

**Comment 1 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: John

Last Name: Onderdonk

Email Address: john.onderdonk@caltech.edu

Affiliation: Caltech

Subject: Caltech Comments Regarding 05/01/2013 Workshop

Comment:

Please see the attached comment.

Attachment: [www.arb.ca.gov/lists/com-attach/2-may1-unilegbutfor-ws-AGMFYgRpUXYDYAhr.pdf](http://www.arb.ca.gov/lists/com-attach/2-may1-unilegbutfor-ws-AGMFYgRpUXYDYAhr.pdf)

Original File Name: Caltech Comments\_CARB Workshop 05.01.13.pdf

Date and Time Comment Was Submitted: 2013-05-13 13:48:55

No Duplicates.

## **Comment 2 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Nicholas  
Last Name: Balistreri  
Email Address: nick.balistreri@ucop.edu  
Affiliation: University of California

Subject: Re: Public Meeting for Universities, LC, and 'But For' under Cap and Trade  
Comment:

The University of California (UC) support s the California Air Resources Board's (CARB) staff proposal to provide transition assistance through the allocate allowances to universities. If adopted in its current form the regulatory amendments will relieve UC approximately \$8 million per year in cap and trade fees and allow it to continue to invest in greenhouse gas reducing projects across its campuses.

Under the proposal, universities would receive an allocation based on the average emissions during 2008-2010 from each of its facilities regulated under the cap and trade program. The allocation would then be reduced each year, keeping in line with the same allowance reduction in the overall cap and trade program. UC believes this is a fair and equitable solution to the directive given to CARB staff by its board (Resolution 12-33, September 20, 2012).

Nevertheless, UC is concerned about clarity regarding incorporating the future growth of its facilities that are not currently obligated under the cap and trade program. Several of its campuses are under the 25,000 mtCO<sub>2</sub>e threshold, but expect to surpass it as they fulfill their educational and research mandates. During the workshop CARB staff also expressed these concerns and proposed having the other facilities opt-in so that they would be eligible to receive an allocation. UC supports this solution, but requests the regulations state a defined period of time after adopting the new regulations that the campuses can decide to opt-in, or not, to the cap and trade program to receive the allocation for transition assistance. The additional language will assure UC will not have to opt-in facilities prior the regulations receiving final Board approval.

UC welcomes the allocation methodology proposed by CARB staff. UC believes the transition assistance will aid in its ability to continue to reduce its greenhouse gas emissions to the benefit of California and it looks forward to continue working with CARB staff on the final proposed regulatory language.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2013-05-16 16:07:49

No Duplicates.

## **Comment 3 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Gail

Last Name: Welch

Email Address: gwelch@qualcomm.com

Affiliation: Qualcomm Inc

Subject: Comments from Workshop on "But For" CHP

Comment:

Qualcomm's Comments to CARB Proposed Adjustments to the Cap-and-Trade Program's Treatment of "But For" CHP -May 1, 2013  
CARB Workshop, Byron Sher Auditorium, Sacramento, CA

Qualcomm thanks the California Air Resources Board (CARB) for this opportunity to comment on its Proposed Adjustments to the Cap-and-Trade Program's Treatment of "But For" CHP. Qualcomm has a strong track record in energy efficiency and has helped the state meet its clean energy goals as an early adopter of Combined Heat and Power (CHP) since 1995. Our CHP processes utilize natural gas, which in turn generates electricity for our on-site usage and also generates waste heat which is further processed through our absorption chillers to provide industrial cooling water (for air conditioning of our labs, offices and data centers), as well as domestic hot water. We have taken early action in purchasing 20 percent renewable power for our San Diego facilities under the State's Renewable Portfolio Standard (RPS) program, well ahead of our local utility company's timeline for meeting those renewable objectives. QUALCOMM seeks to be treated on a level playing field with other entities who have received allowances and transitional assistance to help the state meet its cap-and-trade implementation goals. Below are Qualcomm's comments on the CARB Proposed Adjustments to the Cap-and-Trade Program's Treatment of "But For" CHP.

