS)

California Public Utilities Code §§ 8340-41 require the Commission to consider emissions associated with new long-term (five years or greater) power contracts procured on behalf of California ratepayers.

D.07-01-039 adopted an interim EPS that establishes an emission rate for obligated facilities at levels no greater than the greenhouse gas (GHG) emissions of a combined-cycle gas turbine power plant. The EPS applies to all energy contracts for baseload generation that are at least five years in duration.[8] Generating facilities using certain renewable resources are deemed compliant with the EPS.[9]

The North Sky PPA meets the conditions for EPS compliance because it is for intermittent generation with a capacity factor less than 60 percent, whose generation will be delivered into California.[10]

<u>The proposed PPA meets the conditions for EPS compliance established in D.07-01-039 because the facility will produce electricity at a capacity factor of less than 60 percent and is therefore not a baseload power plant as defined in Public Utilities Code §8340(a).</u>

Procurement Review Group (PRG) Participation

The Procurement Review Group (PRG) process was initially established in D.02-08-071 as an advisory group to review and assess the details of the IOUs' overall procurement strategy, solicitations, specific proposed procurement contracts and other procurement processes prior to submitting filings to the Commission as an interim mechanism for procurement review.

Participants in the Procurement Review Group include representatives from the CPUC's Energy and Legal Divisions, the Division of Ratepayer Advocates, The Utility Reform Network, the Natural Resources Defense Council, California Utility Employees, the Union of Concerned Scientists, and the California Department of Water Resources.

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[8] "Baseload generation" is electricity generation at a power plant "designed and intended to provide electricity at an annualized plant capacity factor of at least 60%." § 8340(a).

[9] D.07-01-039, Attachment 7, p. 4.

[10] D.07-01-039, Attachment 7, p. 7.

PG&E first presented the North Sky PPA to its Procurement Review Group on October 8, 2010. Further discussions then took place during the March 8, 2011 and May 7, 2011 PRG Meetings.

Pursuant to D.02-08-071, PG&E's Procurement Review Group participated in the review of the North Sky contract, and PG&E has complied with the Commission's rules for involving the PRG.

Independent Evaluator (IE) Review

Lewis Hashimoto of Arroyo Seco Consulting ("Arroyo" or "IE") provided a Statement of Independent Evaluator for AL 3885-E. The IE conducted activities to review and assess PG&E's processes as the utility evaluated and negotiated the bilateral contract. The IE participated in the negotiation's material discussions and communications and fully evaluated the PPA. Arroyo's opinion is that negotiations were conducted fairly and resulted in a contract with reasonable terms and conditions that will provide high net valuation, a low contract price, moderate portfolio fit, and high project viability. The Independent Evaluator concluded, therefore, that the PPA merits Commission approval.

Consistent with D.06-05-039 and D.09-06-050, an Independent Evaluator oversaw PG&E's negotiations with North Sky River Energy, LLC and recommends the North Sky contract for approval by the Commission. See Confidential Appendix C for the Independent Evaluator's summary comments on AL 3885-E.

Compliance with the Minimum Standard Conditions

D.07-05-028 establishes a "minimum quantity" condition on the ability of utilities to count a contract of less than 10 years duration with an existing facility for compliance with the RPS program. In the calendar year that a short-term contract with an existing facility is executed, the utility must also enter into long-term contracts with new facilities equivalent to at least 0.25% of the utility's previous year's retail sales.

As a new facility, delivering pursuant to a contract greater than 10 years in length, the North Sky PPA will contribute to PG&E's minimum quantity requirement established in D.07-05-028.

CONFIDENTIAL INFORMATION

The Commission, in implementing Pub. Util. Code § 454.5(g), has determined in D.06-06-066, as modified by D.07-05-032, that certain material submitted to the Commission as confidential should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future RPS solicitations. D.06-06-066 adopted a time limit on the confidentiality of specific terms in RPS contracts. Such information, such as price, is confidential for three years from the date the contract states that energy deliveries begin, except contracts between IOUs and their affiliates, which are public.

The confidential appendices, marked "[REDACTED]" in the public copy of this resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.

