

W 24a & 24b W 25a

ADDENDUM TO COMMISSION PACKET FOR ENERGY, OCEAN RESOURCES, and FEDERAL CONSISTENCY

For Wednesday, March 9, 2011

**Item No. W 24a & W 24b Appeal No. A-2-MAR-11-007
Appeal No. A-2-MAR-11-008
Nextera, Marin Co.**

- Staff Report Modifications
- Correspondence
- Ex Parte Communication

**Item No. W 25a CD-061-10
U.S. Army Corps of Engineers**

- Correspondence

CALIFORNIA COASTAL COMMISSION

45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200



W24a

March 8, 2011

To: Coastal Commissioners and Interested Persons

From: Alison Dettmer, Deputy Director
Cassidy Teufel, Analyst, Energy, Ocean Resources & Federal Consistency Division

Subject: **STAFF REPORT ADDENDUM for Item W24a**
Coastal Development Permit Appeal No. A-2-MAR-11-007 (NextEra, Marin County)

Coastal Commission staff recommends the following minor modification to the staff report. Deletions are shown with ~~striketrough~~ and additions are underlined.

[MODIFICATION 1: The following change on page 2 of the staff report]

SUBSTANTIVE FILE DOCUMENTS:

- Certified County of Marin Local Coastal Program
- Coastal Commission Appeal File No. A-2-MAR-11-007 ~~A-2-MAR-11-107~~

[MODIFICATION 2: The following change to the appeal number referenced in the motion and resolution on page 5 of the staff report]

IV. MOTION AND RESOLUTION

I move that the Commission determine that Appeal No. A-2-MAR-11-007 ~~A-2-MAR-11-107~~ raises NO substantial issue with respect to the grounds on which the appeal has been filed under Section 30603 of the Coastal Act.

STAFF RECOMMENDATION ON ~~OF~~ NO-SUBSTANTIAL ISSUE:

Staff recommends a **NO** vote. Failure of these motions will result in a de novo hearing on the application, and adoption of the following resolutions and findings. Passage of these motions will result in a finding of No Substantial Issue and the local actions will become final and effective. The motion passes only by an affirmative vote by a majority of the appointed Commissioners present.

RESOLUTION TO FIND SUBSTANTIAL ISSUE:

The Commission finds that Appeal No. A-2-MAR-11-007 ~~A-2-MAR-11-107~~ presents a substantial issue with respect to the grounds on which the appeal has been filed under section 30603 of the Coastal Act regarding consistency with the certified local coastal plan and/or the public access and recreation policies of the Coastal Act.

Correspondence
W24a and W24b

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March 4, 2011

Sara Wan, Chair
45 Fremont Street
Suite 2000
San Francisco, CA 94105-2219

Subject: *Item W24a - Appeal No. A-2-MAR-11-007 (NextEra, Marin Co.)*
Item W24b - Appeal No. A-2-MAR-11-008 (NextEra, Marin Co.)

Dear Chair Wan and Commissioners,

NextEra Energy Resources (NextEra) appreciates the Commission staff efforts to study and better understand our meteorological (met) tower project in Marin County. The project consists of two met towers with separate applications that are intended to collect wind resource data for consideration of development of a future wind energy project. Any future wind energy project will of course require separate permitting action.

NextEra welcomes the opportunity to further educate the staff and Commission on the met tower project. While NextEra are not opposing the staff recommendation to find substantial issue, we strongly believe this project is consistent with both Marin Local Coastal Plan (LCP) and policies of the Coastal Act – specifically Chapter 3 -- and look forward to a *de nova* hearing before the Commission. The development of renewable energy in California is a matter of statewide priority and an important policy issue for Commission discussion. Following are brief comments on several staff issues of concern:

Are met towers electric facilities and a conforming land use in C-APZ zoning?

Wind energy differs from other methods of electrical generation in its need for resource evaluation prior to development of the wind generating facilities. Wind energy's unique infrastructure requirements should not exclude it from definition as an essential component of an electrical facility. Met towers are critical infrastructure for the development of wind energy resources; Marin County's development code in fact requires the measurement of wind speeds prior to erection of wind turbines in the coastal zone. Accordingly, it is NextEra's view that staff's preliminary finding that met towers do not qualify as electrical facilities is incorrect.



Was an approved master plan required for this project?

There are discrepancies between the LCP and County development code on the necessity of a master plan for development in the coastal zone and the authority to waive such requirements on *de minimus* projects. The development code allows use of a master plan to be waived at the County's discretion. A waiver was not explicitly processed on this project, as it was implicitly given when the use permit was granted; further, the implementation and use of master plans is at the sole discretion of Marin County.

Will visual resources be significantly impacted?

The extensive visual simulations for each of the proposed met towers found that there were no significant visual impacts. NextEra conducted these visual analyses as part of the County approval process and to be responsive to any community concerns. The towers are only 8 to 10 inches wide, have a very slim visual profile, and are extremely difficult to see with the human eye from relatively short distances.

Are there potential significant impacts to local wildlife?

No, the potential avian impacts of this project are minimal, as concluded in the risk assessment done by Curry & Kerlinger, LLC (C&K), a recognized and trusted (cited several times by appellants, as well as NextEra) authority on the impacts of met towers, communication towers, and guy wires. Contrary to the concerns of Commission staff, the impacts of guy wires were found to be insignificant for the proposed met towers. C&K's conclusions were wholly supported by the Point Reyes Bird Observatory, stating "I agree with their conclusions that there is no significant risk of significant impact to bird populations in the area of the towers."

Are there valid concerns about possible archaeological or paleontological resources?

Marin County concluded that there was no particular concern about potential archaeological or paleontological resources given the extremely small footprint of the project and that the site was located outside of known areas of sensitivity. The County approval of the project required NextEra to halt construction in the unlikely event that any unexpected resources are uncovered.

NextEra strongly believes that the proposed met towers are consistent with the Marin County LCP and the Coastal Act. Again, NextEra welcomes further clarification of certain elements raised in the appeal and discussed with Commission staff through a *de novo* hearing process.



NextEra has a tradition of working closely with permitting agencies and stakeholders to address resource issues. In the Altamont Pass area, NextEra recently reached an agreement with five Bay Area Audubon Chapters, Californians for Renewable Energy (CARE) and the California Attorney General to replace old wind turbines with new larger turbines that are less likely to harm avian populations.

Finally, NextEra is aware that the Commission is considering a variety of potential workshops for more in depth policy discussions. We suggest the Commission consider a workshop dedicated to a discussion of renewable energy development in the coastal zone. The workshop should consider a variety of generation types such as wind, solar, wave, and offshore wind. This effort will provide applicants, stakeholders, staff and the Commission invaluable information for future consideration of renewable energy projects.

We look forward to continue working with your staff in preparation for the de novo hearing considering these two met towers. The data garnered from these towers is the essential first step before development and permitting of a wind energy project. NextEra will have a representative present for the hearing as you consider these appeals should the Commission have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Cliff Graham".

Cliff Graham

cc: Peter Douglas, Executive Director
Supervisor Steve Kinsey
Brian Crawford, Marin County Community Development Agency



Environmental Action Committee ~ Protecting West Marin since 1971

March 7, 2011

Sara Wan, Chair
California Coastal Commission
45 Fremont Ave., Suite 2000
San Francisco, CA 94105

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Attn: Cassidy Teufel

Re: Agenda Items W24a and W24b. Appeal of NextEra Meteorological Towers
Appeal No. AA-2-MAR 11-007 and AA-2-MAR 11-008

Dear Chairwoman Wan and Coastal Commissioners:

The Environmental Action Committee of West Marin (EAC) is writing to urge the Coastal Commission to find that EAC's appeal and that of other appellants have raised substantial issues regarding the proposed Meteorological Tower projects in West Marin County and to schedule the projects for a de novo public hearing. The staff report delineates many failings of the environmental analysis to adequately address compliance with provisions of the Marin LCP and potential adverse environmental impacts.

Coastal Commission review is necessary because Marin County's environmental review was flawed. Throughout its analysis, the County confused the purpose of the projects (i.e. to obtain data) with the projects (i.e. tower structures with guy wires) themselves, leading to a failure to identify and address potential impacts. The following deficiencies in the county's environmental review are of particular concern:

- Incorrect description of the projects as electrical facilities which allowed approval of unpermitted uses in the coastal zone. (LCP Agricultural policy 622.57.033)
- Conflict with wildlife habitat protection, natural resource and environmentally sensitive habitat protection provisions of the LCP due to failure to ensure that adequate biological information was provided, including: site specific evaluations, buffers, surveys of rare, endangered and migratory species that use the area, habitat impacts, adverse impacts to wildlife movement, and potential mortality from the guy-wired structures. All of this information is necessary to ensure that development is sited to avoid potential impacts to wildlife and habitats as required by LCP policy 22.56.130
- Failure to make, or be able to make, the required finding that "development would have no

significant adverse impacts on environmental quality or natural habitats..." LCP policy 22.57.036

The manner in which the Commission handles these project applications has the potential to be precedent setting for future applications for met towers along the California coast. The public interest would be best served by ensuring that a standard is set for adequate environmental review of such projects.

Thank you for considering our recommendation to support the Coastal Commission staff report and find that substantial issues exist.

Respectfully yours,

Amy Trainer, Executive Director



Marin Audubon Socie

P.O. Box 599 | MILL VALLEY, CA 94942-0599 | MARINAUDUBON.ORG

March 7, 2011

Sara Wan, Chair
California Coastal Commission
45 Fremont Ave., Suite 2000
San Francisco, CA 94105

ATT: CASSIDY TEUFEL

RE: Agenda Items W24a. Appeal of NextEra Meteorological Towers
Appeal No. AA-2-MAR 11-007 and AA-2-MAR 11-008

Dear Chairwoman Wan and Commissioners:

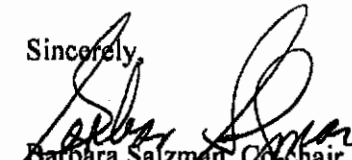
We are writing to urge the Commission to find that Marin Audubon's appeal and that of other appellants have raised substantial issues regarding the Meteorological Tower projects in Marin County and to schedule the projects for a *do novo* public hearing. The staff report delineates many failings of the environmental analysis to adequately address compliance with provisions of the LCP, potential adverse environmental impacts, and make required findings.

Commission review is necessary because Marin County's environmental review was flawed. Throughout its analysis, the County confused the purpose of the projects (i.e. to obtain data) with the projects (i.e. tower structures with guy wires) themselves, leading to a failure to identify and address potential impacts. The following deficiencies in the county's environmental review are of particular concern:

- Incorrect description of the projects as an electrical facilities which allowed approval of unpermitted uses in the coastal zone. (LCP Agricultural policy 622.57.033)
- Conflict with wildlife habitat protection, natural resource and environmentally sensitive habitat protection provisions of the LCP due to failure to ensure that adequate biological information was provided including site specific evaluations, buffers, surveys of rare, endangered and migratory species that use the area, and habitat impacts, adverse impacts to wildlife movement, and potential mortality from the structure. All of this information is necessary to ensure that development is sited to avoid potential impacts to wildlife and habitats as required by LCP policy 22.56.130
- Failure to make, or be able to make, the required finding that "development would have no significant adverse impacts on environmental quality or natural habitats..." LCP policy 22.57.036

How these projects are handled by the Commission has the potential to be precedent setting for future applications for met towers along the coast. The public interest would best be served by ensuring that a standard is set for adequate environmental review of such projects. Thank you for considering our recommendation.

Sincerely,


Barbara Salzman, Co-chair
Conservation Committee

Post-it® Fax Note	7671	Date	3/7	# of pages	1
To	Commissioners	From	Barbara Salzman		
Co./Dept.	Conservation	On	Marin Audubon		
Phone #		Phone #	927-3533		
Fax #		Fax #	927-3533		

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Phil Peterson, Co-chair
Conservation Committee

January/1/2011

P.O. Box 344
Tomales, CA 94971

To Whom It May Concern:

A-2-M AR-11-007

A-2-MAR-11-008

W 24 A

W 24 B

Pro-initial study

con- met towers

wind turbines

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MAR 04 2011

CALIFORNIA
COASTAL COMMISSION

Look up and talk up West Marin you are about to get thoughtless ineffective power producing wind turbine neighbors. Wind turbines will kill the birds and steal our serenity as well as our lovely coastal tapestry. The sight on our coastal ridges will be irrevocably damaged by the view of ugly turbines. Building planners discourage any structures on ridges so why is it ok for wind turbines. Our Marin Supervisors voted to proceed with turbine testing, a first step in the process. Their vote did not serve to protect the resources of West Marin. We are not so desperate for energy that our coast is expendable. Wind turbines near a national seashore constitute an industrial blight on our priceless coast.

Regards,

Mrs. Diana Muhanoff

000 Ref # A2-MAR-11-007
A2-MAR-11-008



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c teufel@coastal.ca.gov

FVI Cassidy
Ben McIntosh

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Towers

During the past decade, 8% of all agricultural aviation fatal accidents were caused by collisions with towers. Every collision with a tower reported by the NTSB during this reporting period resulted in a fatality. The past decade has seen an increasing number of towers constructed as a result of an escalating demand for mobile phones and digital television networks. There are more than 85,000 communication towers in the U.S. and they are being constructed at a rate of about 7,000 each year. But expected to grow at an even greater rate are towers to be constructed to generate wind-powered energy. By the end of last year, wind was expected to generate enough electricity to supply just shy of one percent of the country's needs. This percentage has doubled since 1999 and, according to the American Wind Energy Association (AWEA), could provide 20 percent of the electricity in some areas of the country by 2010. That poses a real concern to the aerial application industry, not just in terms of safety, but also in terms of accessing farmer's fields to treat their crops, since many prime wind-energy development areas are located in rural, agriculturally rich areas.

There are many economic variables of why wind-generated power is attractive today. One reason is that the price of other fuel sources, such as natural gas and oil, are increasing to the level where wind-powered energy can compete. The cost of wind generated electricity, on the other hand has dropped by about two-thirds since the mid-1980's as a result of more efficient turbines and better access to the power grid. Furthermore, the U.S. Congress enacted a production tax credit that has breathed a fresh breath of air into the wind-power industry. This amounts to a 1.8 cent per kilowatt-hour tax credit for wind-generators. According to wind energy representatives, without this tax credit, wind energy could not compete.

Another factor driving the demand for wind-energy is that eighteen states, including the District of Columbia, have established what are known as renewable portfolio standards (RPS), which require utilities to supply minimum amounts of electricity from green sources such as wind and sunlight. The federal government has provided other help to the development of wind energy in the recently enacted Farm Bill which includes provisions to provide an extension of the National Agricultural Weather Information System until 2012. This will help to create more weather stations and meteorological towers to study wind energy which can potentially be problematic for agriculture aviators as the towers are barely visible. There is another provision that would provide grants for rural energy systems. These grants intend to provide funds for rural areas to set up and utilize renewable energy systems including wind energy (turbines). These structures have proven particularly cumbersome for ag pilots.

Additionally, loans will be made available to rural electric cooperatives for the purpose of renewable energy generation and transmission. Renewable energy is defined as an energy conversion system fueled from a solar, wind, hydropower, etc source of energy. Again, this will provide resources to fund more wind turbines in areas that can support that type of energy and these turbines have been the cause of agricultural aviation accidents.

All these factors are resulting in wind-energy becoming a multibillion-dollar business dominated by some major global corporations. For example, General Electric makes high tech wind energy turbines, as does Siemens AG—the \$91.3 billion German industrial conglomerate. Even John Deere is involved. It has a subsidiary that finances the development of wind energy towers and maintains the wind energy turbines.

With the demand for wind-energy, towers—equipped with the rotating turbines that generate the electricity—are sprouting up throughout the country. Many locations that look promising for harnessing the wind for power are in prime agricultural areas. The DOE estimates that wind energy over the next 20 years will create \$60 billion in capital investment in rural America, provide \$1.2 billion in new income for rural landowners and create 80,000 new jobs. This is attractive to rural landowners because they can lease out their land to wind-energy companies where the towers are placed and receive between \$2,000-3,500 a year while still being able to farm, or lease their land to be farmed between the towers. Some farmers that lease land might find out too late that their leased land cannot be accessed by aerial applicators to treat a crop infestation because the landowner contracted with a utility company to construct a wind energy tower on the said land. Both the American Farm Bureau Federation and the American Corn Growers Association are supportive of wind energy and of the 1.8 cent per kilowatt-hour tax-credit associated with it.

The obvious concerns that the aerial application industry has with towers being constructed in rural areas is related to safety. One fatal accident in the industry is one too many and in the past decade there have been 26 when considering collisions with both towers and wires. With an expected boom in wind-energy tower construction in rural areas, aerial applicators will be even more at risk. Also, there is the concern that with wind-energy towers peppered across America's ag land, it will be extremely difficult, if not impossible, to access a farmer's land by plane to treat it.

One way a potential wind-energy tower location is analyzed to determine if air movement is sufficient is to erect a meteorological testing tower. These are the testing towers that can also jeopardize the safety of aerial applicators. These towers usually have only anemometers mounted on them making them less visible. Furthermore, these towers use guy wires to anchor them in place which ag pilots have a hard time seeing. Meteorological testing towers are also typically below 200 feet in height and thereby exempted from lighting requirements if not near a public airport. The good news is they are not permanent; they stay in place for a few seasons to generate an appropriate amount of data to determine whether a site is suitable for the larger wind-energy towers. The bad news is that they go up quickly and as just mentioned, can be difficult to see. Moreover some counties don't require permits for towers that are not erected on cement and some meteorological testing towers are not erected on cement.

NAAA has been actively pursuing ways to ensure that tower construction does not jeopardize the safety of aerial applicators, nor make prime agricultural land inaccessible to aerial application. The Association has met with congressional offices to garner support for national legislation to make the 1.8-cent per kilowatt-hour tax credit for wind-generators conditional upon not developing them on prime ag land. This approach has not been met with much support as a result of a diversified and powerful coalition of wind-energy advocates consisting of the AWEA, corporate interests (John Deere, GE, Siemens AG), some environmental groups and the American Farm Bureau Federation. In general the federal government has limited jurisdiction over where towers, generators or transmission wires are placed, unless it is on federal land or near public airports. States and local governments are the primary entities that determine the location, or zoning of towers, generators and transmission lines.

There have been moderately successful efforts at the state level to address rampant tower construction to protect aerial applicators. The Wisconsin Agricultural Aviation Association adopted a document that it shares with Wisconsin farmers that states farms with towers on its land will not be treated via aerial application.

In 2003, the Texas Agricultural Aviation Association (TAAA) worked diligently to pass state legislation requiring an entity proposing to build a communication tower above 100 feet to contact the TAAA and that such towers with guy wires be marked if within 100 feet of a cultivated field. In 2004 the Louisiana Agricultural Aviation Association was successful in enacting legislation that would require a person to construct a communication facility between 100 and 200 feet to notify the Association at least 30 days before beginning construction.

NAAA has received a report from the Midwest that wind farm operations have been notifying farmers not to worry about aerial applicators not being able to spray fields in which wind energy towers have been erected. For example one wind farm operation is disseminating information that states "the [aerial] applicant will cooperate with those who wish to use aerial application to spray crops. . . Additionally, crop dusters currently navigate among communication towers, power lines, and various other obstacles; they tend to be highly skilled pilots. After a wind farm has been constructed, crop dusters do continue to spray crops in areas among the wind turbines."

NAAA is also receiving reports from the Midwest that a number of aerial applicators are fighting back against the wind farms' nonchalant attitude towards the concerns of those protecting crops by air. For example, one Illinois applicator is stating on his price list that if a field can be applied "with a wind turbine and/or meteorological testing (met) tower in the field (providing the field map has been provided) the application will include an extra 50% surcharge." and if a wind turbine area (including the met towers) is within one mile of a field and that field is able to be sprayed by air it will also include a 50% surcharge. One suggestion forthcoming from the

Ask about "gag contract" confidentially agreements and proprietary information, Leases have to sign these 1/25/2011

<http://www.agaviation.org/content/towers>

Shell owns Vista

Count down ref error heli-copter @ Top Rock

SF Chron. Sep. 3, 1-20-11/Jan. 10, 2011, Oakley, CA/Met Tower

The purpose of the job is to correct

aerial application community is that aerial applicators prominently display on their pricing lists and invoices bold print stating: **fields nearby or with erected wind turbines or meteorological testing towers will not be sprayed if inaccessible; if accessible they will include significant surcharges.** This is especially important to do in areas where farmers are considering signing leases to host wind turbines. Placement of this language on invoices is an important way of reiterating this information to customers of aerial application services.

A secondary approach NAAA has taken on this issue is to ask for the wind-energy advocates to educate their constituencies about potential liability issues and possible repercussions to agriculture if wind-energy towers prevent crop protection application services from accessing farmland. Again, this approach has not been met with much success because of the attractive monetary windfalls associated with wind energy. NAAA has made additional attempts to garner the support from the American Farm Bureau Federation on the wind energy issue, but it has not been met with glowing enthusiasm.

NAAA has developed tower safety guidelines to inform entities involved with the tower industry of the aerial application industry's concerns and suggested remedies to the construction of such towers. They are as follows:

NAAA Tower Safety Guidelines

Petitions for constructing towers should be provided to the local government zoning authority, landowners and or farmers and aerial applicators within at least a one-half mile radius of a proposed tower, and the state or regional agricultural aviation association, no later than 30 days before tower construction permits are considered for approval. This information should include the proposed location of:

- each turbine generator
- each meteorological tower including the height to be associated with the wind farm
- the distribution sub-station and any connecting power lines from the generators
- power lines connecting the sub-station to the existing electrical power grid.

Towers should not be erected on prime agricultural land in a manner that may inhibit aerial applicators' access and ability to treat the land.

If a proposed tower is to be constructed on prime agricultural land or in the vicinity of such land in such a way that may inhibit an aerial applicator's access, person(s) that own and/or farm such land should be made aware by the entity responsible for that tower that it may result in the land no longer being accessible to aerial applicators and in the event of a pest outbreak or plant disease a crop on such land may be put in jeopardy of not being treated.

In the event that a proposed tower is constructed on prime agricultural land or in the vicinity of such land, towers should be freestanding without guy wires. Furthermore, towers should be lit and well marked so they are clearly visible to aerial applicators.

Towers erected with guy wires, particularly the meteorological testing towers, should be marked with two visible warning spheres on each guy wire, highly visible sleeves on the lower end of the cables that extend at least 8 feet above the height of the highest crop that may be grown there, and properly lit.

In the event that a number of proposed towers are to be constructed on prime agricultural land or in the vicinity of such land, the towers should be constructed in a linear pattern, not a disordered, clustered pattern that would make an area completely inaccessible by air.

During construction and upon completion, the operator of the wind farm should provide detailed field layout information to the local government zoning authority and make this information available to those working in close proximity to that area.

NAAA is not the only special interest group that has a real concern with rampant tower construction. Other interested groups include wildlife groups, fisherman and certain homeowner groups that don't want their pristine vistas distorted. The American Bird Conservancy filed suit in federal court against the Federal Communications Commission for violating the Endangered Species Act by not requiring mitigation techniques to avoid bird deaths with licensing communications towers. A major cause of fatalities for migrating birds every year is collisions with towers. The U.S. Fish and Wildlife Service estimates that at least 5 million birds and possibly as many as 50 million birds are killed annually in collisions with communications towers in the U.S. Fifty-two of these 230 species killed are endangered or in decline. In Cape Cod, Massachusetts, groups are fighting what they call visual pollution from 130 wind-energy towers, each taller than the Statue of Liberty, sought for Nantucket Sound. Furthermore, fishermen in the area fear loss of prime fishing grounds from the proposed offshore project. Another interesting development related to wind energy turbines was made public October 1st, 2008 from a long-awaited Defense Department report that found that wind energy turbines can interfere with military radar systems and that only a few proven methods exist to mitigate the problem. The report specifically said that "wind farms located within radar line of sight of air defense radar have the potential to downgrade the ability of that radar to perform its intended function."

The NAAA is currently working with members of the House of Representatives and the Senate to include an amendment within the FAA Reauthorization Bill that calls on the FAA Administrator to lead a study with the appropriate leaders of the Armed Services, the Department of Defense, the Department of Homeland Security and the Department of Energy pertaining to the safe height and distance that wind turbines may be installed in relation to aviation sites. Such a study was introduced by Congressman Neugebauer (R-TX) in the House of Representatives last Congress and was included in that legislative body's version of the FAA Reauthorization bill. Unfortunately, FAA Reauthorization was not enacted last year, but will be back on the legislative docket for the recently sworn in 111th Congress.