1) Application to CARB to be classified as a "But For" Facility. Qualcomm already reports the data that CARB requires in the CAL E-GGRT Reporting Tool, namely fuel usage, useful thermal output and electricity production. Therefore, CARB already has the relevant information to determine that our company meets the requirements of a "But For" facility. Additionally, this information has already been verified by an independent, third party, CARB-approved verifier. Requiring the "But For" facility to go through a separate process to submit the same data only prolongs the process and is unnecessary, particularly given the limited number of entities that would qualify under "But For" CHP. Furthermore, having the company apply for an exemption pushes the date for Qualcomm's exemption past October, when the Board will adopt the regulations.

2) Useful Thermal Output terminology (versus steam). The use of the term "steam" throughout CARB's proposal needs to be replaced with "useful thermal output." In addition to generating electricity, Qualcomm's CHP systems also generate waste heat, which is not steam. The appropriate wording to describe this heat generated would be "useful thermal output," as identified by the Federal Energy Regulatory Commission (FERC) mandated annual report that CHP facilities submit to their utility company (attached). Additionally, the metric that CARB is using for their proposed methodology for the "But For" Exemption addresses only steam emissions (i.e.  $0.06244 \times \text{MMBtu steam output}$ ). This needs to be amended to reflect all useful thermal output MMBtu (including waste heat, which applies to Qualcomm).

3) Need to ensure there is no double dipping. Because Qualcomm both generates a significant portion of its electricity and purchases a significant portion of its electricity, we receive invoices from both the utility (for the transportation and distribution of the commodity) and from our third party providers (for the natural gas commodity and the electricity commodity). The process of paying for implementation costs of cap and trade and the allowance costs that are passed through to users like Qualcomm must ensure that there is transparency in identifying exactly who is responsible for obtaining the allowances and how that allowance cost is passed through. There should be no double dipping of costs.

Likewise, the awarded allowances to the utilities should clearly identify how those benefits are passed through to all users. If it is in the commodity cost (instead of the transportation and distribution cost component), then those who purchase the commodity from a third party provider receive no benefit, while others who purchase the commodity from the utility company would receive the benefit. CARB should seek to create an equal playing field in this regard.

4) 2nd Compliance period transition assistance is needed. "But For" CHP users need to be on a level playing field with other entities that have received allowances beyond 2015; otherwise we will be paying more per kilowatt hour to generate electricity than we would if we were to buy the same electricity from the grid. The utilities have received allowances for 2015 and beyond for their electricity generation, which helps reduce their cost of generating that kilowatt hour. Without transition assistance beyond 2015, "But For" CHP entities are at a disadvantage for the cost of producing a kilowatt hour of electricity. It does not make sense for big electricity generation entities to get transitional assistance while the smaller generation facilities who have been early adopters of energy efficiency and renewable energy, and helped the State meet its energy goals, receive none.

5) Early action recognition is missing. Qualcomm not only generates its own electricity but purchases a significant portion of its electricity commodity requirements as well. For many years, Qualcomm has obtained its purchased electricity commodity from a third party provider under the State's "Direct Access" program. From the start, Qualcomm has complied with the State's RPS requirements, and we took early action to meet the RPS requirement of 20 percent Renewable Energy by January 1, 2010 - meeting it long before our utility company was able to. As a result, we have been paying more for each kilowatt hour of our electricity. Qualcomm's early action in being proactive on CHP and in helping the State meet its RPS requirements has not been recognized, while others who simply purchased offsets while continuing to emit higher levels of greenhouse gases are getting an early action benefit. Again, this penalizes Qualcomm's early efforts to help the state meet its energy objectives.

End of Comments - See attached Utility "FERC" form.