RPS ELIGIBILITY AND CPUC APPROVAL

Pursuant to Pub. Util. Code § 399.13, the CEC certifies eligible renewable energy resources. Generation from a resource that is not CEC-certified cannot be used to meet RPS requirements. To ensure that only CEC-certified energy is procured under a Commission-approved RPS contract, the Commission has required standard and non-modifiable "eligibility" language in all RPS contracts. That language requires a seller to warrant that the project qualifies and is certified by the CEC as an "Eligible Renewable Energy Resource," that the project's output delivered to the buyer qualifies under the requirements of the California RPS, and that the seller uses commercially reasonable efforts to maintain eligibility should there be a change in law affecting eligibility.[11]

The Commission requires a standard and non-modifiable clause in all RPS contracts that requires "CPUC Approval" of a PPA to include an explicit finding that "any procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (*Public Utilities Code* §§ *399.11 et seq.*), Decision 03-06-071, or other applicable law."[12]

Notwithstanding this language, the Commission has no jurisdiction to determine whether a project is an eligible renewable energy resource, neither can the

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[11] *See, e.g.* D. 08-04-009 at Appendix A, STC 6, Eligibility.

[12] *See, e.g.* D. 08-04-009 at Appendix A, STC 1, CPUC Approval.

Commission determine, prior to final CEC certification of a project, that "any procurement" pursuant to a specific contract will be "procurement from an eligible renewable energy resource."

Therefore, while we include the required finding here, this finding has never been intended, and shall not be read now, to allow the generation from a non-RPS-eligible resource to count towards an RPS compliance obligation. Nor shall such finding absolve the seller of its obligation to obtain CEC certification, or the utility of its obligation to pursue remedies for breach of contract. Such contract enforcement activities shall be reviewed pursuant to the Commission's authority to review the utilities' administration of contracts.

COMMENTS

This is an uncontested matter in which the resolution grants the relief requested. Accordingly, pursuant to Public Utilities Code § 311(g)(2), the otherwise applicable 30-day period for public review and comment is being waived.

FINDINGS AND CONCLUSIONS

1. The North Sky PPA is consistent with the bilateral contracting guidelines established in D.06-10-019 and D.09-06-050.
2. The PPA is consistent with PG&E's 2009 and 2011 RPS Procurement Plans approved by D.09-06-018 and D.11-04-030.
3. The PPA includes the Commission-adopted RPS "non-modifiable" standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025.
4. The North Sky PPA was evaluated consistent with the LCBF methodology identified in PG&E's RPS Procurement Plan.
5. Based on the North Sky project's commercial operation date, PG&E estimates that the price of the PPA is below the applicable 2009 Market Price Referent.
6. The Commission finds that the price and net market value of the North Sky PPA are reasonable and competitive with the contracts on PG&E's 2011 RPS Shortlist.
7. The North Sky project is highly viable given the developer's experience, the utilization of mature technology, and the fact that permitting and transmission are on target for the December 2012 COD.

8. Projected generation from the North Sky project meets the need requirements of PG&E's RPS portfolio.
9. The proposed PPA meets the conditions for EPS compliance established in D.07-01-039 because the facility will produce electricity at a capacity factor of less than 60 percent and is therefore not a baseload power plant as defined in Public Utilities Code §8340(a).
10. Pursuant to D.02-08-071, PG&E's Procurement Review Group participated in the review of the North Sky contract, and PG&E has complied with the Commission's rules for involving the PRG.
11. Consistent with D.06-05-039 and D.09-06-050, an Independent Evaluator oversaw PG&E's negotiations with North Sky River Energy, LLC and recommends the North Sky contract for approval by the Commission.
12. As a new facility, delivering pursuant to a contract greater than 10 years in length, the North Sky PPA will contribute to PG&E's minimum quantity requirement established in D.07-05-028.
13. The confidential appendices, marked "[REDACTED]" in the public copy of this resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.
14. The North Sky power purchase agreement should be approved in its entirety.
15. AL 3885-E should be approved effective today without modification.

<u>THEREFORE IT IS ORDERED THAT:</u>

1. The power purchase agreement between Pacific Gas and Electric Company and North Sky River Energy, LLC proposed in Advice Letter 3885-E is approved without modification.

This resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on February 2, 2012; the following Commissioners voting favorably thereon:

Paul Clanon
Executive Director

Confidential Appendix A

Price Reasonableness, Value, RPS Portfolio Need and Project Viability

PRICE REASONABLENESS AND NET MARKET VALUE

The North Sky contract was executed in July 2011, concurrent to the 2011 RPS Solicitation, following one year of bilateral negotiations. Therefore, the proper contracts to which the North Sky contract should be compared are those that were selected by PG&E for its 2011 RPS Shortlist and that have near-term CODs in 2012 or 2013. The PPA also compares favorably against similar projects with higher viability.

Compared against these contracts, North Sky is competitively priced with an all-in flat contract price of $86.90/MWh that is not subject to TOD adjustments. The contract's net market value (NMV[13]) of -$9.70/MWh is among the first quartile of comparable contracts. The net market value is PG&E's internal calculation of the incremental cost of a renewable generation facility compared to a fossil generation facility.

See Table 1 below for a comparison of North Sky's flat rate contract price and net market value against comparable proposals selected by PG&E for its Shortlist.

Table 1 – North Sky PPA Compared to Proposals from PG&E's 2011 RPS Shortlist.

Comparison of North Sky to PG&E's 2011 RPS Short-List with 2012 and 2013 COD								
Project Overview					Project Size		Price ($/MWh)	
	Project Name	Technology	Location	Commercial Online Date (COD)	Capacity (MW)	Generation (GWh/yr)	post-TOD Adjusted	Net Mkt. Value (NMV)
1	RE Kansas	Solar PV	CA	12/31/2013	20	47.7	96.27	12.57
2	RE Grangeville	Solar PV	CA	12/31/2013	20	47.7	99.46	9.38
3	RE Adams East	Solar PV	CA	12/31/2013	19	44.4	102.47	5.85
4	WKN Wagner	Wind	CA	1/12/2012	6	21.5	63.72	-2.79
	North Sky	**Wind**	**CA**	**12/31/2012**	**163**	**597.0**	**86.90**	**-9.70**
5	Wild Rose	Geothermal	NV	12/31/2013	15	123.1	98.10	-14.49
6	Heber 1 Repower	Geothermal	CA	12/31/2012	45	375.9	98.79	-19.15
7	SPI Biomass	Biomass	CA	2/1/2012	58	399.7	95.09	-19.59
8	M-1 Geothermal	Geothermal	CA	12/31/2012	12	129.7	101.89	-24.22
9	Tres Vaqueros Wind	Wind	CA	12/31/2012	41	123.3	100.42	-30.81
10	Altamont Renewable	Landfill Gas	CA	1/1/2012	7	32.9	97.92	-31.45
11	Rio Bravo JASMIN	Biomass	CA	1/1/2012	35	264.3	113.20	-33.90
12	Tri Cities	Landfill Gas	CA	3/6/2013	5	30.9	95.14	-35.82
13	Rio Bravo POSO	Biomass	CA	1/1/2012	35	264.3	111.17	-35.86
14	Rio Bravo FRESNO	Biomass	CA	1/1/2012	25	183.5	113.20	-38.06
15	Rio Bravo ROCKLIN	Biomass	CA	1/1/2012	25	183.5	114.64	-40.02

RPS PORTFOLIO NEED

The following page provides a summary of 1) the forecast annual generation from 2011 to 2020 for the North Sky contract, 2) PG&E's forecast for RPS compliant renewable generation on a non-risk adjusted basis (Base Case Portfolio Need Scenario), and 3) PG&E's forecast for RPS compliant renewable generation

[13] PG&E's Net Market Value (NMV) calculation represents the cost differential per MWh of procuring electricity from a renewable resource compared to a combined cycle natural gas facility. The resulting value, if negative as here, indicates that the contract is more expensive than the state-mandated benchmark of a combined cycle gas facility.

on a risk-adjusted basis (High Need Portfolio Scenario). PG&E assumes a 40% failure rate for all facilities in its High Need Portfolio Scenario. Table 1 shows the forecast annual generation in Gigawatt-Hours (GWh) as well as the annual net long/short positions of the portfolio when benchmarked against the new compliance periods under SB 2 (1X).

Figure 1 depicts the annual net long/short position for both the base case and high need case portfolio scenarios. The vertical lines on the graph indicate the three compliance periods. This graphical illustration shows that PG&E has a minimal need, on a risk-adjusted basis, for new renewable generation through the first compliance period, that the utility is significantly over-procured for the second compliance period, and that its need increases dramatically during the third compliance period.