The language also directs the FAA to investigate the feasibility of developing a publicly searchable, internet-based tool that would enable stakeholders such as industry, landowners and air space users to know in advance whether the site they wish to build wind turbines on would have a negative impact on aviation.

In addition, NAAA has been attempting to meet with independent wind energy companies to see our wind energy tower recommendations adopted. The Association has been in contact with one of these companies, Gamesa. Gamesa met last fall with the Illinois Agricultural Aviation Association and the Illinois Fertilizer and Chemical Association about wind energy concerns harbored by aerial applicators. Gamesa has stated an interest in bringing the aerial application industry's concerns and recommendations to the AWEA for adoption. NAAA will continue to work on this issue and attempt to move the company's stated interest to action. NAAA has also been in discussions with the 25 x 25 Coalition, a coalition to boost renewable energy (wind, bio-fuel and solar) by 25% by 2025. Members of that coalition include the American Wind Energy Association. The director of the 25 x 25 Coalition has expressed a willingness to help facilitate a discussion with the AWEA if NAAA were to become a member. There is no membership fee.

This document is intended for NAAA members' review only. It is not intended for publication. NAAA requests that should any party desire to publish, distribute or quote any part of this document that they first seek the permission of the Association.

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National Agricultural Aviation Association, 1005 E Street, SE, Washington DC 20003

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JAN 27 2011

CALIFORNIA
COASTAL COMMISSION

January 26, 2011

DEAR MR. TEUFEL,

I would appreciate you sending this information to all the coastal commissioners as this is pertinent to the appeal on February 9 (TABLONIS & CORNELL). Presently we are trying to find at which energy's company MET tower was involved in the fatal accident. Thank you for sending this new information around.

Yours,
SUSIE SCHLESINGER

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Crop-duster pilot may not have seen tower

Henry K. Lee, Chronicle Staff Writer

Thursday, January 20, 2011

(01-19) 10:02 PST ANTIOCH --

The pilot of a crop-dusting plane may not have seen a meteorological tower before he crashed into it and died in Contra Costa County, according to a preliminary report by federal investigators.

Stephen Allen, 58, of Courtland (Sacramento County) died after his S-2R Thrush Commander crashed into the 197-foot tower on Webb Tract Island the morning of Jan. 10. The island is in the Sacramento-San Joaquin River Delta northeast of the Antioch Bridge.

Allen was applying seed at the time and witnesses "did not report seeing the airplane perform any evasive maneuvers prior to the impact," said the report issued Friday by the National Transportation Safety Board.

Meteorological towers are used for gathering wind data during the development of wind-energy conversion facilities, and low-flying aircraft "may be affected," the report said. The tower on Webb Tract Island was erected in April 2009.

"The fact that these towers are narrow, unmarked and gray in color makes for a structure that is nearly invisible under some atmospheric conditions," the safety board said.

E-mail Henry K. Lee at hlee@sfchronicle.com.

<http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2011/01/20/BAIB1HBHMQ.DTL>

This article appeared on page **C - 3** of the San Francisco Chronicle

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Steve ALLEN

ALLEN, Steve

A highly respected owner- operator of an agricultural spraying and seeding business in Walnut Grove, CA, perished on January 10, 2011 in an aerial collision with a temporary weather station tower. He was 58. Born in Lodi, CA in 1952, he graduated from Elk Grove High School and worked in the family dairy business before beginning a flying career in 1971. His specialized training in agricultural application began three years later. After a long established reputation in the industry, he and his wife bought Alexander's Ag Flying Service in 2006, and continued to serve the client base that had followed Steve for more than two decades. Survivors include his wife of 23 years, Karen of Rio Vista; daughter Gail Back of Sacramento; daughter Angela Lucero of Sacramento; grandson Brenden Back; and six brothers and sisters. A memorial service is scheduled for Thursday, January 20, 2011 at 1:30pm in the Our Lady of Fatima Society Portuguese Hall in Thornton. **Donations are welcome to the California Agricultural Aircraft Association fund seeking to require marking and notification of tower installations.**

Published in The Sacramento Bee from January 19 to January 20, 2011

**FORM FOR DISCLOSURE OF
EX-PARTE COMMUNICATIONS**

Name or description of the project: Appeal A-2-MAR-11-007 and
A-2-MAR-11-008, Nextera, Marin Co

Time/Date of communication: 2/27/2011

Location of communication: Lowe's Coronado lobby

Person(s) initiating communication: Travis Longcore

Person(s) receiving communication: Sara Wan

Type of communication: phone call/ email

I called Travis to see if he knew anything about the issue of bird mortality in relation to tower guide wires. He sent me several references to APLIC reports:
<http://dl.dropbox.com/u/19770528/APLIC-1994.pdf>
<http://dl.dropbox.com/u/19770528/APLIC-2006.pdf>
which turned out to be mostly about electrocution on wires

He also sent me a quote from an EIR by Kern County on the Alta Oak Creek energy project.

Meteorological Towers: Guy wires supporting communications and meteorological towers can kill birds at high rates, including birds protected by Fish and Game Code (Kerlinger et al. 2008, Longcore et al. 2008). Appendix C-3 of the DEIR documents a bird fatality rate at meteorological towers exceeding the rate from wind turbines at the "Alite" wind farm adjacent to the Project site. Both the CEC-DFG Guidelines and the USFWS (2000) recommend using free-standing tower designs due to the known avian mortality impacts from guy wires. We request that all meteorological or communications towers associated with the Project are required to be free-standing towers.

Date: 3/2/2011



Commissioner's Signature

CALIFORNIA COASTAL COMMISSION

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W24a

Filed: January 11, 2011
49th Day: Waived
Staff: CLT-SF
Staff Report: February 18, 2011
Hearing Date: March 9, 2011

STAFF REPORT AND RECOMMENDATION ON APPEAL
SUBSTANTIAL ISSUE

LOCAL GOVERNMENT: County of Marin

DECISION: Approval with Conditions

APPEAL NO.: A-2-MAR-11-007

APPLICANTS: Nextera Energy Resources; David Jablons and Tamara Hicks

PROJECT DESCRIPTION: Construction and operation of a 197.7 foot high meteorological tower for up to three years.

PROJECT LOCATION: 5488 Middle Road, Petaluma (Marin County - APN 100-050-29)

HEARING PROCEDURES: **The Commission will not take public testimony during this phase of the appeal hearing unless at least three Commissioners request it. If the Commission finds that the appeal raises a substantial issue, it will schedule the de novo phase of the hearing for a future meeting, during which it will take public testimony. Written comments may be submitted to the Commission during either phase of the hearing.**

APPELLANTS: Commissioner Steve Blank and Commissioner Mark Stone, California Coastal Commission; Marin Audubon Society; Environmental Action Committee of West Marin; Susie Schlesinger, Louise Gregg, Beverly Childs McIntosh, Sid Baskin, and Helen Kozoriz

SUMMARY OF STAFF RECOMMENDATION: The staff recommends that the Commission, after public hearing, determine that **substantial issue exists** with respect to the grounds on which the appeals have been filed. The appellants have raised substantial issues in that the County of Marin's approval of a coastal development permit does not conform to applicable local coastal program policies.

SUBSTANTIVE FILE DOCUMENTS:

- Certified County of Marin Local Coastal Program
- Coastal Commission Appeal File No. A-2-MAR-11-107
- Appeals from Commissioner Steve Blank and Commissioner Mark Stone, California Coastal Commission; Marin Audubon Society; Environmental Action Committee of West Marin; Susie Schlesinger, Louise Gregg, Beverly Childs McIntosh, Sid Baskin, and Helen Kozoriz
- U.S. Geological Survey report, *Invertebrate paleontology of the Wilson Grove Formation (late Miocene to late Pliocene), Sonoma and Marin Counties, California, with some observations on its stratigraphy, thickness, and structure*, 2004
- Curry & Kerlinger, LLC. report, *Avian and Bat Risk Assessment for Meteorological Towers in Marin County, California*, 2010

EXHIBIT 1: Proposed project location

EXHIBIT 2: Proposed project design

APPENDIX I: Appeals

I. APPELLANTS' CONTENTIONS

The County of Marin Local Coastal Development Permit No. 10-30, approved with conditions by the Marin County Board of Supervisors on December 14, 2010, has been appealed by Commissioner Steve Blank and Commissioner Mark Stone, California Coastal Commission; Marin Audubon Society; Environmental Action Committee of West Marin; and Susie Schlesinger, Louise Gregg, Beverly Childs McIntosh, Sid Baskin, and Helen Kozoriz (Appendix I).

The grounds of the appeal filed by Commissioner Steve Blank and Commissioner Mark Stone on January 11, 2010, are:

- The project, as approved and conditioned by the County of Marin (County), does not conform to several applicable local coastal program (LCP) policies related to protection of agricultural resources and use of the agricultural production zone.
- The project is not sited and designed to protect visual resources, as required by the LCP.
- The County's approval is inconsistent with applicable natural resource and environmentally sensitive habitat protection provisions of the LCP.
- The County's approval appears to be inconsistent with applicable archeological resource protection provisions of the LCP.

The grounds for the appeal filed by the Environmental Action Committee of West Marin on January 11, 2010, are:

- Because it may inhibit wildlife movement and adversely affect environmentally sensitive habitats, the County's approval is inconsistent with applicable natural resource and environmentally sensitive habitat protection provisions of the LCP.
- The project, as approved and conditioned, does not conform to several applicable LCP policies related to protection of agricultural resources and use of the agricultural production zone.

The grounds for the appeal filed by the Marin Audubon Society on January 11, 2011, are:

- Because it may inhibit wildlife movement and adversely affect environmentally sensitive habitats, the County's approval is inconsistent with applicable natural resource and environmentally sensitive habitat protection provisions of the LCP.

The grounds for the appeal jointly filed by Susie Schlesinger, Louise Gregg, Beverly Childs McIntosh, Sid Baskin, and Helen Kozoriz on January 11, 2011, are:

- The proposed project site supports birds listed as Species of Special Concern and is therefore an environmentally sensitive habitat (ESHA). The County's approval is inconsistent with the LCP policy which only allows resource dependent uses in ESHA.
- The project would result in the loss of productive agricultural land and therefore does not protect continued agricultural uses as required by the LCP.
- The project site is within the Wilson Grove Formation and may therefore contain paleontological resources. The County's approval did not include a field survey for paleontological resources at the proposed site, as required by the LCP.
- The scenic and visual qualities of the area would be adversely affected.
- The proposed project is not a coastal dependent industrial facility.
- The project site is under a Marin Agricultural Land Trust easement and as such cannot be used for non-agricultural development.
- The Town of Tomales is listed as a Historical District of national importance.
- The proposed project would obstruct the operations of Coast Guard rescue helicopters in the area.
- The CEQA Categorical Exemption approved by the County was not appropriate.
- Procedural errors occurred during the County's approval process.

II. LOCAL GOVERNMENT ACTION

On January 8, 2010, Nextera Energy Resources (Nextera) applied for a coastal development permit (CDP) from the County of Marin. On August 26, 2010, the County's Deputy Zoning Administrator approved the CDP, initiated a five day appeal period, and determined that the project qualified for a Categorical Exemption under the California Environmental Quality Act

(CEQA). Barbara Salzman (representing the Marin Audubon Society), Nona Dennis (representing the Marin Conservation League), Carolyn Longstreth (representing the Environmental Action Committee of West Marin), Louise Gregg, Susie Schlesinger, Beverly McIntosh, Helen Kozoriz, Kit McSweeney, and Chips Armstrong filed timely appeals of this decision to the Marin County Planning Commission. On October 25, 2010, the Marin County Planning Commission approved this appeal and required the Marin County Community Development Agency to prepare an initial study of the potential adverse environmental impacts associated with the proposed project. Nextera filed a timely appeal of this decision with the Marin County Board of Supervisors. On December 14, 2010, the Marin County Board of Supervisors approved Nextera's appeal and approved the CDP, with special conditions. Concurrent with this CDP review, the Marin County Board of Supervisors also determined that the project qualified for a Categorical Exemption under CEQA.

III. APPEAL PROCEDURES

After certification of an LCP, the Coastal Act provides for limited appeals to the Coastal Commission of certain local government actions on coastal development permits. Projects within cities and counties may be appealed if they are located within the appealable areas as defined by Section 30603(a) of the Coastal Act. The grounds for appeal are limited to the assertion that "development does not conform to the certified local coastal program." Where the project is located between the first public road and the sea or within 300 feet of the mean high tide line, the grounds of appeal are limited to those contained in Section 30603(b) of the Coastal Act. Those grounds are that the development does not conform to the standards set forth in the certified local coastal program or the access policies set forth in the Coastal Act.

Section 30625(b) of the Coastal Act requires the Commission to hear an appeal unless it determines that no substantial issue is raised by the appeal. If the staff recommends "substantial issue" and no Commissioner objects, the Commission will proceed to the *de novo* portion of the hearing at the same meeting if the staff has prepared a recommendation on the merits of the full project or at a subsequent meeting if there is no such recommendation.

If the staff recommends "no substantial issue" or the Commission decides to hear arguments and vote on the substantial issue question, proponents and opponents will have three minutes per side to address whether the appeal raises a substantial issue. It takes a majority of Commissioners present to find that no substantial issue is raised. If substantial issue is found, the Commission will proceed to a full public hearing on the merits of the project at either the same or a subsequent meeting as described above. If the Commission considers the permit application *de novo*, the applicable test for the Commission to apply is whether the proposed development is in conformity with the certified local coastal program. In addition, for projects located between the sea and the first public road paralleling the sea, Section 30604(c) of the Coastal Act requires a finding that the development conforms to the public access and public recreation policies of Chapter 3.

The only persons qualified to testify before the Commission at the “substantial issue” stage of the appeal process are the applicant, persons who opposed the application before the local government (or their representatives), and the local government. Testimony from other persons must be submitted in writing. At the time of the de novo hearing, any person may testify.

IV. MOTION AND RESOLUTION

I move that the Commission determine that Appeal No. A-2-MAR-11-107 raises NO substantial issue with respect to the grounds on which the appeal has been filed under Section 30603 of the Coastal Act.

STAFF RECOMMENDATION OF NO SUBSTANTIAL ISSUE:

Staff recommends a **NO** vote. Failure of these motions will result in a de novo hearing on the application, and adoption of the following resolutions and findings. Passage of these motions will result in a finding of No Substantial Issue and the local actions will become final and effective. The motion passes only by an affirmative vote by a majority of the appointed Commissioners present.

RESOLUTION TO FIND SUBSTANTIAL ISSUE:

The Commission finds that Appeal No. A-2-MAR-11-107 presents a substantial issue with respect to the grounds on which the appeal has been filed under section 30603 of the Coastal Act regarding consistency with the certified local coastal plan and/or the public access and recreation policies of the Coastal Act.

V. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

1. Project Description: The development approved by the County of Marin is a proposal by Nextera Energy Resources to construct and operate (for no more than three years) a 197.7-foot high meteorological research tower on a 157-acre agricultural parcel (Exhibit 1). The tower would be a ten-inch diameter galvanized steel tube that tapers to eight-inches on top. The tower would be anchored by 24 1/4 –inch guy wires. Although the wires would be connected to the tower at 24 separate locations, they would attach to the ground at 12 sites - three guy wire anchors placed on each of four axes at intervals of 131, 148, and 167-feet from the base of the tower (see Exhibit 2). The guy wires would be marked with orange aviation warning balls near the top of the tower and bird deterrent devices. The tower would be located on a ridge and maintain the following setbacks: 572-feet from the northerly property line, 400-feet from the eastern property line, and 1,046-feet from the southerly property line. Small meteorological research and acoustic bat monitoring devices would be attached to the tower, along with a solar panel to power the instruments.

Installation of the tower would not result in substantial grading and the base of the tower would be attached to a nine square foot steel plate secured to the ground by screw-in soil anchors. Access to the tower site for construction and maintenance would be from existing farm roads. The meteorological instruments would collect data to inform future decisions regarding the suitability of the area for wind energy production. The collected data would be transmitted wirelessly for further analysis offsite. As described in Marin County Board of Supervisors Resolution No. 2010-122, the project would include a post-construction avian and bat data collection program, with results submitted every four months to the Marin County Community Development Agency; data collection would occur during periods of nesting, roosting, foraging, and migration, including nocturnal migration, and would include carcass counts in the vicinity of the meteorological tower and/or a similar site proposed for the installation of another meteorological tower (Cornett, Assessor's Parcel 100-050-07). The data collection program would be in accordance with criteria established by the U.S. Fish and Wildlife Service, the California Department of Fish and Game, or Point Reyes Bird Observatory. Data collection would be conducted by a professional biologist or an ornithologist approved by the Marin Environmental Coordinator. The zoning for the proposed project site is C-APZ-60 (Coastal, Agricultural Production Zone, 1 unit/60 acres).

2. Permit History: On August 26, 2010, the County's Deputy Zoning Administrator approved a coastal development permit (CDP), with conditions, for the proposed project. Barbara Salzman (representing the Marin Audubon Society), Nona Dennis (representing the Marin Conservation League), Carolyn Longstreth (representing the Environmental Action Committee of West Marin), Louise Gregg, Susie Schlesinger, Beverly McIntosh, Helen Kozoriz, Kit McSweeney, and Chips Armstrong filed timely appeals of this decision to the Marin County Planning Commission on September 2, 2010. These appellants asserted that the project may result in adverse environmental impacts and would not qualify for a Categorical Exemption under the California Environmental Quality Act (CEQA). On October 25, 2010, the Marin County Planning Commission determined that they did not have enough information to categorically exempt the project pursuant to certain CEQA guidelines. The Marin County Planning Commission then voted to require the Marin County Community Development Agency to prepare an initial study of the potential adverse environmental impacts associated with the proposed project but made no determination on the merits of the CDP. The applicant, Nextera Energy Resources (Nextera), filed a timely appeal of this decision with the Marin County Board of Supervisors. On December 14, 2010, the Marin County Board of Supervisors approved Nextera's appeal and approved the CDP, with special conditions. In addition, the Marin County Board of Supervisors approved the issuance of a Categorical Exemption for the project under CEQA. On December 28, 2010 the Coastal Commission received the County's Final Local Action Notice and associated records to start the 10-working-day appeal period, which ended on January 11, 2011. Commissioner Steve Blank and Commissioner Mark Stone, California Coastal Commission; Marin Audubon Society; Environmental Action Committee of West Marin; and Susie Schlesinger, Louise Gregg, Beverly Childs McIntosh, Sid Baskin, and Helen Kozoriz filed timely appeals on January 11, 2011.

3. Permit Jurisdiction: The proposed project would be located within the Coastal Zone in the County of Marin (County) and is subject to the County's certified local coastal program (LCP).

The proposed site is also within the appeal jurisdiction of the California Coastal Commission (Commission).

4. Non-conformity to the Certified LCP: The standard of review for this appeal is consistency with the certified LCP of the County of Marin. The appellants contend that the County's approval of a CDP application for the proposed project is based on an erroneous interpretation of its LCP. The appellants specifically contend that the County did not make necessary findings required by the LCP's agriculture policies, erred in approving non-agricultural development within an area designated as an Agricultural Production Zone, and inappropriately found the proposed project to qualify as a conditional use in this area as an "electric facility." The appellants also contend that the proposed project is inconsistent with the LCP's policies on the protection of environmentally sensitive habitats, visual resources, and archeological and paleontological resources. As described below, these appeal contentions raise a substantial issue with the project's conformity to the LCP.

5. Appeal Issues Raising a Substantial Issue:

Appeal Issue – whether the County made all the findings required by the LCP's agriculture policies:

The Agriculture section included in the Marin County Local Coastal Program Unit 2 – *Amended* (the certified Land Use Plan portion of the LCP), states:

***LCP Policy Agriculture 3: Intent of the Agricultural Production Zone.** The intent of the Agricultural Production Zone is to preserve lands within the zone for agricultural use. The principal use of lands in the APZ shall be agricultural. Development shall be accessory, incidental, or in support of agricultural land uses, and shall conform to the policies and standards in #4 and #5 below.*

***LCP Policy Agriculture 4: Development standards and requirements.** All land divisions and developments in the APZ shall require an approved master plan showing how the proposed division or development would affect the subject property. In reviewing a proposed master plan and determining the density of permitted units, the County shall make all of the following findings:*

- a. The development would protect and enhance continued agricultural use and contribute to agricultural viability.*
- b. The development is necessary because agricultural use of the property is no longer feasible. The purpose of this standard is to permit agricultural landowners who face economic hardship to demonstrate how development on a portion of their land would ease this hardship and enhance agricultural operations on the remainder of the property.*
- c. The land division or development would not conflict with the continuation of agriculture on that portion of the property which is not developed, on adjacent parcels, or those within one mile of the perimeter of the proposed development.*
- d. Adequate water supply, sewer disposal, road access and capacity and other public services are available to service the proposed development after provision has been made*

for existing and continued agricultural operations. Water diversions or use for a proposed development shall not adversely impact stream habitats or significantly reduce freshwater inflows to Tomales Bay, either individually or cumulatively.

e. Appropriate public agencies are able to provide necessary services (fire protection, police protection, schools, etc.) to serve the proposed development.

f. The proposed land division and/or development will have no significant adverse impacts on environmental quality or natural habitats, including stream or riparian habitats and scenic resources. In all cases, LCP policies on streams and natural resources shall be met.

g. Development consists of permitted and conditional uses as authorized in the APZ.

LCP Agriculture Policy 5: Conditions. *As part of the approval of a master plan, the following conditions shall be required:*

- a. All development shall be clustered to retain the maximum amount of land in agricultural production or available for agricultural use. Development, including all land converted from agricultural use such as roads and residential support facilities, shall be clustered on no more than five percent of the gross acreage, to the extent feasible, with the remaining acreage to be left in agricultural production and/or open space. Development shall be located close to existing roads and shall be sited to minimize impacts on scenic resources, wildlife habitat and streams, and adjacent agricultural resources.*
- b. Permanent conservation easements over that portion of the property not used for physical development or services shall be required to promote long-term preservation of these lands. Only agricultural uses shall be allowed under the easements. In addition, the County shall require the execution of a covenant not to divide the parcels created under this division so that they are retained as a single unit and are not further subdivided.*
- c. The creation of a homeowner's or other organization and/or the submission of agricultural management plans may be required to provide for the proper utilization of agricultural lands and their availability on a lease basis or for the maintenance of community roads or mutual water systems.*

Chapters 22.56 and 22.57 of the Marin County Title 22 Zoning Ordinance (the certified Implementation Plan portion of the LCP) include the following policies specific to coastal agricultural production zone districts:

22.57.030 C-APZ Districts, Coastal, Agricultural Production Zone Districts.

22.57.031 Purpose: *The purpose of the Agricultural Production Zone is to preserve lands within the zone for agricultural use. The principal use of lands in the APZ districts shall be agricultural. Development shall be accessory, incidental, or in support of agricultural land uses, and shall conform to the policies and standards as set forth in this chapter.*

...