Attachment: [www.arb.ca.gov/lists/com-attach/5-may1-unilegbutfor-ws-AGJSOFw8VWgGalcl.pdf](http://www.arb.ca.gov/lists/com-attach/5-may1-unilegbutfor-ws-AGJSOFw8VWgGalcl.pdf)

Original File Name: Blank FERC.pdf

Date and Time Comment Was Submitted: 2013-05-20 09:27:03

No Duplicates.



**Comment 4 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: David  
Last Name: Huard  
Email Address: dhuard@manatt.com  
Affiliation: Panoche Energy Center

Subject: PEC Comments on May 1st Staff Proposals  
Comment:

Please see the attached comment letter.

Attachment: [www.arb.ca.gov/lists/com-attach/8-may1-unilegbutfor-ws-AHACYQZkVFgLbghn.pdf](http://www.arb.ca.gov/lists/com-attach/8-may1-unilegbutfor-ws-AHACYQZkVFgLbghn.pdf)

Original File Name: PEC Comments to May 1, 2013 ARB Staff Proposal-Legacy Contracts.pdf

Date and Time Comment Was Submitted: 2013-05-20 15:48:48

No Duplicates.

**Comment 5 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Amber  
Last Name: Riesenhuber  
Email Address: amber@iepa.com  
Affiliation: IEP

Subject: IEP's Comments on CARB's Proposed Adjustments to Treatment of Legacy Contracts  
Comment:

Attached please find IEP's Comments on CARB's Proposed Adjustments to Treatment of Legacy Contracts.

Attachment: [www.arb.ca.gov/lists/com-attach/9-may1-unilegbutfor-ws-B25RMgBxWFRXMghn.pdf](http://www.arb.ca.gov/lists/com-attach/9-may1-unilegbutfor-ws-B25RMgBxWFRXMghn.pdf)

Original File Name: IEP Comments on CARBs Proposed Adjustments to the Treatment of Legacy Contracts FINAL.pdf

Date and Time Comment Was Submitted: 2013-05-20 16:56:44

No Duplicates.

**Comment 6 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Charles

Last Name: White

Email Address: cwhite1@wm.com

Affiliation: Waste Management

Subject: Cap & Trade - Legacy Contracts

Comment:

Please See attached.

Attachment: [www.arb.ca.gov/lists/com-attach/10-may1-unilegbutfor-ws-Wi1SOQdlBDhSOQFs.pdf](http://www.arb.ca.gov/lists/com-attach/10-may1-unilegbutfor-ws-Wi1SOQdlBDhSOQFs.pdf)

Original File Name: WMCommentsCARBLegacyNonStandardContracts52113.pdf

Date and Time Comment Was Submitted: 2013-05-21 12:07:12

No Duplicates.



**Comment 7 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Barbara

Last Name: McBride

Email Address: barbara.mcbride@calpine.com

Affiliation: Calpine Corporation

Subject: Calpine Comments on Universities, But For CHP and Legacy Contracts

Comment:

Attached are the Comments on CARB Starff Workshop regarding  
Proposed Adjustments to the Cap-and-Trade Program's Treatment of  
Universities, "But For" CHP and Legacy Comments.

Attachment: [www.arb.ca.gov/lists/com-attach/13-may1-unilegbutfor-ws-VGEBK1Z1A2EEL1Bi.pdf](http://www.arb.ca.gov/lists/com-attach/13-may1-unilegbutfor-ws-VGEBK1Z1A2EEL1Bi.pdf)

Original File Name: 5-21-2013 Calpine Comments re CHP and Legacy Contracts.pdf

Date and Time Comment Was Submitted: 2013-05-21 13:31:58

No Duplicates.

## **Comment 8 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Joseph  
Last Name: Allen  
Email Address: Suarez\_veronica@cat.com  
Affiliation:

Subject: Solar Turbines Comments - May 1 ARB Staff Workshop on CHP and Cap & Trade  
Comment:

Solar Turbines Comments - May 1 ARB Staff Workshop on CHP and Cap & Trade

Solar Turbines, Inc. would like to thank the ARB for the opportunity to comment on the May 1st.

