Clean Coalition

Community Update | March 20, 2013

Dear Clean Coalition Friends,

It is undeniable: The United States is in the midst of a clean energy transition, and one of the Clean Coalition's top objectives – that from 2020 onward, at least 80% of all new electricity generation in the U.S. comes from renewable sources – is on a successful trajectory. Nationally, renewable sources accounted for every megawatt of new generating capacity brought online in January of this year, and wind energy comprised the top source of new generation in 2012.

Another of the Clean Coalition's top objectives – that from 2020 onward, at least 50% of all new energy generation in the United States comes from local sources – is also gaining significant traction. As detailed in this newsletter, a number of states are currently considering legislation to create impactful Clean Local Energy Accessible Now (CLEAN) Programs. Cities are showing even greater leadership in the advancement of renewable energy. Palo Alto, California recently announced the huge milestone that 100% of the electricity consumed in Palo Alto is carbon-neutral, while at the same time, maintaining electric rates that are well below California's average. [See this <u>fun video</u> by a precocious Palo Alto high school student for a creative look at Palo Alto's tremendous achievement.] Boulder, Colorado is municipalizing its electric utilities to help ensure the development of clean local energy, and similarly, San Francisco has launched CleanPowerSF – a Community Choice Aggregation (CCA) Program to help ensure that local renewables play a significant role in achieving San Francisco's 2020 goal to be "100% renewably powered."

In the ongoing energy transition, some of the most encouraging lessons come from abroad. Ontario, Canada – which plans to <u>retire its entire coal fleet</u> a year ahead of schedule – will become the first jurisdiction in North America to completely phase out coal, and in Europe, renewables comprised nearly 70 percent of the new generation deployed last year.

The creation of a clean, efficient, and reliable power system will require a variety of resources throughout the grid. To this end, the Clean Coalition promotes an energy portfolio that utilizes diversity, both geographic and technological, to maximize reliability and resilience. Interestingly, energy supply and demand requirements are changing as solar fulfills an increasing share of daytime power needs while electric vehicles are adding to evening loads, which serendipitously coincides with the availability of wind generation. These trends place a growing importance on community wind and biopower projects, and the Clean Coalition promotes policies that harness the natural complementation of wind, biopower, and solar to maximize renewables while maintaining grid reliability. Also, the deployment of intelligent grid solutions - such as demand response, advanced inverters, and energy storage - are fundamental to the transition to clean local energy. The CPUC's recent mandate for 50 megawatts of energy storage in Southern California marks an important early step in embracing intelligent grid solutions that enable significant levels of distributed generation and signals the formation of a viable pathway to achieve the Clean Coalition's objective for at least 50% of all new energy generation coming from local sources from 2020 onward.

This quarterly newsletter is full of additional details on the following highlights:



In the News

Guest opinion: Fostering competition through municipalization | Boulder Daily Camera | March 3, 2013

The city of Boulder, Co is pursuing municipalization in order to control their electricity supply and bring more renewable energy online. The Clean Coalition argues for the benefits of municipalization in this opinion piece.

A Glimpse Into The Future Of Renewable Energy In California | Solar Industry Magazine | February 28, 2013

California's solar market – the largest in the nation – now stands at the edge of a new era. Although the PV portion of the California Solar Initiative (CSI) has all but wound down, industry advocates are optimistic that the state's aggressive renewable portfolio standard (RPS) will help keep the market moving forward.

Greed and fear bring Florida closer to Germany's feed in tariff model | PV-Tech | February 26, 2013

Feed-in tariffs have been popular all over the world and have transformed some solar markets. But many US utilities has been resistant to the power of this transformational policy, treating them with the same hostility as net energy metering.

An Energy Lesson From Ontario | Huffington Post | February 13, 2013

In part by adopting an ambitious CLEAN Program, the province of Ontario recently announced that it would become the first jurisdiction in North America to completely eliminate coal from its energy mix.

- 2012 IEPR Update embraces a distributed energy tuture
- <u>Clean Coalition guides FERC to improve interconnection</u>
- Legislative update: numerous states consider CLEAN Programs
- <u>CPUC mandates procurement of preferred resources</u>
- <u>A bright future for the CLEAN LA Solar Program</u>
- Featured topic: Energy system resilience
- Featured event: 2013 Sustainability Summit on April 19th in Los Angeles

As always, thank you for supporting the Clean Coalition and its pursuit of making clean local energy accessible now.