22.57.035 Development Standards and Requirements:

All development permits in the C-APZ shall be subject to the following standards and requirements:

- 1. All development shall be clustered to retain the maximum amount of land in agricultural production or available for agricultural use. Development, including all land converted from agricultural use such as roads and residential support facilities, shall be clustered on no more than five percent of the gross acreage, to the extent feasible, with the remaining acreage to be left in agricultural production and/or open space. Development shall be located close to existing roads and shall be sited to minimize impacts on scenic resources, wildlife habitat and streams, and adjacent agricultural operations.*
- 2. Permanent conservation easements over that portion of the property not used for physical development or services shall be required to promote the long-term preservation of these lands. Only agricultural uses shall be allowed under the easements. In addition, the County shall require the execution of a covenant not to divide the parcels created under this division so that they are retained as a single unit and are not further subdivided.*
- 3. The creation of a homeowner's or other organization and/or the submission of agricultural management plans may be required to provide for the proper utilization of agricultural lands and their availability on a lease basis or for the maintenance of community roads or mutual water systems.*
- 4. Design standards as set forth in 22.57.024.*

22.57.036 Required Findings

Review and approval of the development permits, including a determination of density shall be subject to the following findings:

- 1. The development will protect and enhance continued agricultural use and contribute to agricultural viability.*
- 2. The development is necessary because agricultural use of the property is no longer feasible. The purpose of this standard is to permit agricultural landowners who face economic hardship to demonstrate how development on a portion of their land would ease this hardship and enhance agricultural operations on the remainder of the property.*
- 3. The land division of development would not conflict with the continuation or initiation or agriculture, on that portion of the property which is not proposed for development, on adjacent parcels, or those within one mile of the perimeter of the proposed development.*
- 4. Adequate water supply, sewage disposal, road access and capacity and other public services are available to service the proposed development after provision has been made for existing and continued agricultural operations. Water diversions or use for*

- a proposed development shall not adversely impact stream habitats or significantly reduce freshwater inflows to Tomales Bay, either individually or cumulatively.*
5. *Appropriate public agencies are able to provide necessary services (fire protection, police protection, schools, etc.) to serve the proposed development.*
 6. *The proposed land division and/or development will have no significant adverse impacts on environmental quality or natural habitats, including stream or riparian habitats and scenic resources. In all cases, LCP policies on streams and natural resources shall be met.*

Discussion: These LCP policies apply to the approved project due to the zoning of the proposed project site as an Agricultural Production Zone (APZ), specifically, C-APZ-60 (Coastal, Agricultural Production Zone, 1 unit/60 acres). The certified Land Use Plan portion of the LCP describes the specific intention and purpose of the APZ as follows:

*The method for preserving agricultural lands used in the LCP is the Agricultural Production Zone or APZ. Briefly, **the APZ establishes a planned zoning district in which all land divisions and developments require an approved master plan.** The master plan is evaluated according to a set of agriculturally related criteria. The APZ has a maximum density of 1 unit per 60 acres; actual density is determined based on a review of the master plan according to the proposed criteria. The APZ also refines the definition of "agricultural" land uses and establishes a list of permitted and conditional uses for the zone. The APZ concept is strongly supported by the Marin County Farm Bureau and has been widely discussed in the County. The County's position is that the APZ offers the most feasible method of preserving agricultural lands in a manner consistent with the Coastal Act and at the same time allows for the operation of the agricultural land trust. (emphasis added)*

As such, the provisions included above generally require that development within an APZ is accessory, incidental, or in support of agricultural land uses. Additionally, the agricultural policies of the Land Use Plan (LUP) portion of the LCP specifically require an approved master plan showing how the proposed development would affect the subject property. As described in LUP Agricultural Policies 4 and 5, during the review and approval of this master plan, the County is required to make a series of seven findings and establish three specific conditions. However, in its evaluation of the project's conformity to the LCP, included in Marin County Board of Supervisors Resolution No. 2010-122, the County did not require a master plan showing how the proposed development would affect the subject property. The required findings for this master plan were therefore not made and the required conditions for this master plan were not established. In a discussion of this matter with Commission staff, Marin County Planning Division staff noted that the requirement for the submittal of a master plan for the proposed development was waived at the staff level. However, Commission staff has been unable to find formal recognition or discussion of this waiver in the local record, including a reference to the LCP policies that establish authority for this action. Further, the LUP includes

no allowances for the requirements of these agricultural policies to be waived.¹ The Commission therefore finds that the County did not adequately apply LUP Agriculture Policies 3, 4, and 5 to the proposed project and therefore the requirements of these policies have not been met.

In addition, the County did not require compliance with the specific agricultural production zone district (C-APZ) policies that are included in Chapters 22.56 and 22.57 of the Marin County Title 22 Zoning Ordinance (these two chapters make up the Implementation Plan portion of the certified LCP). These agricultural resource protection policies, included above, differ slightly from the agricultural policies of the LUP. Policies 22.57.035 and 22.57.036, establish required conditions and findings for the approval of “[a]ll development permits in the C-APZ...” In contrast with the LUP agricultural policies, the Implementation Plan (IP) policies appear to be more protective of coastal and agricultural resources by requiring certain resource protection findings and conditions (e.g., establishment of conservation easements; clustering of development; developments to be located closed to existing roads, etc) be applied to all development projects proposed within the C-APZ designation. These findings were not made² and therefore the County failed to evaluate if the project complies with the applicable agricultural IP policies of the LCP. Similar to the LUP, the certified IP also does not allow for any exemption or waiver of policies 22.57.035 and 22.57.036,

Conclusion: Based on the above, the record provided by the County and the information provided by the appellants, the County’s decision does not appear to conform to the Agriculture Policies of the LCP (both LUP and IP). Therefore, for the reasons cited above, the Commission finds that a substantial issue exists with respect to the project’s consistency with the County’s certified LCP.

Appeal Issue – whether the County appropriately identified the proposed project as a permitted or conditional use of an area designated as an Agricultural Production Zone (APZ):

The Agriculture section included in the Marin County Local Coastal Program Unit 2 – *Amended*, states:

LCP Agriculture Policy 6: Definitions and uses. *The definition of agricultural uses in the APZ is given below, along with permitted and conditional uses.*

- a. ***Definitions.*** *For the purposes of the Agricultural Production Zone, agricultural uses shall be defined as uses of land to grow and/or produce agricultural commodities for commercial purposes, including:*

¹ While policy 22.56.026 of the Implementation Plan portion of the LCP does note that certain zoning ordinance requirements may be waived by the Planning Director, this waiver authority only applies to the specific requirements described in Chapter 22.45 of the Zoning Ordinance. Chapter 22.45 is not part of the certified LCP and a waiver of the requirements of this chapter does not affect the requirements detailed in the LCP, including those applicable policies of Chapter 22.56 and 22.57 of the Implementation Plan and LUP Agriculture Policies 3, 4, and 5.

² The IP does not allow for an exemption or waiver of Policies 22.57.035 and 22.57.036.

- c. Livestock and poultry - cattle, sheep, poultry, goats, rabbits, horses unless they are the primary animals raised.*
- d. Livestock and poultry products - milk, wool, eggs.*
- e. Field, fruit, nut, and vegetable crops - hay grain, silage, pasture, fruits, nuts, and vegetables.*
- f. Nursery products - nursery crops, cut plants.*
- b. Permitted uses. Permitted uses include the following:*
 - g. Agricultural uses as defined above.*
 - h. One single-family dwelling per parcel. "Parcel" is defined as all contiguous assessor's parcels under common ownership.*
 - i. Accessory structures or uses appurtenant and necessary to the operation of agricultural uses, other than dwelling units of any kind, but including barns fences, stables, corrals, coops and pens, and utility facilities.*
- c. Conditional Uses. Conditional uses include the following:*
 - j. Land divisions.*
 - k. Farmworker housing.*
 - l. Mobile homes so long as they are used exclusively for employees of the owner who are actively and directly engaged in the agricultural use of the land.*
 - m. Hog ranch.*
 - n. Veterinary facilities.*
 - o. Fish hatcheries and rearing ponds.*
 - p. Stabling of more than five horses on ranches where horses are the primary or only animals raised.*
 - q. Raising of other food and fiber producing animals not listed under (a) above.*
 - r. Planting, raising, or harvesting of trees for timber, fuel, or Christmas tree production.*
 - s. Facilities for processing or retail sale of agricultural products.*
 - t. Greenhouses.*
 - u. Commercial storage and sale of garden supply products.*
 - v. Water conservation dams and ponds.*
 - w. Mineral resource production.*
 - x. Game or nature preserve or refuge.*
 - y. Public or private recreational activities, such as hunting, fishing, and camping.*
 - z. Bed and breakfast operations in existing structures up to a maximum of 5 rooms.*
 - aa. Construction, alteration, or maintenance of gas, electric, water, communication, or flood control facilities, unrelated to an agricultural use, as approved by the appropriate governmental agencies.*
 - bb. Dump.*

Chapters 22.56 and 22.57 of the Marin County Title 22 Zoning Ordinance (the certified Implementation Plan portion of the LCP) include the following policies specific to coastal agricultural production zone districts:

22.57.033 *Conditional Uses.*

The following uses are permitted in all Coastal Agricultural Production Zone Districts, subject to the securing of a Use Permit in each case. When it is determined by the Planning Director that any of the following uses constitute a major land use change, a Master Plan submitted in accordance with 22.45 may be required.

1. *Farmworker housing.*
2. *Mobile homes which are used exclusively for employees of the owner who are actively and directly engaged in the agricultural use of the land.*
3. *Hog ranch.*
4. *Veterinary facilities.*
5. *Fish hatcheries and rearing ponds.*
6. *Stabling of more than five horses on ranches where horses are the primary or only animals raised.*
7. *Raising of other food and fiber producing animals not listed under 22.57.032 (1) above.*
8. *Planting, raising, or harvesting of trees for timber, fuel, or Christmas tree production.*
9. *Facilities for processing or retail sale of agricultural products.*
10. *Greenhouses.*
11. *Commercial storage and sale of garden supply products.*
12. *Water conservation dams and ponds.*
13. *Mineral resource production.*
14. *Game or nature preserve or refuge.*
15. *Public or private recreational activities, such as hunting, fishing, and camping.*
16. *Bed and breakfast operations in existing structures up to a maximum of 5 rooms.*
17. *Construction or alteration of gas, electric, water, communication, or flood control facilities, unrelated to an agricultural use, as approved by the appropriate governmental agencies.*
18. *Dump.*

Discussion: The provisions of LUP Agriculture Policy 6/IP Policy 22.57.033 require that development within an APZ conform to a specific list of either permitted or conditional uses. In its findings under this policy, it appears that the County inappropriately identified the project as a listed conditional use in an APZ area. Specifically, the County noted in Resolution No. 2010-122, Part IX, that:

*While the C-APZ-60 zoning district is one of the most restrictive districts in Marin County and prohibits most forms of development that are unrelated to agricultural production, the construction or alteration of electric facilities may be authorized in these districts by a Use Permit approval pursuant to Marin County Code (MCC) Section 22.57.033.17I. The proposed project is considered an electrical facility because its **purpose is to provide meteorological data** to ascertain whether the area is suitable for the production of wind-generated electricity. (emphasis added)*

This statement clearly notes that the purpose of the proposed project is to “provide meteorological data,” a purpose that is reiterated in the project description included as part of the

County's findings which again classifies the project as a "meteorological research tower." The project is not described or defined as a device to generate, distribute, store, or otherwise serve as an "electric facility." Regardless of the potential future use of the meteorological data that would be gathered by the proposed project, for the purposes of LUP Agriculture Policy 6/IP Policy 22.57.033, the appropriate consideration is of the function, operation, description, and stated purpose of the current proposed project – a platform for "small meteorological research and bat monitoring devices."

Conclusion: In sum, the project, as approved and conditioned, appears to have been incorrectly identified as a conditionally allowable use in an agricultural production zone. Therefore, the Commission finds that a substantial issue exists with respect to the project's consistency with the County's certified LCP.

Appeal Issue – whether the proposed project would be sited and designed to protect visual resources:

The New Development and Land Use section included in the Marin County Local Coastal Program Unit 2 – *Amended*, states:

LCP New Development and Land Use Policy 3: Visual resources.

- a. The height, scale, and design of new structures shall be compatible with the character of the surrounding natural or built environment. Structures shall be designed to follow the natural contours of the landscape and sited so as not to obstruct significant views as seen from public viewing places.*
- b. Development shall be screened with appropriate landscaping; however such landscaping shall not, when mature, interfere with public views to and along the coast. The use of native plant material is encouraged.*
- c. ...*
- d. ...*

Chapters 22.56 and 22.57 of the Marin County Title 22 Zoning Ordinance (the certified Implementation Plan portion of the LCP) include the following policies specific to the protection of visual resources:

22.56.130 Development Requirements, Standards and Conditions.

...

O. Visual Resources and Community Character

1. ...

- 2. To the maximum extent feasible, new development shall be designed and sited so as not to impair or obstruct existing coastal views from Highway 1 or Panoramic Highway.*
- 3. The height, scale, and design of new structures shall be compatible with the character of the surrounding natural or built environment. Structures shall be designed to follow the natural contours of the landscape and sited so as not to obstruct significant views as seen from public viewing places.*

4. Development shall be screened with appropriate landscaping; however such landscaping shall not, when mature, interfere with public views to and along the coast. The use of native plant material is encouraged.

...

Discussion: As noted in the project description included in Resolution No. 2010-122, the proposed project would be 197.7-feet high, would be installed on a coastal ridge, and would include numerous orange aviation warning balls to increase visibility. The proposed tower would be constructed within an existing agricultural grazing pasture dominated by low lying vegetation and devoid of any structure larger than a small fence. In this way the proposed structure would be notable as a discordant visual element in the area and would likely not be compatible with the rural and open character of the surrounding natural and built environment. The nearest public viewing site is located at an approximate distance of 2,000-feet, however, the height of the structure as well as the orange aviation markers are likely to ensure the proposed tower's visibility from this site as well as others. As noted in the appeal filed by the Environmental Action Committee of West Marin (EAC):

For its part the Visual Resources portion of Marin's Local Coastal Program, Unit II, recognizes that "Tomales Bay and adjacent lands in the Unit II coastal zone form a scenic panorama of unusual beauty and contrast... New development in sensitive visual areas, such as along the shoreline of Tomales Bay and on the open rolling grasslands east of the Bay, has the potential for significant adverse visual impacts unless very carefully sited and designed." Accordingly, the LCP requires structures to be "designed to follow the natural contours of the landscape and sited so as not to obstruct significant views as seen from public viewing places." LCP at 194, 206a.

In addition, from the local record provided to Commission staff it appears that the County of Marin evaluated only one visual simulation of the proposed project as a basis for its determination that the "proposed project would be barely visible." It is not clear what criteria were used to select this visual simulation location or if additional public viewing places exist from which the proposed project would be more visually dominant. Further, it does not appear that the County's decision included findings or analysis regarding the use of landscaping for visual screening, as required by LUP New Development and Land Use Policy 3(b)/IP Policy 22.56.130(O).

Conclusion: For these reasons there is not substantial evidence in the record to support a conclusion that the proposed project is in conformance with the visual resource protection policies of the LCP and is sited and designed to protect visual resources, as required by the LCP. Therefore, the Commission finds that a substantial issue exists with respect to the project's consistency with the County's certified LCP.

Appeal Issue – whether the proposed project would be consistent with the LCP's Natural Resources Policies:

The Natural Resources section included in the Marin County Local Coastal Program Unit 2 – Amended, states:

LCP Natural Resource Policy 5: Coastal Dunes and Other Sensitive Land Habitats.

Development in or adjacent to sensitive habitats shall be subject to the following standards:

a. ...

b. Other Environmentally Sensitive Habitats. Other sensitive habitats include habitats of rare or endangered species and unique plant communities.

Development in such areas may only be permitted when it depends upon the resources of the habitat area. Development adjacent to such areas shall be set back a sufficient distance to minimize impacts on the habitat area. Public access to sensitive habitat areas, including the timing, intensity, and location of such access, shall be controlled to minimize disturbance to wildlife. Fences, roads, and structures which significantly inhibit wildlife movement, especially access to water, shall be avoided.

Chapters 22.56 and 22.57 of the Marin County Title 22 Zoning Ordinance (the certified Implementation Plan portion of the LCP) include the following policies specific to the protection of biological resources:

22.56.130 Development Requirements, Standards and Conditions.

...

I. Wildlife Habitat Protection

1. ...

2. Siting of New Development. Coastal project permit applications shall be accompanied by detailed site plans indicating existing and proposed construction, major vegetation, water courses, natural features and other probable wildlife habitat areas. Development shall be sited to avoid such wildlife habitat areas and to provide buffers for such habitat areas. Construction activities shall be phased to reduce impacts during breeding and nesting periods. Development that significantly interferes with wildlife movement; particularly access to water, shall not be permitted.

Discussion: The County approval was not based on or informed by adequate site-specific evaluations or surveys of rare or endangered species, including listed bird and bat species, which may be present at the proposed project site. Although the County determined that “there are no known rare or endangered animal species at or near the project site” it does not appear that sufficient data exists to conclusively support this determination. Further, the limited biological data that is available for the proposed project site – resulting from a site visit carried out on November 24, 2010, by the applicant’s consultants – includes observations of the presence of a California Species of Special Concern at the site (eight Northern Harriers) as well as recognition that the habitat may be suitable for the three additional bird species recognized by the California Department of Fish and Game as Species of Special Concern due to their rarity and sensitivity (Burrowing Owl, Golden Eagle, and Prairie Falcon). In addition, because of its location on a ridgeline approximately one-half mile from the Estero de San Antonio, a wetland and open water

area recognized as important habitat for a high diversity of avian species³ (including migratory, listed, and sensitive species), there is a high likelihood that the proposed project site may provide additional rare or endangered species with habitat for foraging, nesting, breeding and/or other essential behaviors. Because environmentally sensitive habitats are defined in the LUP to “include habitats of rare or endangered species,” additional site specific biological information is necessary before it can be conclusively determined that the proposed site does not provide environmentally sensitive habitat. As noted in the report by naturalist Jules Evens that was included in the Marin Audubon Society’s appeal documents,

The proposed project site is located amidst wetlands and coastal environments that have been designated as protected areas because of their great natural diversity and biological value, especially to birds. It is important to consider these unique values when evaluating the impacts of adding anomalous structures to the landscape and introducing potential hazards to the species that inhabit the area. The meteorological and topographical features of the landscape – especially the coastal fog, wind, and abrupt ridgelines – introduce variables that pose unique circumstances that should be considered before any project is approved. An initial study to define and identify these variables is critical to ensure that this project does not result in adverse impacts to native wildlife.

Marin County LUP Natural Resource Policy 5(b)/IP Policy 22.56.130(I)(2) also requires that development which significantly inhibits wildlife movement, especially access to water, shall not be permitted. The proposed meteorological tower includes approximately 3,568-feet of guy wires covering a coastal ridge area of roughly 27,000 square feet. Wires would connect the tower to the ground at intervals of roughly 30 feet along the length of the tower, from 37 feet high to 184 feet high. The combination of these wires would result in roughly 3,500 linear feet of wire spread across an airspace of about 15,000 square feet at each of four axes around the tower. Guy wires are well known to present a substantial risk to the movement and passage of wildlife, primarily bird species that may inadvertently collide with or strike these structures and suffer injury and/or mortality. As noted in the appeal filed by EAC:

The guy wired towers are anomalous structures that could significantly inhibit wildlife movement to water and along the routine migratory routes according to Mr. Evens. The exceptional avian species diversity that this protected habitat supports requires protection and, at a minimum, a biological assessment prior to permit issuance, under the LCP ESHA policies.

While the County and Nextera have acknowledged the likelihood of this potential risk, both by revising the proposed project to include bird deterrent devices on the guy wires and by requiring periodic “carcass counts” at the project site as part of a post-construction monitoring plan, it has not provided an adequate evaluation of the proposed project’s impact on wildlife movement.

³ In describing the importance of Estero de San Antonio to avian species, the Marin County LUP notes on page 69: “Animal life includes seventy-one species of water and marsh-related birds and sixty-six species of terrestrial birds. Monthly observations of birdlife indicate the importance of the esteros to migrating and wintering birds-as well as to year-round residents.”

Specifically, the County approval appears not to have been based on or informed by adequate site-specific evaluations or surveys of rare or endangered species, including listed bird and bat species, which may be present at the proposed project site. The presence of sensitive bird species at the project site during the limited site visit that was carried out suggests that more information would benefit the evaluation of this issue. It also appears that much of the support cited by the County for its finding that the proposed project would not adversely affect birds was based on the use of data from guyed towers located at non-coastal sites without nearby estuary, riparian, and marine habitats. Commission staff is not aware of any studies which suggest that such locations would provide accurate and appropriate proxies for the proposed project site. In addition, as has been well established in the scientific literature on the effects of guyed towers on birds and noted several times in the report by Curry & Kerlinger, LLC., many of the birds most sensitive to mortality from impacts with guy wires and towers are night migrating passerine species. Based on the local record, it does not appear that any attempt was made to determine the species composition, frequency, or density of birds, migratory or otherwise, that may transit the project site at night. Further, the County has not provided adequate support for its conclusion that the use of bird deterrent devices will adequately mitigate the project's potential adverse impacts to wildlife movement. Information included in the local record suggests that the Board of Supervisors' decision was based primarily on a report by the applicant's consultant biologists, Curry & Kerlinger, LLC., titled, *Avian and Bat Risk Assessment for Meteorological Towers in Marin County, California* and a letter in support of this report by the Point Reyes Bird Observatory. The Curry & Kerlinger, LLC. report includes a cursory evaluation of the project site and a review of the literature and relevant data bases on bird impacts at communication and meteorological towers. In the conclusion of its report, Curry & Kerlinger, LLC., note:

The weight of evidence strongly suggests that risk factors for birds and bats at the towers proposed for installation at the Marin County sites are minimal. The towers are short, have no FAA lights and they are not located at a site where avian use is high and likely to result in large numbers of bird fatalities. Bird fatalities caused by the two proposed towers are likely to be similar to those found at met towers at other wind power sites, which have never been implicated with large or significant fatality rates. Therefore, it is highly improbable that fatality numbers will be biologically significant or impact rare, threatened or endangered species. With respect to bats, no impacts are anticipated.

Curry & Kerlinger, LLC., also conclude that “[t]here is nothing about the geography, topography or habitat of the proposed tower sites that would suggest great or significant risk to birds.” However, these conclusions do not appear to be based on an adequate evaluation of the existing habitat conditions and species representation at the project site or an appropriate consideration of the unique nature of the site due to its close proximity to a well recognized area of high bird density and diversity, Estero de San Antonio. For example, Curry & Kerlinger, LLC.’s conclusion that the proposed project area is not “a site where avian use is high” is unsubstantiated by adequate data collected at this site. Based on the documents filed by several appellants, including the memorandum from Jules Evens and the discussion of the project area included in the Marin County LCP, it appears that there is substantial existing information which suggests that avian use of the project site and surrounding areas may indeed be quite high. While the report by Curry & Kerlinger, LLC. identifies several factors that appear to have augmented

the number of avian mortalities associated with communication and meteorological towers in other locations, including lights and height, the fact that these elements are absent or minimized on the proposed project cannot be used as conclusive evidence that the proposed project would not adversely affect wildlife movement and/or habitat values at the project site. In fact, the risk factors identified by Curry & Kerlinger, LLC. ignore what is potentially the most significant risk factor associated with towers – the presence of guy wires. Commission staff's review of relevant scientific literature suggests that guy wires may be the most dangerous aspect of meteorological towers with respect to avian species.

Conclusion: The proposed project appears to be in conflict with several applicable natural resource and environmentally sensitive habitat protection provisions of the LCP due to its potential to inhibit the movement of wildlife and its location within an area that may be considered environmentally sensitive habitat based on the presence of rare or endangered species. Therefore, the Commission finds that a substantial issue exists with respect to the project's consistency with the County's certified LCP.

Appeal Issue – whether the proposed project would be consistent with the LCP's Archeological and Paleontological Resource Protection Policies:

The New Development and Land Use section included in the Marin County Local Coastal Program Unit 2 – *Amended*, states:

LCP New Development and Land Use Policy 2: Archaeological Resources.

a. The County shall maintain a file on known and suspected archaeological and paleontological sites in the coastal zone, in cooperation with the area clearinghouse. Additional information on such sites that becomes available through the EIR process or by other means shall be added to the file and forwarded to the clearinghouse. The file shall be kept confidential in order to prevent vandalism of sites.

b. Prior to the approval of any development proposed within an area of known or suspected archaeological or paleontological significance, a field survey by a qualified professional shall be required at the applicant's expense to determine the extent of archaeological or paleontological resources on the site. Where development would adversely impact identified resources, reasonable mitigation measures shall be required, as recommended in the field survey.

Chapters 22.56 and 22.57 of the Marin County Title 22 Zoning Ordinance (the certified Implementation Plan portion of the LCP) include the following policies specific to the protection of paleontological resources:

22.56.130 Development Requirements, Standards and Conditions.

...

D. Archeological Resources

1. Prior to the approval of any development proposed within an area of known or probable archaeological significance, a limited field survey by a qualified professional at

the applicant's expense shall be required to determine the extent of the archaeological resources on the site. Where the results of such survey indicate the potential to adversely impact probable archeological resources, the result shall be transmitted to the appropriate clearinghouse for comment. The County Planning Department shall maintain a confidential map file of known or probable archeological sites so as to assist in site identification.

2. Where development would adversely impact archeological resources or paleontological resources which have been identified, reasonable mitigation measures shall be required as may be recommended by the field surveyor or by the State Historic Preservation Officer. Such mitigation shall include as necessary:

- a) The resiting or redesign of development to avoid the site;*
- b) That, for a specified period of time prior to the commencement of development, the site be opened to qualified, approved professional/educational parties for the purpose of exploration/excavation;*
- c) The utilization of special construction techniques to maintain the resources intact and reasonably accessible;*
- d) Where specific or long-term protection is necessary, sites shall be protected by the imposition of recorded open space easements; and*
- e) For significant sites of unique archeological resource value, where other mitigation techniques do not provide a necessary level of protection, the project shall not be approved until the determination is made that there are no reasonably available sources of funds to purchase the property.*

Discussion: Although minimal, the proposed project does include a variety of activities that would result in soil disturbance and minor excavation – both during installation and removal of the meteorological tower and its associated guy wires. These activities include the placement of soil screws to secure the tower's metal base plate and guy wires.