Allowances for Universities: Solar Turbines Supports

For Universities that are in Cap & Trade, most or all of whom have an operational CHP system, transitional assistance was proposed in the form of allowances equal to their three year historical fuel use baseline (excluding electricity exports). Such allowances would decline in proportion to the cap through 2020. Solar Turbines supports this proposal, aimed at entities that have taken early actions and provided leadership to reduce GHG emissions. We recommend that eligibility for this transitional assistance be broadened to include other institutional and private entities who have demonstrated similar early action and leadership.

Exempt "But For" entities from Cap & Trade: Solar Turbines Supports

ARB staff proposed to exempt "But For" entities from Cap & Trade during the first compliance period if both steam emissions and electricity emissions are less than 25,000 MTCO<sub>2</sub>e. We support this proposed approach. However, Solar Turbines asks that the offsetting boiler efficiency assumption be set at 80% which is a typical value for today's large steam plants. We also recommend that the word "steam" be replaced with "useful heat" as steam is not always the heat output form from a CHP system.

Cap & Trade will incentivize CHP: Solar Turbines Disagrees

ARB stated that in the 2nd compliance period, all CHP facilities, whether as a covered entity or through a carbon adder in the price of natural gas, will be on the same economic playing field and Cap & Trade will provide an incentive for efficient CHP. Solar Turbines disagrees with this statement.

ARB acknowledges that efficient CHP displaces less efficient wholesale fossil generation sources from the California grid and uses an emissions benchmark of 0.431 MTCO<sub>2</sub>e/MWh. This corresponds to a 42% efficient natural gas generating plant. However, because the grid is not comprised of 100% natural gas power, the economic linkage between the carbon cost adder in natural gas and the carbon cost adder in electricity is distorted.

Because eligible renewables, large hydro, and nuclear are included in the electricity carbon adder, the adder is about one half what it would be if it were all natural gas. This results in a negative economic signal instead of a positive economic signal for CHP.

Sending this inadvertent negative market signal to existing and prospective CHP adopters goes against the fundamentals of AB 32. Those who have already made a commitment to efficient CHP will understandably lose trust in the Cap & Trade mechanism and prospective CHP adopters will question the wisdom of investing in CHP and its uncertain economic treatment under Cap & Trade.

Corrective Action is Needed: Solar Turbines Strongly Supports

This fundamental flaw with the treatment of CHP in California's Cap & Trade program must be corrected. Many prospective CHP projects are currently delayed because of this situation and without a speedy remedy, new CHP implementation will be diminished.

In order to create a level economic playing field based on CHP's GHG reducing benefits, adjustments are needed to the carbon cost for natural gas used for efficient CHP. This can be accomplished through the issuance of allowances for CHP fuel or through payments from either Cap & Trade auction proceeds or the Natural Gas Allowance revenue Fund.

Solar Turbines urges CARB and the CPUC to fix this policy inequity quickly so CHP customers can utilize this technology to reduce GHG emissions in California and companies that manufacture and sell CHP equipment can compete on a level playing field in California.

Sincerely,

Joe Allen  
Solar Turbines Incorporated

Attachment: [www.arb.ca.gov/lists/com-attach/14-may1-unilegbutfor-ws-BnVQOVE8WGpRJQhX.pdf](http://www.arb.ca.gov/lists/com-attach/14-may1-unilegbutfor-ws-BnVQOVE8WGpRJQhX.pdf)

Original File Name: Solar Turbines Comments \_ May 1 ARB Staff Workshop on CHP and Cap & Trade.pdf

Date and Time Comment Was Submitted: 2013-05-21 14:15:05

No Duplicates.

