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Date: April 17, 2012

Ms. Carla Peterman  
Commissioner  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

**DOCKET**

**12-IEP-1D**

DATE APR 17 2012

RECD. APR 18 2012

Dear Commissioner Peterman:

The Forest Service is pleased to know that the Energy Commission is considering the public values associated with the utilization of biomass renewable energy for inclusion in your 2012 Integrated Energy Policy Report (IEPR). We were unable to attend the April 12 workshop on this topic; however, we greatly appreciate the efforts by your staff to include us.

Please let me begin by applauding the testimony of Mr. Bill Snyder from CalFire at the workshop on April 12. During the past five years, over 4.5 million acres have been burned by wildfire in California. The five year running average is now approaching one million acres per year and the increasing trend is expected to continue. Numerous scientists predict increasing size and severity of fires unless aggressive restoration treatments are implemented. These points were made at the Governors recent Climate Change Extreme Events conference. We believe an aggressive restoration effort is needed to reverse this trend and we are beginning that work. The Forest Service works very closely with CalFire and several other agencies to promote restoration, fuel hazard reduction, and increased use of forest biomass for energy in the state. We agree with the remarks by Mr. Snyder.

The Forest Service manages about 20 million acres of forestlands representing twenty percent of California's land base. I have determined that six to nine million acres of these public lands need some form of restoration action. These areas are at increased risk of severe fires due to the accumulation of woody fuels that has resulted from our aggressive fire suppression for the past several decades. I have established a goal of restoring 400,000 to 500,000 acres on the National Forests in California annually. Our restoration plans represent an increase of 200-300% over the rate we are currently accomplishing.

I am enclosing a copy of our Leadership Intent for Ecological Restoration, which lays out our vision and course forward for restoration of Forest Service lands in California. It describes the magnitude of the restoration challenge and how we intend to work with partners to achieve our restoration goals. Restoration treatments will generate significant amounts of biomass that must be removed from project areas to effectively reduce fire hazards. We do not expect additional federal funding to support our ability to increase the needed restoration work and will not reach our goals unless we find creative new ways to help us restore our forests. Our success will be dependent on our ability to economically remove biomass to achieve these goals. Policies that



improve markets for production of affordable energy from excess forest biomass and encourage development of appropriately scaled bioenergy facilities near high fire hazard areas will greatly enhance our ability to conduct our restoration work. The retention of the existing bioenergy infrastructure and the strategic expansion of additional infrastructure will be critical to enabling forest land managers the ability to reduce the risk of large severe forest fires.

In addition to facilitating forest restoration here in California, numerous public benefits may be derived by creating renewable energy from excess forest biomass, including reducing the effects of uncharacteristically severe wildfire, protecting water quality, enhancing biodiversity, reducing greenhouse gas emissions, and providing quality recreation experiences for California citizens. The following data were derived from the Placer County Air Pollution Control Districts filing to the California Public Utilities Commission, also enclosed with this letter. The Forest Service supplied supporting data to build these data sets.

1. Increased removal of forest biomass will reduce the risk of severe fires, thereby enhancing public safety and reducing state and federal fire suppression costs. Over the past five years, wildfire suppression costs incurred by the three primary fire agencies in California (US Forest Service, CALFIRE and BLM) have totaled almost \$6 billion dollars and averaged \$1.19 billion dollars per year. While wildfires can never be eliminated in California, we believe that our plan for aggressive forest restoration can significantly reduce the cost of fire suppression for the nation and for California.

2. Increased removal of forest biomass will reduce the risk of severe fires while adding protection to the state's energy infrastructure and private property. These protections will reduce utility and ratepayer costs associated with post fire damage settlements. Much of California's energy transmission and distribution system is located across forest landscapes considered at significant risk to wildfire. From 2006 through 2010, California Investor Owned Utilities paid almost \$12 million dollars per year to fire agencies to provide compensation for fire suppression costs incurred by fighting fires caused by transmission and distribution systems. San Diego Gas and Electric is currently in negotiations with homeowner insurance companies to settle claims due to SDG+E power lines igniting the Witch Creek, Guejito and Rice Canyon fires in 2007. Final settlements could exceed over \$1 billion according to some estimates, as all three fires destroyed over 1,300 homes and killed two county residents.

As high-risk landscapes are treated, the incidence of large wildfires from transmission/distribution system ignitions will be reduced. As acres impacted by wildfires started by transmission/distribution system ignitions are reduced, fire suppression cost recovery will drop, thus providing significant avoided cost savings in damage settlements and fire insurance premiums.

3. Reducing the risk of severe fires will reduce the cost of restoring badly burned areas. An additional cost from severe fires is associated with restoring damaged landscapes. The costs incurred by the US Forest Service and the Bureau of Land Management to restore and stabilize fire-impacted, federally managed landscapes in California from 2006 through 2010 averaged over \$8 million dollars per year. Proactively treating high-risk landscapes and using the forest

waste for energy will reduce the cost of fire restoration because the number of acres impacted by severe wildfire will be reduced.

4. Biomass that is used to produce renewable energy directly offsets greenhouse gas emissions from non-renewable electricity sources. Also, in reducing the risk of severe fire, these treatments allow forests to reach their full potential as sources of primary sequestration for greenhouse gas emissions. California has been a leader in the development of a mitigation strategy to address global climate change. California's strategy correctly identifies forests, and specifically Improved Forest Management under AB 32 Forestry Protocols, as a strategy for removal and storage of carbon from the atmosphere. The Forest Service recognizes the value of national forests to California's climate mitigation strategy and we are full partners in working to accomplish the state's goals. However, unless our forests are restored, they will remain at risk to severe wildfires. We believe that the best long-term strategy for maximizing carbon sequestration in forests is to develop forest stands that are predominantly large trees which are resistant to wildfires. Most of our stands are not in that condition today. Rather, they are in a condition that will allow large carbon emissions if they are exposed to severe fire. The Western Governors Association has estimated that the value of the climate benefits from using wood waste for energy is 11.4 cents/kwh. Policies that recognize these benefits will create a pricing structure that will facilitate removal of excess biomass and conversion to clean renewable energy.

5. Increased removal of forest biomass to reduce the risk of severe fires will reduce the environmental impacts from these events. While ecologists recognize that wildfires produce beneficial effects for many plants and animals, most believe that the trends in severe fire are uncharacteristically high for forests in some areas of the state. The increasing acreage of badly burned areas is resulting in elevated sediment loads to streams and a shift away from the historic less-intensively burned conditions. Reducing forest fuels will reduce the acreages of badly burned areas. It will also restore the conditions that are favorable to plant and animal species that prefer the historic forest conditions that were dominated by more frequent, but less intense fires. To date, we are not aware of any work to monetize the public values from producing desired ecological conditions in forests, but we believe they are significant.

6. I have not included a discussion about the human health benefits that result from improved air quality because that subject was covered very well by the representative from the Environmental Protection Agency and others at the April 12 workshop.