The appeal documents submitted by Susie Schlesinger et al. note that “[t]he project will adversely impact paleontological resources. The site is mapped as Wilson Grove Formation.” The Wilson Grove Formation has been described as an ancient bed of sand and gravel that includes fossilized remains reflecting ancient marine and/or estuarine conditions. This geological formation has been documented at a variety of locations in north-western Marin County. A report produced by Powell et al. (2004) of the U.S. Geological Service titled, *Invertebrate paleontology of the Wilson Grove Formation (late Miocene to late Pliocene), Sonoma and Marin Counties, California, with some observations on its stratigraphy, thickness, and structure*, describes a variety of locations around Estero de San Antonio, including the proposed project site, that represent the Wilson Grove Formation. While this report does not describe paleontological discoveries that have been made within the proposed project footprint, the project site does appear to be designated as an area that is representative of the Wilson Grove Formation. This designation suggests that it is reasonable to assume that the proposed project site is within an area of “suspected” paleontological significance, as described in the LUP. As such, LUP New Development and Land Use Policy 2 requires that a field survey by a qualified professional to be carried out “to determine the extent of archaeological or paleontological resources on the site.” Additionally, if the results of this survey reveal the presence of

paleontological resources, IP Policy 22.56.130(D)(2) requires a variety of specific mitigation measures to be applied. The local record does not indicate that a field survey has been carried out at the project site and suggests that the County may have failed to apply this relevant requirement. The proposed project therefore appears to be inconsistent with the paleontological resource protection policies of the LUP, and potentially, with the mitigation measure requirements of the IP as well.

As noted by several appellants, the staff report and analysis provided to the Marin County Deputy Zoning Administrator notes that “review of the Marin County Archeological Sites Inventory Maps on file in the Planning Division indicates that the subject property is located in an area of archeological sensitivity...” while the findings included in Marin County Board of Supervisors Resolution No. 2010-122 contradicts this statement with no apparent justification or explanation. Further review of the local record, however, provides an adequate explanation of this reversal. Specifically, section 1(D) of the October 25, 2010, staff report to the planning commission notes that “GIS data does not identify the project sites as areas of archeological sensitivity. Findings in Section I.VI.D of the previously approved resolutions incorrectly stated that the project sites were in an area of high archeological sensitivity.” Furthermore, the CDP approved by the Marin County Board of Supervisors, as conditioned, includes measures requiring the cessation of all project construction activities if archeological, historic, or prehistoric resources are discovered during construction. This condition additionally requires evaluation and reporting of these resources by a registered archeologist and approval of this report and its recommendations by the County prior to construction resuming. The proposed project is therefore consistent with the archeological resource protection policies of the LCP.

Conclusion: While the proposed project is consistent with the relevant LCP policies for the protection of archeological resources, the location of the project site within an area of suspected paleontological sensitivity requires that a field survey be carried out prior to the approval of development. The approval of the CDP without this survey is therefore inconsistent with the LCP. Therefore, the Commission finds that a substantial issue exists with respect to the project’s consistency with the County’s certified LCP.

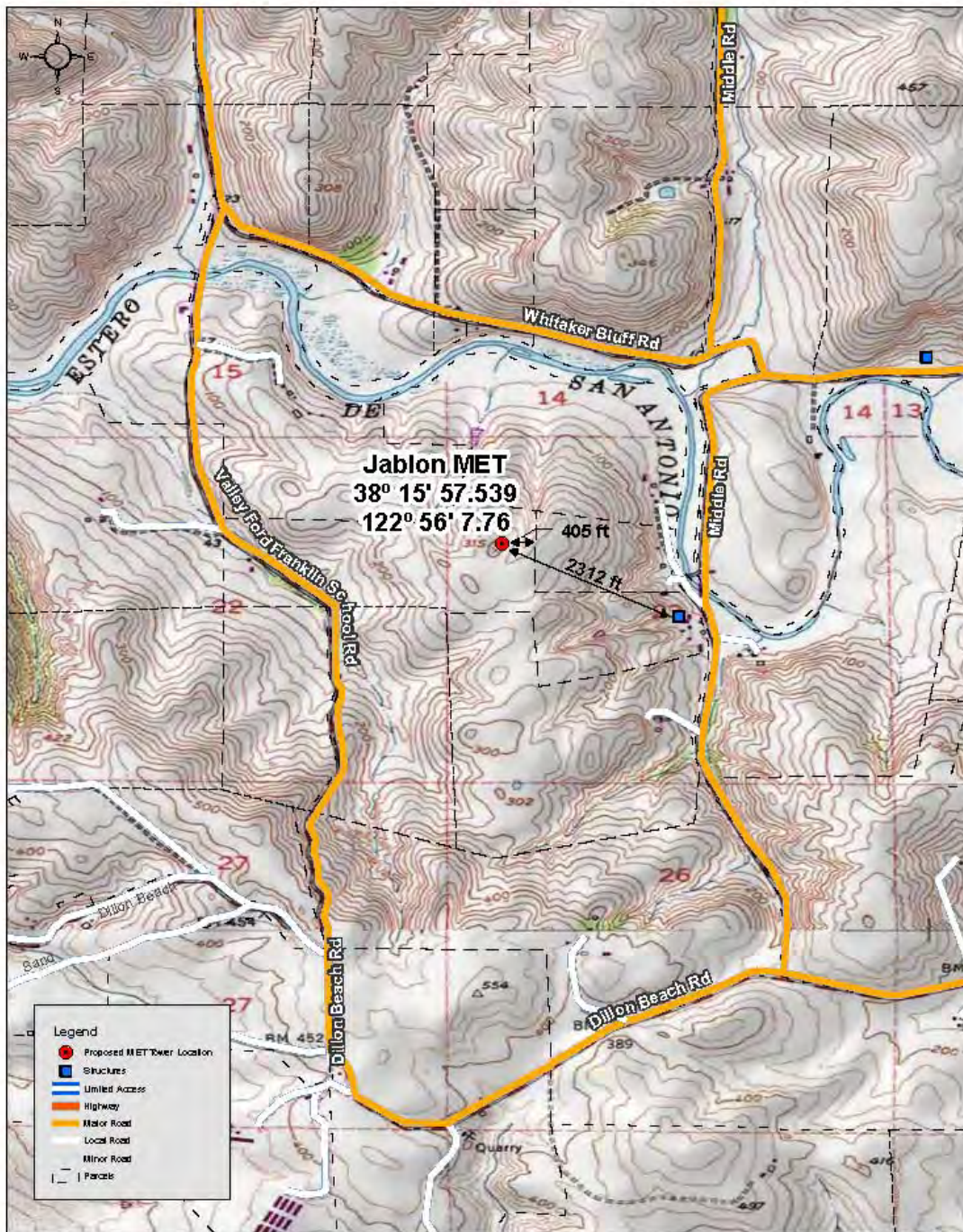
6. Appeal Issues Raising No Substantial Issue:

Appeal Issues – additional appeal issues pertain to whether the proposed project is a coastal dependent industrial facility, whether or not a Marin Agricultural Land Trust easement on the project site precludes the proposed development, whether or not the status of the town of Tomales as a Historic District precludes the proposed development, whether or not the proposed project would obstruct U.S. Coast Guard rescue helicopter operations in the area, whether or not procedural errors occurred during the County process, and whether or not it was appropriate for the Board of Supervisors to approve a Categorical Exemption from CEQA requirements for the proposed project:

Discussion/Conclusion: As noted above, the grounds for appeal are limited to the assertion that “development does not conform to the certified local coastal program.” Commission staff’s review of these appeal issues has not revealed their connection to specific LCP policies, and they

do not appear to raise relevant points related to the conformance of the proposed project with the LCP. These contentions therefore do not support a finding that the proposed project raises a substantial issue of conformance with the certified LCP.

Exhibit 1: Proposed Project Location



Site Elevation:
 Max 497'
 Base 300'

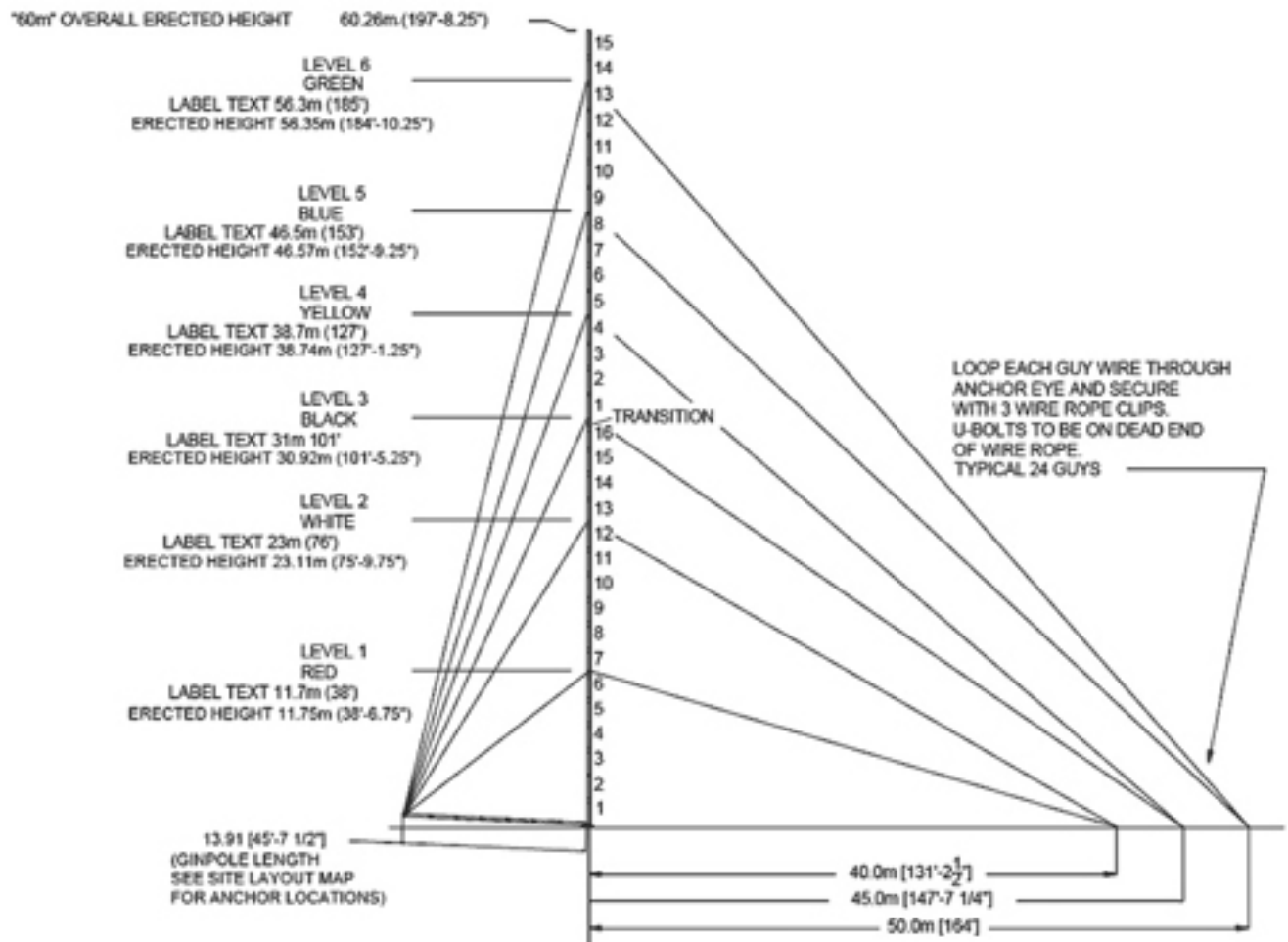
Jablon Met Tower
Marin County California

December 07, 2009

0 750 1,500 3,000 4,500 6,000 Feet



Exhibit 2: Proposed Project Design



60m XHD NRG TallTower™ Standard Footprint

APPENDIX I

Appeal Documents

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT OFFICE
45 FREMONT ST, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5260
FAX (415) 904-5400
TDD (415) 597-5885

**COMMISSION NOTIFICATION OF APPEAL**

DATE: January 12, 2011

TO: Lorene Jackson, Planner
County of Marin, Community Development Agency
3501 Civic Center Drive, #308
San Rafael, CA 94903-4157

FROM: Cassidy Teufel, Coastal Program Analyst

A handwritten signature in cursive script, appearing to read "Cassidy Teufel".

RE: **Commission Appeal No. A-2-MAR-11-007**

Please be advised that the coastal development permit decision described below has been appealed to the California Coastal Commission pursuant to Public Resources Code Sections 30603 and 30625. Therefore, the decision has been stayed pending Commission action on the appeal pursuant to Public Resources Code Section 30623.

Local Permit #: UP 10-15 / CP 10-30 - Project ID 10-0005
Applicant(s): David Jablons & Tamara Hicks; Nextera Energy Resources
Description: To install a temporary 197.7-foot high meteorological research tower on a 157-acre agricultural parcel.
Location: 5488 Middle Road, Petaluma (Marin County) (APN 100-050-29)
Local Decision: Approved w/ Conditions
Appellant(s): Susie Schlesinger; Louise Gregg; Beverly Childs McIntosh; Sid Baskin; Helen Kozoriz; Marin Audubon Society; Environmental Action Committee of West Marin; Commissioner Steve Blank and Commissioner Mark Stone, California Coastal Commission
Date Appeal 1/11/2011

The Commission appeal number assigned to this appeal is A-2-MAR-11-007. The Commission hearing date has not yet been established for this appeal. Within 5 working days of receipt of this Commission Notification of Appeal, copies of all relevant documents and materials used in the County of Marin's consideration of this coastal development permit must be delivered to the North Central Coast District office of the Coastal Commission (California Administrative Code Section 13112). Please include copies of plans, relevant photographs, staff reports and related documents, findings (if not already forwarded), all correspondence, and a list, with addresses, of all who provided verbal testimony.

A Commission staff report and notice of the hearing will be forwarded to you prior to the hearing. If you have any questions, please contact Cassidy Teufel at the North Central Coast District office.

cc: David Jablons & Tamara Hicks
Nextera Energy Resources

CALIFORNIA COASTAL COMMISSION

45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200



APPEAL FROM COASTAL PERMIT
DECISION OF LOCAL GOVERNMENT

Please Review Attached Appeal Information Sheet Prior To Completing This Form.

SECTION I. Appellant(s)

Name, mailing address and telephone number of appellant(s):

Commissioner Steve Blank

45 Fremont St., Suite 2000

San Francisco, CA 94105

Zip

415

Area Code

904-5200

Phone No.

SECTION II. Decision Being Appealed

1. Name of local/port government:

County of Marin

2. Brief description of development being appealed:

Installation of a temporary 197.7-foot high meteorological research tower on 157-acre agricultural parcel.

3. Development's location (street address, assessor's parcel no., cross street, etc.):

5488 Middle Road, Petaluma (Marin County - APN 100-050-29)

4. Description of decision being appealed:

a. Approval; no special conditions:

b. Approval with special condition:

X

c. Denial:

Note: For jurisdictions with a total LCP, denial decisions by a local government cannot be appealed unless the development is a major energy or public works project. Denial decisions by port governments are not appealable.

TO BE COMPLETED BY COMMISSION:

APPEAL NO:

A-2 MAR-11-007

DATE FILED:

1/11/2011

DISTRICT:

North Central Coast District

RECEIVED

JAN 11 2011

CALIFORNIA
COASTAL COMMISSION
NORTH CENTRAL COAST

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 2)

5. Decision being appealed was made by (check one):

a. ☐ Planning Director/Zoning
Administrator

c. ☐ Planning Commission

b. ☒ City Council/Board of
Supervisors

d. ☐ Other

6. Date of local government's decision: 12-14-10

7. Local government's file number (if any): CDP #10-30, Project ID #10-0005

SECTION III. Identification of Other Interested Persons

Give the names and addresses of the following parties. (Use additional paper as necessary.)

a. Name and mailing address of permit applicant:

David Jablons & Tamara Hicks	Nextera Energy Resources
5488 Middle Road	P.o. Box 14000
Petaluma, Ca 94954	Juno Beach, FL 33408

b. Names and mailing addresses as available of those who testified (either verbally or in writing) at the city/county/port hearing(s). Include other parties which you know to be interested and should receive notice of this appeal.

- (1) _____

- (2) _____

- (3) _____

- (4) _____

SECTION IV. Reasons Supporting This Appeal

Note: Appeals of local government coastal permit decisions are limited by a variety of factors and requirements of the Coastal Act. Please review the appeal information sheet for assistance in completing this section, which continues on the next page.

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT

Page 3

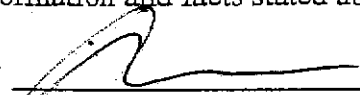
State briefly your reasons for this appeal. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)

SEE ATTACHED

Note: The above description need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

SECTION V. Certification

The information and facts stated above are correct to the best of my/our knowledge.

Signed: 
Appellant or Agent

Date: 1/10/2011

Agent Authorization: I designate the above identified person(s) to act as my agent in all matters pertaining to this appeal.

Signed: _____

Date: _____

Attachment #1
Appeal of Coastal Development Permit #10-30
Issued by County of Marin to Nextera Energy Resources and David Jablons &
Tamara Hicks

On December 14, 2010, the County of Marin (County) approved Coastal Development Permit #10-30 for Nextera Energy Resources and David Jablons & Tamara Hicks to construct and operate a temporary 197.7-foot high meteorological research tower on a 157-acre agricultural parcel.

Project Description: The approved development is a proposal by Nextera to construct and operate for no more than three years, a 197.7-foot high meteorological research tower on a 157-acre agricultural parcel. The stand-alone tower would be a ten-inch diameter galvanized steel tube that tapers to eight-inches on top. The tower would be anchored by 24 1/4 -inch guy wires: three guy wire anchors placed on each of four axes at intervals of 131, 148, and 167-feet from the base of the tower. The guy wires would be marked with orange aviation warning balls near the top of the tower and bird deterrent devices. The tower would be located on a ridge and maintain the following setbacks: 572-feet from the northerly property line, 400-feet from the eastern property line, and 1,046-feet from the southerly property line. Small meteorological research and acoustic bat monitoring devices would be attached to the tower, along with a solar panel to power the instruments. Installation of the tower would not result in substantial grading and the base of the tower would be attached to a steel base plate secured by screw-in soil anchors. Access to the tower site for construction and maintenance would be by existing farm roads. The meteorological instruments would collect data to inform future decisions regarding the suitability of the area for wind energy production. The collected data would be transmitted wirelessly for further analysis offsite. As described in Marin County Board of Supervisors Resolution No. 2010-122, the project would include a post-construction avian and bat data collection program, with results submitted every four months to the Marin County Community Development Agency; data collection would occur during periods of nesting, roosting, foraging, and migration, including nocturnal migration, and would include carcass counts in the vicinity of the meteorological tower and/or a similar site proposed for the installation of a meteorological tower (Cornett, Assessor's Parcel 100-050-07). The data collection program would be in accordance with criteria established by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), or PRBO Conservation Science. Data collection would be conducted by a professional biologist or an ornithologist approved by the Marin Environmental Coordinator. The zoning for the proposed project site is C-APZ-60 (Coastal, Agricultural Production Zone, 1 unit/60 acres).

Jurisdiction: The proposed project site is within the coastal zone in the County of Marin and subject to the County's certified Local Coastal Plan (LCP). The proposed site is also within the appeal jurisdiction of the California Coastal Commission.

Grounds for Appeal: The approved project does not conform to the LCP for the following reasons, each of which is described in more detail below:

1. The project, as approved and conditioned, does not conform to several applicable LCP policies related to protection of agricultural resources and use of the agricultural production zone.
2. The project is not sited and designed to protect visual resources, as required by the LCP.
3. The County's approval is inconsistent with applicable natural resource and environmentally sensitive habitat protection provisions of the LCP.
4. The County's approval appears to be inconsistent with applicable archeological resource protection provisions of the LCP.

GROUND FOR APPEAL #1: The project, as approved and conditioned, does not conform to several applicable LCP policies related to protection of agricultural resources and use of the agricultural production zone.

***LCP Agriculture Policy 3: Intent of the Agricultural Production Zone.** The intent of the Agricultural Production Zone is to preserve lands within the zone for agricultural use. The principal use of lands in the APZ shall be agricultural. Development shall be accessory, incidental, or in support of agricultural land uses, and shall conform to the policies and standards in #4 and #5 below.*

***LCP Agriculture Policy 4: Development standards and requirements.** All land divisions and developments in the APZ shall require an approved master plan showing how the proposed division or development would affect the subject property. In reviewing a proposed master plan and determining the density of permitted units, the County shall make all of the following findings:*

- a. The development would protect and enhance continued agricultural use and contribute to agricultural viability.*
- b. The development is necessary because agricultural use of the property is no longer feasible. The purpose of this standard is to permit agricultural landowners who face economic hardship to demonstrate how development on a portion of their land would ease this hardship and enhance agricultural operations on the remainder of the property.*
- c. The land division or development would not conflict with the continuation of agriculture on that portion of the property which is not developed, on adjacent parcels, or those within one mile of the perimeter of the proposed development.*
- d. Adequate water supply, sewer disposal, road access and capacity and other public services are available to service the proposed development after provision has been made for existing and continued agricultural operations. Water diversions or use for a proposed development shall not adversely impact stream habitats or significantly reduce freshwater inflows to Tomales Bay, either individually or cumulatively.*
- e. Appropriate public agencies are able to provide necessary services (fire protection, police protection, schools, etc.) to serve the proposed development.*
- f. The proposed land division and/or development will have no significant adverse impacts on environmental quality or natural habitats, including stream or*

riparian habitats and scenic resources. In all cases, LCP policies on streams and natural resources shall be met.

g. Development consists of permitted and conditional uses as authorized in the APZ.

LCP Agriculture Policy 5: Conditions. *As part of the approval of a master plan, the following conditions shall be required:*

- a. All development shall be clustered to retain the maximum amount of land in agricultural production or available for agricultural use. Development, including all land converted from agricultural use such as roads and residential support facilities, shall be clustered on no more than five percent of the gross acreage, to the extent feasible, with the remaining acreage to be left in agricultural production and/or open space. Development shall be located close to existing roads and shall be sited to minimize impacts on scenic resources, wildlife habitat and streams, and adjacent agricultural resources.*
- b. Permanent conservation easements over that portion of the property not used for physical development or services shall be required to promote long-term preservation of these lands. Only agricultural uses shall be allowed under the easements. In addition, the County shall require the execution of a covenant not to divide the parcels created under this division so that they are retained as a single unit and are not further subdivided.*
- c. The creation of a homeowner's or other organization and/or the submission of agricultural management plans may be required to provide for the proper utilization of agricultural lands and their availability on a lease basis or for the maintenance of community roads or mutual water systems.*

LCP Agriculture Policy 6: Definitions and uses. *The definition of agricultural uses in the APZ is given below, along with permitted and conditional uses.*

- a. Definitions. For the purposes of the Agricultural Production Zone, agricultural uses shall be defined as uses of land to grow and/or produce agricultural commodities for commercial purposes, including:*
 - c. Livestock and poultry - cattle, sheep, poultry, goats, rabbits, horses unless they are the primary animals raised.*
 - d. Livestock and poultry products - milk, wool, eggs.*
 - e. Field, fruit, nut, and vegetable crops - hay grain, silage, pasture, fruits, nuts, and vegetables.*
 - f. Nursery products - nursery crops, cut plants.*
- b. Permitted uses. Permitted uses include the following:*
 - g. Agricultural uses as defined above.*
 - h. One single-family dwelling per parcel. "Parcel" is defined as all contiguous assessor's parcels under common ownership.*
 - i. Accessory structures or uses appurtenant and necessary to the operation of agricultural uses, other than dwelling units of any kind, but including barns fences, stables, corrals, coops and pens, and utility facilities.*

- c. Conditional Uses. *Conditional uses include the following:*
- j. *Land divisions.*
 - k. *Farmworker housing.*
 - l. *Mobile homes so long as they are used exclusively for employees of the owner who are actively and directly engaged in the agricultural use of the land.*
 - m. *Hog ranch.*
 - n. *Veterinary facilities.*
 - o. *Fish hatcheries and rearing ponds.*
 - p. *Stabling of more than five horses on ranches where horses are the primary or only animals raised.*
 - q. *Raising of other food and fiber producing animals not listed under (a) above.*
 - r. *Planting, raising, or harvesting of trees for timber, fuel, or Christmas tree production.*
 - s. *Facilities for processing or retail sale of agricultural products.*
 - t. *Greenhouses.*
 - u. *Commercial storage and sale of garden supply products.*
 - v. *Water conservation dams and ponds.*
 - w. *Mineral resource production.*
 - x. *Game or nature preserve or refuge.*
 - y. *Public or private recreational activities, such as hunting, fishing, and camping.*
 - z. *Bed and breakfast operations in existing structures up to a maximum of 5 rooms.*
 - aa. *Construction, alteration, or maintenance of gas, electric, water, communication, or flood control facilities, unrelated to an agricultural use, as approved by the appropriate governmental agencies.*
 - bb. *Dump.*

These LCP policies apply to the approved project due to the zoning of the proposed project site as an Agricultural Production Zone (APZ), specifically, C-APZ-60 (Coastal, Agricultural Production Zone, 1 unit/60 acres). These provisions generally require that development within an APZ is accessory, incidental, or in support of agricultural land uses and specifically require an approved master plan showing how the proposed development would affect the subject property. As described in LCP Agricultural Policies 4 and 5, during the review and approval of this master plan, the County is required to make a series of seven findings and establish three specific conditions. However, in its evaluation of the project's conformity to the LCP, included in Marin County Board of Supervisors Resolution No. 2010-122, it does not appear that the County reviewed, approved, or required a master plan showing how the proposed development would affect the subject property. The required findings for this master plan were therefore not made and the required conditions for this master plan were not established. The approval of this proposed project is therefore inconsistent with LCP Agriculture Policies 3, 4, and 5.