**Comment 9 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: William

Last Name: Westerfield

Email Address: wwester@smud.org

Affiliation: Sacramento Municipal Utility District

Subject: SMUD's Comments on May 1st Workshop

Comment:

Attached please find SMUD's Comments on Proposed Adjustments to the Cap-and-Trade Program's Treatment of Universities, "But For" Combined Heat and Power, and Legacy Contracts

Attachment: [www.arb.ca.gov/lists/com-attach/15-may1-unilegbutfor-ws-BnVcN1YiU2QLIANg.pdf](http://www.arb.ca.gov/lists/com-attach/15-may1-unilegbutfor-ws-BnVcN1YiU2QLIANg.pdf)

Original File Name: SMUD-Comments-May-1st-Workshop.pdf

Date and Time Comment Was Submitted: 2013-05-21 14:35:46

No Duplicates.

**Comment 10 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: F. Jackson

Last Name: Stoddard

Email Address: jstoddard@manatt.com

Affiliation:

Subject: County of Los Angeles Comments on Staff Proposals from May 1st Workshop

Comment:

Please find attached comments submitted on behalf of the County of Los Angeles.

Attachment: [www.arb.ca.gov/lists/com-attach/16-may1-unilegbutfor-ws-VDhdOgRaUGBQOVQh.pdf](http://www.arb.ca.gov/lists/com-attach/16-may1-unilegbutfor-ws-VDhdOgRaUGBQOVQh.pdf)

Original File Name: LA County Comment Submittal for May 1 Workshop.pdf

Date and Time Comment Was Submitted: 2013-05-21 14:52:32

No Duplicates.

**Comment 11 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Timothy  
Last Name: Lipman  
Email Address: telipman@berkeley.edu  
Affiliation:

Subject: Comments on May 1 workshop  
Comment:

Please find comments attached. Thanks, Tim Lipman, UC Berkeley

Attachment: [www.arb.ca.gov/lists/com-attach/17-may1-unilegbutfor-ws-WzdTPF0sUmwCZQBu.pdf](http://www.arb.ca.gov/lists/com-attach/17-may1-unilegbutfor-ws-WzdTPF0sUmwCZQBu.pdf)

Original File Name: Lipman UCB memo ARB unilegbufor .pdf

Date and Time Comment Was Submitted: 2013-05-21 15:03:08

No Duplicates.

**Comment 12 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: John

Last Name: Leslie

Email Address: jleslie@mckennalong.com

Affiliation:

Subject: Comments of Shell Energy North America

Comment:

Please see attached comments.

Thank you.

Attachment: [www.arb.ca.gov/lists/com-attach/18-may1-unilegbutfor-ws-BWZTOlA8BTtWNQJs.pdf](http://www.arb.ca.gov/lists/com-attach/18-may1-unilegbutfor-ws-BWZTOlA8BTtWNQJs.pdf)

Original File Name: Comments of Shell Energy North America.pdf

Date and Time Comment Was Submitted: 2013-05-21 15:07:26

No Duplicates.

**Comment 13 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Sean

Last Name: Beatty

Email Address: sean.beatty@nrgenergy.com

Affiliation: NRG Energy, Inc.

Subject: NRG's Comments on May 1st Workshop Issues.

Comment:

Please see the attached comments.

Attachment: [www.arb.ca.gov/lists/com-attach/19-may1-unilegbutfor-ws-UjwFcV07VVkDZII9.pdf](http://www.arb.ca.gov/lists/com-attach/19-may1-unilegbutfor-ws-UjwFcV07VVkDZII9.pdf)

Original File Name: NRG Comments on May 1 workshop issues.pdf

Date and Time Comment Was Submitted: 2013-05-21 15:34:13

No Duplicates.



**Comment 14 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: James  
Last Name: Halloran  
Email Address: JPH@CAT.COM  
Affiliation: CCDC

Subject: Comments on May 1st Workshop "But for CHP"  
Comment:

Please add the attached to the record.

Attachment: [www.arb.ca.gov/lists/com-attach/20-may1-unilegbutfor-ws-AGEFcQBjAg4CaQZn.pdf](http://www.arb.ca.gov/lists/com-attach/20-may1-unilegbutfor-ws-AGEFcQBjAg4CaQZn.pdf)

Original File Name: ARB May 1 Comments.pdf

Date and Time Comment Was Submitted: 2013-05-21 15:35:57

No Duplicates.