Thank you for considering the wide range of public values associated with biomass utilization as a renewable energy source. We believe there are enormous public benefits from utilizing woody material for energy. We believe that tremendous public value would result if California chose to include forest biomass-to-energy as a larger fraction of the state energy strategic plan.

We hope you agree and will propose greater support of forest biomass to renewable energy in your 2012 IEPR report. In addition to enclosing our Forest Service Pacific Southwest Region Leadership Intent, I am enclosing a copy of the Placer County Air Pollution Control District Opening Comments to the October 13, 2011, Renewable Feed In tariff Staff Proposal. This

document contains additional information about the public values that are associated with the utilization of forest biomass to energy.

My staff is most willing to provide additional information or work with you in any way that we can to help promote greater use of forest biomass for renewable energy.

Sincerely,

*/s/ Ronald G. Ketter (for)*  
RANDY MOORE  
Regional Forester

Enclosures

cc: Bruce Goines  
Christine Nota  
Mike Chapel



# Region 5 Ecological Restoration

## Leadership Intent

The mission of the Forest Service is to sustain the health, diversity and productivity of the Nation's forests and grasslands to meet the needs of present and future generations. It is our intent to establish a regional vision and corresponding goals for Ecological Restoration consistent with this mission and the laws, regulations and policies that guide National Forest management.

Our goal for the Pacific Southwest Region<sup>1</sup> is to retain and restore ecological resilience of the National Forest lands to achieve sustainable ecosystems that provide a broad range of services to humans and other organisms. Ecologically healthy and resilient landscapes, rich in biodiversity, will have greater capacity to adapt and thrive in the face of natural disturbances and large scale threats to sustainability, especially under changing and uncertain future environmental conditions such as those driven by climate change and increasing human use. Our goal is based on a commitment to land and resource management that is infused by the principles of Ecological Restoration and driven by policies and practices that are dedicated to make land and water ecosystems more sustainable, more resilient, and healthier under current and future conditions.

Ecosystem services are the goods and services that flow from wildlands and forests that are valued and used by people, and that directly or indirectly support human well-being. Wildlands and forests are valued for basic goods, such as wood, fiber, and water, but these ecosystems also deliver important services that are perceived to be free or limitless such as air and water purification, flood and climate regulation, biodiversity, scenic landscapes, wildlife habitat, and carbon sequestration and storage. The National Forests are important providers of ecosystem services to humans and to other inhabitants of our wildlands as well. Our commitment to restoration-based manage-



Meadow restoration in the Tahoe National Forest

ment includes a commitment to a renewed focus on the sustainable delivery of ecosystem services.

In the 21st century, three major drivers of change define restoration needs on the National Forests of the Pacific Southwest Region: climate change and shifting hydrologic patterns; increasingly dense and unhealthy forests; and rapidly growing human populations. These synergistic sources of change are resulting in increasingly over-allocated and undervalued ecosystem services (especially water); a dramatic increase in disturbance events such as uncharacteristic large-scale wildfires, floods, and insect and disease outbreaks; new and growing threats from terrestrial and aquatic invasive species; and a growing need to revitalize rural economies in California, Hawaii and the Pacific Islands.

While sound restoration work is being conducted throughout the Region to increase forest and watershed resilience, important indicators suggest that disturbance impacts already outpace the benefits of this work, and that we will fall further behind over

<sup>1</sup> The Pacific Southwest Region (also known as Region 5) includes California, Hawaii and the Pacific Islands. It also includes small portions of the state of Nevada, managed by the Inyo National Forest, and the state of Oregon, managed by the Klamath National Forest.



time. Wildland fires in California are becoming larger and more frequent. Of greatest concern is a notable increase in the area of forestland burning at high severity over the last quarter-century. Fire exclusion over many decades, in conjunction with other forest management choices, has resulted in dense, middle-aged forests over large areas of California. These forests are highly susceptible to severe wildfire, which fragments forests, emits carbon, increases erosion rates and sedimentation, negatively affects water quality and delivery, and damages old-growth forest habitats that sustain important components of the Region's biodiversity. Dense middle-aged forests are also more susceptible to drought stress, large-scale insect outbreaks and disease epidemics.



Seedling planted after a wildfire, Lassen National Forest.

The ability of the Region's forestlands to sequester and store carbon has become a matter of national and international significance. Human additions of greenhouse gases to the atmosphere are altering the climate, and federal land management agencies like the Forest Service are expected to play a major role in U.S. adaptation and mitigation responses to global warming. Mitigation responses revolve around the maintenance and enhancement of carbon sequestration processes on forestlands. In the Mediterranean climate that characterizes much of California, annual summer droughts and frequent fire are the norm, retention of carbon in most of the forest landscape requires stand structures and compositions that are resilient to fire. Nearly a century of fire exclusion in California, coupled with other management decisions on both private and public land, has resulted in forests that are at an increasing risk of loss due to large scale disturbances. There is an additional crisis taking place in our Southern California Forests as an unprecedented number of human-caused fires have increased fire frequency to the extent that fire-adapted chaparral can no longer survive and is being replaced with non-native annual grasses at an alarming rate. To counter these trends, forest managers will need to significantly increase the pace and scale of the Region's restoration work. Only an environmental restoration program of unprecedented scale can alter the direction of current trends.

From this point forward, Ecological Restoration will be the central driver of wildland and forest stewardship in the Pacific Southwest Region, across all program areas and activities. Future Land and Resource Management Plans, other strategic plans and project plans will identify Ecological Restoration as a core objective. Our Ecological Restoration work will include coordination and support for all wildlands and forests in the Region to promote an "all lands" approach to restoration. It will lead to a new way of doing business with our partners and neighbors, to coordinate work and priorities across forests and wildlands regardless of ownership. Collaboration across ownerships and jurisdictions to achieve Ecological Restoration will require active use of Forest Service State and Private Forestry authorities; an expanded effort to engage tribes, partners,

and neighbors and to work in closer coordination with other agencies.

Resource program managers will have the responsibility for promoting Ecological Restoration activities including, but not limited to, management of vegetation, water, wildland fire, wildlife and recreation. Activities may include monitoring resource conditions; managing, restoring or enhancing terrestrial and aquatic ecosystems; or regulating human uses. Activities to be promoted include, among others, forest thinning and prescribed fire to decrease fuel loading and increase forest heterogeneity; meadow and riparian restoration to improve watershed function; environmentally and ecologically sensitive fire management practices; invasive species eradication; and wildlife and fish habitat improvement. Emphasis will be placed on expanding and developing partnerships to increase organizational capacity and the use of large-scale stewardship contracts operating at the landscape level to achieve restoration goals. We will expand and improve our consultation with tribal governments to utilize their traditional knowledge of stewardship and caring for the land. Emphasis will be placed on collaboration with stakeholders, communities, local government, volunteers, and citizens to facilitate dialogue and to decrease conflict in planning and implementing Ecological Restoration efforts.

