

# **Combined Heat and Power Program Settlement**

**October 7, 2010**

# QF Summit

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- Initiated in May 2009
- Goal: to resolve existing disputes and future issues associated with Combined Heat and Power (CHP) QFs
- Parties:
  - QF/CHP trade groups: CAC, EPUC, CCC, IEP
  - Consumer advocates: DRA, TURN
  - Investor-owned utilities (IOUs): PG&E, SCE, SDG&E
- Negotiations lasted 16 months
- Settlement anticipated to be filed at CPUC for adoption this year.

# Settlement Overview

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- Resolution of pending litigated issues before the CPUC and Courts;
- Design and development of a new State CHP Program; and
- For QFs greater than 20 MW, transition from a PURPA-authorized program to a new State CHP Program that includes competitive solicitations.

# **New State CHP Program Goals and Objectives**

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Section 1 of the Term Sheet establishes the goals and objectives of the new State CHP Program:

- CHP Facility Owner Benefits;
- Societal Benefits;
- Retail Customer Benefits;
- GHG Emissions Reduction Benefits; and
- Regulatory Certainty.

# Results of CHP Settlement

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- **CHP procurement program through 2020**
  - MW targets
  - GHG reduction targets
- **Establishes new energy pricing for QFs**
  - Transitions Short Run Avoided Cost Energy Pricing to a market-based formula by 2015
- **New form contracts**
  - CHP RFO form contract
  - Transition contract
  - PURPA contract for 20 MW or smaller
  - As-available contract
  - Legacy energy pricing amendment
- **Parties support utilities' FERC PURPA 210 (m) application**
- **Settlement of pending CPUC cases and court litigation**

# CHP Procurement Program: MW Targets

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- **3000 MW of CHP contracts resulting from CHP Program Procurement Processes**
- **Initial Program Period (2,949 MW over 4 yrs after Settlement Effective Date)**
  - SCE: 1,402 MW
  - PG&E: 1,387 MW
  - SDG&E: 160 MW
- **Second Program Period (end of Initial Program Period-2020):**
  - SDG&E: additional 51 MW
  - All IOUs: any shortfall from the Initial Program Period Targets
  - Any additional amounts established in the long-term procurement plan (LTPP) proceeding at CPUC

# CHP Procurement Program: GHG Reduction Targets

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- Target is 6.7 million metric tons (MMT) of GHG annual reductions from CHP statewide, by 2020, subject to review and modification
- Targets are based on:
  - ARB's AB 32 Scoping Plan
  - Maintenance of the GHG reductions from Existing CHP facilities
  - Individual LSE targets based on percent of statewide retail sales
  - Program allocates GHG reduction targets to ESPs and CCAs
- GHG Reduction Accounting
  - The Settlement includes accounting mechanisms based on: avoided GHG emissions assumptions, facility efficiency, must-take status, new or existing capacity, repowering, conversion to prescheduled, and shut-downs with or without continuation of thermal application

## Non IOU Load Serving Entity GHG Targets

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- IOUs, ESPs and CCAs have GHG Targets allocated on proportional share of retail sales.
- Targets will be adjusted over Settlement term as CEC publishes data on
  - Departing or returning load and will be based on updated CEC data
  - Shift in proportional share of retail sales
- Mechanisms to meet target discussed below.



# Cost Allocation and Departing Load Charges

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- Settlement conditioned on CPUC Decision providing:
  - Recovery of relevant costs of this CHP Program through Non-Bypassable Charges; and
  - Cost recovery for the full term of the CHP PPA (up to 12 years)
- CPUC can choose between:
  - **Plan A:** ESPs and CCAs procure CHP for their customers going forward and IOUs recover any above market costs of existing CHP PPAs on a vintaged basis from future direct access (DA), CCA and all Departing Load customers, except CHP Departing Load Customers
  - **Plan B:** IOUs purchase CHP generation for all customers and recover the net costs after accounting for the energy and AS value of CHP generation from all bundled, DA, CCA and all Departing Load Customers, except CHP Departing Load customers, on a non-vintaged basis

# Procurement Options under CHP Program

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**CHP MW and GHG Targets can be met through:**

- **RFOs**
  - CHP RFOs conducted by IOUs during Settlement Term
  - Participation by Independent Evaluator, Procurement Review Group, and evaluation by CHP Auditor, where applicable.
- **Optional As-Available PPAs**
- **PPAs for QFs 20 MW or less**
- **AB 1613 PPAs**
- **Bilaterally negotiated PPAs and amendments**
- **IOU-owned CHP for GHG targets, capped at 10% of GHG targets**
- **Utility Prescheduled Facilities**
- **New behind the meter CHP facilities**