Sincerely, Craig Lewis

2012 IEPR Update embraces a distributed energy future

Last month, the California Energy Commission (CEC) approved its 2012 Integrated Energy Policy Report (IEPR) Update, which reflects California's most advanced thinking on its energy future.

In a key victory for the Clean Coalition's vision, the 2012 IEPR Update embraces significant growth of distributed generation (DG) and reflects a number of important policy recommendations initiated or strongly supported by the Clean Coalition, including:

- The need for a transparent and comprehensive distribution system planning process to strategically advance renewable DG throughout the state
- Recognition of the locational value provided by DG to consumers, including reduced dependence on the expensive and inefficient long-distance transmission of power
- The development of longer-term energy planning to guide a cost-effective transition that meets California's 2050 goal of reducing greenhouse gas emissions to 80% below 1990 levels
- The need to start using advanced analysis and modeling tools for efficient interconnection of renewables and intelligent grid (IG) solutions like energy storage

The Clean Coalition is pleased to see that its work providing policymakers with information, analysis, and proven solutions was clearly reflected in the 2012 IEPR Update. The Clean Coalition has invested significant wherewithal to ensure that the CEC's most important policy document guides California towards a cleaner, more affordable, and more reliable energy system.

Clean Coalition guides FERC to improve interconnection

The Federal Energy Regulatory Commission (FERC) recently proposed significant rule changes to the Small Generator Interconnection Procedures. These changes, which build upon the Clean Coalition's extensive work streamlining interconnection rules and processes in California, highlight how critical state-level work can be beneficially leveraged for national impact.

FERC's proposed changes adopt Clean Coalition recommendations from a <u>March 27, 2012 FERC filing</u>, which was submitted in coordination with the Solar Energy Industries Association.



These changes remove significant barriers to development of clean local energy. One key rule change, resulting from the Clean Coalition's work on California's Rule 21 interconnection

process, will allow interconnection customers to request a pre-application report from transmission providers. This added transparency streamlines interconnection efforts for project developers by facilitating straightforward evaluation of potential points of interconnection before having to initiate formal and expensive interconnection processes. FERC also proposed revising its current 2 megawatt (MW) project threshold for participation in the Fast Track Interconnection Process by basing eligibility on individual grid and resource characteristics, up to a 5 MW project limit.

in promoting solar? | Sacramento Bee | January 29, 2013

Net metering remains a complicated and hotly-debated subject in California between solar advocates and utilties.

Boulder Likely to Adopt Its Own Green Utility – and Risks of Going Solo | Inside Climate News | January 23, 2013

Boulder is on a long-fought path to break from Xcel Energy, control its own electricity, and ramp up clean power. But obstacles await.

Clean Coalition Founder Craig Lewis on What it Will Take to Build a Clean, Local Energy System | Solar Mosaic | January 16, 2013

Craig Lewis discusses the Clean Coalition and how we can accelerate the transition to a clean local energy system.

See the Clean Coalition <u>website</u> for additional news.

Upcoming Events

March 20, 2013 | Solar Power Finance & Investment Summit 2013 | San Diego, CA

Craig Lewis, Executive Director of the Clean Coalition, will present on March March 20 on the "The First One Hundred Days in Washington: Reading the Tea Leaves" panel. The event takes place in San Diego, CA at the Rancho Bernardo Inn.

March 20, 2013 | Grid Interconnect & Integration | Oakland, CA

Ted Ko, Associate Executive Director of the Clean Coalition, will present on March 20 at the Grid Interconnect & Integration hosted by the Local Clean Energy Alliance. The event will take place in Oakland, CA.

April 11, 2013 | Silicon Valley Energy Storage Symposium | Mountain View, CA

This symposium will bring together key participants – from the public and private sectors and from the academic and

The Clean Coalition previously succeeded in raising California's Fast Track limit to 3 MW and pushed for the 5 MW threshold at FERC. The proposed changes will be open for comment this summer and then finalized in the months that follow.