With Ecological Restoration as the driving force behind the Region's work, and with a pace and scale sufficient to reverse current trends, it is our intent to accomplish the following in the next 15-20 years:

- ◆ Work together to achieve a collaborative and financially supported effort among forest land management agencies, private land owners, and the public to implement a large scale restoration program to accelerate the scale and pace of forest restoration activities on both public and private lands.
- ◆ Increase forest resilience through treatments (including prescribed fire and thinning) and wildfire, resulting in resource benefits to approximately 9 million acres on national forest system lands.
- ◆ Restore at least 50% of accessible, degraded forest meadows to improve their habitat function and ability to hold water longer into the summer and deliver clean water when most needed.



Loggy Meadow Restoration Project on the Sequoia National Forest. The project stabilized stream banks and allowed the stream to access its flood plain, returning the area to a more natural condition.

- ◆ Decrease the occurrence of uncharacteristically severe wildfires and their associated impacts through environmentally and ecologically sensitive vegetation treatments, fire management, and public education.
- ◆ Work with key partners in Southern California to expand fire prevention efforts in order to retard the loss of native ecosystems like chaparral and coastal sage scrub.
- ◆ Ensure vegetation and fire management efforts are grounded in concern for biodiversity and ecological process both before and after disturbances like fire.
- ◆ Reforest after wildfire where appropriate and implement suitable stand maintenance activities that meet project goals and site conditions.
- ◆ Ensure the retention and sustainability of forests, forest resources, and forest carbon over the long term, even as climates change.
- ◆ Expand watershed improvement programs at the forest level (inventory, prioritization, and scheduling of restoration).
- ◆ Target fuel reductions activities in key watersheds for protection of aquatic species and municipal watersheds.
- ◆ Work with partners to increase restoration actions that will improve habitat connectivity.



- ♦ Decrease the impacts of invasive species through preventative practices, rapid response control, management, rehabilitation and restoration, emphasizing cooperative work with federal, state, and community partners.
- ♦ Restore landscapes affected by unmanaged recreation.
- ♦ Identify the minimum road system needed for safe and efficient travel for administration, utilization and protection of National Forest System lands; establish priorities and a time schedule to decommission or close unneeded roads.
- ♦ Increase conservation education, interpretation and volunteer programs to promote understanding and support for restoration actions and increase understanding of the value of healthy watersheds and the ecosystem services that they deliver.

With a focus on Ecological Restoration, the following ecosystem services and community economic benefits will be enhanced:

- ♦ Delivery of clean water and an improved flow regime that benefits people, fish, and wildlife

- ♦ Fish, wildlife, and plant habitat, for both common and rare species
- ♦ Maintenance of biodiversity
- ♦ Forest resilience in the face of climate change and changing disturbance processes
- ♦ Carbon sequestration
- ♦ Air quality
- ♦ Rural economic health
- ♦ Outdoor recreation and scenic beauty
- ♦ Landscapes for health and renewal
- ♦ Wood products
- ♦ Wood biomass for energy
- ♦ Forage for wildlife and livestock
- ♦ Green economic activity

As we work toward the goals outlined above, we will learn and adjust as we go. Over time there will be new science, new ideas, and new collaborations that will improve our understanding. With this new understanding, we will make course corrections in policy and practice and move even more efficiently toward our overall goal of resilient forests and wildlands.



The Student Conservation Association (SCA) is one of the many partners that help restore California's National Forests. On the Angeles National Forest, SCA students restore a trail as part of a partnership called the "Angeles Wildfire Recovery Project."



A wood chipper processes woody biomass from a restoration thinning project, Mt Hope Stewardship Project, Plumas National Forest.

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March 2011



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

Order Instituting Rulemaking to Continue	)	Rulemaking 11-05-005
Implementation and Administration of	)	(Filed May 5, 2011)
California Renewables Portfolio Standard Program.	)	
_____	)	

**PLACER COUNTY AIR POLLUTION CONTROL DISTRICT  
OPENING COMMENTS TO OCTOBER 13, 2011 RENEWABLE FIT STAFF PROPOSAL**

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## **I. INTRODUCTION**

This rulemaking proceeding was instituted on May 5, 2011, as the successor to R.08.08-009, and as noted in the Order Instituting Rulemaking (OIR), ongoing administration of RPS procurement plans now requires a consideration of the recent RPS legislation (SB 2 [1X]) and necessary modifications to the existing program. These comments are more specifically in response to the October 13, 2011 Renewable FIT Staff Proposal.

This comment letter responds to Section 8, Questions 4, 5 and 6 relating to the concept of an additional adder -beyond the locational adder- currently included in the staff proposal. The Placer County Air Pollution Control District is confident that the Wildfire Hazard Reduction Adder, or (WHRA) will be of great benefit to the ratepayers of California. The significant values and avoided costs delivered as a result of small scale (<3MW) biopower generation facilities sited in strategic, high fire hazard locations, deserve recognition in the form of appropriately configured wholesale energy prices, commensurate with the values delivered to California ratepayers. In addition, the ratepayer benefits delivered are so compelling that small forest biopower generation deserve a 50 MW set aside (carve out) within the 750 total MW allocated to the FIT program. This assures deployment of a technology (small forest biopower) that provides substantial incremental value to California ratepayers, over and above other renewable technologies.

As the CPUC considers methodologies to implement the feed-in tariff program for small renewable power generators, there should be consideration for monetizing the value of locating small biopower projects near at risk communities, ecosystems and watersheds that provide water for human consumption and agriculture, and serve hydropower assets, as many of those assets are within, or directly downstream, from medium and high priority fire risk landscapes.

PCAPCD has discussed these comments with organizations that represent a wide range of stakeholders and public agencies that have significant concerns regarding the continued impacts of catastrophic wildfire in California. Many of these organizations endorse the methodology and approach laid out in these comments. (Organizations that support these comments, are listed (along with signature blocks) in Exhibit A, and letters of support are included herein as Attachments 1 through 5.)

## II. SECTION VIII; PRICING ADDERS

The staff proposal indicates that any adder beyond a “locational adder” must be justified for consideration by the CPUC staff and ALJ. Below is Placer County Air Pollution Control District’s detailed analysis as to why a Wildfire Hazard Reduction Adder, or (WHRA) will provide significant value to the ratepayers of California.

### ***4. Does the technology have an incremental avoided cost compared to a RAM project in the same product category? If so, explain why.***

Yes. Small forest biomass generation projects are versatile enough to qualify for inclusion in all three product categories (baseload, peaking as available, non-peaking as available). When forest biopower generation is compared to other renewable technologies (e.g., solar, wind, geothermal, biogas), regardless of product category there are significant incremental avoided costs/value to the ratepayer that fall under three primary categories of benefits to the ratepayers including:

- 1) Public Safety
  - Mitigated fire suppression costs to public agencies due to reduced incidence, intensity and size of catastrophic wildfires.
  - Reduced fire cost settlements by the investor owned utilities (IOU) for transmission/distribution system caused wildfires.
  - Mitigated fire restoration costs due to reduced incidence, intensity and size of catastrophic wildfires.
  - Reduced air emissions from wildfire and open burning which result in net air quality improvement, thus mitigating impacts to human health and the costs associated with health care.
- 2) Generation/Distribution Infrastructure Protection
  - Wildfire protection of sensitive upland watersheds that support existing hydropower assets from wildfire impacts (water quality, siltation of reservoirs, timing of water flow).
  - Wildfire protection for transmission/distribution systems.
- 3) Natural resource and property damage reduction



- Wildfire risk mitigation will reduce damage and erosion to watersheds from catastrophic fires that degrades water quality and reduces water supply by silting in reservoirs (reducing water storage capacity).
- Wildfire risk reduction due to proactive fuels treatment techniques will protect homes and commercial buildings thereby mitigating property insurance premiums over time.
- Proactive treatment of medium and high risk landscapes will mitigate the impacts of climate change (higher ambient temperatures and lower precipitation) upon forested landscapes at risk.