**Comment 15 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Paul  
Last Name: Shepard  
Email Address: p.shepard@dgc-us.com  
Affiliation: Wildflower Energy LP

Subject: Wildflower's Comments on CARB's Proposed Amendments to Treatment of Legacy Contracts  
Comment:

Dear CARB,

Please find attached the comments of Wildflower Energy, LP on CARB's Proposed Amendments to Treatment of Legacy Contracts.

Sincerely,

Paul Shepard  
Asset Manager, Wildflower Energy, LP

Attachment: [www.arb.ca.gov/lists/com-attach/21-may1-unilegbutfor-ws-VCNUNF05BwsAZVI9.pdf](http://www.arb.ca.gov/lists/com-attach/21-may1-unilegbutfor-ws-VCNUNF05BwsAZVI9.pdf)

Original File Name: WFE Comment Letter on ARB May 1 Workshop (00152921).PDF

Date and Time Comment Was Submitted: 2013-05-21 15:43:58

No Duplicates.

## **Comment 16 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Leonard

Last Name: Pettis

Email Address: lpettis@calstate.edu

Affiliation: CSU Office of the Chancellor

Subject: CSU Comments on Cap/Trade Regulation Changes 5/1/2013

Comment:

Re: Comments of the California State University System on the May 1, 2013 proposal to change the Cap and Trade Program.

We have reviewed the Staff proposal and also had the pleasure of meeting with the Staff after the May 1, 2013 meeting. We offer the following comments.

Credits for Universities

In response to ARB staff request to provide evidence of CSU commitment to energy efficiency and the environment, following is a summary of activities and achievement ss over the past decade.

The CSU system has invested heavily in CHP and other programs to reduce GHG emissions. In the last 10 years, the CSU system has devoted \$150M to reduce energy use, build new CHP facilities, construct new renewables facilities and retire ozone-depleting substances. Over the last 37 years, CSU has reduced systemwide energy use intensity by 50% and has the lowest Carbon footprint of any public or private institution in the state at 437,000 Metric Tonnes. Our current AB 32, 1990 target is 337,000 Metric tonnes and includes four new campuses.

A San Jose State University, the campus has invested in Monitoring Based Commissioning (MBCx) projects resulting in improved operational efficiencies reducing energy consumption by approximately 20 percent.

At San Diego State University the campus has capitalized on energy efficiency and installed 700kW in photovoltaic systems offsetting the impacts of more than 1M gsf in needed classroom and facility space to accommodate enrollment growth.

CSU Channel Islands is a relatively new campus but has added new chiller plant using waste heat to chill buildings.

CSU Campus Energy Initiatives and Programs

CSU campuses provide particularly strong evidence of applied research programs in energy-related fields.

California State Polytechnic University, San Luis Obispo (250kW PV, 500kW cogen) (Cal Poly SLO). Cal Poly SLO offers one of the best known and highest ranked Electric Power Programs in the nation. The university has a rich history of applied research in electric power, energy engineering, solar systems, alternative fuel and electric vehicle development, and is a well-established leader in undergraduate engineering education in these area.

CSU Chico (436kW PV) has an active Environmental Studies and Sustainability curriculum, including a professional Master's degree in Environmental Sciences.

Humboldt State University (750kW Cogen) is home to the Schatz Energy Research Center which serves the rural north coast region to provide model energy systems and projects as well as energy education.

CSU Long Beach's (635kW PV) Center for Energy and Environmental Research in the College of Engineering is a leader in development of wind powered energy advances and works closely with urban transportation initiatives.

CSU East Bay's (1MW PV 1.4MW Fuel Cell) Environmental Studies program has developed a model Energy and Environmental Studies curriculum, initiated the installation and monitoring of the 1MW campus photovoltaic systems, conducted many faculty-guided student-based studies of energy efficiency and renewable energy potential at CSU and in the surrounding communities, and the environmental implications thereof.