In addition, the provisions of LCP Agriculture Policy 6 require that the development within an APZ conform to a specific list of either permitted or conditional uses. In its findings under this policy, it appears that the County inappropriately identified the project as a listed conditional use of an APZ area. Specifically, the County noted in Resolution No. 2010-122, Part IX, that

While the C-APZ-60 zoning district is one of the most restrictive districts in Marin County and prohibits most forms of development that are unrelated to agricultural production, the construction or alteration of electric facilities may be authorized in these districts by a Use Permit approval pursuant to Marin County Code (MCC) Section 22.57.033.17I. The proposed project is considered an electrical facility because its purpose is to provide meteorological data to ascertain whether the area is suitable for the production of wind-generated electricity.

This statement clearly notes that the purpose of the proposed project is to “provide meteorological data,” a purpose that is reiterated in the project description included as part of the County’s findings which again classifies the project as a “meteorological research tower.” The project is not described or defined as a device to generate, distribute, store, or otherwise serve as an “electric facility.” Regardless of the potential future use of the meteorological data that would be gathered by the proposed project, for the purposes of LCP Agriculture Policy 6, the appropriate consideration is of the function, operation, description, and stated purpose of the current proposed project – a platform for “small meteorological research and bat monitoring devices.”

In sum, the proposed project is inconsistent with the relevant agriculture protection policies of the LCP. Therefore, the project, as approved and conditioned, does not conform to several applicable LCP policies related to protection of agricultural resources and use of the agricultural production zone.

GROUND FOR APPEAL #2: The project is not sited and designed to protect visual resources, as required by the LCP.

LCP New Development and Land Use Policy 3: Visual resources.

- a. The height, scale, and design of new structures shall be compatible with the character of the surrounding natural or built environment. Structures shall be designed to follow the natural contours of the landscape and sited so as not to obstruct significant views as seen from public viewing places.*
- b. Development shall be screened with appropriate landscaping; however such landscaping shall not, when mature, interfere with public views to and along the coast. The use of native plant material is encouraged.*
- c. ...*
- d. ...*

As noted in the project description included in Resolution No. 2010-122, the proposed project would be 197.7-feet high, would be installed on a coastal ridge, and would

include numerous orange aviation warning balls to increase visibility. The proposed tower would be constructed within an existing agricultural grazing pasture dominated by low lying vegetation and devoid of any structure larger than a small fence. In this way the proposed structure would be notable as a discordant visual element in the area and would not be compatible with the rural and open character of the surrounding natural and built environment. The nearest public viewing site is located at an approximate distance of 2,000-feet, however, the height of the structure as well as the orange aviation markers are likely to ensure the proposed tower's visibility from this site as well as others. In addition, it does not appear that the County of Marin required or evaluated a visual simulation of the proposed project as a basis for its determination that the "proposed project would be barely visible." Further, it does not appear that the County's decision included findings or analysis regarding the use of landscaping for visual screening, as required by LCP New Development and Land Use Policy 3(b). For these reasons the proposed project is inconsistent with the visual resource protection policies of the LCP and is not sited and designed to protect visual resources, as required by the LCP.

GROUND FOR APPEAL #3: The County's approval is inconsistent with applicable natural resource and environmentally sensitive habitat protection provisions of the LCP.

***LCP Natural Resource Policy 5: Coastal Dunes and Other Sensitive Land Habitats.** Development in or adjacent to sensitive habitats shall be subject to the following standards:*

a. ...

*b. **Other Environmentally Sensitive Habitats.** Other sensitive habitats include habitats of rare or endangered species and unique plant communities. Development in such areas may only be permitted when it depends upon the resources of the habitat area. Development adjacent to such areas shall be set back a sufficient distance to minimize impacts on the habitat area. Public access to sensitive habitat areas, including the timing, intensity, and location of such access, shall be controlled to minimize disturbance to wildlife. Fences, roads, and structures which significantly inhibit wildlife movement, especially access to water, shall be avoided.*

The County approval was not based on or informed by adequate site-specific evaluations or surveys of rare or endangered species, including listed bird and bat species, which may be present at the proposed project site. Although the County determined that "there are no known rare or endangered animal species at or near the project site" it does appear that sufficient data exists to conclusively support this determination. Located on a ridgeline near the Estero de San Antonio, an area recognized as important habitat for a high diversity of avian species¹ (including migratory, listed, and sensitive species), there is a

¹ In describing the importance of Estero de San Antonio to avian species, the Marin County LCP notes on page 69: "Animal life includes seventy-one species of water and marsh-related birds and sixty-six species of terrestrial birds. Monthly observations of birdlife indicate the importance of the esteros to migrating and wintering birds-as well as to year-round residents."

high likelihood that the proposed project site may provide one or more rare or endangered species with habitat for foraging, nesting and/or other essential behaviors.

In addition, LCP Natural Resource Policy 5(b) also requires that “structures which significantly inhibit wildlife movement, especially access to water, shall be avoided.” The proposed meteorological tower includes approximately 3,568-feet of guy wires covering a coastal ridge area of roughly 28,000 square feet. Guy wires are well known to present a substantial risk to the movement and passage of wildlife, primarily bird and bat species, that may inadvertently collide with or strike these structures and suffer injury and/or mortality. While the County has acknowledged the likelihood of this potential risk, both by requiring the proposed project to install bird deterrent devices on the guy wires and by requiring periodic “carcass counts” at the project site, it has not provided an adequate evaluation of the proposed project’s impact on wildlife movement. Further, the County has not provided adequate support for the potential of these impact minimization strategies to mitigate the project’s potential adverse impacts on wildlife movement.

In sum, the proposed project appears to be in conflict with several applicable natural resource and environmentally sensitive habitat protection provisions of the LCP.

GROUND FOR APPEAL #4: The County’s approval appears to be inconsistent with applicable archeological resource protection provisions of the LCP.

LCP New Development and Land Use Policy 2: Archaeological Resources

- a. The County shall maintain a file on known and suspected archaeological and paleontological sites in the coastal zone, in cooperation with the area clearinghouse. Additional information on such sites that becomes available through the EIR process or by other means shall be added to the file and forwarded to the clearinghouse. The file shall be kept confidential in order to prevent vandalism of sites.*
- b. Prior to the approval of any development proposed within an area of known or suspected archaeological or paleontological significance, a field survey by a qualified professional shall be required at the applicant’s expense to determine the extent of archaeological or paleontological resources on the site. Where development would adversely impact identified resources, reasonable mitigation measures shall be required, as recommended in the field survey.*

The staff report and analysis provided to the Marin County Deputy Zoning Administrator notes that “review of the Marin County Archeological Sites Inventory Maps on file in the Planning Division indicates that the subject property is located in an area of archeological sensitivity...” Although the findings included in Marin County Board of Supervisors Resolution No. 2010-122 contradicts this statement, no justification or explanation is provided for the reversal. It therefore appears that the proposed site may be “within an area of known or suspected archaeological or paleontological significance” as described in LCP New Development and Land Use Policy 2. If this is indeed the case, the archeological resources LCP policy requires “a field survey by a qualified professional”

to be carried out at the project site “to determine the extent of archaeological or paleontological resources on the site.” No information has been provided to suggest that this survey was carried out or to explain the reason for the discrepancy in the County’s analysis. It therefore appears that the County’s approval may be inconsistent with applicable archeological resource protection provisions of the LCP.

CALIFORNIA COASTAL COMMISSION

45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200



APPEAL FROM COASTAL PERMIT
DECISION OF LOCAL GOVERNMENT

Please Review Attached Appeal Information Sheet Prior To Completing This Form.

SECTION I. Appellant(s)

Name, mailing address and telephone number of appellant(s):

Commissioner Mark Stone

45 Fremont St., Suite 2000

San Francisco, CA

94105

415

904-5200

Zip

Area Code

Phone No.

SECTION II. Decision Being Appealed

1. Name of local/port government:

County of Marin

2. Brief description of development being appealed:

Installation of a temporary 197.7-foot high meteorological research tower on 157-acre agricultural parcel.

3. Development's location (street address, assessor's parcel no., cross street, etc.):

5488 Middle Road, Petaluma (Marin County - APN 100-050-29)

4. Description of decision being appealed:

a. Approval; no special conditions:

b. Approval with special condition:

X

c. Denial:

Note: For jurisdictions with a total LCP, denial decisions by a local government cannot be appealed unless the development is a major energy or public works project. Denial decisions by port governments are not appealable.

TO BE COMPLETED BY COMMISSION:

APPEAL NO:

A-2-MAR-11-007

DATE FILED:

1/11/2011

DISTRICT:

North Central Coast District

RECEIVED

JAN 11 2011

COASTAL COMMISSION
NORTH CENTRAL COAST

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 2)

5. Decision being appealed was made by (check one):

a. ☐ Planning Director/Zoning
Administrator

c. ☐ Planning Commission

b. ☒ City Council/Board of
Supervisors

d. ☐ Other

6. Date of local government's decision: 12-14-10

7. Local government's file number (if any): CDP #10-30, Project ID #10-0005

SECTION III. Identification of Other Interested Persons

Give the names and addresses of the following parties. (Use additional paper as necessary.)

a. Name and mailing address of permit applicant:

David Jablons & Tamara Hicks	Nextera Energy Resources
5488 Middle Road	P.O. Box 14000
Petaluma, Ca 94954	Juno Beach, FL 33408

b. Names and mailing addresses as available of those who testified (either verbally or in writing) at the city/county/port hearing(s). Include other parties which you know to be interested and should receive notice of this appeal.

- (1) _____

- (2) _____

- (3) _____

- (4) _____

SECTION IV. Reasons Supporting This Appeal

Note: Appeals of local government coastal permit decisions are limited by a variety of factors and requirements of the Coastal Act. Please review the appeal information sheet for assistance in completing this section, which continues on the next page.

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT

Page 3

State briefly your reasons for this appeal. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)

SEE ATTACHED

Note: The above description need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

SECTION V. Certification

The information and facts stated above are correct to the best of my/our knowledge.

Signed: Mark W. Stein
Appellant or Agent

Date: 1/10/2011

Agent Authorization: I designate the above identified person(s) to act as my agent in all matters pertaining to this appeal.

Signed: _____

Date: _____

Attachment #1
Appeal of Coastal Development Permit #10-30
Issued by County of Marin to Nextera Energy Resources and David Jablons &
Tamara Hicks

On December 14, 2010, the County of Marin (County) approved Coastal Development Permit #10-30 for Nextera Energy Resources and David Jablons & Tamara Hicks to construct and operate a temporary 197.7-foot high meteorological research tower on a 157-acre agricultural parcel.

Project Description: The approved development is a proposal by Nextera to construct and operate for no more than three years, a 197.7-foot high meteorological research tower on a 157-acre agricultural parcel. The stand-alone tower would be a ten-inch diameter galvanized steel tube that tapers to eight-inches on top. The tower would be anchored by 24 1/4 -inch guy wires: three guy wire anchors placed on each of four axes at intervals of 131, 148, and 167-feet from the base of the tower. The guy wires would be marked with orange aviation warning balls near the top of the tower and bird deterrent devices. The tower would be located on a ridge and maintain the following setbacks: 572-feet from the northerly property line, 400-feet from the eastern property line, and 1,046-feet from the southerly property line. Small meteorological research and acoustic bat monitoring devices would be attached to the tower, along with a solar panel to power the instruments. Installation of the tower would not result in substantial grading and the base of the tower would be attached to a steel base plate secured by screw-in soil anchors. Access to the tower site for construction and maintenance would be by existing farm roads. The meteorological instruments would collect data to inform future decisions regarding the suitability of the area for wind energy production. The collected data would be transmitted wirelessly for further analysis offsite. As described in Marin County Board of Supervisors Resolution No. 2010-122, the project would include a post-construction avian and bat data collection program, with results submitted every four months to the Marin County Community Development Agency; data collection would occur during periods of nesting, roosting, foraging, and migration, including nocturnal migration, and would include carcass counts in the vicinity of the meteorological tower and/or a similar site proposed for the installation of a meteorological tower (Cornett, Assessor's Parcel 100-050-07). The data collection program would be in accordance with criteria established by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), or PRBO Conservation Science. Data collection would be conducted by a professional biologist or an ornithologist approved by the Marin Environmental Coordinator. The zoning for the proposed project site is C-APZ-60 (Coastal, Agricultural Production Zone, 1 unit/60 acres).

Jurisdiction: The proposed project site is within the coastal zone in the County of Marin and subject to the County's certified Local Coastal Plan (LCP). The proposed site is also within the appeal jurisdiction of the California Coastal Commission.

Grounds for Appeal: The approved project does not conform to the LCP for the following reasons, each of which is described in more detail below:

1. The project, as approved and conditioned, does not conform to several applicable LCP policies related to protection of agricultural resources and use of the agricultural production zone.
2. The project is not sited and designed to protect visual resources, as required by the LCP.
3. The County's approval is inconsistent with applicable natural resource and environmentally sensitive habitat protection provisions of the LCP.
4. The County's approval appears to be inconsistent with applicable archeological resource protection provisions of the LCP.

GROUND FOR APPEAL #1: The project, as approved and conditioned, does not conform to several applicable LCP policies related to protection of agricultural resources and use of the agricultural production zone.

***LCP Agriculture Policy 3: Intent of the Agricultural Production Zone.** The intent of the Agricultural Production Zone is to preserve lands within the zone for agricultural use. The principal use of lands in the APZ shall be agricultural. Development shall be accessory, incidental, or in support of agricultural land uses, and shall conform to the policies and standards in #4 and #5 below.*

***LCP Agriculture Policy 4: Development standards and requirements.** All land divisions and developments in the APZ shall require an approved master plan showing how the proposed division or development would affect the subject property. In reviewing a proposed master plan and determining the density of permitted units, the County shall make all of the following findings:*

- a. The development would protect and enhance continued agricultural use and contribute to agricultural viability.*
- b. The development is necessary because agricultural use of the property is no longer feasible. The purpose of this standard is to permit agricultural landowners who face economic hardship to demonstrate how development on a portion of their land would ease this hardship and enhance agricultural operations on the remainder of the property.*
- c. The land division or development would not conflict with the continuation of agriculture on that portion of the property which is not developed, on adjacent parcels, or those within one mile of the perimeter of the proposed development.*
- d. Adequate water supply, sewer disposal, road access and capacity and other public services are available to service the proposed development after provision has been made for existing and continued agricultural operations. Water diversions or use for a proposed development shall not adversely impact stream habitats or significantly reduce freshwater inflows to Tomales Bay, either individually or cumulatively.*
- e. Appropriate public agencies are able to provide necessary services (fire protection, police protection, schools, etc.) to serve the proposed development.*
- f. The proposed land division and/or development will have no significant adverse impacts on environmental quality or natural habitats, including stream or*

riparian habitats and scenic resources. In all cases, LCP policies on streams and natural resources shall be met.

g. Development consists of permitted and conditional uses as authorized in the APZ.

LCP Agriculture Policy 5: Conditions. *As part of the approval of a master plan, the following conditions shall be required:*

- a. All development shall be clustered to retain the maximum amount of land in agricultural production or available for agricultural use. Development, including all land converted from agricultural use such as roads and residential support facilities, shall be clustered on no more than five percent of the gross acreage, to the extent feasible, with the remaining acreage to be left in agricultural production and/or open space. Development shall be located close to existing roads and shall be sited to minimize impacts on scenic resources, wildlife habitat and streams, and adjacent agricultural resources.*
- b. Permanent conservation easements over that portion of the property not used for physical development or services shall be required to promote long-term preservation of these lands. Only agricultural uses shall be allowed under the easements. In addition, the County shall require the execution of a covenant not to divide the parcels created under this division so that they are retained as a single unit and are not further subdivided.*
- c. The creation of a homeowner's or other organization and/or the submission of agricultural management plans may be required to provide for the proper utilization of agricultural lands and their availability on a lease basis or for the maintenance of community roads or mutual water systems.*

LCP Agriculture Policy 6: Definitions and uses. *The definition of agricultural uses in the APZ is given below, along with permitted and conditional uses.*

- a. Definitions. For the purposes of the Agricultural Production Zone, agricultural uses shall be defined as uses of land to grow and/or produce agricultural commodities for commercial purposes, including:*
 - c. Livestock and poultry - cattle, sheep, poultry, goats, rabbits, horses unless they are the primary animals raised.*
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 - i. Accessory structures or uses appurtenant and necessary to the operation of agricultural uses, other than dwelling units of any kind, but including barns fences, stables, corrals, coops and pens, and utility facilities.*

- c. Conditional Uses. Conditional uses include the following:
- j. Land divisions.
 - k. Farmworker housing.
 - l. Mobile homes so long as they are used exclusively for employees of the owner who are actively and directly engaged in the agricultural use of the land.
 - m. Hog ranch.
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 - aa. Construction, alteration, or maintenance of gas, electric, water, communication, or flood control facilities, unrelated to an agricultural use, as approved by the appropriate governmental agencies.
 - bb. Dump.

These LCP policies apply to the approved project due to the zoning of the proposed project site as an Agricultural Production Zone (APZ), specifically, C-APZ-60 (Coastal, Agricultural Production Zone, 1 unit/60 acres). These provisions generally require that development within an APZ is accessory, incidental, or in support of agricultural land uses and specifically require an approved master plan showing how the proposed development would affect the subject property. As described in LCP Agricultural Policies 4 and 5, during the review and approval of this master plan, the County is required to make a series of seven findings and establish three specific conditions. However, in its evaluation of the project's conformity to the LCP, included in Marin County Board of Supervisors Resolution No. 2010-122, it does not appear that the County reviewed, approved, or required a master plan showing how the proposed development would affect the subject property. The required findings for this master plan were therefore not made and the required conditions for this master plan were not established. The approval of this proposed project is therefore inconsistent with LCP Agriculture Policies 3, 4, and 5.

In addition, the provisions of LCP Agriculture Policy 6 require that the development within an APZ conform to a specific list of either permitted or conditional uses. In its findings under this policy, it appears that the County inappropriately identified the project as a listed conditional use of an APZ area. Specifically, the County noted in Resolution No. 2010-122, Part IX, that

While the C-APZ-60 zoning district is one of the most restrictive districts in Marin County and prohibits most forms of development that are unrelated to agricultural production, the construction or alteration of electric facilities may be authorized in these districts by a Use Permit approval pursuant to Marin County Code (MCC) Section 22.57.033.171. The proposed project is considered an electrical facility because its purpose is to provide meteorological data to ascertain whether the area is suitable for the production of wind-generated electricity.

This statement clearly notes that the purpose of the proposed project is to “provide meteorological data,” a purpose that is reiterated in the project description included as part of the County’s findings which again classifies the project as a “meteorological research tower.” The project is not described or defined as a device to generate, distribute, store, or otherwise serve as an “electric facility.” Regardless of the potential future use of the meteorological data that would be gathered by the proposed project, for the purposes of LCP Agriculture Policy 6, the appropriate consideration is of the function, operation, description, and stated purpose of the current proposed project – a platform for “small meteorological research and bat monitoring devices.”

In sum, the proposed project is inconsistent with the relevant agriculture protection policies of the LCP. Therefore, the project, as approved and conditioned, does not conform to several applicable LCP policies related to protection of agricultural resources and use of the agricultural production zone.

GROUND FOR APPEAL #2: The project is not sited and designed to protect visual resources, as required by the LCP.

LCP New Development and Land Use Policy 3: Visual resources.

- a. The height, scale, and design of new structures shall be compatible with the character of the surrounding natural or built environment. Structures shall be designed to follow the natural contours of the landscape and sited so as not to obstruct significant views as seen from public viewing places.*
- b. Development shall be screened with appropriate landscaping; however such landscaping shall not, when mature, interfere with public views to and along the coast. The use of native plant material is encouraged.*
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As noted in the project description included in Resolution No. 2010-122, the proposed project would be 197.7-feet high, would be installed on a coastal ridge, and would

include numerous orange aviation warning balls to increase visibility. The proposed tower would be constructed within an existing agricultural grazing pasture dominated by low lying vegetation and devoid of any structure larger than a small fence. In this way the proposed structure would be notable as a discordant visual element in the area and would not be compatible with the rural and open character of the surrounding natural and built environment. The nearest public viewing site is located at an approximate distance of 2,000-feet, however, the height of the structure as well as the orange aviation markers are likely to ensure the proposed tower's visibility from this site as well as others. In addition, it does not appear that the County of Marin required or evaluated a visual simulation of the proposed project as a basis for its determination that the "proposed project would be barely visible." Further, it does not appear that the County's decision included findings or analysis regarding the use of landscaping for visual screening, as required by LCP New Development and Land Use Policy 3(b). For these reasons the proposed project is inconsistent with the visual resource protection policies of the LCP and is not sited and designed to protect visual resources, as required by the LCP.

GROUND FOR APPEAL #3: The County's approval is inconsistent with applicable natural resource and environmentally sensitive habitat protection provisions of the LCP.

LCP Natural Resource Policy 5: Coastal Dunes and Other Sensitive Land Habitats. Development in or adjacent to sensitive habitats shall be subject to the following standards:

a. ...

b. ***Other Environmentally Sensitive Habitats.*** Other sensitive habitats include habitats of rare or endangered species and unique plant communities. Development in such areas may only be permitted when it depends upon the resources of the habitat area. Development adjacent to such areas shall be set back a sufficient distance to minimize impacts on the habitat area. Public access to sensitive habitat areas, including the timing, intensity, and location of such access, shall be controlled to minimize disturbance to wildlife. Fences, roads, and structures which significantly inhibit wildlife movement, especially access to water, shall be avoided.

The County approval was not based on or informed by adequate site-specific evaluations or surveys of rare or endangered species, including listed bird and bat species, which may be present at the proposed project site. Although the County determined that "there are no known rare or endangered animal species at or near the project site" it does appear that sufficient data exists to conclusively support this determination. Located on a ridgeline near the Estero de San Antonio, an area recognized as important habitat for a high diversity of avian species¹ (including migratory, listed, and sensitive species), there is a

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high likelihood that the proposed project site may provide one or more rare or endangered species with habitat for foraging, nesting and/or other essential behaviors.

In addition, LCP Natural Resource Policy 5(b) also requires that “structures which significantly inhibit wildlife movement, especially access to water, shall be avoided.” The proposed meteorological tower includes approximately 3,568-feet of guy wires covering a coastal ridge area of roughly 28,000 square feet. Guy wires are well known to present a substantial risk to the movement and passage of wildlife, primarily bird and bat species, that may inadvertently collide with or strike these structures and suffer injury and/or mortality. While the County has acknowledged the likelihood of this potential risk, both by requiring the proposed project to install bird deterrent devices on the guy wires and by requiring periodic “carcass counts” at the project site, it has not provided an adequate evaluation of the proposed project’s impact on wildlife movement. Further, the County has not provided adequate support for the potential of these impact minimization strategies to mitigate the project’s potential adverse impacts on wildlife movement.

In sum, the proposed project appears to be in conflict with several applicable natural resource and environmentally sensitive habitat protection provisions of the LCP.