Compared against PG&E's risk-adjusted need, it becomes apparent that North Sky's most valuable contribution will come during the third compliance period when the utility faces a significant net short position. In the immediate term, however, the North Sky facility can help to offset PG&E's marginal net short position over the first compliance period (2011-13). As a result, the North Sky PPA only moderately fits PG&E's RPS Portfolio Need, primarily as a result of its projected deliveries during the second compliance period when the utility is significantly over-procured.

Figure 1. PG&E NET SHORT SUMMARY

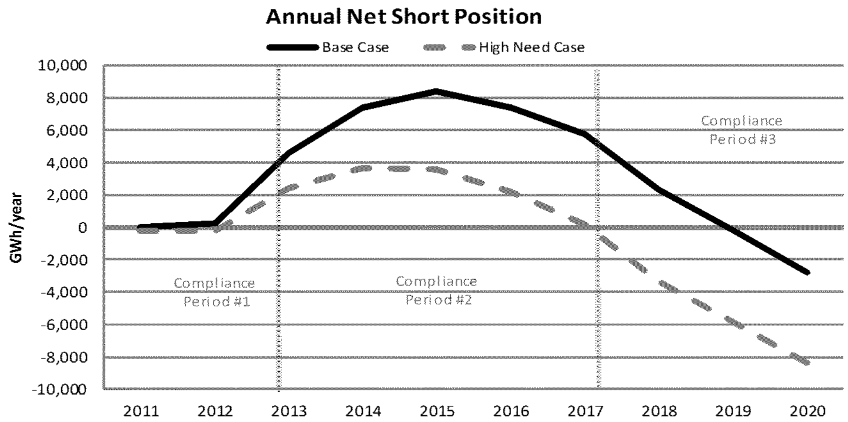

Table A. Summary Table: North Sky Energy Deliveries Compared to Long/Short Position (GWh/year)										
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
(1) Projected Energy Deliveries (GWh): North Sky PPA	0.0	0.0	597.0	597.0	597.0	597.0	597.0	597.0	597.0	597.0
(2) Long/Short Position (Base case)	31.6	259.9	4,588.6	7,360.9	8,399.8	7,352.8	5,719.3	2,324.9	-165.8	-2,780.3
(3) Long/Short Position (High Need)	-250.4	-224.3	2,439.3	3,629.9	3,568.4	2,176.3	186.4	-3,314.2	-5,790.9	-8,388.0

(1) Project Energy Delivery (GWh): North Sky River PPA

GWh	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Projected Annual Energy Deliveries	0.0	0.0	597.0	597.0	597.0	597.0	597.0	597.0	597.0	597.0

(2) Base Case Portfolio Need Scenario

Assumes 100% deliveries from executed contracts not yet on-line
APT based on the utility's most recent bundled sales forecast
APT assumes 20% goal through 2013, straight-line to 25% in 2016, and straight-line to 33% in 2020 and beyond
Includes all contracts executed through August 31, 2011.

GWh	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RPS-Eligible Energy Delivery	14,903.4	15,618.5	19,951.4	24,214.1	26,688.2	27,044.8	27,083.1	25,382.5	24,612.8	23,752.4
Long/Short Position	31.6	259.9	4,588.6	7,360.9	8,399.8	7,352.8	5,719.3	2,324.9	-165.8	-2,780.3

(3) High Need Portfolio Scenario

Assumes the IOU's forecased risk-adjusted (i.e. 60% project success) deliveries from executed contracts not-under construction
APT based on the utility's most recent bundled sales forecast
APT assumes 20% goal through 2013, straight-line to 25% in 2016, and straight-line to 33% in 2020 and beyond
Includes all contracts executed through August 31, 2011.

GWh	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RPS-Eligible Energy Delivery	14,621.4	15,134.3	17,802.1	20,483.1	21,856.8	21,868.3	21,550.1	19,743.4	18,987.7	18,144.7
Long/Short Position	-250.4	-224.3	2,439.3	3,629.9	3,568.4	2,176.3	186.4	-3,314.2	-5,790.9	-8,388.0

PROJECT VIABILITY

North Sky Project Milestones

The North Sky project is highly viable. The developer, NextEra Energy, is the largest generator of wind and solar power in North America with extensive development experience and the project will utilize proven wind turbine technology from General Electric.