***5. Is the adder avoiding a ratepayer cost? In staff's view, any additional FIT adder should avoid a ratepayer cost and not a more general societal cost since the statute requires that ratepayers be held indifferent to the FIT payments.***

Yes. As landscapes receive fuels reduction treatments and wildfires are mitigated, the ratepayers of California will directly benefit due to; 1) improved public safety (from reduced incidence of wildfire), reduced fire size, intensity and suppression costs, reduced fire cost recovery settlements, reduced fire restoration costs and improved air quality (from reduction of wildfire emissions and diversion of traditionally open burned forest biomass); 2) protection of generation/distribution assets from wildfire and potential impacts to upland watersheds (which protect existing hydropower assets) and 3) natural resource and property damage (which protects water supplies for domestic/agricultural use and commercial/residential buildings) while creating more fire resilient landscapes (especially important due to climate change).

Figure 1 provides graphic representation of the forest and range landscapes considered at risk to catastrophic wildfire. Overlaid on this map are the locations of key hydropower assets.

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Figure 1. California Ecosystems and Hydropower Assets at Risk to Wildfire<sup>1</sup>



Each of the IOU service territories includes significant acreage considered at risk to wildfire. Table 1 summarizes high, medium and low priority landscape acreage by the three largest California Investor Owned Utilities (IOU). The entire state of California includes approximately 100 million total acres. A total of 24,927,583 acres (almost 25% of the California) are located within PG+E, SCE, and SDG+E service territory in the high and medium priority landscape categories.

<sup>1</sup>Map provided courtesy of the Fire and Resource Assessment Program, Department of Forestry and Fire Protection.

**Table 1. IOU Service Territory Acreage by Wildfire Threat Status<sup>2</sup>**

<b>Investor Owned Utility</b>	<b>Low Priority Landscape</b>	<b>Medium Priority Landscape</b>	<b>High Priority Landscape</b>	<b>Total</b>
<b>PG+E</b>	14,921,399	9,192,045	7,848,943	<b>31,962,387</b>
<b>SCE</b>	20,741,116	2,001,248	4,630,159	<b>27,372,523</b>
<b>SDG+E</b>	769,512	248,548	1,006,640	2,024,700
<b>Total</b>	<b>36,432,027</b>	<b>11,441,841</b>	<b>13,485,742</b>	<b>61,359,610</b>

By locating small biopower generation facilities within high and medium priority landscapes, additional treatment and removal of hazardous forest fuels will be accomplished due to a ready market being created for biomass material for use as wood fuel for renewable power generation. Deployment of 50 MW of small biopower generation facilities, scaled at 1 to 3 MW, will result in a ready market for about 400,000 bone dry tons (BDT)<sup>3</sup> of excess forest biomass. Land managers in California have been thinning forests and removing forest biomass sustainably and in compliance with state and federal regulations, for use as wood fuel for several decades. Field experience and recent studies<sup>4</sup> confirm that an average of 13 BDT/acre of woody biomass is recoverable as a byproduct of forest fuels treatment activities. At 13 BDT/acre and 400,000 BDT per year market demand (assuming 50 MW of small forest biopower generation), approximately 30,770 acres will be treated. Treatment of 30,770 acres of high and medium priority at risk landscapes will mitigate wildfire behavior and reduce acres burned, as well as improve fire suppression cost effectiveness.<sup>5</sup>

In the past five years over 4.5 million acres have been impacted by wildfire in California. Table 2 provides an overview of acres burned by wildfire from 2006 through 2010. While average acreage impacted per year over the past five years is 913,973 acres, there is a disturbing trend of increasing acres impacted over time. The five year rolling average of acres

<sup>2</sup>Data provided by Fire and Resource Assessment Program, Department of Forestry and Fire Protection.

<sup>3</sup>BDT is standard unit of measure for the biopower industry in California, and represents 2,000 dry pounds of woody biomass material.

<sup>4</sup>Fuel Procurement Plan for the Lake Tahoe Basin Biomass Power Facility, TSS Consultants, February 2011.

<sup>5</sup>The Cone Fire: A Chance Reckoning for Fuels Treatments, Carl Skinner, Martin Ritchie, Fire Science Brief, January 2008.

burned is trending significantly upward over time as shown in Table 2.

**Table 2. Acres Burned by Wildfires 2006 through 2010<sup>6</sup>**

<b>Fiscal Year</b>	<b>Acres Burned</b>	<b>Five Year Rolling Average Acres Burned</b>
<b>2006</b>	869,380	592,721
<b>2007</b>	1,520,362	789,150
<b>2008</b>	1,593,690	914,734
<b>2009</b>	451,969	942,923
<b>2010</b>	134,462	913,973
<b>Total</b>	<b>4,569,863</b>	
<b>Average/Year</b>	<b>913,973</b>	

Fire agencies tasked with managing fire in California understand the importance of fuels treatment through the removal of hazardous forest fuels (letters of support from the two largest fire agencies endorsing these comments are included in Attachment A). Hazardous fuels treatment is a key component of the 2010 Strategic Fire Plan for California.<sup>7</sup>

Assuming 50 MW (scaled at 1 to 3 MW) of small forest biopower generation, the proactive fuels reduction treatment of 30,770 acres per year will mitigate acreage impacted by wildfire. As strategic hazardous fuels reduction projects are completed on high and medium priority landscapes, the number and intensity of catastrophic wildfires will be reduced and fire suppression costs will drop.

Other costs are incurred as a result of wildfires in California and can be very significant. For example the total costs incurred (including post fire landscape restoration, home replacement) for the Old, Grand Prix and Padua fires in 2003, are estimated at over \$1.2 billion

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<sup>6</sup>Data provided by CALFIRE and US Forest Service.

<sup>7</sup>2010 Strategic Fire Plan for California, State Board of Forestry and Fire Protection, California Department of Forestry and Fire Protection, June 2010.



dollars.<sup>8</sup> This estimate does not include costs associated with wildfire that are not easily quantified such as impacts to ecosystem values (e.g., wildlife habitat), loss of recreational opportunities and health care treatment costs (associated with hazardous air pollutants from wildfire).<sup>9</sup> However, fire suppression costs are readily quantifiable and are used here to demonstrate avoided costs and value to the ratepayers if small forest biopower projects are developed. Table 3 provides historic data regarding fire suppression costs incurred by the three primary fire agencies (US Forest Service, CALFIRE and BLM) fighting fires in California from 2006 through 2010.