GROUND FOR APPEAL #4: The County’s approval appears to be inconsistent with applicable archeological resource protection provisions of the LCP.

LCP New Development and Land Use Policy 2: Archaeological Resources.

- a. The County shall maintain a file on known and suspected archaeological and paleontological sites in the coastal zone, in cooperation with the area clearinghouse. Additional information on such sites that becomes available through the EIR process or by other means shall be added to the file and forwarded to the clearinghouse. The file shall be kept confidential in order to prevent vandalism of sites.*
- b. Prior to the approval of any development proposed within an area of known or suspected archaeological or paleontological significance, a field survey by a qualified professional shall be required at the applicant's expense to determine the extent of archaeological or paleontological resources on the site. Where development would adversely impact identified resources, reasonable mitigation measures shall be required, as recommended in the field survey.*

The staff report and analysis provided to the Marin County Deputy Zoning Administrator notes that “review of the Marin County Archeological Sites Inventory Maps on file in the Planning Division indicates that the subject property is located in an area of archeological sensitivity...” Although the findings included in Marin County Board of Supervisors Resolution No. 2010-122 contradicts this statement, no justification or explanation is provided for the reversal. It therefore appears that the proposed site may be “within an area of known or suspected archaeological or paleontological significance” as described in LCP New Development and Land Use Policy 2. If this is indeed the case, the archeological resources LCP policy requires “a field survey by a qualified professional”

to be carried out at the project site “to determine the extent of archaeological or paleontological resources on the site.” No information has been provided to suggest that this survey was carried out or to explain the reason for the discrepancy in the County’s analysis. It therefore appears that the County’s approval may be inconsistent with applicable archeological resource protection provisions of the LCP.

RECEIVED

JAN 11 2011

CALIFORNIA
COASTAL COMMISSION

eac

Environmental Action Committee - Protecting West Marin since 1971.
Box 609, Point Reyes Station, CA 94956 tel: 415-663-9312 www.eacmarin.org

January 10, 2010

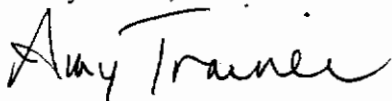
Ruby Papp, District Supervisor
North Central Coast District Office
45 Fremont Street, Suite 2000
San Francisco CA 94105-2219

Dear Ms. Papp:

Please find enclosed two copies of EAC's appeal of Marin County's approval of a proposal by NextEra Energy Resources LLC to construct two meteorological towers in the vicinity of Dillon Beach. One exhibit is attached.

Please do not hesitate to contact me at EAC@svn.net should you need to discuss this appeal. Thank you for your attention.

Very Truly Yours,



Amy Trainer, Executive Director

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT OFFICE

45 FREMONT STREET, SUITE 2000

SAN FRANCISCO, CA 94105-2219

VOICE (415) 904-5260 FAX (415) 904-5400



APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT

Please Review Attached Appeal Information Sheet Prior To Completing This Form.

SECTION I. Appellant(s)

Name: Environmental Action Committee of West Marin

Mailing Address: PO Box 609

City: Point Reyes Station

Zip Code: 94956

Phone: 415-663-9312

CALIFORNIA
COASTAL COMMISSION

JAN 11 2011

RECEIVED

SECTION II. Decision Being Appealed

1. Name of local/port government:

Marin County

2. Brief description of development being appealed:

Construction of two 197.7-foot meteorological towers secured with over 3500 feet of guy wires per tower and sited on top of ridges in environmentally sensitive habitat area and agricultural land. The guy-wired towers will collect wind data for three (3) years, will have multiple orange aviation balls at the top, and were declared "categorically exempt" under CEQA, and thus no initial study or biological assessment is required to understand the possibly significant impacts to the high diversity of bird species in this ESHA.

3. Development's location (street address, assessor's parcel no., cross street, etc.):

Jablons Property: 5488 Middle Road, Petaluma (preserved with a MALT conservation easement)

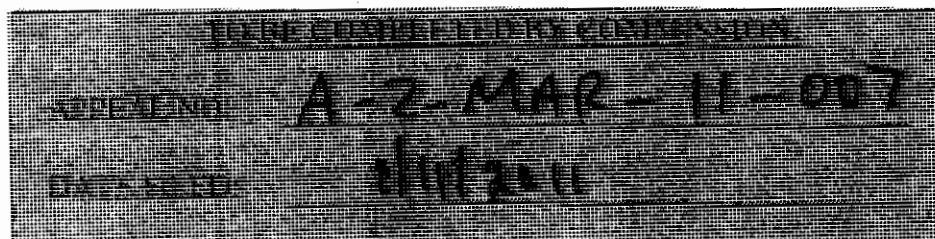
Assessor's Parcel: 100-050-29

Cornett Property: 2640 Whitaker Bluff Road, Petaluma Assessor's Parcel: 100-050-07

4. Description of decision being appealed (check one.):

- ☐ Approval; no special conditions
- ☒ Approval with special conditions:
- ☐ Denial

Note: For jurisdictions with a total LCP, denial decisions by a local government cannot be appealed unless the development is a major energy or public works project. Denial decisions by port governments are not appealable.



CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT OFFICE

45 FREMONT STREET, SUITE 2000

SAN FRANCISCO, CA 94105-2219

VOICE (415) 904-5260 FAX (415) 904-5400



DISTRICT:

North Central Coast

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 2)

5. Decision being appealed was made by (check one):

- ☐ Planning Director/Zoning Administrator
☒ City Council/Board of Supervisors
☐ Planning Commission
☐ Other

6. Date of local government's decision: December 14, 2010

7. Local government's file number (if any): CP 10-30 and 10-31

SECTION III. Identification of Other Interested Persons

Give the names and addresses of the following parties. (Use additional paper as necessary.)

a. Name and mailing address of permit applicant:

NextEra Energy Resources, LLC
PO Box 14000 Juno Beach, FL 33408-0420

b. Names and mailing addresses as available of those who testified (either verbally or in writing) at the city/county/port hearing(s). Include other parties which you know to be interested and should receive notice of this appeal.

(1) Barbara Salzman
Marin Audubon Society
(415) 924-6057
(415) 927-3533 fax
bsalzman@att.net

(2) William (Bill) Shook
Point Reyes National Seashore
(415) 464-5100
(415) 663-8132
william_shook@nps.gov

(3) Nona Dennis
Marin Conservation League
(415) 485-6257
(415) 383-0250 home
(415) 485-6259 fax
nbdennis@sbcglobal.net

(4) Susie Schlesinger
5901 Redhill Road
Petaluma, CA 94952
(707) 763-7979
chisosdog@earthlink.net

Frank Egger
13 Meadow Way
Fairfax, CA 94930-2151
(415) 456-6356
(415) 686-7153 cell
fegger@pacbell.net

Louise Gregg
P.O. Box 127
Tomales, CA 94971
(707) 878-2778
(707) 364-8821
louisebgregg@yahoo.com

Beverly McIntosh
(415) 455-8316 unlisted
beverlymcintosh@hotmail.com

Helen Kozoriz
1 Rydal Court
Oakland, CA 94611
(510) 336-0499
helenkozoriz@sbcglobal.net

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 3)

SECTION IV. Reasons Supporting This Appeal

PLEASE NOTE:

- Appeals of local government coastal permit decisions are limited by a variety of factors and requirements of the Coastal Act. Please review the appeal information sheet for assistance in completing this section.
- State briefly **your reasons for this appeal**. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)
- This need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

The Environmental Action Committee of West Marin (EAC) appeals the Marin County Board of Supervisors' approval of two meteorological (met) towers without an initial study or biological assessment. These structures, to be constructed by NextEra Energy Resources, LLC (NextEra), would collect data for possible future wind turbines and would be secured with over 7000 feet of guy wires. EAC requests the Coastal Commission find that a substantial issue is present because the possibility exists that the guy-wired towers will cause significant environmental impact to the natural resources protected by the Local Coastal Program (LCP). EAC further requests that the Commission require a biological assessment akin to a CEQA Initial Study prior to issuing a coastal permit to the project applicant NextEra.

An initial study is necessary to a) ensure compliance with Coastal Act and LCP policies, b) address potential impacts caused to natural resources by the guy wires, and c) impose mitigation measures to address those impacts. The manner in which the biological and natural resource information has been presented to the public has been inconsistent and disjointed throughout the public process, the information itself was incomplete, and, therefore, the County's level of environmental review was inadequate.

Wind turbines are being considered for West Marin and it seems that this form of alternative energy (solar as well) was not considered when the Coastal Act was adopted. EAC supports alternative energy and is not opposed to met towers or to wind turbines, but in order to protect coastal resources, believes it essential that a comprehensive, systematic evaluation and approval process be followed. This appeal allows the Commission to ensure that such a process takes place.

I. MARIN COUNTY'S APPROVAL OF NEXTERA'S MET TOWERS FAILED TO MAKE THE REQUIRED FINDINGS UNDER THE COUNTY'S LCP UNIT II AGRICULTURAL POLICIES.

The Marin County Local Coastal Program (LCP), Unit II, has clear development standards. Proposals for agricultural lands must "preserve lands within the zone for agricultural use." (LCP, Unit II, Section 4, p. 98) The development standards in Section 4 state that "the county shall make all of the following findings," including that:

a. The development would protect and enhance continued agricultural use and contribute to agricultural viability.

b. The development is necessary because agricultural use of the property is no longer feasible. The purpose of this standard is to permit agricultural landowners who face economic hardship to demonstrate how development on a portion of their land would ease this hardship and enhance agricultural operations on the remainder of the property.

f. The proposed land division and/or development will have no significant adverse impacts on environmental quality or natural habitats, including stream or riparian habitats and scenic resources. In all cases, LCP policies on streams and natural resources shall be met.

County staff did not include these required findings in the reports prepared for public hearings on NextEra's proposed guy-wired met towers-- specifically, the hearings conducted by the Deputy Zoning Administrator on August 26th, the Planning Commission on October 25th, or the Board of Supervisors on December 14th. Before a Coastal Permit may issue for the proposed met towers within the Coastal Zone, the findings in the LCP, Unit II, Section 4 must be made.

Additionally, the County did not define the proposed met towers as either "permitted uses" or "conditional uses" based on the definitions of these terms found in Section 6 of the Agricultural Policies. LCP, Unit II, Section 6.b defines "Permitted Uses" to include "i. Accessory structures or uses appurtenant and necessary to the operation of agricultural uses." Section 6.c. defines "Conditional Uses" to include "aa. Construction, alteration, or maintenance of gas, electric, water, communication, or flood control facilities, unrelated to an agricultural use, as approved by the appropriate governmental agencies." The County failed to properly find that the proposed guy-wired met towers qualified as a permitted or conditional use.

Before a Coastal Permit may issue for NextEra's proposed met towers within the Coastal Zone, the necessary findings must be made under the LCP's Agricultural Use policies.

II. THE COUNTY'S APPROVAL OF NEXTERA'S MET TOWERS FAILS TO PROTECT NATURAL RESOURCES AS REQUIRED BY SECTION 30001.5 OF THE CALIFORNIA COASTAL ACT AND THE LOCAL COASTAL PROGRAM.

The first of five goals of the California Coastal Act is to "protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and manmade resources." Section 30001.5. The Act states that the "highest priority given to the preservation and protection of natural resources, including environmentally sensitive habitats." (LCP, Unit II, p. vi) The proposed met towers would be sited within the watershed and immediate vicinity of an environmentally sensitive habitat area (ESHA), the Estero de San Antonio, which is specifically called out in the Marin LCP for its incredible bird diversity – over 100 species of birds.

The County approved construction of two 197.7-foot towers sited on top of ridges, each secured with 12 looped guy-wires amounting to more than 3500 feet in length for each tower - over 7000 feet total - on two ranches in West Marin. As attached to the towers, the guy wires would cover

approximately 2/3 of an acre of land for each tower. The 7000 feet in length of the guy wires, and the amount of land area covered by them, are important factors in evaluating the impact to the ESHA and dozens of species of birds dependent on it.

The LCP provides considerable background information about the uniqueness and importance of the Estero de San Antonio as well as its direct connection to Tomales Bay and nearness to the Estero de Americano:

In the Unit II coastal zone, there are two **coastal wetland areas of statewide significance**: one is Tomales Bay and the other, the northern county region including the Estero Americano and the **Estero de San Antonio**. Since over two-thirds of the original coastal wetlands in California have been destroyed or degraded, the remaining wetland areas, such as those in Unit II, assume an even greater significance.

Estero Americano and Estero de San Antonio. The second major wetland area in the Unit II coastal zone is north of Tomales Bay and includes the Esteros Americana and de San Antonio. These esteros are described in the report *The Natural Resources of Esteros Americano and de San Antonio* by the State Department of Fish and Game, from which this discussion was taken. According to this report, the open waters of the Estero Americano cover about 300 acres, and wetland habitats extend over an additional 400 acres. The smaller and more southerly Estero de San Antonio includes about 90 acres of open water and over 200 acres of wetland habitats.

The **esteros are unique in comparison to other coastal wetland areas**. Originally formed from "drowned river valleys," the esteros have steeply sloping hillsides which create an abrupt transition from uplands to open water. The resulting fjord-like quality of the esteros is not found in other California wetlands. The esteros are also unique in that they are "seasonal estuaries" whose connection to the ocean is periodically closed. During the late spring and summer months, when the inflow of freshwater from the upland watershed is small, a sand bar forms at the mouth of each estero. Tidal influence is eliminated and evaporation is high, sometimes resulting in a hypersaline estuary with salinities far above that of the ocean. In winter months, by contrast, winter rainfall runoff keeps the mouths of the esteros flooded and open. During this time, tidal influence extends three to four miles upstream, approximately half the length of each estero.

Within the watersheds of the esteros, there are a wide variety of habitat types and a high diversity of associated animal species. Major habitats include open water, seasonal brackish marsh, California annual type grassland, coastal prairie and coastal scrub. **Animal life includes seventy-one species of water and marsh-related birds and sixty-six species of terrestrial birds.** Monthly observations of birdlife indicate the importance of the esteros to migrating and wintering birds-as well as to year-round residents. Surveys of fish species are equally impressive, identifying thirty-one marine and freshwater species in the two esteros. Greatest species abundance and diversity are located at each estero mouth. The rich bird and fish populations are due, in part, to the abundance of marine invertebrates which inhabit the mudflats, eelgrass beds, and channel bottoms of the esteros. (LCP, Unit II, pp. 82-83)(Emphasis added)

The location for the proposed met towers is within the watershed and ESHA of the Estero de San Antonio and therefore requires a site-specific understanding of the possible significant environmental impacts to avian species. According to maps submitted by the applicant, both towers would be approximately one-half mile from the Estero de San Antonio and Stemple

Creek, part of the tidally-influenced Estero de San Antonio to the east of both sites. The towers would be located "adjacent to environmentally sensitive habitat areas" and within the watershed of the Estero. *The risk of impacts to birds from the guy-wired towers is high because of the quantity and diversity of birds in the vicinity of the proposed project sites and the special circumstances that exist in that section of the coast.*

In preparation for the Board of Supervisors appeal hearing on December 14th, Point Reyes expert naturalist Jules Evens provided an opinion letter about the potential environmental impacts to birds from the placement of over 7000 feet of guy wires and towers within the immediate vicinity of the Estero de San Antonio. Mr. Evens, Principal of Avocet Research Associates and author of the "Natural History of the Point Reyes Peninsula," reviewed studies from Solano County that NextEra and the County relied on to support their conclusion that the guy-wired towers would not present the possibility of a significant environmental impact.

After reviewing the Solano County studies, Mr. Evens concluded that:

1. One lesson that is clear from a review of these studies is that avian mortality associated with tower strikes is highly site specific. Any extrapolation from other sites – Altamont Pass or Montezuma Hills – is highly speculative and not likely to address the conditions associated with another site.
2. Because of the diversity of habitats – grasslands, forest, coastal scrub, wetlands – available to landbirds along the Marin-Sonoma coast, avian species diversity is high. It would be a mistake to infer from studies at Montezuma Hills or Altamont, areas surrounded by grassland and relatively low avian species diversity, that anomalous structures would produce comparable rates of avian mortality.
3. The meteorological and topographical features of the landscape – especially the coastal fog, wind, and abrupt ridgelines – introduce variables that pose unique circumstances that should be considered before any project is approved. An initial study to define and identify these variables is critical to ensure that this project does not result in adverse impacts to native wildlife.

EAC believes that Mr. Evens' analysis represents substantial evidence showing that the guy-wired towers could cause significant impacts to birds within this ESHA. Additionally, the habitats highlighted in Mr. Evens' analysis support ground dwelling animals, upon which raptors depend for food. Many of the species are likely to pass over the project sites and would be at risk of injury or fatality with the presence of 7000 feet of guy wires and the anomalous tower structures.

Mr. Evens further points out that "The Point Reyes peninsula and the coastal environs of Marin and Sonoma counties are well known as migratory routes for passerine birds attracting as diverse an array of species as can be found anywhere in the U.S. (Stallcup 2005, Evens 2008 and Parmeter 2001). Migrating landbirds, especially "birds-of-the-year" (immatures) exhibit the "coastal effect" during autumn migration, i.e., they tend to concentrate along coastal environments (Stewart 1972, Newton 2008)." These factors, combined with the heavy coastal

fog and the proposed placement of the guy-wired towers on top of ridges, support EAC's request for an initial study or biological assessment prior to issuance of a permit.

The LCP policy 5.b. on protecting Environmentally Sensitive Habitat states:

Other Environmentally Sensitive Habitats. Other sensitive habitats include habitats of rare or endangered species and unique plant communities. Development in such areas may only be permitted when it depends upon the resources of the habitat area. Development adjacent to such areas shall be set back a sufficient distance to minimize impacts on the habitat area. Public access to sensitive habitat areas, including the timing, intensity, and location of such access, shall be controlled to minimize disturbance to wildlife. **Fences, roads, and structures which significantly inhibit wildlife movement, especially access to water, shall be avoided.** (LCP, Unit II. P. 89)(Emphasis added).

The proposed projects would be sited within the ESHA that includes the Estero de San Antonio watershed protected by the LCP. The guy-wired towers are anomalous structures that could significantly inhibit wildlife movement to water and along routine migratory routes according to Mr. Evens. The exceptional avian species diversity that this protected habitat supports requires protection and, at a minimum, a biological assessment prior to permit issuance, under the LCP ESHA policies.

There is considerable evidence showing that towers and guy wires kill birds. The surveys presented by NextEra state that "towers are not without impacts" to birds. The evidence from the reports presented by NextEra is clear: 50-60 meter guy-wired towers do result in bird fatalities. Further, as noted in these reports, the Solano and Montezuma surveys "do not take into account variables...like scavenger removal of carcasses and searcher efficiency" nor do they extrapolate from the number of carcasses found the total number of birds killed.

There are multiple special status species in the ESHA where these towers are proposed. According to Mr. Evens "the State endangered Bald Eagle and the State endangered Peregrine Falcon (CDFG 2010), both species now nesting in coastal Marin County, commute regularly between Bodega Bay, the esteros, and Tomales Bay during the nesting season as well as at other times of year. Other raptors susceptible to mortality from anomalous structures, and which occur regularly in coastal Marin and Sonoma counties, include White-tailed Kite*, Northern Harrier*, Sharp-shinned Hawk*, Cooper's Hawk*, Red-shouldered Hawk*, Red-tailed Hawk*, Rough-legged Hawk, Ferruginous Hawk, Golden Eagle*, Merlin, American Kestrel*, Barn Owl*, Great horned Owl*, and Burrowing Owl. (* indicates locally nesting)"

The LCP states that all of the "policies in Chapter 3 of the Coastal Act apply to the issue of new development and land use." (LCP, Unit II, p. 193) The Coastal Act policies in Chapter 3 include:

30240. (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and **only uses dependent on such resources shall be allowed within such areas.**

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and **shall be compatible with the**

continuance of such habitat areas. (Emphasis added).

30250. (a) **New residential, commercial, or industrial development**, except as otherwise provided in this division, **shall be located** within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and **where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.** (Emphasis added)

The proposed guy-wired met towers are structures that would have the potential to significantly inhibit wildlife movement, especially toward water. The guy-wired met towers are not uses dependent on ESHA resources, nor are they "compatible with the continuance of such" environmentally sensitive habitat areas. Further, it is questionable whether the cumulative impacts of future towers could be considered by the County or the Commission if the Commission does not require an initial study or biological assessment now, and prior to issuance of these coastal use permits.

If wind turbines are to be permitted in the coastal zone, a baseline from which to judge the impacts is needed. That baseline data should be gathered now, and, prior to the issuance of any permit, the Commission or County should understand the current, pre-tower, pre-wire environment. An initial study is required to ensure that the data collection and analysis are adequate both to gauge impacts and formulate necessary mitigation measures.

EAC requests that the Commission find that a substantial issue exists so that it may (1) require a biological assessment prior to issuing a permit for the guy-wired towers and (2) develop appropriate measures to mitigate the possible significant impacts to this environmentally sensitive habitat area.

III. THE COUNTY'S APPROVAL OF NEXTERA'S MET TOWERS FAILS TO ADEQUATELY PROTECT SCENIC AND VISUAL RESOURCES AS REQUIRED BY SECTION 30251.

Section 30251 of the Coastal Act provides that "The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, ... New development in highly scenic areas such as those designated... by local government shall be subordinate to the character of its setting."

In February, 1979, the North Central Coast Regional Coastal Commission designated "the coastal waters and immediately adjacent uplands of Tomales... Bay... as a Special Resource Area; such designation to denote the Commission's commitment to the protection, enhancement, and where feasible, restoration of the unique and important natural resources of this area." Local Coastal Program, Unit II, at 64.

For its part, the Visual Resources portion of Marin's Local Coastal Program, Unit II, recognizes that "Tomales Bay and adjacent lands in the Unit II coastal zone form a scenic panorama of unusual beauty and contrast. New development in sensitive visual areas, such as along the

shoreline of Tomales Bay and on the open rolling grasslands east of the Bay, has the potential for significant adverse visual impacts unless very carefully sited and designed." Accordingly, the LCP requires structures to be "designed to follow the natural contours of the landscape and sited so as not to obstruct significant views as seen from public viewing places." LCP II at 194, 206a.

Marin County Code Section 22.57.024I [made applicable by Section 22.57.035I(4)], requires that structures be sited in the "least visually prominent" portion of the site-- specifically, behind "existing vegetation, rock outcroppings or depressions in topography-- adding that such siting "is especially important on grassy hillsides."

The County failed to adequately consider the potential impacts to scenic resources from the proposed 197.7-foot towers sited on top of ridges with multiple orange aviation balls attached to the top of the guy wires. The County staff's report to the Planning Commission noted that County personnel placed a 20-foot pole with a red flag on top at each of the proposed tower locations to give the public a chance to understand the potential impact to scenic resources. They then used computer models to simulate whether the guy-wired towers would be visible from nearby county roads. They did not assess impacts to scenic or visual resources from Tomales Bay. The County's analysis was inadequate and failed to address potential scenic resource impacts from both Tomales Bay and the Point Reyes National Seashore.

EAC understands that the urgent need for clean energy may require sacrifices to some of our most precious resources, including scenic resources. But before those resources are sacrificed, a thorough and comprehensive assessment must be performed that provides the public and interested agencies, like the Point Reyes National Seashore, full disclosure of the impacts. Such an assessment was not performed here, and should be required prior to the issuance of a coastal permit for the two guy-wired towers.

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 4)

SECTION V. Certification

The information and facts stated above are correct to the best of my/our knowledge.

Amy Trainer, EAC Executive Director
Signature of Appellant(s) or Authorized Agent

Date: January 10, 2011

Note: If signed by agent, appellant(s) must also sign below.

Section VI. Agent Authorization

I/We hereby authorize Amy Trainer, Executive Director
to act as my/our representative and to bind me/us in all matters concerning this appeal.

Carolyn K. Longstreet, EAC Board President
Signature of Appellant(s)

Date: January 10, 2011

Avocet Research Associates

wildlife biology

P.O. Box 839 Point Reyes Station, CA 94956 <avocetra@gmail.com>

Memorandum

Date: December 10, 2010

To: Marin County Board of Supervisors

From: Jules Evens, Principal, ARA

Re: Comments on the proposed installation of meteorological towers by NextEra near Dillon Beach

The proposed MET sites lie mid-way between Bodega Harbor and Tomales Bay, and within a network of important coastal estuaries.