Legislative update: numerous states consider CLEAN Programs

Wholesale distributed generation (WDG) in the United States may get a big boost from a variety of states in 2013 as a number of jurisdictions are navigating legislation to adopt Clean Local Energy Accessible Now (CLEAN) Programs. The Clean Coalition is actively supporting legislative efforts in Arkansas, Minnesota, and Oregon; it is also building support for a statewide CLEAN Program in Iowa. Furthermore, the Clean Coalition is supporting an important bill in Michigan to ensure equal property tax treatment for both wholesale and retail DG. Unfortunately, Texas provides a painful example of how this property tax issue can block significant deployments of clean local energy.



Currently, the value of many renewable energy systems in Michigan is included in the property tax assessment. The unwise inclusion of renewable systems in Michigan's property taxes can increase a 20-year power purchase agreement (PPA) by more than one cent per kWh, which ultimately raises the cost of renewable energy for consumers.

In Texas, a similarly misaligned property tax has increased PPA rates by up to 2 cents per kWh. As written, Michigan House Bill (HB) 4245 would change current property tax laws to exempt renewable energy systems that provide on-site power. While this is a step in the right direction, HB 4245 fails to provide a property tax exemption for wholesale distributed generation (WDG) facilities, which serve local load rather than just on-site load. The Clean Coalition is supporting an HB 4245 amendment to exempt all distributed renewable systems that generate less than 10,000 megawatt-hours per year, which would include roughly up to 1.5 MW biomass projects, 3 MW wind projects, and 8 MW solar projects.

The Arkansas Distributed Generation Act – if passed into law – would make the state a national energy leader through the creation a 1,200 MW statewide CLEAN Program. The Clean Coalition has made a number of key recommendations to improve program pricing, contract terms, and eligibility. Additionally, Craig Lewis, Executive Director of the Clean Coalition, and Bill Ritter Jr., former Governor of Colorado and current Clean Coalition Advisor, recently visited Little Rock to build support for this bill.

In Minnesota, the Solar Energy Jobs Act of 2013 calls for a mandated amount of solar PV (similar to a Renewable Portfolio Standard), as well as a CLEAN Program supporting solar PV projects greater than 40 kilowatts. If passed into law, this precedent-setting legislation would require full cost and value accounting for all energy procurement decisions, including line losses, future fuel costs, and local economic and environmental benefits. The Clean Coalition – which has provided detailed recommendations on pricing factors, incentive provisions, and the scope of the required studies – applauds this ambitious bill and looks forward to promoting this legislation as a model for the rest of the country.

The Clean Coalition has also been active in Oregon, where two, competing DG-related bills were under consideration. One bill, brought forward by Oregonians for Renewable Energy Policy, sought to establish a significant CLEAN Program for all renewable energy technologies, differentiated by type and project size. The other bill, promoted by the Sierra Club, outlines a general procurement program based upon true "solar values". On a recent trip to Oregon, Sahm White – one of the Clean Coalition's policy directors – provided guidance on both legislative vehicles to help improve cost-effectiveness while maintaining program scale. Sahm also worked to achieve collaboration between parties

research communities – to engage in a discussion about energy storage and how we can move the industry forward in Silicon Valley.

April 16, 2013 | Pathways to 100% Renewable Energy Conference | San Francisco, CA

The Clean Coalition is proud to be a partner organization in supporting the Pathways to 100% Renewable Energy Conference, taking place in San Francisco on April 16 at the Fort Mason Center.

See the Clean Coalition <u>website</u> for additional upcoming events.

Recent Regulatory Filings

CPUC | Opening Comments on PG&E Smart Grid Pilot Proposed Decision | March 7, 2013

This filing represents the Clean Coalition's opening comments to PG&E's application for a Smart Grid deployment pilot project. Generally, the comments supported the Proposed Decision and reiterate Clean Coalition support for Smart Grid pilot programs that call for the extensive use of DG+IG technology resources.

<u>CPUC | SONGS Legal Issues |</u> <u>February 25, 2013</u>

This filing represents the Clean Coalition's opening legal brief responding to questions posed by the Commission. The Clean Coalition argued that a hearing is not required for the Commission to reduce rates, and nor must the hearing, if held, be combined with the next General Rate Case, as SCE argued. The Clean Coalition agreed, however, with SCE on the general proposition that the Commission may only reduce rates after the commencement of this Investigation, with one major exception in the event that the Commission finds any of SCE's actions or omissions with respect to the SONGS outages to be unreasonable.