**Table 3. Annual Fire Suppression Costs - CALFIRE, USFS and the Bureau of Land Management 2006 through 2010<sup>10</sup>**

<b>Fiscal Year</b>	<b>CALFIRE</b>	<b>US Forest Service</b>	<b>Bureau of Land Management</b>	<b>Total</b>
<b>2006</b>	\$618,411,000	\$377,383,958	\$27,610,000	<b>\$1,023,404,958</b>
<b>2007</b>	\$775,615,000	\$319,972,787	\$29,910,000	<b>\$1,125,497,787</b>
<b>2008</b>	\$1,004,125,000	\$741,156,096	\$34,440,000	<b>\$1,779,721,096</b>
<b>2009</b>	\$805,386,000	\$311,387,024	\$21,100,000	<b>\$1,137,873,024</b>
<b>2010</b>	\$776,684,000	\$98,837,894	\$22,160,000	<b>\$897,681,894</b>
<b>Totals</b>	<b>\$3,980,221,000</b>	<b>\$1,848,737,759</b>	<b>\$135,220,000</b>	<b>\$5,964,178,759</b>
<b>Average/Year</b>	<b>\$796,044,200</b>	<b>\$369,747,552</b>	<b>\$27,044,000</b>	<b>\$1,192,835,752</b>

Over the past five years wildfire suppression costs in California have totaled almost \$6 billion dollars and averaged \$1.19 billion dollars per year.

Wildfires are typically ignited by natural (e.g., lightning) and human (e.g., campfire, arson) causes. Transmission and distribution systems occasionally interact with forest

<sup>8</sup>The Old, Grand Prix and Padua Wildfires: How Much Did These Fires Really Cost? Dunn et. al, 2005.

<sup>9</sup>Health Effects of the 2003 Southern California Wildfires on Children, Kunzli et. al., 2006.

<sup>10</sup>Data provided by CALFIRE, US Forest Service and the Bureau of Land Management.

vegetation (e.g., trees falling onto power lines) to ignite wildfires. Much of California's transmission and distribution system is located across forest landscapes considered at significant risk to wildfire. Figure 2 highlights the location of major transmission lines (rated at 70 to 500 KV) and utility service territories relative to at risk landscapes.

**Figure 2. California Ecosystems and Power Transmission Assets at Risk to Wildfire<sup>11</sup>**



<sup>11</sup>Map provided courtesy of the Fire and Resource Assessment Program, Department of Forestry and Fire Protection.

From 2006 through 2010, California IOU paid out almost \$12 million dollars per year to fire agencies to provide compensation for fire suppression costs incurred fighting fires started by transmission and distribution system caused ignitions. Table 4 summarizes fire suppression cost compensation paid to the US Forest Service and CALFIRE. In addition to fire suppression cost recovery, the IOU are subject to civil claims which can amount to hundreds of million dollars. San Diego Gas and Electric is currently in negotiations with homeowner insurance companies to settle claims due to SDG+E power lines igniting the Witch Creek, Guejito and Rice Canyon fires in 2007. Final settlements will likely exceed \$1.1 billion<sup>12</sup> as all three fires destroyed over 1,300 homes and killed two county residents.

As high and medium priority landscapes are treated, the incidence of large wildfires from transmission/distribution system ignitions will be reduced. As acres impacted by wildfires started by transmission/distribution system ignitions are reduced, fire suppression cost recovery will drop, thus providing the IOU (and ratepayers) significant avoided cost savings in damage settlements and fire insurance premiums.

**Table 4. IOU Fire Suppression Cost Recovery Settlements  
for 2006 through 2010 Fire Incidents<sup>13</sup>**

<b>Agency</b>	<b>Number of Fire Incidents Settled</b>	<b>Fire Suppression Cost Recovery Settlement</b>	<b>Number of Fire Incidents Settlements Pending</b>
<b>US Forest Service</b>	2	\$24,841,000	2
<b>CALFIRE</b>	21	\$35,088,000	1 <sup>14</sup>
<b>Total</b>	<b>23</b>	<b>\$59,929,000</b>	
<b>Average/Year</b>	<b>4.6</b>	<b>\$11,985,000</b>	

<sup>12</sup>San Diego Union Tribune, Sept 18,2011 article.

<sup>13</sup>Data provided by CALFIRE and US Forest Service.

<sup>14</sup>Pending case with letter of demand submitted.

An additional wildfire related cost incurred is the expense to restore fire damaged landscapes. Table 5 provides the costs incurred by the US Forest Service and the Bureau of Land Management, restoring and stabilizing fire impacted, federally managed landscapes in California from 2006 through 2010. (Costs for post-fire restoration and rehabilitation of private lands is significant<sup>15</sup> but not readily available, and so is not included in Table 5.) Proactively treating high and medium priority landscapes will reduce the cost of fire restoration as acres impacted by wildfire are reduced.

**Table 5. US Forest Service and Bureau of Land Management Fire Restoration Costs 2006 through 2010<sup>16</sup>**

<b>Fiscal Year</b>	<b>Restoration and Stabilization Costs</b>
<b>2006</b>	\$3,438,181
<b>2007</b>	\$7,085,597
<b>2008</b>	\$18,016,244
<b>2009</b>	\$8,892,107
<b>2010</b>	\$3,603,167
<b>Total</b>	<b>\$41,035,296</b>
<b>Average/Year</b>	<b>\$8,207,059</b>

***6. Can the adder be quantified? If so, suggest a method and the data sources for quantifying the adder. Reference previous filings if applicable.***

Yes. As stated previously (see answers to questions 4 and 5), the incremental value to ratepayers for avoided costs associated with deployment of small biopower facilities in California fall into three categories; public safety, protection of power generation/distribution infrastructure from wildfire, and protection of natural resources and private property.

The direct quantifiable costs associated with wildfire in California are provided in the answer to question 5. Summarized below in Table 6 are the findings from this data:

<sup>15</sup>San Diego Union Tribune, Sept 18,2011 article regarding SDG+E settlement discussions with homeowner insurance companies.

<sup>16</sup>Data provided US Forest Service and the Bureau of Land Management.