Location

Tomales Bay was designated September 30, 2002 by the RAMSAR Convention "Wetland of International Importance."¹

Tomales Bay. 30/09/02. California. 2,850 ha. 38°09'N, 123°23'W. Part of Marine Sanctuary. Tomales Bay is a marine-coastal wetland consisting of geomorphologically dynamic estuaries, eelgrass beds (*Zostera marina*), sand dune systems, and restored emergent tidal marshes which floods the northern 20 km of the San Andreas Fault-generated Olema Valley on the central California coast. The site fulfills all eight Ramsar Criteria. Approximately 90% of the bay's 28.5 km² area is subtidal with a much greater area of open water at low tide than most other Pacific coast estuaries, thus becoming a suitable waterbird habitat through the tidal cycle. Because the 58,000 ha. watershed is non-industrial and has a low human population density, the bay is relatively pristine. The site supports several endangered or threatened plant and animal species, and is an important waterbird migratory stopover site and over-wintering ground along the Pacific flyway - it regularly hosts over 20,000 individuals in the winter months, most notably of surf scoter (*Melanitta perspicillata*), bufflehead (*Bucephala albeola*), and greater scaup (*Aythya mariloides*). In the past, the site has been affected by industrial and agricultural activities, which have since been terminated or mitigated. Local authorities and private and non-governmental organizations have conducted a number of watershed protection measures and conservation and restoration projects over the past 40 years in the area. Ramsar site no. 1215. Most recent RIS information: 2002.

Both Tomales Bay and Bodega Harbor are recognized as "Important Bird Areas"

¹ The Convention on Wetlands (Ramsar, Iran, 1971) -- called the "Ramsar Convention" - is an intergovernmental treaty that embodies the commitments of its member countries to maintain the ecological character of their Wetlands of International Importance and to plan for the "wise use", or sustainable use, of all of the wetlands in their territories.

by the National Audubon Society (NAS). Important Bird Areas, or "IBAs", are sites that provide essential habitat for one or more species of bird. IBAs include sites for breeding, wintering, and/or migrating birds. IBAs may be a few acres or thousands of acres, but usually they are discrete sites that stand out from the surrounding landscape. IBAs may include public or private lands, or both, and they may be protected or unprotected. <http://web4.audubon.org/bird/iba/iba_intro.html>

The NAS Important Bird Area website describes Bodega Harbor as follows:

The Bodega Harbor area features a natural, protected estuary/harbor fed by several small, freshwater creeks that flow out of the surrounding hills. Tidal action transforms the harbor into a vast mudflat, making it attractive to large numbers of waterbirds year round. A sand-spit juts out across its southern end, protecting extensive Doran Marsh, a brackish, tidal wetland. Another peninsula comes down from the north, and forms grassy Bodega Head, surrounded by sand dunes. The area is a popular destination for tourists exploring the California coast and with fishermen. The U.S. Coast Guard maintains a station on the sand spit, and UC Davis operates the Bodega Marine Lab on Bodega Head. **Just south of Bodega Harbor, two major estuaries flow into Bodega Bay, Estero Americano (on the Marin/Sonoma county line) and Estero San Antonio (Marin County).** [Emphasis added]. Estero Americano is accessible through a purchase by the Sonoma Land Trust, however Estero San Antonio is located on private ranches and is virtually unstudied and inaccessible.

WATERBIRDS

These two estuaries—Bodega and Tomales—in concert with Estero Americano and Estero San Antonio, are embedded within a system of interrelated coastal wetlands—San Francisco and San Pablo bays, Bolinas Lagoon, Drake's and Limantour esteros, and Abbot's Lagoon—that provide a mosaic of habitats that host as diverse an array of waterbirds as any coastal wetland system on the west coast of North America (Shuford et al. 1989, Stenzel et al. 2002, Page et al. 2002). As stated above, Bolinas Lagoon and Tomales Bay have been designated by the Ramsar Convention on Wetlands as "Wetlands of International Importance." San Francisco Bay and its associated wetlands, including "the Point Reyes esteros" and Tomales Bay, are identified as wetlands of *hemispheric importance* (Harrington and Perry 1995). This network of habitats holds more total shorebirds in all seasons than any other wetland in the conterminous U.S. Pacific coast (Stenzel et al. 2002). Movement of migratory birds between and among the S.F. Bay Area complex of wetlands is well-documented (Shuford et al. 1989) and the connectivity adds to the value of each site within the network.

Maximum annual fog frequency along the shoreline between Bodega Harbor and Tomales Bay is among the highest in the continent (Barbour et al. 1973, Evens 2008, p.22) Waterbirds commute along the shoreline and often navigate along topographical contours, especially under high wind or stormy conditions. Under such conditions, visibility is reduced and anomalous structures, like towers and guy wires, are likely to increase the incidence of collision and avian mortality. A list of 102 migratory waterbirds that occur regularly (excluding rarities and raptors) in this wetland complex is attached (Appendix 1). Twelve of those species which have been documented as occurring are included on special status lists (CDFG 2010). Those species most prone to striking anomalous structures located along the coast (because of their flocking behavior and habitat preferences) are indicated (*).

RAPTORS

The location of the proposed project site, and its proximity to the esteros and Bodega Harbor and Tomales Bays, is of concern not just to waterbirds, but also to raptors that are attracted to these waterfowl-rich wetlands. It is a well-documented fact that diurnal raptors follow topographical features like coastlines and ridgelines as they migrate and travel (Peeters and Peeters 2005, p 74). Marin County hosts the largest concentration of Osprey (*Pandion haliaeetus*) in California, and these fish-eating raptors move regularly between the various estuaries within their foraging range (Evens 2009). Additionally, the State endangered Bald Eagle and the State endangered Peregrine Falcon (CDFG 2010), both species now nesting in coastal Marin County, commute regularly between Bodega, the esteros, and Tomales Bay during the nesting season as well as at other times of year. Other raptors susceptible to mortality from anomalous structures, and which occur regularly in coastal Marin and Sonoma counties, include White-tailed Kite*, Northern Harrier*, Sharp-shinned Hawk*, Cooper's Hawk*, Red-shouldered Hawk*, Red-tailed Hawk*, Rough-legged Hawk, Ferruginous Hawk, Golden Eagle*, Merlin, American Kestrel*, Barn Owl*, Great horned Owl*, and Burrowing Owl. (* indicates locally nesting.)

At Altamont Pass, one half of the estimated 1000 birds killed annually were raptors. Although this proposal does not involve wind turbines (yet), avian mortality due to collisions with "communication towers" is analogous to the meteorological tower scenario. Numerous studies exist regarding avian mortality associated with towers and their associated structures (guy wires) (NWCC 2001). These various studies show high

variability among sites based on climatic conditions, topography, tower design (lighting vs no lighting, tower height, etc.) and other factors. One lesson that is clear from a review of these studies is that avian mortality associated with tower strikes is highly site specific. Any extrapolation from other sites—Altamont Pass or Montezuma Hills—is highly speculative and not likely to address the conditions associated with another site. The Dillon Beach location is unique in its relationship to avian communities as well as topographical and climatic conditions. This uniqueness alone argues for a site specific initial study.

LANDBIRDS

The attached list (Appendix A) does not include landbirds, although passerine migrants account for a large proportion of avian mortality associated with towers, guy wires, etc. (NWCC 2001). At an Oregon wind turbine site, passerines accounted for 69 percent of avian mortality (West 2007), but other studies have reported passerines representing up to 80% of avian fatalities. A 2000 review of communication tower studies provides some relevant analogies to this project and provides references that emphasize the variables that contribute to increases or decreases in avian mortality rates (height, guy wires, and visibility factors) (Kerlinger 2000).

The Point Reyes Peninsula and the coastal environs of Marin and Sonoma counties are well known as migratory routes for passerine birds attracting as diverse an array of species as can be found nearly anywhere in the U.S. (Stallcup 2005, Evens 2008, Bolander and Parmeter 2001). Migrating landbirds, especially “bird-of-the-year” (immatures) exhibit the “coastal effect” during autumn migration, i.e. the tend to concentrate along coastal environments (Stewart 1972, Newton 2008). Bird strikes at anomalous structures at local coastal sites have not been studied systematically, but anecdotal information from the Point Reyes Lighthouse and the Farallon Islands suggests it can be significant.

Because of the diversity of habitats—grasslands, forest, coastal scrub, wetlands—available to landbirds along the Marin-Sonoma coast, avian species diversity is high. It would be a mistake to infer from studies at Montezuma Hills or Altamont, areas surrounded by grassland and relatively low avian species diversity, that anomalous structures would produce comparable rates of avian mortality.

Summary

Public agencies are mandated to protect of migratory birds (See Executive Order 13186, 66 Fed. Reg. 3853 and "Memorandum of Understanding to Promote the Conservation of Migratory Birds" between U.S. Department of the Interior and the U.S. Fish and Wildlife Service, April 12, 2010.)

The proposed project site is located amidst wetlands and coastal environments that have been designated as protected areas because of their great natural diversity and biological value, especially to birds. It is important to consider these unique values when evaluating the impacts of adding anomalous structures to the landscape and introducing potential hazards to the species that inhabit the area. The meteorological and topographical features of the landscape—especially the coastal fog, wind, and abrupt ridgelines—introduce variables that pose unique circumstances that should be considered before any project is approved. An initial study to define and identify these variables is critical to ensure that this project does not result in adverse impacts to native wildlife.

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Appendix 1. Regularly occurring waterbirds in the Tamales bay –Bodega Harbor complex.

Greater White-fronted Goose	Brandt's Cormorant	Thayer's Gull
Snow Goose	Double-crested Cormorant	Western Gull
Ross's Goose	Pelagic Cormorant	Glaucous-winged Gull
Brant	American Bittern	Caspian Tern
Cackling Goose	Great Blue Heron	Forster's Tern
Canada Goose*	Great Egret	Elegant Tern
Tundra Swan	Snowy Egret	Common Murre
Wood Duck	Green Heron	Pigeon Guillemot
Gadwall	Black-crowned Night-Heron	
Eurasian Wigeon	Peregrine Falcon	102 species
American Wigeon*	Black Rail	
Mallard*	Clapper Rail	
Blue-winged Teal	Virginia Rail	
Cinnamon Teal	Sora	
Northern Shoveler	Common Moorhen	
Northern Pintail*	American Coot	
Green-winged Teal	Black-bellied Plover*	
Canvasback	American Golden-Plover	
Redhead	Pacific Golden-Plover	
Ring-necked Duck	Snowy Plover	
Tufted Duck	Semipalmated Plover*	
Greater Scaup	Killdeer	
Lesser Scaup	American Avocet	
Harlequin Duck	Spotted Sandpiper	
Surf Scoter	Greater Yellowlegs	
White-winged Scoter	Willet	
Black Scoter	Lesser Yellowlegs	
Long-tailed Duck	Whimbrel	
Common Goldeneye	Long-billed Curlew	
Barrow's Goldeneye	Marbled Godwit	
Hooded Merganser	Ruddy Turnstone	
Common Merganser	Black Turnstone	
Red-breasted Merganser	Sanderling	
Ruddy Duck	Western Sandpiper*	
Red-throated Loon	Least Sandpiper*	
Arctic Loon	Baird's Sandpiper	
Pacific Loon	Pectoral Sandpiper	
Common Loon	Dunlin	
Yellow-billed Loon	Short-billed Dowitcher*	
Pied-billed Grebe	Long-billed Dowitcher*	
Horned Grebe	Wilson's Snipe	
Red-necked Grebe	Red-necked Phalarope	
Eared Grebe	Heermann's Gull	
Western Grebe	Mew Gull	
Clark's Grebe	Ring-billed Gull	
American White Pelican	California Gull	
Brown Pelican	Herring Gull	



Marin Audubon Society

RECEIVED

JAN 11 2011

CALIFORNIA
COASTAL COMMISSION

P.O. Box 599 | MILL VALLEY, CA 94942-0599 | MARINAUDUBON.ORG

January 8, 2011

California Coastal Commission
North Coast Central Office
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

RE: Appeal

Dear Sirs:

Enclosed please find Marin Audubon Society's appeal of the Marin county Board of Supervisors approval of a permit for NextEra to construct two meteorological towers with guy wires, one on each of two ranches in West Marin. Our appeal is based on the failure of Marin County to perform adequate environmental review. In particular, they failed to ensure compliance of the project with the Coastal Act and LCP

Enclosed Please find:

Completed appeal form with three page text explaining our reasons
A Memorandum from Avocet Research Associates discussing

Thank you for reviewing this appeal information. Please contact me if you have any questions
(415)924-5047 or bsalzman@att.net.

We hope you will agree that this project warrants further environmental analyses.

Sincerely,

Barbara Salzman
President

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT OFFICE

45 FREMONT STREET, SUITE 2000

SAN FRANCISCO, CA 94105-2219

VOICE (415) 904-5260 FAX (415) 904-5400

**APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT****Please Review Attached Appeal Information Sheet Prior To Completing This Form.**CALIFORNIA
COASTAL COMMISSION

JAN 11 2011

RECEIVED

SECTION I. Appellant(s)

Name: Marin Audubon Society - contact Barbara Salzman

Mailing Address: 48 Ardmore Road

City: Larkspur.

Zip Code: 94939

Phone: 415-924-6057

SECTION II. Decision Being Appealed

1. Name of local/port government:

County of Marin

2. Brief description of development being appealed:

Approval of two meteorological towers in West Marin

3. Development's location (street address, assessor's parcel no., cross street, etc.):

5488 Middle Road, Petaluma

2640 Whitaker Bluff Road, Petaluma

4. Description of decision being appealed (check one.):

- ☒ Approval; no special conditions
- ☐ Approval with special conditions:
- ☐ Denial

Note: For jurisdictions with a total LCP, denial decisions by a local government cannot be appealed unless the development is a major energy or public works project. Denial decisions by port governments are not appealable.

TO BE COMPLETED BY COMMISSION:

APPEAL NO:

A-2-MAR-11-007

DATE FILED:

1/11/2011

DISTRICT:

North Central Coast

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 2)

5. Decision being appealed was made by (check one):

- ☐ Planning Director/Zoning Administrator
- ☒ City Council/Board of Supervisors
- ☐ Planning Commission
- ☐ Other

6. Date of local government's decision: December 14, 2010

7. Local government's file number (if any): ?

SECTION III. Identification of Other Interested Persons

Give the names and addresses of the following parties. (Use additional paper as necessary.)

a. Name and mailing address of permit applicant:

NextEra Energy Resources
700 Universe Blvd.
Juno Beach, FL 33408

b. Names and mailing addresses as available of those who testified (either verbally or in writing) at the city/county/port hearing(s). Include other parties which you know to be interested and should receive notice of this appeal.

(1) Nona Dennis
Marin Conservation League
1623 Fifth Avenue
San Rafael, CA 94901

(2) Helen Kozoriz
One Ryder Court
Oakland, CA 94611

(3) Beverly Childs McIntosh
29 Woodland Ave. #5
San Anselmo, CA 94960

(4) Susie Schlessinger
5901 Redhill Rd.
Petaluma 94952

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 3)

SECTION IV. Reasons Supporting This Appeal

PLEASE NOTE:

- Appeals of local government coastal permit decisions are limited by a variety of factors and requirements of the Coastal Act. Please review the appeal information sheet for assistance in completing this section.
- State briefly **your reasons for this appeal**. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)
- This need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

See Attached

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 4)

SECTION V. Certification

The information and facts stated above are correct to the best of my/our knowledge.

Barbara Elymer, President
Signature of Appellant(s) or Authorized Agent

Date:

Jan 8, 2011
Barbara Elymer

Note: If signed by agent, appellant(s) must also sign below.

Section VI. Agent Authorization

I/We hereby authorize _____
to act as my/our representative and to bind me/us in all matters concerning this appeal.

Signature of Appellant(s)

Date: _____

MARIN AUDUBON SOCIETY (MAS) APPEAL OF MARIN COUNTY SUPERVISOR'S APPROVAL OF METEOROLOGICAL TOWERS

This is an appeal of the Marin County Supervisor's approval using a Categorical Exemption, of two meteorological towers in West Marin. MAS requests the Coastal Commission to require an Initial Study prior to issuing a coastal permit to the project applicant, NextEra. As described in more detail below, an Initial Study is necessary to ensure adequate information and analysis of the project, including compliance with CCA and LCP policies, potential impacts and measures to address the impacts, are provided. The public record on which this project was approved has been assembled in an untimely manner, in pieces over many months. The information and analyses are incomplete and the environmental review is inadequate.

It is also clear that wind energy (solar as well) was not considered when the Coastal Act was adopted. MAS is not opposed to met towers or to wind turbines, but in order to protect coastal resources, it is essential that a comprehensive and systematic evaluation and approval process be followed for each proposed project, a process that results in adequate understanding of the project and its potential impacts. It is timely that the Commission ensure such a process, beginning with this application.

This appeal should be granted because the project(s) is inconsistent with the following provisions of the Coastal Act and the LCP:

1. One of the basic goals of the Marin LCP states 's coastal zone: "Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and manmade resources."

NextEra plans for two 197.7-foot towers secured with 12 loops of guy-wires that would total *more than 3500 feet in length, or one-half mile, for each tower on two different ranches in West Marin.* How much land area would be covered by the guywires is important to evaluating the potential impact to birds, but that data is not provided. To fulfill the goal of protecting and enhancing the overall quality of the coastal zone environment, an Initial Study should be prepared prior to these or any other towers being sited within the coastal zone of West Marin. We emphasize that a comprehensive process that ensures adequate basic information on specifics of the project, how that project will impact the natural resources and how those impacts are addressed, is essential to protecting and maintaining the quality of the natural environment and its natural resources. Our particular interest is protecting avian resources that are dependent on the coastal habitats.

2. Provision in the Coastal Act that, in evaluating proposed developments in the coastal zone, the highest priority for development be given to *the preservation and protection of natural resources.*

A December 10, 2010, Memorandum (attached) from Jules Evens, Principal of Avocet Research Associates (ARA), long-time biological consultant and author of the "Natural History of the Point Reyes Peninsula," contains substantial evidence that the towers could risk significant impacts to many species of birds. The risk is high because of the quantity and diversity of birds in the vicinity of the proposed project sites and the special circumstances that exist in that section of the coast. An Initial Study should be required to ensure that these special conditions are adequately addressed. The County Community Development Agency and the Supervisors completely ignored the ARA report.

**The ARA Memo included the following analysis and conclusion is particularly relevant:
"Minimum annual fog frequency along the shoreline between Bodega Harbor and Tomales Bay is among the highest in the continent (Barbour et.al. 1973, Evens 2008)"**

“The meteorological and topographic features of the landscape—especially the coastal fog, wind, and abrupt ridgelines—introduce variables that pose unique circumstances that should be considered before any project is approved. An initial study to define and identify these variables is critical to ensure that this project does not result in adverse impacts to native wildlife.”

3. The natural resources warranting protection, as required by the above provisions of the Coastal Act, are described in the LCP. The LCP speaks specifically to the unique coastal environment in which the project would be located within the watershed of the Estero de San Antonio:

p. 82 In the Unit II coastal zone, one of two coastal wetland areas of statewide significance: one is the northern county region including the Estero Americano and the Estero de San Antonio.

p. 83 Estero de San Antonio is described in the report The Natural Resources of Esteros Americano and de San Antonio by the State Department of Fish and Game, as including about 90 acres of open water and over 200 acres of wetland habitats. This Estero (along with Estero Americano) is unique in comparison to other coastal wetland areas. “... within the watersheds of the esteros, there are a wide variety of habitat types and a high diversity of associated animal species. Major habitats include open water, seasonal brackish marsh, California annual type grassland, coastal prairie and coastal scrub. Animal life includes seventy-one species of water and marsh-related birds and sixty-six species of terrestrial birds. Monthly observations of birdlife indicate the importance of the esteros to migrating and wintering birds—as well as to year-round residents. ...”

As discussed above, the project sites are part of the much larger watershed and ecosystem of Estero de San Antonio and must be considered as part of this landscape. The habitats noted above support ground dwelling animals, upon which raptors depend for food. Studies have shown that wetland dependent birds fly back and forth between habitats, even as far as San Francisco Bay. Many of these species are likely to pass over the project sites and would be at risk with the presence of the towers, particularly with guy wires.

The ARA Memo explains: “Because of the diversity of habitats – grasslands, forests, coastal scrub, wetlands – available to landbirds along the Marin-Sonoma coast, avian species diversity is high. It would be a mistake to infer from studies at Montezuma Hills or Altamont, areas surrounded by grassland and relatively low avian species diversity, that anomalous structures would produce comparable rates of avian mortality.”

To best ensure that the collision potential for these species is minimized, an Initial Study is needed. In addition, if wind turbines are to be permitted in the coastal zone, a baseline is needed from which to evaluate the impacts. That baseline data should be gathered and now, prior to any impacts – the Commission should understand the current, pre-tower, pre-wire environment before a permit is issued. An Initial Study is required to ensure the data collection and analysis are adequate.

4. Other relevant policies of the LCP:

p. 89 Other sensitive habitats include habitats of rare or endangered-species....Development in such areas may only be permitted when it depends upon the resources of the habitat area. ... Fences, roads, and structures which significantly inhibit wildlife movement, especially access to water, shall be avoided.”

ARA reports: “... the State endangered Bald Eagle and the State endangered Peregrine Falcon (CDFG 2010) both species now nesting in coastal Marin County, commute regularly between Bodega, the esteros and Tomales Bay during the nesting season as well as other times of year.” ARA lists 13 other raptors, many of which are special status species, are susceptible to mortality from structures such as those proposed.

ARA also points out: "The Point Reyes peninsula and the coastal environs of Marin and Sonoma counties are well known as migratory routes for passerine birds attracting as diverse an array of species as can be found anywhere in the U.S. (Stallcup 2005, Evens 2008 and Parmeter 2001). Migrating landbirds, especially "birds-of-the-year" (immatures) exhibit the "coastal effect" During autumn migration, i.e. they tend to concentrate along coastal environments (Stewart 1972, Newton 2008)."

These guyed-towers are structures that have the potential to significantly impact birds moving through the area and to inhibit wildlife movement. Using guy wires make them even more lethal for birds.

A 2008 article in the American Ornithological Union publication THE AUK states, "Most towers from which large bird kills have been reported have guy wires. Observational studies of birds in the vicinity of towers revealed that birds are much more likely to collide with the guy wire than with the tower itself. ...the average number of birds killed at a guyed meteorological tower was ~3x greater than the average rate of mortality at nearby turbines of a similar height without guy wires (Young 2003).

The evidence from the Shilo II Survey Report presented by NextEra is clear, 50-60 meter guyed towers do result in fatalities. Further, as noted in the survey reports, the Solano and Montezuma surveys "do not take into account variables...like scavenger removal of carcasses and searcher efficiency" nor do they extrapolate from the number of carcasses found, the total number of birds killed. The total number of fatalities is undoubtedly much greater than the number of carcasses actually found during the limited survey days.

5. Coastal Act policies Article 5. Land Resources

30240. (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas... shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas,

According to maps submitted by the applicant, both towers would be close to the Estero de San Antonio (erroneously referred to as San Antonio River) - 2,312 feet and the other 3,502 feet. Estero de San Antonio is tidally influenced to east of both sites. While the distances have not been verified, it is clear that the towers would be located "adjacent to environmental sensitive habitat areas" and are within the watershed of the Estero. The compatibility of these guyed towers with the "continuance of such habitats" is highly questionable. An Initial Study should be required to identify and evaluate the potential impacts of the towers, their compatibility with the sensitive habitats of the Estero, and to ensure that they do not significantly degrade sensitive habitats for the species that depend on them.

The guywired towers would introduce potential impediments to the movement of birds that depend on the grassland and tree habitats, for birds moving between the waters of the Estero, to feed and for birds migrating through the area.

Submitted by Barbara Salzman
January 8, 2011

Avocet Research Associates

wildlife biology

P.O. Box 839 Point Reyes Station, CA 94956 <avocetra@gmail.com>

Memorandum

Date: December 10, 2010

To: Marin County Board of Supervisors

From: Jules Evens, Principal, ARA

Re: Comments on the proposed installation of meteorological towers by NextEra near Dillon Beach

The proposed MET sites lie mid-way between Bodega Harbor and Tomales Bay, and within a network of important coastal estuaries.