<u>CPUC | Energy Storage Staff Report |</u> <u>February 21, 2013</u>

This filing represents the Clean

to maximize the probability of effective results.

Iowa's ambitious bill (SF 372) aims to establish a statewide CLEAN Program that could bring as much as 60 MW online annually. The bill, which has bipartisan support, passed the Senate Agriculture Committee unanimously and is now on the Senate floor. Importantly, this bill fosters the development of distributed wind projects owned by Iowans – in contrast to Iowa's existing wind projects, which are almost exclusively largescale and owned by multinational corporations. This bill is also intended to be expanded to WDG solar and biopower. The Clean Coalition is providing program design recommendations and is helping to build support for this transformational bill.

CPUC mandates procurement of preferred resources

On February 13, the California Public Utilities Commission (CPUC) released its Final Decision (FD) in Track 1 of the Long-term Procurement Planning (LTPP) proceeding, which addresses Local Capacity Requirements (LCR) in Southern California. Many Clean Coalition recommendations were incorporated into the FD, including increased procurement requirements of preferred resources like DG and critical intelligent grid (IG) solutions such as energy storage and demand response.



Through its extensive authorization of preferred resource procurement, the FD reflects a paradigm shift towards a renewable future for California. In particular, the FD includes 50 MW of energy storage procurement in the LCR – an outcome vigorously sought by the Clean Coalition, in collaboration with the California Environmental Justice Alliance and the Santa Barbara Community Environmental Council. The inclusion of critical IG solutions in the

LTPP position these technologies for eventual priority placement in the Loading Order specified by California's Energy Action Plan.

Another FD outcome vigorously promoted by the Clean Coalition was the authorized procurement of 600 MW of preferred resources – nearly doubling the amount specified in the earlier Proposed Decision. In addition, Southern California Edison must now procure a *minimum of 150 MW* of preferred resources to meet the capacity needs facing Southern California energy consumers, while capping natural gas-fired resources at a *maximum of 1,200 MW*.

Despite the FD's disappointing allowance of an unnecessarily large amount of natural gas-fired procurement, the FD marks a clear Clean Coalition victory and is a significant step toward meeting both the state's Renewable Portfolio Standard and Governor Brown's goal to achieve 12,000 MW of DG by 2020.

A bright future for the CLEAN LA Solar Program

The CLEAN LA Solar Program is off to a strong start as the Los Angeles Department of Water and Power (LADWP) received applications for 107 MW of potential solar projects during the program's opening week.

Initial applications totaled 7 MW more than the allotment for the entire 100 MW program – highlighting a significant market opportunity for distributed solar projects in Southern California. Notably, LADWP will be able to bring 100 MW of local solar energy online at an additional cost of only 15 cents per month to the average residential customer in Los Angeles.



staff report, generally supporting CESA's opening comments but also urging equal attention on small-scale storage as well as large-scale storage; and criticizing SCE and PG&E's "go-slow" approach.

<u>CPUC | Energy Storage Staff Report |</u> <u>February 4, 2013</u>

This filing represents the Clean Coalition's comments on the interim staff report, calling for an interim energy storage procurement target, an evaluation period and then a more substantial target by 2020; designating GHG-reducing energy storage as a preferred resource; and properly quantifying the grid benefits of energy storage.

<u>CAISO | Distributed Generation</u> <u>Deliverability Proposal | January 25,</u> 2013

This filing represents the Clean Coalition's opening comments supporting Option 1 and a "first expected online, first served" approach to awarded deliverability status, with suggested criteria for determining first expected online.

CEC | 2013 IEPR | January 24, 2013

This filing represents the Clean Coalition's comments in support of some proposed elements of the 2013 IEPR and suggesting others to include. Emphasis focuses on climate change, non-transmission alternatives, and IG technology.

CAISO | Transmission Planning Process | January 22, 2013

This filing represents the Clean Coalition's comments on 2013-2014 unified planning assumptions focused on the need for CAISO to take nontransmission alternatives seriously, based on the state's Loading Order and FERC Order 1000.