PG&E executed its Large Generator Interconnection Agreement (LGIA) for the North Sky project on August 4, 2011. Commercial energy deliveries from the project will begin on December 31, 2012, however the full transmission upgrade is not expected until Q1 2015. As a result, delivery of Resource Adequacy (RA) is expected to be delayed beyond the COD. In the interim, the developer has agreed to provide full RA replacement value to PG&E from the COD until January 1, 2017. After that date, failure of North Sky to provide fully deliverable RA will result in damages capped at $32 million.

The project will interconnect at Southern California Edison's 230 kV High Winds Substation, already fully permitted by SCE as part of the Tehachapi Renewable Transmission Project. Deliveries will be received by PG&E at the CAISO designated PNode.

The developer, NextEra Energy, owns the site in fee simple (i.e., 100% site control) and will deploy one-hundred 1.6 MW General Electric wind turbines for a total site capacity of 160 MW[14]. Kern County unanimously approved the site's Conditional Use Permit (CUP) on September 13, 2011 and the developer will connect the facility to an existing 26-mile gen-tie on adjacent property that it currently leases for its existing Sky River Wind Farm. The developer does not anticipate an adverse impact for the North Sky project from ongoing public opposition to the Chino Hills transmission line (also part of the Tehachapi Renewable Transmission Plan), but it has requested a study from CAISO to confirm this.

[14] Note that the PPA allows for installation of two additional 1.6 MW turbines, bringing the site's total capacity to 163.2 MW.

The only milestone issues of significance still outstanding concern permitting status. Because the development site is located within the Bureau of Land Management's checkerboard, the developer is seeking right of way permitting and environmental impact reviews for grading existing roads for purposes related to construction and maintenance of the site. These permits are still outstanding but are expected without incident by February 2012.

Additionally, the developer is still awaiting outstanding incidental take and streambed alteration permits from the California Department of Fish & Game. The developer has a survey in hand that shows no rare or endangered plants exist on the development site and the developer expects the permits without incident by February 2012. The developer is also aware of the concern raised by the Independent Evaluator concerning recently released U.S. Fish and Wildlife Service draft guidelines regarding eagle take permits, but does not expect this to have an adverse impact on the project.

Confidential Appendix B

Contract Terms and Conditions

Term/Condition	North Sky River Contract
Type of Purchase (Renewable, renewable/conventional hybrid, etc.)	Renewable energy
Utility Ownership Option	No

Conditions Precedent and Date Triggers	• Agreement has been executed by both PG&E and North Sky • CPUC Approval, in the form of a final, non-appealable order, that finds that entry into the PPA is reasonable and payments are recoverable in rates Either party may terminate the Agreement without liability upon failure to obtain CPUC Approval within 240 days following the Advice Letter filing date. PG&E has requested that the Commission issue a final resolution approving the Agreement no later than mid-February 2012 so that final and non-appealable CPUC Approval will occur before April 1, 2012, which is 240 days from the Advice Letter filing date. Reference: Section 2.5
Average Actual Price ($/MWh)	Negotiated Contract Price: Levelized price: $86.90/megawatt-hour ("MWh") flat Expected price after applicable TOD factors: Not subject to TOD factor adjustment
Product Type	As-available
Key Contract Dates (initial startup deadline, commercial operation deadline, PTC deadlines, etc.)	Guaranteed Construction Start Date: May 7, 2012 Guaranteed Commercial Operation Date ("GCOD"): December 31, 2012
Firming/Shaping Requirements	Not applicable
Expected Payments	$151 million (Net Present Value ("NPV") calculation in AMF calculator) for the negotiated contract price. $513 million (calculation in nominal dollars from the AMF calculator) for the negotiated contract price.
Scheduling Coordinator	PG&E
Allocation of CAISO (or other control area) Charges	North Sky assumes all liability for CAISO Penalties caused by North Sky's actions. PG&E assumes all liability for CAISO Penalties caused by PG&E's actions. PG&E is responsible for costs assessed by the CAISO with respect to Scheduling and imbalances, with the exception of when the North Sky is subject to Forecasting Penalties. Reference: Section 4.5(c)
Allocation of Congestion Risk	Under the Market Redesign and Technology Upgrade ("MRTU"), congestion is a part of the nodal price at the delivery point. PG&E would be responsible for, or benefit from, differences in price between the delivery point and where PG&E ultimately uses the generation.