CSU Fresno (1.4MW PV) operates the Center for Irrigation Technology and the California Water Institute, both key to understanding and mitigating the water and energy uses of the state's agribusinesses. CSU Sacramento has created a Center for Micro Grid Development that is a national model, and is leading the region in terms of product testing of automated metering systems.

The CSU Sacramento (450 kBTU Solar hot water, 436kW PV) Center for Micro Grid Development provides practical solutions for stakeholders in industry, utilities, and the public sector. Through the excellent relationship that CSU Sacramento has with the City of Sacramento, community engagement and outreach is emphasized to demonstrate the benefits to consumers from every sector of our society.

San Jose State University (4.5MW Cogen) has created a Center for Energy Management and provides leadership in a number of energy-related areas, including energy efficiency technology such as next generation battery storage materials.

CSU Northridge (800kW solar, 1.4 MW Fuel Cell) has been at the forefront of energy research and has built a strong portfolio in distributed energy, including fuel cells, micro turbines, and solar photovoltaic systems.

San Diego State University (700kW PV, 14MW Cogen) researchers are working on a cognitive home management system through funding from the California Energy Commission. The project focuses on residential home energy management and in particular on the development of smart meters and non-parametric embedded controllers for home demand response.

California State Polytechnic University, Pomona (Cal Poly Pomona) (700kW PV) is conducting research on Micro Grid technologies and cyber security through the Center for Information Assurance.

These are just a few of many exemplary stewards of applied research, education, and services entities within the CSU that are very productive, quality-oriented enterprises, and which will support Micro Grid related applied research projects.

CSU submits that providing allowances to universities is a worthwhile process. This allows CSU to continue its program of operating its existing CHP units and investing in energy efficiency.

But For CHP

It has been CSU's understanding that if a CHP facility became subject to Cap & Trade because of its decision to install cogeneration, increasing its emissions beyond the 25,000 Metric

Tonne threshold, ARB was going to capture only the emissions required to serve the thermal load of the operation. Additionally, a test was to be developed to exclude campuses from Cap & Trade where a facility would not be subject to those obligations "but for" the installation of cogeneration. The Staff's program differs in this regard as they confirmed only a few CHP facilities would be exempted under the ARB concept, which includes both thermal and electrical emissions. CSU calculated that the formula proposed by the Staff does not work for any generator 11mw or greater. At May 1, 2013 hearing, ARB staff confirmed CSU's assumptions.

CSU suggests that, ARB exclude from the formula CHP emissions generated to create electricity. Alternatively, CSU requests ARB consider crediting the cogenerator with the emissions from its facility that the utilities would have had to generate "but for" the existence of the cogenerator.

#### Legacy Contracts (Qualified Facilities 'QF')

CSU understands that the staff's concept of legacy contracts does not include any QF who sells power to a utility and seeks to rely upon negotiation to address Local Distribution Company (LDC) - QF contract issues. CSU urges the ARB to preserve the regulatory integrity of the standard offer contracts established circa 1982, and allow the remaining legacy QF contracts to continue unencumbered by new regulation until their original contract expiration on or about 2018.

We request that ARB provide for emission allowances for any QF that is not getting allowances from the LDC's. This would be applicable to any QF that was operating prior to the adoption of the later of (i) the QF settlement or (ii) the approval of the Cap & Trade regulations in December of 2011. This date was selected because until those regulations were finalized and adopted, the system could be changed.

#### Definition of Facility

We have previously raised our concern regarding the definition of 'facility' with staff and believe it is applicable to any CHP facility. The CSU believes a more comprehensive definition is necessary for the following reason. Under the current definition of 'facility', a campus which has a CHP facility as well as other smaller uses not connected to the CHP must still buy emission credits for all uses within the legal limits of the property. Ultimately, this definition will result in CHP owners/operators paying more to offset emissions for the non-CHP uses than would others without CHP.