CPUC | Reply Comments on LTPP Track 1 LCR Proposed Decision | January 22, 2013

This filing represents the Clean Coalition's reply comments on other parties recommendations for Procurement for the program is divided into five 20 MW allocations. Within each allocation, 4 MWs are reserved for small projects between



30 kW to 150 kW, while the remaining 16 MWs areopen to larger projects up to 3 MW. The first 20 MW allocation began accepting applications on February 1, and subsequent allocations will open every six months through 2016 – until the full 100 MW program capacity is subscribed.

Contracts feature a 20-year agreement in which LADWP purchases 100% of the energy generated by projects at \$0.17/kWh for the City of Los Angeles and \$0.14/kWh for Owens Valley. The price differential accounts for the cost incurred when transmitting energy from Owens Valley to Los Angeles. The fixed price paid for energy will decline after each 20 MW allocation is reserved.

Featured topic: Energy system resilience



The widespread power outage caused by Hurricane Sandy and the Super Bowl blackout are just the latest high-profile examples of our nation's vulnerable electric grid – a system that relies on an outdated model of centralized generation and long-distance transmission. These painful events make it all-too-clear that the current energy system is unacceptably fragile and increasingly susceptible to stronger and more frequent disruptions due to climate change, as well as to potential terrorist attacks.

The Clean Coalition understands the need to address grid resilience by transitioning to a decentralized power system. Integrating distributed generation (DG) from renewable source with intelligent grid (IG) solutions – like energy storage and demand response – will result in a significantly more resilient energy system. To expedite this transition, policies must be updated to align economic interests amongst utilities and ratepayers, while updated technical standards are needed to facilitate seamless interaction between high levels of DG and the IG solutions that enable supply and demand of energy to be balanced at the local level.

Given the importance of technical standards to the DG+IG future, the Clean Coalition is an active participant in IEEE Standard 1547, which governs how distributed resources interconnect to the electrical grid. The Clean Coalition seeks to change standards so that DG and IG resources can utilize advanced inverter capabilities, including fault ridethrough and reactive power provisioning, to allow DG+IG resources to provide high quality electricity service even during major grid disruptions. Simultaneously, the Clean Coalition is working with regulatory agencies and legislatures to design and implement policies that properly quantify the value of DG+IG and compensate accordingly.

Featured event: 2013 Sustainability Summit on April 19th in Los Angeles

The Clean Coalition is pleased to be a supporting organization for the Los Angeles Business Council's 7th Annual Sustainability Summit. This event, which will take place at The Getty Center on Friday, April 19, will address clean energy investment, innovation, and implementation.

A number of distinguished individuals will speak at the summit, including California Governor Jerry Brown, California Senator Kevin de León, and Los Angeles Mayor Antonio Villaraigosa.



Local Capacity Requirements in Southern California, and we emphasize the use of DG, DR and ES in the Final Decision.

<u>CPUC | NRDC/CC/SCCEC Joint</u> <u>Opening Comments on the LTPP</u> <u>Track 1 LCR | January 14, 2013</u>

This filing represents the Clean Coalition's joint comments on the Track 1 LCR for LTPP. General support for increased energy efficiency use.

CPUC | Opening Comments on LTPP Track 1 LCR Proposed Decision | January 14, 2013

This filing represents the Clean Coalition's opening comments on the Track 1 LCR for LTPP, focusing on general support for the PD and emphasizing the use of ES, DR, and WDG.

<u>CPUC | Comments on TPP Renewable</u> Portfolios | January 11, 2013

This filing represents the Clean Coalition's comments on TPP workshop materials and renewable portfolios, as well as offering policy comments on TPP process. Comments also address the inclusion of NTAs in the TPP process.

See the Clean Coalition <u>website</u> for additional regulatory filings.

About the Clean Coalition

The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to local energy systems through innovative policies and programs that deliver cost-effective renewable energy, strengthen local economies, foster environmental sustainability, and enhance energy security. If you no longer wish to receive these emails, please reply to this message with "Unsubscribe" in the subject line or simply click on the following link: <u>Unsubscribe</u>

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