Project Development Security	The Total Project Development Security is $8 million. - $2.5 million posted within 5 Business Days following Execution Date of the Agreement. - Increased to $8 million posted within 30 days following the date on which all of the Conditions Precedent are satisfied or waived. Reference: Section 8.4(a)
Cure Periods / Daily Delay Damages	The cure periods for both for construction start and commercial operation are 120 days each. Daily Delay Damages are equal to 1/120th of Project Development Security, which is the same as the PG&E 2011 Standard Form. Reference: Section 3.9(c)(iv)(A) and Section 1.49
Seller-Required Performance	North Sky must deliver renewable energy according to the terms of the PPA, which includes Guaranteed Energy Production ("GEP"). GEP provisions are discussed below under "Energy Delivery Requirements." Reference: Section 3.1(e)(ii)
Seller Performance Assurances (calculation methodology, form of Performance Assurance and amount)	Delivery Term Security was negotiated to be $34 million. The security can be in the form of cash, letter of credit, or guarantee. 50% of the Delivery Term Security may be in the form of a corporate guarantee. Reference: Section 8.4(a)(iii)
Availability Guarantees	Not applicable
Energy Delivery Requirements	GEP - throughout the Term, North Sky must deliver 160% the Contract Quantity for each two year Performance Measurement Period. The GEP requirements in Appendix VII of the PPA reflect 160% of the average Contract Quantity in the two-year Performance Measurement Period. If North Sky fails to meet the GEP in any Performance Measurement Period, North Sky may cure the GEP Failure by delivering no less than 90% of the Contact Quantity of the following Contract Year. See "Utility's Termination Rights" and in this table for GEP Shortfall termination rights. Reference: Section 3.1(e)(ii) and Appendix VII

Liquidated Damages / Penalties for Failure to Perform	<u>Liquidated Damages</u>: The PG&E 2011 Standard Form with the following exception - Prior to Commercial Operation Date, drawing upon the Project Development Security is PG&E's sole and exclusive remedy for a breach of the Agreement by North Sky or termination due to development failure, except when a breach by North Sky is caused by the willful misconduct or gross negligence of North Sky. Reference: Section 8.4 <u>Damages for Failure to Perform</u>: GEP Damages: If North Sky fails to deliver sufficient Product to achieve the GEP Cure for a given Performance Measurement Period, North Sky must pay PG&E GEP Damages, calculated pursuant to the GEP Damages Calculation. Reference: Section 3.1(e)(ii) and Appendix VII

Force Majeure Provisions	Force Majeure Outage Notification: North Sky must provide notice to PG&E within 48 hours of the time at which the force majeure event first prevents or delays the performance of the Project. Reference: Section 3.7(e) Force Majeure Termination Rights in relation to Guaranteed Project Milestones: In the case of force majeure that prevents North Sky from achieving Construction Start or Commercial Operation, North Sky must provide a certification from an independent third party engineer within 90 days of the event stating that the Project is capable of being repaired within 24 months. PG&E has the right, but not the obligation, to terminate the PPA if North Sky does not provide the certification or does not achieve Construction Start or Commercial Operation by either Guaranteed Milestone. Reference: Section 11.2(a)(ii) Force Majeure Termination Rights after COD: North Sky has the right, but not the obligation, to terminate the PPA if after commercial operation the Project fails due to an event of force majeure to produce at least 40% of Contract Quantity for 12 consecutive months (subject to an additional 6 month cure period). Reference: Section 11.2(a)(i) Force Majeure Termination Right of First Offer ("ROFO"): If PG&E exercises termination right in connection with such prolonged event of force majeure project failure, PG&E has a ROFO for 3 years from the effective date of the contract termination. North Sky must offer to sell the Product from the Project at the same terms and conditions, including price, unless there is a required change that is a direct result of the force majeure event. Reference: Section 11.2(b)
No Fault Termination	Either party may terminate based on failure to meet Conditions Precedent. Reference: Section 2.5
Seller's Termination Rights	Not applicable