# Energy Short-run Avoided Cost (SRAC)

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- SRAC heat rates transition to market-based heat rates

<u>YEAR</u>	<u>Heat Rate (Btu/kWh)</u>
2011	8,700
2012	8,225
2013 and 2014	8,125
2015 and beyond	Market Heat Rate

- SRAC Energy Price:

$$\text{Energy Price } \$/\text{kWh} = ((\text{Applicable HR} * \text{BTGP}/1,000,000) + \text{VOM}) * \text{TOU} + \text{LA} + \text{GHG Charges}$$

Applicable Heat Rate (HR) = The Heat Rate for the specified period in the table above.

Market Heat Rate = Determined under the current MIF methodology using 12 month forward prices.

- Additional energy pricing options for Legacy Contracts [See Appendix]

# Energy Price During the Floor Test

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If there is a cap-and-trade program in California for the regulation of GHG, then, during the Floor Test Term (3 years), the SRAC energy price will be the higher of the two formulas provided below:

1. Energy Price \$/kWh = ((Market Heat Rate \* BTGP/1,000,000) + VOM) \* TOU + LA

Market Heat Rate = Determined under the current MIF methodology using 12 month forward prices.

2. Energy Price \$/kWh =

((Applicable Heat Rate \* (BTGP + GHG Allowance Price) /1,000,000) + VOM) \* TOU + LA + GHG Charges

Applicable Heat Rate = (A) 8,225 Btu/kWh through December 31, 2012, (B) 8,125 Btu/kWh from January 1, 2013 through December 31, 2014; and (C) Actual HR from January 1, 2015 until the end of the Floor Test Term.

Actual Heat Rate = The average daily heat rate of the two year period immediately preceding the commencement of the First Compliance Period.

# New Form Contracts

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- **CHP RFO *Pro Forma* Contract**
- **Transition Contract**
- **QF PURPA Contract for facilities equal to or under 20 MW**
- **Optional As-available Contract**
- **Amendment to existing Legacy Contracts**

# CHP RFO *Pro Forma* Contract

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- For CHP QFs greater than 5 MW, structured for baseload CHP product
- Term: Up to 7 years for existing or expanded capacity; Up to 12 years for new or repowered capacity; expanded facilities electing to satisfy credit/ collateral terms may also get a 12 year contract
- Pricing: according to offer prices agreed to by the parties
- Project Development Security:
  - \$20/kW, 30 days after Effective Date of contract
  - \$60/kW, 18 months after Effective Date of contract
- Performance Assurance for new or repowered facilities
  - 12 months capacity payments; 5% of revenues
- Curtailment for system emergencies or limited economic conditions

# Transition Contract

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- Provides a bridge for CHP QFs with expired or expiring contracts to PPA options under the CHP Program or exit from IOU QF PPAs
- Term: Up to July 1, 2015
- Eligibility: CHP currently selling to IOU under QF PPA
- Capacity pricing pursuant to D. 07-09-040
  - Firm Capacity at \$91.97 / kW-yr
  - As-Available Capacity of \$41.22 / kW-yr escalating each year
- Pricing for SRAC Energy according to values and formulas in Settlement
- Updated scheduling provisions, CAISO metering

## PURPA Contract for Under 20 MW

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- Must take purchase obligation will continue for QFs 20 MW and under
- Term: Up to 7 years for existing capacity, Up to 12 years for new capacity
- Capacity pricing pursuant to D. 07-09-040
  - Firm Capacity at \$91.97 / kW-yr
  - As-Available Capacity of \$41.22 / kW-yr escalating each year
- SRAC Energy Pricing
- Project Development Security, Performance Assurance for New/ Repowered facilities



# Optional As-Available Contract

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- Intended for CHP that export less than 131400 MWh in an IOU's service territory each year.
- IOUs may but are not required to sign additional PPAs after reaching average MW delivery cap
  - SCE: 75 average MW
  - PG&E: 75 average MW
  - SDG&E: 10 average MW
- Term: up to 7 years, Seller's election
- Energy pricing for scheduled energy: SRAC for up to 20 MW in any hour; Day Ahead Pnode price for amounts greater than 20 MW
- Real Time Pnode price for unscheduled energy
- As-Available Capacity of \$41.22/ kW-yr escalating annually