Our recommendation is that the definition be changed to exclude for CHP 'facilities' any small, residential or commercial core use buildings not served by the CHP application. This will resolve any unintended disincentives for CHP that would arise from the use of the current definition.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2013-05-21 15:54:51

No Duplicates.

**Comment 17 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Beth

Last Name: Vaughan

Email Address: beth@beth411.com

Affiliation:

Subject: CCC Comments on Universities, But For CHP and Legacy Contracts

Comment:

Comments of the California Cogeneration Council on ARB staff proposals at May 1st CHP workshop.

Attachment: [www.arb.ca.gov/lists/com-attach/23-may1-unilegbutfor-ws-V2JSeVRnUDIFLIVk.pdf](http://www.arb.ca.gov/lists/com-attach/23-may1-unilegbutfor-ws-V2JSeVRnUDIFLIVk.pdf)

Original File Name: 5-21-13\_CCC\_Comments ARB\_CHP workshop\_FINAL.pdf

Date and Time Comment Was Submitted: 2013-05-21 16:41:51

No Duplicates.

**Comment 18 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Claire  
Last Name: Halbrook  
Email Address: cehu@pge.com  
Affiliation: Pacific Gas and Electric Company

Subject: PG&E Comments on Legacy Contracts and "But For" CHP  
Comment:

PG&E Comments on Legacy Contracts and "But For" CHP

Attachment: [www.arb.ca.gov/lists/com-attach/24-may1-unilegbutfor-ws-UyNQMVAOAJRVDAIq.pdf](http://www.arb.ca.gov/lists/com-attach/24-may1-unilegbutfor-ws-UyNQMVAOAJRVDAIq.pdf)

Original File Name: PG&E Comments on Legacy Contracts and but for CHP.pdf

Date and Time Comment Was Submitted: 2013-05-21 16:44:25

No Duplicates.

**Comment 19 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: Michael

Last Name: Balster

Email Address: michaelbalster@paulhastings.com

Affiliation:

Subject: PH Comment Letter on May 1 2013 Cap-and-Trade Workshop

Comment:

Please find attached our comment letter regarding CARB's May 1, 2013 Workshop on the Cap-and-Trade Program's Treatment of Universities, 'But For' CHP, and Legacy Contracts.

Attachment: [www.arb.ca.gov/lists/com-attach/25-may1-unilegbutfor-ws-VCQFawdZV2hSMVI1.pdf](http://www.arb.ca.gov/lists/com-attach/25-may1-unilegbutfor-ws-VCQFawdZV2hSMVI1.pdf)

Original File Name: PH Legacy Contract Cmt. Ltr. 5.21.13.pdf

Date and Time Comment Was Submitted: 2013-05-24 13:14:16

No Duplicates.



**Comment 20 for Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor-ws) - 1st Workshop.**

First Name: David  
Last Name: Weaver  
Email Address: dweaver@environcorp.com  
Affiliation: ENVIRON

Subject: Comment letter on May 1 Workshop 'But for CHP' under Cap-and-Trade Program  
Comment:

Please see attached comment letter for the May 1 "Public Meeting to Discuss Universities, Legacy Contracts, and 'But for CHP' under the Cap-and-Trade Program."

Attachment: [www.arb.ca.gov/lists/com-attach/26-may1-unilegbutfor-ws-AWNSIVQhWFQLawhn.pdf](http://www.arb.ca.gov/lists/com-attach/26-may1-unilegbutfor-ws-AWNSIVQhWFQLawhn.pdf)

Original File Name: but for comment letter.pdf

Date and Time Comment Was Submitted: 2013-05-24 13:47:41

No Duplicates.

**There are no comments posted to Public Meeting to Discuss Universities, Legacy Contracts, and 'But For CHP' under the Cap-and-Trade Program (may1-unilegbutfor- ws) that were presented during the Workshop at this time.**