Utility's Termination Rights	PG&E has the right to terminate upon an event of default by North Sky. These events include: ▪ North Sky delivers or attempts to deliver Energy that is not generated by the Project. ▪ Failure by North Sky to meet the GCSD or GCOD, after the applicable cure period has expired. ▪ Failure by North Sky to satisfy creditworthiness/collateral requirements if not remedied within 5 days. ▪ Failure by North Sky to cure GEP Failure and has failed to pay GEP damages within the time period required. ▪ Failure by North Sky to achieve Full Deliverability Status Finding at the GCOD, unless North Sky posts additional collateral Reference: Section 5.1 and Section 3.3(e)(i)
Interim Sales of Energy	In the event that the Project achieves Commercial Operation prior to CPUC Approval (the "Interim Period"), North Sky will sell the Product from the Project to PG&E Prior to CPUC Approval and PG&E will only purchase the Energy from the Project at the market price, which is the Integrated Forward Market (Day Ahead) hourly price, as published by the CAISO, for the Existing Zone Generation Trading Hub for the Project's PNode. During the Interim Period, North Sky shall invoice PG&E, and PG&E shall make payment to North Sky. During the Interim Period, North Sky shall use reasonable efforts to ensure that WREGIS Certificates associated with Renewable Energy Credits corresponding to all Energy purchased during the Interim Period are issued and tracked for purposes of satisfying the requirements of the RPS requirements and transferred to PG&E upon satisfaction of the outstanding conditions precedent and the commencement of the Delivery Term. Upon receipt of such WREGIS Certificates and a corresponding invoice from North Sky, PG&E will pay North Sky an amount equal to the positive difference between the market price and the Contract Price ($86.90) for each MWh of Product received by PG&E during the Interim Period.
Right of First Refusal or Rights of First Offer	<u>Force Majeure Termination Right of First Offer ("ROFO")</u>: See "Force Majeure" provisions in this table for more details on Force Majeure Termination Rights. Reference: Section 11.2(b)

Resource Adequacy / Reliability Obligations	Resource Adequacy: During the Delivery Term, North Sky assigns and otherwise commits to PG&E all of the Project's Contract Capacity, including Capacity Attributes, from the Project for PG&E to apply towards meeting its Resource Adequacy or successor program requirements. North Sky has full deliverability obligations. Reference: Section 3.3(a), and Appendix X) Availability Standards and Replacement Capacity Rules:_ North Sky shall be responsible for all costs, charges, expenses, penalties, and obligations resulting from Availability Standards, if applicable, and North Sky shall be entitled to retain all credits, payments, and revenues, if any, resulting from North Sky achieving or exceeding Availability Standards, if applicable. Reference: Section 3.3(b) North Sky shall be responsible for all costs, charges, expenses, penalties, and obligations resulting from the Replacement Capacity Rules. However, if the costs, resulting from the Replacement Capacity Rules arise due to a planned outage and North Sky has given PG&E notice of such planned outage at least 90 days before the first day of the month for which the planned outage will occur, then PG&E shall be responsible for such costs, charges, expenses, penalties, and obligations resulting from the Replacement Capacity Rules. Reference: Section 3.3(c) North Sky shall pay damages for any Resource Adequacy shortfall from 1/1/2017 and the end of the Delivery Term, up to amount of $32 million. Reference: Section 3.3(e)

Buyer Curtailment	A Buyer Curtailment is the instruction from PG&E to North Sky for North Sky to reduce generation from the Project by the amount and for the period of time set forth in such order, when absent instruction from the CAISO or the Participating Transmission Owner ("PTO") in any form (whether such CAISO or PTO instruction was issued Day-Ahead or Real-Time and whether such CAISO or PTO instruction was issued to PG&E, PG&E's SC or directly to North Sky) to effectuate a reduction in Energy production from the Project for the same period of time. Reference: Section 1.16 PG&E has the right to declare a Buyer Curtailment Order for 250 hours of Contract Quantity per Contract Year. North Sky will be paid Contract Price for all energy that would have been generated during a Buyer Curtailment Period. Reference: Section 3.1(o)
Compliance Cost Cap	North Sky assumes all risk with respect to a change in law risk after the execution date with respect to WREGIS Operating Rules or any applicable WREGIS fees, Greenhouse Gas Emission Reporting, Green Attributes, and Resource Adequacy (excluding Availability Standard and Replacement Capacity). North Sky is required to bear all compliance costs over the delivery term. With regard to the Project's Eligible Renewable Energy Resource ("ERR") certification, to the extent a change in law occurs after execution of the PPA, North Sky shall be deemed to have made commercially reasonable efforts to comply with such change in law if North Sky takes all actions to comply with or implement any change or improvement to the Project to maintain such certification or qualification, which would require Seller to incur, in the aggregate, costs up to $1,000,000 over the term of the PPA.
Adjustment to Contract Capacity (Triggering Event)	The Project is expected to have a 163 MW nameplate capacity, but may be reduced by up to 8 MW if North Sky is unable to secure permits for the entire Project. If the permits are not granted in full, the contract capacity could be as low as 155 MW, and the associated total expected output from the project will be reduced from 597 GWh to 568 GWh. North Sky must notify the PG&E by May 7, 2012 (the guaranteed construction start date) if such permits were not granted and this option is exercised. Reference: Section 1.225