**Table 6. Annual Wildfire Related Costs Based on 2006 through 2010 California Wildfire Incidents**

Wildfire Cost Category	Average Cost/Year
Wildfire Suppression (CALFIRE, USFS, BLM)	\$1,192,835,792
Wildfire Restoration & Stabilization (USFS, BLM)	\$8,207,059
Total	<b>\$1,201,042,851</b>

Strategic placement of fuels treatment activities are effective in modifying wildfire behavior resulting in fire size reduction and mitigating fire suppression costs.<sup>17</sup> Deployment of small biopower generation facilities with a generation capacity of 50 MW (scaled at 1 to 3 MW) will result in the treatment of approximately 30,770 acres of high and medium priority landscapes per year. While not all of the costs summarized in Table 6 are paid directly by California IOU retail ratepayers, they serve to underscore the very significant costs borne by the taxpayers, which include almost all ratepayers. The annual cost associated with wildfire suppression and restoration in California totals over \$1.201 billion. Assuming that 75 percent of California ratepayers are served by the IOU, then wildfire related costs to the IOU ratepayers amount to about \$900,782,000 ( $\$1,201,042,851 \times 75\%$ ) per year. Using the five-year acres burned average figure of 913,973 acres per year, the annual wildfire cost to the IOU ratepayer is \$985/acre ( $\$900,782,000/913,973$  acres).

A recent study<sup>18</sup> sponsored by the California Energy Commission and conducted by the US Forest Service (Pacific Southwest Research Station) found a net reduction in burned acres as a direct result of strategic placement of fuels treatment projects across a northern California study area comprised of 2.7 million acres. On a per decade basis, burned acre reduction over the 40 year modeling period ranged from 11% to 36% with an average per decade reduction of 23.5%. Using a median 2.3% per year reduction in burned acres results in a net reduction of 21,021 acres ( $913,973 \times 2.3\%$ ) burned per year. A net reduction of 21,021 acres impacted by

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<sup>17</sup>USDA Forest Service, "A Summary of Fuel Treatment Effectiveness in the Herger-Feinstein Quincy Library Group Pilot Project Area," publication # R5-TP-031, December 2010.

<sup>18</sup>USDA Forest Service, Pacific Southwest Research Station. 2009. *Biomass to Energy: Forest Management for Wildfire Reduction, Energy Production, and Other Benefits*. California Energy Commission, Public Interest Energy Research (PIER) Program. CEC-500-2009-080.

wildfire results in an annual avoided cost savings to the IOU ratepayers of \$20,705,000 (21,021 acres \* \$985). This avoided cost value to the IOU ratepayers amounts to a wildfire hazard risk reduction adder of \$.055/kWh assuming 50 MW of installed biopower operating at 85% capacity.

Assuming that the Wildfire Hazard Reduction Adder is set at \$.055/kWh and facilities with a combined output of 50 MW (scaled at 1 to 3 MW) of community-scale biopower projects are deployed across all IOU service territories, the net cost to the IOU ratepayer will amount to approximately \$.15/month.

Table 7 summarizes the figures used to calculate this cost estimate.

**Table 7. Incremental Cost to IOU Retail Ratepayer for the Wildfire Hazard Reduction Adder**

<b>Total Generation Capacity</b>	50,000 KW
<b>Operating Hours/Year</b>	7,446 hours/Year
<b>Total Kilowatt Generated</b>	372,300,000 KW
<b>Wildfire Hazard Reduction Adder</b>	\$.055/kWh
<b>Total Annual Cost of WHRA</b>	\$20,476,500
<b>Number of IOU Retail Ratepayers</b>	11,600,000
<b>Incremental Cost per Ratepayer/Month</b>	<b>\$.15/Month</b>

### III. CONCLUSION

The current CPUC FIT rulemaking process provides a clear opportunity for implementation of an energy pricing mechanism that delivers value to California IOU ratepayers. By providing an energy pricing incentive in the form of a **Wildfire Hazard Reduction Adder**, small community-scale forest biopower generation projects placed strategically within high and medium hazard landscapes would provide significant avoided cost value to the IOU ratepayers. The avoided cost benefits and incremental value delivered to the ratepayers are compelling and significant. A 50 MW carve out of the 750 MW allocated to the FIT program should be set aside for small forest biopower generation.

Avoided cost calculations provided here (see answer to Question 6) only account for the quantifiable benefits (wildfire suppression costs and post-fire restoration costs). A number of ratepayer benefits are not easily quantified (e.g., clean air, water quality, family wage jobs, recreational opportunities protected) and as such are not included in our calculations.

DATED: November 2, 2011.

Respectfully submitted,

/s/ Christiana Darlington

CHRISTIANA DARLINGTON

Deputy County Counsel, Placer

On behalf of;

PLACER COUNTY AIR POLLUTION

DISTRICT

175 Fulweiler Avenue

Auburn, CA 95603

Telephone: 530/889-4044

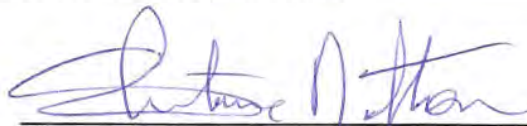
cdarling@placer.ca.gov

**VERIFICATION**

I am an officer of the non-profit organization herein, and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and, as to those matters, I believe them to be true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 2<sup>nd</sup> day of November, 2011, at Auburn, California.



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CHRISTIANA DARLINGTON  
General Counsel

## EXHIBIT A

## Exhibit A



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Representative's Name: Michael DeBonis, Executive Director  
Organization: Forest Guild



---

Representative's Name: Kim Hunter, Coordinator  
Organization: Modoc County Partners



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Representative's Name: Ken Nolte, Chair  
Organization: Northern California Society of American Foresters



---

Representative's Name: Larry Alexander,  
Organization: Northern California Resource Center



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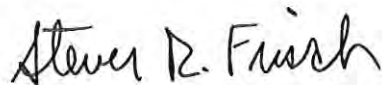
Representative's Name: Paul Mason, Vice President of Policy & Incentives  
Organization: Pacific Forest Trust





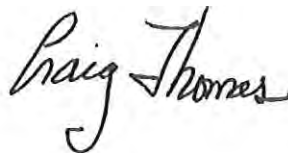
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Representative's Name: Greg Stangl, CEO  
Organization: Phoenix Energy



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Representative's Name: Steven Frisch, President and CEO  
Organization: Sierra Business Council



---

Representative's Name: Craig Thomas, Executive Director  
Organization: Sierra Forest Legacy



---

Representative's Name: Jonathan Kusel, Executive Director  
Organization: Sierra Institute for Community and Environment



---

Representative's Name: Bill Wickman, Spokesperson  
Organization: Sustainable Forest Action Coalition

A handwritten signature in black ink, appearing to read "Matthew D. Summers". The signature is fluid and cursive, with a horizontal line extending from the end of the name.

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Representative's Name: Matthew D. Summers, Director of Operations  
Organization: West Biofuels, LLC

## ATTACHMENT 1



## California Forestry Association

1215 K Street, Suite 1830  
Sacramento, CA 95814  
(916) 444-6592 fax (916) 444-0170  
[www.foresthealth.org](http://www.foresthealth.org) [cfa@foresthealth.org](mailto:cfa@foresthealth.org)

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October 27, 2011

Commissioner Mark J. Ferron  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102

Re: 399.20 Rulemaking Process

Commissioner:

The California Forestry Association (CFA) supports the November 2, 2011 comments provided by the Placer County Air Pollution Control District (PCAPCD) regarding changes to PUC Code 399.20, addressing feed in tariffs for small renewable power generation

CFA is a trade association whose members consist of forest products producers, forest landowners, biomass powerplant owners, and natural resource professionals committed to environmentally sound policies, responsible forestry, and sustainable use of natural resources. Our member's process over 90 percent of the wood products manufactured in the state of California and produce much of the electricity generated from forest biomass.