## Termination of PURPA Purchase Obligation

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- Upon CPUC approval of the Settlement, the IOUs will file an application at FERC to terminate the PURPA purchase requirement under Section 210 (m) (1) (c) of the Energy Policy Act of 2005 for QFs that are larger than 20 MW
- The application will be based upon the following: (a) the MRTU day-ahead market; (b) RA Capacity market; (c) Renewable Portfolio Standard Program; and (d) CHP Program
- Settlement Parties may file comments on, but may not oppose the IOUs' application
- FERC approval of IOUs' application is a condition precedent to effectiveness of settlement agreement.

## Resolution of Certain Pending Claims

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QF-related claims at CPUC and Court of Appeals are withdrawn or closed:

- Retroactive Adjustment of SRAC Prices: the IOUs will withdraw with prejudice all SRAC retroactive price adjustment claims and challenges and will not raise new claims
- QFs over 20 MW will not have the right to new 5 year and 10 year PPAs ordered in D. 07-09-040
- CCC motion for an order on prospective QF program PPA options adopted in D. 07-09-040
- All retroactive claims for energy and capacity adjustments by any party
- Petition for Writ of Review of D. 07-09-040 and D. 08-07-048 at California Court of Appeals (Case B210398) and all related cross claims

## **Resolution of Certain Pending Claims (cont'd)**

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QF-related claims at CPUC and Court of Appeals are withdrawn or closed:

- All applications for rehearing of D. 09-04-032
- The CPUC shall close with prejudice its reconsideration of the Administrative Heat Rates as ordered in D. 08-11-062
- Petition for Modification of D. 07-09-040 regarding CHP Facilities on Transitional SO1 agreements or extensions
- IOUs will withdraw Advice Letters PG&E 3197-E, SDG&E 1958-E, and SCE 2200-E to implement new QF PPAs pursuant to D. 07-09-040
- IOUs will withdraw Petition for Modification of D. 07-12-052 regarding QF purchase requirements

## **Schedule and Process**

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- **Submittal of Settlement to CPUC October 2010**
- **Settlement Effective Date as of:**
  - CPUC approves Settlement
  - FERC approves IOUs' application to terminate the PURPA put obligation for > 20 MW Qualifying Facilities
- **First CHP RFOs to be issued within 90 days of Settlement Effective Date**

## APPENDIX: Additional Options for Legacy Contracts

Pricing Option Terms	A (SRAC)	B	C2	C3	C1
	<b>This is the default energy price for existing QFs and would be based on market price indices beginning 2015</b>	<b>Fixed heat rate transitioning to market-based heat rate; Seller assumes all GHG risk</b>	<b>Discount to Option B Heat Rate; GHG costs based on a fixed emissions rate for energy delivered and an allowance price capped at \$20 per tonne</b>	<b>Discount to Option B Heat Rate; GHG costs based on facility specific emissions, capped at Base Year emissions, and an allowance price capped at \$12.50 per tonne.</b>	<b>Negotiated conversion to Utility Prescheduled facility</b>
<b>2011 Heat Rate</b>	<b>8,700</b>	<b>8,700</b>	<b>~8,435</b>	<b>~8,435</b>	
<b>2012 Heat Rate</b>	<b>8,225</b>	<b>8,600</b>	<b>~8,335</b>	<b>~8,335</b>	
<b>2013 Heat Rate</b>	<b>8,125</b>	<b>8,500</b>	<b>~8,135</b>	<b>~8,135</b>	
<b>2014 Heat Rate</b>	<b>8,125</b>	<b>8,500</b>	<b>~8,135</b>	<b>~8,135</b>	
<b>2015 - Term Heat Rate</b>	<b>Market Heat Rate (MHR) proxy</b>	<b>MHR proxy</b>	<b>MHR proxy</b>	<b>MHR proxy</b>	
<b>GHG</b>	<b>- GHG Charges - Floor Test</b>	<b>N/A</b>	<b>Energy at 8000 Btu/ KWh</b>	<b>Facility Specific, up to the cap</b>	
<b>Allowance Valuation</b>	<b>Most recent Allowance Auction Price</b>	<b>N/A</b>	<b>Lower of (i) \$20 per MT GHG, and (ii) Estimated Allowance Cost.</b>	<b>Lower of (i) \$12.5 per MT GHG, and (ii) Estimated Allowance Cost.</b>	