Adjustment to Contract Quantity (Intervention)	If a governmental action results in the Project's permit being suspended or terminated, and as consequence the Project must reduce or cease operations in order to abide its permitting conditions, then North Sky will be excused from meeting its minimum performance requirements (or Guaranteed Energy Production) for the applicable performance measurement period. Reference: Section 1.125
Test Period Payments	As of the first day of the Test Period and including the date on which PG&E receives PIRP notice from North Sky, North Sky will be paid 90% of Contract Price for Delivered Energy. Reference: Section 4.6
Network Upgrade Cost Provision	Not Applicable
Minimum Contract Capacity	The minimum contract capacity is 163 MW. See Adjustment to Contract Capacity above.

Confidential Appendix C

Independent Evaluator Report's Conclusion

CONCLUSIONS

The 2009 template for IEs provided by the Energy Division calls for a narrative of the merits of the proposed project on the categories of contract price, portfolio fit, and project viability. More specific details are provided in the confidential appendix to [the Statement of Independent Evaluator].

Contract Price and Market Valuation

Arroyo has compared the net value of the proposed North Sky River contract to peer groups of currently or recently available alternative, competing sources of renewable energy, using both PG&E's LCBF methodology and the simpler but independent IE model. Based on those comparisons, Arroyo opines that the market value of the NSR PPA is high and the contract price is low.

The contract price of the North Sky River PPA is less than the approved 2009 Market Price Referent for renewable energy contracts of 25-year term that begin deliveries in 2013. The confidential appendix to [the Statement of Independent Evaluator] provides a more detailed discussion of the pricing of the PPA and the basis for Arroyo's opinion that the net value of the contract ranks high among competing alternatives.

Portfolio Fit

Arroyo ranks the North Sky River contract's fit with PG&E's supply portfolio needs as moderate. The generation profile provided by NextEra for the facility correlates well on a time-of-day basis with PG&E's portfolio needs in some seasons but not in others; it has a weak correlation on a seasonal basis with the utility's needs. As an intermittent wind resource, the facility has relatively poor day-ahead predictability of output.

Project Viability

In Arroyo's opinion, the project viability of the North Sky River wind facility is high. The developer has achieved site control of most of the land required for the facility. The CAISO has completed a Phase II interconnection study for the project. NextEra has substantial experience developing, building, financing, and operating large wind generating facilities in the U.S. The project still faces the potential for impediments to permitting; it is unclear to Arroyo how the recently released U.S. Fish and Wildlife Service draft guidelines regarding programmatic eagle take permits could affect this project.

Arroyo independently scored the North Sky River facility using the Energy Division's final Project Viability Calculator, and observed that the score ranked high compared to competing alternatives.

RPS Goals

Delivery of power under the North Sky River PPA would advance PG&E towards its short-term RPS goals for renewable energy delivery, as well as towards longer-term goal [*sic*]. The contract would not advance the state towards the goal stated in Executive Order S-06-06 of providing at least 20% of the state's renewable power needs from biomass-based generation.

Arroyo concurs with PG&E management that the North Sky River contract merits CPUC approval. In Arroyo's opinion the contract offers high net value, low contract price, and high project viability. It would contribute to PG&E's efforts to meet its RPS Goals in both near-term and later compliance periods. Arroyo has scored the project as moderate with respect to portfolio fit. Arroyo believes that, on balance, the contract was negotiated in a manner fair to ratepayers.