According to Regional Forester, Randy Moore, the National Forests of California need forest health and fuels reduction treatments on about 9 million acres over the next 15 years (R5 Ecological Restoration Leadership Intent, March 2010). The goal is to return these productive forest lands to a resilient condition to be resistant to insects, disease and wildfire.

This goal, of course, then leads to substantial benefits to society. A recent PIER study authored by Mark Nechodom (January 2010, CEC-500-2009-080) suggests that active forest management in northern California on the National Forests could reduce wildfire by 22 percent and reduce net emissions ("cradle to grave") by a whopping 65 percent. Research from 1979 here in California has shown that controlled combustion of woody biomass in a boiler reduces pollutants by 98 percent compared to open field burning the waste (Emission factors from "Hydrocarbon Characterization of Agricultural Waste Burning", CAL/ARB Project A7-068-30, University of California, Riverside, E.F. Darley, April 1979). Finally, the Western Governors Association documented through their January 2006 Biomass Taskforce Report that there's a total of 10-11 cents/kW of ancillary benefits from utilization of woody biomass.

We are extremely concerned over the maintenance of the existing biomass power infrastructure. We've just seen the 10 megawatt Mt. Lassen Power facility at Westwood, CA close its doors and are now in the process of reducing their workforce at that location and selling the fuel pile. In addition to maintaining the existing infrastructure, the PUC has the opportunity, through the feed in tariff rulemaking process, to incentivize additional biopower generation capacity at the community scale as well as at a larger scale at strategic locations to reduce feedstock haul costs.

Specifically the PCAPCD strategy of locating small biopower projects in high wildfire risk zones is an excellent approach that could provide significant value to the IOU ratepayers. A Wildfire Hazard Reduction "Adder" for projects strategically located in high wildfire risk zones would monetize the value of wildfire mitigation and improved watersheds afforded by forest restoration efforts facilitated through the development of new biopower projects.

Sincerely,

A handwritten signature in black ink that reads "Steven A. Brink". The signature is fluid and cursive, with the first name "Steven" being more prominent than the last name "Brink".

STEVEN A. BRINK  
Vice President-Public Resources  
California Forestry Association  
1215 K St., Suite 1830  
Sacramento, CA 95814  
916-444-6592  
[steveb@foresthealth.org](mailto:steveb@foresthealth.org)

cc: Michael Peevey, President, CPUC  
Tom Christofk, Placer County Air Pollution Control Officer  
Jaclyn Marks, CPUC staff  
Ed Randolph, CPUC staff  
Judith Ikle, CPUC staff

## ATTACHMENT 2





## DEPARTMENT OF FORESTRY AND FIRE PROTECTION

P.O. Box 944246  
SACRAMENTO, CA 94244-2460  
(916) 653-7772  
Website: [www.fire.ca.gov](http://www.fire.ca.gov)



October 28, 2011

Commissioner Mark J. Ferron  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102

Re: 399.20 Rulemaking Process

Commissioner Ferron:

The California Department of Forestry and Fire Protection (CAL FIRE) is sending this letter to express support for November 2, 2011 comments provided by the Placer County Air Pollution Control District (PCAPCD) regarding changes to PUC Code 399.20 that address feed-in tariffs for small renewable power generation.

CAL FIRE is responsible for the protection and stewardship of over 31 million acres of privately owned forest and rangelands. Fire suppression and historic forest management have changed the structure and condition of our forests, resulting in increased fuel loading, decreased forest health, and increased threat of extreme wildfire behavior on these wildlands. Wildfires annually burn over 900,000 acres statewide (2010 five year average). Acreage has been increasing for several decades. Over 200,000 acres of that occurs on CAL FIRE responsibility area, costing over \$200 million per year for suppression and resulting in over \$100 million annually in damages to property and resources. Recent climate change studies project 57 to 169 percent more wildfires by the end of the century, with a doubling of burned acres in northern California.

Wildfire hazards can be reduced by thinning trees and removing brush, which make forests more resistant and resilient to damage, however treatments are very costly. Biopower facilities that utilize forest residues can help underwrite the cost of these treatments, making them feasible for landowners who could not otherwise afford to implement them. Biomass utilization for energy also provides air quality co-benefits by reducing pollutants that would occur from alternative disposal such as pile burning or chipping material and leaving it on site.

A robust biopower industry and distributed generation infrastructure is critical to the State's fire hazard reduction goals. The Placer County Air Pollution Control District's recommendations support multiple objectives in the State's 2010 Strategic Fire Plan under Goal 5, which states, "Develop a method to integrate fire and fuels management practices with landowner priorities and multiple jurisdictional efforts within local, state and federal responsibility areas."

Policies and agency actions are needed to maintain current infrastructure and also to incentivize additional development such as community scale projects that can demonstrate environmental, economic and social sustainability. Community scale projects will also result in local job creation, which is especially critical for many rural communities.

CAL FIRE supports recommendations of the Placer County Air Pollution Control District (PCAPCD) regarding the feed-in tariff and the geographic adder for placing small biopower projects in high wildfire risk zones. We believe it will provide significant public benefits and returns to investor owned utility (IOU) ratepayers through avoided wildfire impacts and suppression costs.

Sincerely,



KEN PIMLOTT  
Director

cc: Michael Peevey, President, CPUC  
Tom Christofk, Placer County Air Pollution Control Officer  
Jaclyn Marks, CPUC staff  
Ed Randolph, CPUC staff  
Judith Ikle, CPUC staff

## ATTACHMENT 3



United States  
Department of  
Agriculture

Forest  
Service

Pacific  
Southwest  
Region

Regional Office, R5  
1323 Club Drive  
Vallejo, CA 94592  
(707) 562-8737 Voice  
(707) 562-9240 Text (TDD)

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File Code: 2020

Date: October 31, 2011

Mark J. Ferron, Commissioner  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102

Re: 399.20 Rulemaking Process

Dear Commissioner Ferron:

This past year, my staff and I, along with key State and Federal officials, visited Chairman Peevey and California Public Utilities Commission (PUC) staff to discuss forest and community manager's interests in a healthy and robust bio-energy infrastructure in California. Land managers need this infrastructure to achieve forest restoration activities to reduce fire risk, protect water quality and biodiversity, and provide recreational experiences for California citizens.

Bio-energy facilities are critical for disposal of hazardous fuels that must be removed in high fire risk areas. Both existing and prospective facilities that might be sited following the current 399.20 Rulemaking Process offer economic and environmentally preferable options for disposal of forest restoration byproducts. I encourage the Commission to seriously consider the November 2, 2011, comments provided by the Placer County Air Pollution Control District (PCAPCD) regarding changes to PUC Code 399.20, addressing feed in tariffs for small renewable power generation.

As you are aware, our agency is responsible for managing almost half of the forested landscape of California. A significant challenge for the Forest Service and other agencies tasked with conserving and protecting natural resources in California is the very serious threat of catastrophic wildfire. In 2010, the Forest Service spent almost \$100 million fighting California wildfires. To mitigate wildfire impacts on communities and natural resources, we are proactively treating hazardous fuels on over 175,000 acres per year. Our analysis indicates the need to treat 500,000 acres per year to get ahead of the catastrophic fire cycle and help return forest systems to a more fire resilient state.

We are facing several challenges that must be addressed if we are to reach this goal. Funding hazardous fuels treatment activities is a major challenge that for years has been supported by a robust and active biomass power generation sector in California. The existing infrastructure serves over seven million acres of Forest Service lands. However, significant forested areas are still isolated and simply too far away from existing facilities, making it uneconomical to haul biomass to these facilities. Through this Rulemaking Process, the PUC has an opportunity to consider the PCAPCD strategy of locating small bio-power projects in high wildfire risk zones.



This concept of providing incentives to increase the bio-power generation capacity at the community scale is a well thought out approach, and one that could provide significant value to the IOU ratepayers.

Additionally, diversion of excess forest biomass from the open burning of these residues and into controlled combustion/gasification technology facilities with air emissions controls will improve air quality (reducing impacts to human health), reduce regional haze and mitigate greenhouse gases. Many of the ecosystem services and societal benefits delivered as a result of locating bio-power facilities in forested regions are hard to quantify in economic terms, but we believe their value is significant.

If you have questions, please contact Bruce Goines, Regional Ecosystem Services Group Leader, at (707) 562-8910.

Sincerely,

/s/ Randy Moore

RANDY MOORE  
Regional Forester

cc: Michael Peevey  
President CPUC  
Tom Christofk  
Placer County Air pollution Control Officer  
Jaclyn Marks  
CPUC Staff  
Judith Ikle  
CPUC Staff

## ATTACHMENT 4





AUBURN OFFICE  
11521 Blocker Drive, Ste. 205  
Auburn, CA 95603  
p (530)823-4670 f (530)823-4665

November 1, 2011

Commissioner Mark Ferron  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102

Dear Commissioner Ferron:

**RE: PU CODE 399.20 RULEMAKING PROCESS**

The Sierra Nevada Conservancy (SNC) supports comments provided by the Placer County Air Pollution Control District (PCAPCD) regarding changes to Public Utilities Code 399.20 that address feed-in tariffs for small renewable power generation. The SNC urges the Public Utilities Commission to support PCAPCD's requests.

The SNC, a state agency, has a broad mission to improve the environmental, economic and social well-being of the Sierra Nevada region. We implement this statutory charge through a Proposition 84 grant program, as well as providing support and assistance to partners throughout the region who are undertaking efforts consistent with our mission. Activities that address the "triple bottom line" are our highest priorities, and we have worked with Placer County during the past few years, as their efforts to site a small scale biomass facility in their county is just such an project.

The utilization of biomass from our forests can result in a variety of important benefits beyond the production of energy or other wood products. Without the ability to use biomass that needs to be removed (much of it is not suitable for lumber production), the necessary amount of work cannot be completed without significant adverse impacts to the environment. This is due to the fact that the only feasible alternative is to "pile" the material and to burn it in place. This activity significantly increases the emission of pollutants. Furthermore, without some economic return on the material being removed, the scale of work that can be completed is drastically reduced.

[WWW.SIERRANEVADA.CA.GOV](http://WWW.SIERRANEVADA.CA.GOV)  
TOLL FREE (877)257-1212



Commissioner Mark Ferron


November 1, 2011

Page 2 of 2

Recently, the Regional Forester for the United States Forest Service Region 5 has called for increased restoration efforts on the National Forests in our state, stating that nearly 500,000 acres a year need to be treated (a near tripling of current efforts). For the reasons stated above, without the ability to use the biomass to be removed, we will not be able to restore our forests to ecological health and reduce the risk and consequences of large damaging fires. Clean water, improved wildlife habitat, carbon storage and reduced air emissions are all clear benefits of healthy forests and watersheds that will be diminished without restoration efforts. Such restoration efforts will directly benefit the utilities and ratepayers, by reducing and avoiding cost recovery actions that occur often with utility lines in these forested areas. In addition, reducing the risk of these large, damaging fires can avoid costs associated with infrastructure damage.

In summary, a viable, sustainable community scale biopower industry with distributed infrastructure is crucial to the state and federal government's efforts to restoring our forests to ecological health. The SNC supports the recommendations of the PCAPCD regarding the feed in tariff and the geographic adder for siting small biopower projects in high wildfire risk zones for all of the reasons stated above.

Sincerely,



JIM BRANHAM

Executive Officer

cc: Tom Christofk, Placer County Air Pollution Control Officer  
Jaclyn Marks, California Public Utilities Commission  
Ed Randolph, California Public Utilities Commission  
Judith Ikle, California Public Utilities Commission

[WWW.SIERRANEVADA.CA.GOV](http://WWW.SIERRANEVADA.CA.GOV)

TOLL FREE (877)257-1212



## ATTACHMENT 5





## The Watershed Research and Training Center

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PO Box 356 • Clinic Avenue • Hayfork, Ca. 96041 • (530) 628-4206  
Fax (530) 628-5100 • email: [wrtc@hayfork.net](mailto:wrtc@hayfork.net) • [www.thewatershedcenter.com](http://www.thewatershedcenter.com)

---

November 1, 2011

Commissioner Mark J. Ferron  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102

Re: 399.20 Rulemaking Process

Commissioner:

The Watershed Research and Training Center (WRTC) supports the November 2, 2011 comments provided by the Placer County Air Pollution Control District (PCAPCD) regarding changes to PUC Code 399.20, addressing feed in tariffs for small renewable power generation and distribution.

Over the past 18 years WRTC has worked both locally in Trinity County and northwestern CA, and as part of larger coalitions working across the West, to advance the development of community-scale biomass energy facilities as a tool to improve the economics of hazardous fuels reduction and forest landscape restoration. Volumes of academic research support the assertion that reducing the threat of large-scale high-severity wildfires can protect and enhance a wide suite of public benefits such as protecting municipal watersheds and water systems, reducing risks associated with utility lines, and reducing wildfire related smoke emissions and human health impacts. The ecological values of biomass harvest and bio-energy generation may even exceed these public benefits, making forests resilient in the face of climate change and restoring and protecting habitat for wildlife.

Current energy prices do not reflect these essential public and ratepayer benefits. We believe that the PCAPCD has recommended a novel and equitable approach to assessing value to these ratepayer benefits, and that the feed-in tariff program is an appropriate vehicle for advancing this method of valuation.

Small community-scale biomass energy facilities have a critical role to play in CA's renewable energy future, and in sustainable forest ecosystems, watersheds, energy transmission systems, and rural forest communities like ours. We urge you to adopt PCAPCD's recommendations. Thanks for this for this opportunity to express our support.

Nick Goulette, Executive Director