Location

Tomales Bay was designated September 30, 2002 by the RAMSAR Convention "Wetland of International Importance."¹

Tomales Bay, 30/09/02. California. 2,850 ha. 38°09'N, 123°23'W. Part of Marine Sanctuary. Tomales Bay is a marine-coastal wetland consisting of geomorphologically dynamic estuaries, eelgrass beds (*Zostera marina*), sand dune systems, and restored emergent tidal marshes which floods the northern 20 km of the San Andreas Fault-generated Olema Valley on the central California coast. The site fulfills all eight Ramsar Criteria. Approximately 90% of the bay's 28.5 km² area is subtidal with a much greater area of open water at low tide than most other Pacific coast estuaries, thus becoming a suitable waterbird habitat through the tidal cycle. Because the 58,000 ha. watershed is non-industrial and has a low human population density, the bay is relatively pristine. The site supports several endangered or threatened plant and animal species, and is an important waterbird migratory stopover site and over-wintering ground along the Pacific flyway - it regularly hosts over 20,000 individuals in the winter months, most notably of surf scoter (*Melanitta perspicillata*), bufflehead (*Bucephala albeola*), and greater scaup (*Aythya mariloides*). In the past, the site has been affected by industrial and agricultural activities, which have since been terminated or mitigated. Local authorities and private and non-governmental organizations have conducted a number of watershed protection measures and conservation and restoration projects over the past 40 years in the area. Ramsar site no. 1215. Most recent RIS information: 2002.

Both Tomales Bay and Bodega Harbor are recognized as "Important Bird Areas"

¹ The Convention on Wetlands (Ramsar, Iran, 1971) - called the "Ramsar Convention" - is an intergovernmental treaty that embodies the commitments of its member countries to maintain the ecological character of their Wetlands of International Importance and to plan for the "wise use", or sustainable use, of all of the wetlands in their territories.

by the National Audubon Society (NAS). Important Bird Areas, or "IBAs", are sites that provide essential habitat for one or more species of bird. IBAs include sites for breeding, wintering, and/or migrating birds. IBAs may be a few acres or thousands of acres, but usually they are discrete sites that stand out from the surrounding landscape. IBAs may include public or private lands, or both, and they may be protected or unprotected. <http://web4.audubon.org/bird/iba/iba_intro.html>

The NAS Important Bird Area website describes Bodega Harbor as follows:

The Bodega Harbor area features a natural, protected estuary/harbor fed by several small, freshwater creeks that flow out of the surrounding hills. Tidal action transforms the harbor into a vast mudflat, making it attractive to large numbers of waterbirds year round. A sand-spit juts out across its southern end, protecting extensive Doran Marsh, a brackish, tidal wetland. Another peninsula comes down from the north, and forms grassy Bodega Head, surrounded by sand dunes. The area is a popular destination for tourists exploring the California coast and with fishermen. The U.S. Coast Guard maintains a station on the sand spit, and UC Davis operates the Bodega Marine Lab on Bodega Head. **Just south of Bodega Harbor, two major estuaries flow into Bodega Bay, Estero Americano (on the Marin/Sonoma county line) and Estero San Antonio (Marin County).** [Emphasis added]. Estero Americano is accessible through a purchase by the Sonoma Land Trust, however Estero San Antonio is located on private ranches and is virtually unstudied and inaccessible.

WATERBIRDS

These two estuaries—Bodega and Tomales—in concert with Estero Americano and Estero San Antonio, are embedded within a system of interrelated coastal wetlands—San Francisco and San Pablo bays, Bolinas Lagoon, Drake's and Limantour esteros, and Abbot's Lagoon—that provide a mosaic of habitats that host as diverse an array of waterbirds as any coastal wetland system on the west coast of North America (Shuford *et al.* 1989, Stenzel *et al.* 2002, Page *et al.* 2002). As stated above, Bolinas Lagoon and Tomales Bay have been designated by the Ramsar Convention on Wetlands as "Wetlands of International Importance." San Francisco Bay and its associated wetlands, including "the Point Reyes esteros" and Tomales Bay, are identified as wetlands of *hemispheric importance* (Harrington and Perry 1995). This network of habitats holds more total shorebirds in all seasons than any other wetland in the conterminous U.S. Pacific coast (Stenzel *et al.* 2002). Movement of migratory birds between and among the S.F. Bay Area complex of wetlands is well-documented (Shuford *et al.* 1989) and the connectivity adds to the value of each site within the network.

Maximum annual fog frequency along the shoreline between Bodega Harbor and Tomales Bay is among the highest in the continent (Barbour et al. 1973, Evens 2008, p.22). Waterbirds commute along the shoreline and often navigate along topographical contours, especially under high wind or stormy conditions. Under such conditions, visibility is reduced and anomalous structures, like towers and guy wires, are likely to increase the incidence of collision and avian mortality. A list of 102 migratory waterbirds that occur regularly (excluding rarities and raptors) in this wetland complex is attached (Appendix 1). Twelve of those species which have been documented as occurring are included on special status lists (CDFG 2010). Those species most prone to striking anomalous structures located along the coast (because of their flocking behavior and habitat preferences) are indicated (*).

RAPTORS

The location of the proposed project site, and its proximity to the esteros and Bodega Harbor and Tomales Bays, is of concern not just to waterbirds, but also to raptors that are attracted to these waterfowl-rich wetlands. It is a well-documented fact that diurnal raptors follow topographical features like coastlines and ridgelines as they migrate and travel (Peeters and Peeters 2005, p 74). Marin County hosts the largest concentration of Osprey (*Pandion haliaeetus*) in California, and these fish-eating raptors move regularly between the various estuaries within their foraging range (Evens 2009). Additionally, the State endangered Bald Eagle and the State endangered Peregrine Falcon (CDFG 2010), both species now nesting in coastal Marin County, commute regularly between Bodega, the esteros, and Tomales Bay during the nesting season as well as at other times of year. Other raptors susceptible to mortality from anomalous structures, and which occur regularly in coastal Marin and Sonoma counties, include White-tailed Kite*, Northern Harrier*, Sharp-shinned Hawk*, Cooper's Hawk*, Red-shouldered Hawk*, Red-tailed Hawk*, Rough-legged Hawk, Ferruginous Hawk, Golden Eagle*, Merlin, American Kestrel*, Barn Owl*, Great horned Owl*, and Burrowing Owl. (* indicates locally nesting.)

At Altamont Pass, one half of the estimated 1000 birds killed annually were raptors. Although this proposal does not involve wind turbines (yet), avian mortality due to collisions with "communication towers" is analogous to the meteorological tower scenario. Numerous studies exist regarding avian mortality associated with towers and their associated structures (guy wires) (NWCC 2001). These various studies show high

variability among sites based on climatic conditions, topography, tower design (lighting vs no lighting, tower height, etc.) and other factors. One lesson that is clear from a review of these studies is that avian mortality associated with tower strikes is highly site specific. Any extrapolation from other sites—Altamont Pass or Montezuma Hills—is highly speculative and not likely to address the conditions associated with another site. The Dillon Beach location is unique in its relationship to avian communities as well as topographical and climatic conditions. This uniqueness alone argues for a site specific initial study.

LANDBIRDS

The attached list (Appendix A) does not include landbirds, although passerine migrants account for a large proportion of avian mortality associated with towers, guy wires, etc. (NWCC 2001). At an Oregon wind turbine site, passerines accounted for 69 percent of avian mortality (West 2007), but other studies have reported passerines representing up to 80% of avian fatalities. A 2000 review of communication tower studies provides some relevant analogies to this project and provides references that emphasize the variables that contribute to increases or decreases in avian mortality rates (height, guy wires, and visibility factors) (Kerlinger 2000).

The Point Reyes Peninsula and the coastal environs of Marin and Sonoma counties are well known as migratory routes for passerine birds attracting as diverse an array of species as can be found nearly anywhere in the U.S. (Stallcup 2005, Evens 2008, Bolander and Parmeter 2001). Migrating landbirds, especially "bird-of-the-year" (immatures) exhibit the "coastal effect" during autumn migration, i.e. the tend to concentrate along coastal environments (Stewart 1972, Newton 2008). Bird strikes at anomalous structures at local coastal sites have not been studied systematically, but anecdotal information from the Point Reyes Lighthouse and the Farallon Islands suggests it can be significant.

Because of the diversity of habitats—grasslands, forest, coastal scrub, wetlands—available to landbirds along the Marin-Sonoma coast, avian species diversity is high. It would be a mistake to infer from studies at Montezuma Hills or Altamont, areas surrounded by grassland and relatively low avian species diversity, that anomalous structures would produce comparable rates of avian mortality.

Summary

Public agencies are mandated to protect of migratory birds (See Executive Order 13186, 66 Fed. Reg. 3853 and "Memorandum of Understanding to Promote the Conservation of Migratory Birds" between U.S. Department of the Interior and the U.S. Fish and Wildlife Service, April 12, 2010.)

The proposed project site is located amidst wetlands and coastal environments that have been designated as protected areas because of their great natural diversity and biological value, especially to birds. It is important to consider these unique values when evaluating the impacts of adding anomalous structures to the landscape and introducing potential hazards to the species that inhabit the area. The meteorological and topographical features of the landscape—especially the coastal fog, wind, and abrupt ridgelines—introduce variables that pose unique circumstances that should be considered before any project is approved. An initial study to define and identify these variables is critical to ensure that this project does not result in adverse impacts to native wildlife.

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Appendix 1. Regularly occurring waterbirds in the Tomales bay –Bodega Harbor complex.

Greater White-fronted Goose	Brandt's Cormorant	Thayer's Gull
Snow Goose	Double-crested Cormorant	Western Gull
Ross's Goose	Pelagic Cormorant	Glaucous-winged Gull
Brant	American Bittern	Caspian Tern
Cackling Goose	Great Blue Heron	Forster's Tern
Canada Goose*	Great Egret	Elegant Tern
Tundra Swan	Snowy Egret	Common Murre
Wood Duck	Green Heron	Pigeon Guillemot
Gadwall	Black-crowned Night-Heron	
Eurasian Wigeon	Peregrine Falcon	102 species
American Wigeon*	Black Rail	
Mallard*	Clapper Rail	
Blue-winged Teal	Virginia Rail	
Cinnamon Teal	Sora	
Northern Shoveler	Common Moorhen	
Northern Pintail*	American Coot	
Green-winged Teal	Black-bellied Plover*	
Canvasback	American Golden-Plover	
Redhead	Pacific Golden-Plover	
Ring-necked Duck	Snowy Plover	
Tufted Duck	Semipalmated Plover*	
Greater Scaup	Killdeer	
Lesser Scaup	American Avocet	
Harlequin Duck	Spotted Sandpiper	
Surf Scoter	Greater Yellowlegs	
White-winged Scoter	Willet	
Black Scoter	Lesser Yellowlegs	
Long-tailed Duck	Whimbrel	
Common Goldeneye	Long-billed Curlew	
Barrow's Goldeneye	Marbled Godwit	
Hooded Merganser	Ruddy Turnstone	
Common Merganser	Black Turnstone	
Red-breasted Merganser	Sanderling	
Ruddy Duck	Western Sandpiper*	
Red-throated Loon	Least Sandpiper*	
Arctic Loon	Baird's Sandpiper	
Pacific Loon	Pectoral Sandpiper	
Common Loon	Dunlin	
Yellow-billed Loon	Short-billed Dowitcher*	
Pied-billed Grebe	Long-billed Dowitcher*	
Horned Grebe	Wilson's Snipe	
Red-necked Grebe	Red-necked Phalarope	
Haired Grebe	Heermann's Gull	
Western Grebe	Mew Gull	
Clark's Grebe	Ring-billed Gull	
American White Pelican	California Gull	
Brown Pelican	Herring Gull	

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT OFFICE

45 FREMONT STREET, SUITE 2000

SAN FRANCISCO, CA 94105-2219

VOICE (415) 904-5260 FAX (415) 904-5400



APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT

Please Review Attached Appeal Information Sheet Prior To Completing This Form.

SECTION I. Appellant(s)

Name: Susie Schlesinger, 5901 Redhill Road, Petaluma, CA 94952 Ph. 707.763.7979
Louise Gregg, Box 127, Tomales, CA 94971 Ph. 707.878.2778
Beverly Childs McIntosh, 29 Woodland Ave, San Anselmo, CA 94960 Ph. 415.455.8316
Mailing Address: Sid Baskin, 19 Twelve Oak Hill Drive, San Rafael, CA 94903 Ph. 415.499.1141
City: Helen Kozoriz, 1 Rydal Court, Oakland, CA 94611 Ph. 510.336.0499

*Susie Schlesinger 105-11*SECTION II. Decision Being Appealed

1. Name of local/port government:
County of Marin
#: UP 10-15, CP 10-30, project ID 10-0005
2. Brief description of development being appealed:

David Jablons & Tamara Hicks; Nextera Energy Resources

To install a temporary 197.7-foot high meteorological research tower on a 157-acre agricultural parcel.

3. Development's location (street address, assessor's parcel no., cross street, etc.):

5488 Middle Road, Petaluma (Marin County) (APN(s) 100-050-29)

4. Description of decision being appealed (check one.):

- ☐ Approval; no special conditions
☒ Approval with special conditions:
☐ Denial

Note: For jurisdictions with a total LCP, denial decisions by a local government cannot be appealed unless the development is a major energy or public works project. Denial decisions by port governments are not appealable.

TO BE COMPLETED BY COMMISSION:

APPEAL NO: A-2-MAR-11-007
DATE FILED: 1/11/2011
DISTRICT: North Central Coast

RECEIVED

JAN 11 2011

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NORTH CENTRAL COAST

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 2)

5. Decision being appealed was made by (check one):

- ☐ Planning Director/Zoning Administrator
☒ City Council/Board of Supervisors
☐ Planning Commission
☐ Other

6. Date of local government's decision:

12-14-10

7. Local government's file number (if any): Application No. 2-MAR-10-109

SECTION III. Identification of Other Interested Persons

Give the names and addresses of the following parties. (Use additional paper as necessary.)

a. Name and mailing address of permit applicant:

SEE PAGE #1

NEXTERA ENERGY 700 UNIVERSE BLVD
JUNO BEACH, FLORIDA

b. Names and mailing addresses as available of those who testified (either verbally or in writing) at the city/county/port hearing(s). Include other parties which you know to be interested and should receive notice of this appeal.

(1) SEE MINUTES OF 12-14-10 BOS MEETING
" VIDEO

(2) Name and addresses: a copy of the BOS minutes from the meeting of Dec 14, 2010 will be attached.

(3)

(4)

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 3)

SECTION IV. Reasons Supporting This Appeal

PLEASE NOTE:

- Appeals of local government coastal permit decisions are limited by a variety of factors and requirements of the Coastal Act. Please review the appeal information sheet for assistance in completing this section.
- State briefly **your reasons for this appeal**. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)
- This need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

The five named appellants are members of NO ALTAMONT IN WEST MARIN/SONOMA, an unincorporated association of Marin and Sonoma County ranchers, farmers, residents and environmentalists who oppose industrial wind turbine projects in the Western portions of Marin and Sonoma Counties.

The Marin County LCP for Unit II originally... the verbiage here will be a cut and pasted from the LCP.

While the LCP would appear to exempt solar and wind projects, it is clear the exemption for wind did not include MET towers or industrial wind turbine project/s.

The reason the North Central Coast Regional Commission rejected all of Unit II for power plant sitings was because of the rich agricultural heritage of West Marin (and the West County of Sonoma), the extremely sensitive lands around the Estero de San Antonio and Estero de Americano, the tidal influences, the incredible natural coastal resources in what many describe as one of the most significant flyways (both North and South and East and West) in the Western Hemisphere. The State Coastal Commission at the time rejected that recommendation based on some vague assumptions but today's facts reinforce the decision of the North Central Coast Regional Commission.

Tomaes Bay was designated September 30, 2002 by the RAMSAR Convention "Wetland of International Importance". the MET Tower sites lie midway between Bodega and Tomaes Bays and within a network of important coastal estuaries. (see Avocet Research Associates report dated 12/10/10-copy enclosed)

Approving MET towers in locations where industrial wind turbine projects would never be approved is like approving test oil wells in either Tomaes or Bodega Bay when everyone knows a commercial oil well project would never be approved there.

The County advised, at the hearing on the 14th of Dec, 2010, there were two additional MET Tower applications coming. Marin has not addressed the cumulative impact of multiple MET towers in West Marin.

The approved project is inconsistent with LCP Unit II, Articles 5. Land Resources, Sections:

30240 – 7,000 feet of guy wires holding the towers will be a significant disruption of habitat values and adversely impact Species of Special Concern including Bald and Golden Eagles, Northern Harrier, White Tailed Kite and Coopers Hawk known to be in, on, over and around the site. An American Badger, listed by the California Department of Fish and

SEE PAGE # (2)
FOR CONTINUED REASONS

Game as a Mammalian Species of Special Concern has been seen at the site. Badger dens are located in the immediate area of the project. If the County of Marin had conducted a proper CEQA process, the existence of the American Badger would have been confirmed.

SUSIE SCHLEINGER
ET AL APPEAL

30241 – Prime agricultural land is taken out of production.

30242 – Lands suitable for agriculture shall not be converted...

30244 – The project will adversely impact paleontological resources. The site is mapped as Wilson Grove Formation.

30251 – The scenic and visual qualities will be adversely impacted by 197 foot towers on top of a hill at 315 foot elevation.

And,

Article 7. Industrial Development

30260 – the project is not a coastal-dependent industrial facility.

The Jablons property is under a MALT easement and as such cannot be developed for energy facilities.

The Town of Tomales is listed as a Historical District of national importance.

The MET towers are in the path of US Coast Guard Rescue operations and will obstruct flight patterns of the helicopters that make regular rescue missions between Two Rock, Bodega Bay and Tomales Bay.

A condition of approval is once every two weeks the site will be checked/surveyed for dead/dying birds. Birds, especially nocturnal, will hit the guy wires and be scattered all over the property. Predators will pick up the dead/dying birds before those doing the surveys will find them.

The Marin County Board of Supervisors did not adopt the necessary findings at their meeting on the 14th of Dec, 2010. A resolution purportedly passed by the BOS was not passed on the 14th but later inserted into the official action by county staff and is incorrectly labeled as being approved Dec 14th, 2010 in the information sent to the Coastal Commission. The notice from the Coastal Commission includes Resolution # 2010-122 but that resolution was never approved.

The 12/14/10 minutes approved by the Marin Board at their meeting of 1/4/11 includes a motion to approve the resolution but it was never before the BOS. (see the Marin County BOS packet for the meeting of 12/14/10)

The official Marin County website has the video of the meeting (a DVD is also enclosed). Supervisor Kinsey made the motion to approve the project and at no time did that motion refer to any findings or resolution. The resolution prepared for the Board of Supervisors by the staff for the hearing was a resolution to uphold the Salzman appeal to the Planning Commission, that the project cannot be exempt from CEQA, that they uphold the Planning Commission's determination that the project could lead to a significant environmental impact and directs the Community Development Agency to prepare an Initial Study. (enclosed is the resolution prepared for the Supervisors to uphold the Planning Commission action and the resolution purportedly approved).

The actual motion transcribed from the video states: Supervisor Kinsey moved "we uphold the appeal and allow the project to proceed with a Categorical Exemption". There is absolutely no mention of any resolution, no resolution number or findings of approval, none.

These MET tower projects, the first applied for in the Coastal Zone, are precedent setting as NextEra has contacted 15 ranch owners in both West Marin and the West County of Sonoma seeking leases for industrial wind turbine projects. Other than a couple loosely worded paragraphs, the Coastal Act, Coastal Plan and LCPs are almost silent on siting of MET towers and industrial wind turbines.

The application is premature, inconsistent with the Marin County LCP, Unit II and should be denied. In addition, the project is not exempt from the California Environmental Quality Act.

(2)

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 4)

SECTION V. Certification

The information and facts stated above are correct to the best of my/our knowledge.

Beverly Childs McIntosh 1-8-11

Helen M. Kozarz 01/08/11

Signature of Appellant(s) or Authorized Agent

Siq Bao 01/9/2011

Date: _____

Note: If signed by agent, appellant(s) must also sign below.

Section VI. Agent Authorization

I/We hereby authorize _____

to act as my/our representative and to bind me/us in all matters concerning this appeal.

Signature of Appellant(s)

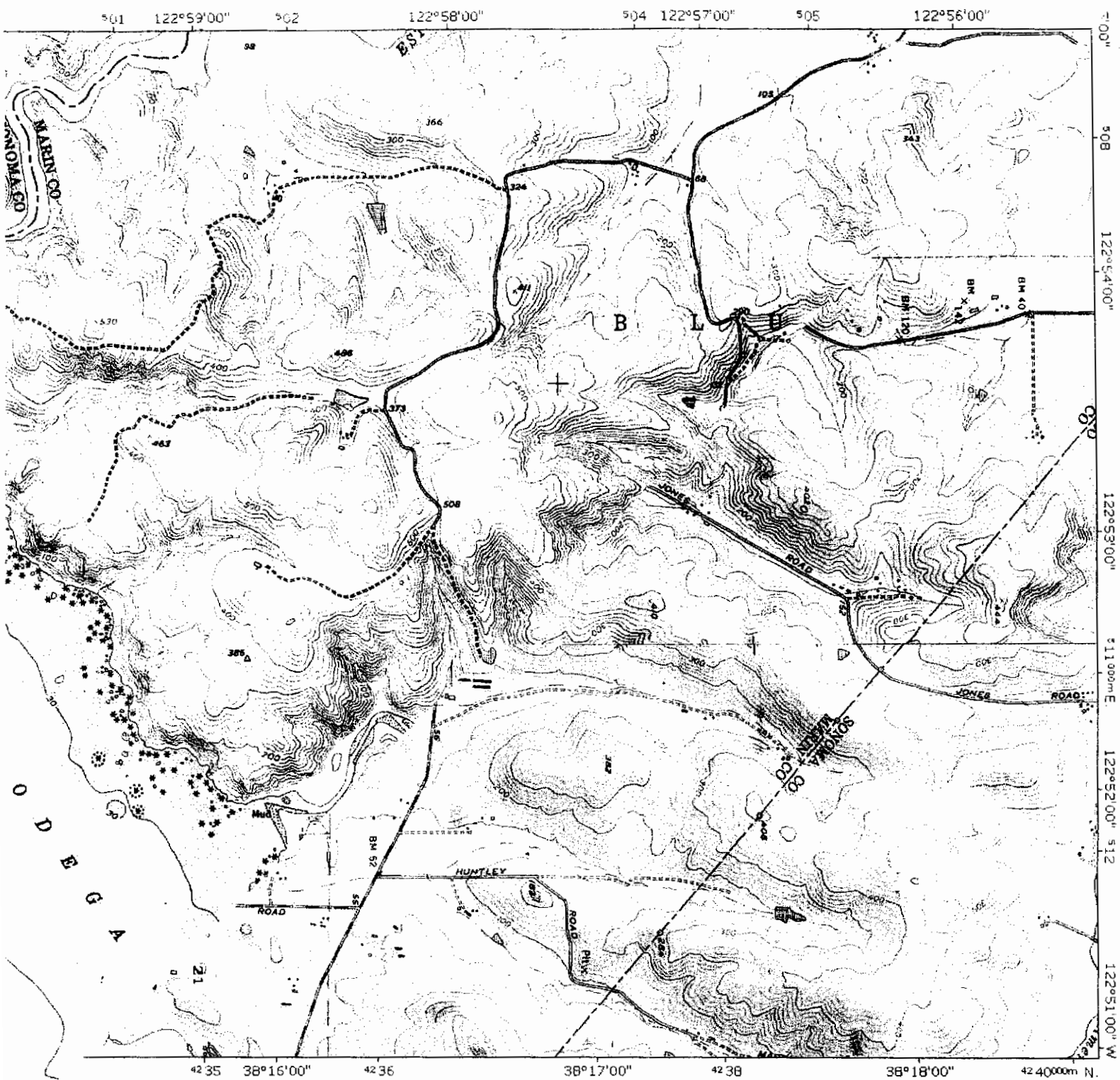
Date: _____

1/8/11
Louise Gregg
P.O. Box 127
Tombales, Ca.
94971
707-878-2778

I would like to sign our appeal
to the Marin County LCP for
Unit II.

sincerely,
Louise Gregg

Louise Gregg





ENERGY



NORTH CENTRAL COAST REGIONAL COMMISSION

CALIFORNIA COASTAL ZONE CONSERVATION COMMISSION

and potential nuclear reactor hazards, which do not yet have definitive solutions, and which become more significant as the number of nuclear reactors increases. In spite of such consequences, it is clear that such energy planning as has been done in California has been based primarily on the conventional utility projection of electricity supply mix.

5. New Developments Should be Considered in Long Range Supply Projections. Energy sources that previously were thought to be economically unsuitable or technologically unattainable have become more desirable or more feasible because of (1) escalating price levels from competing conventional energy sources; (2) new concern for environmental protection, human health and safety, and conservation of nonrenewable hydrocarbon resources; (3) new levels of research commitment for alternative source development; and (4) new concern about political implications of dependence on international markets for energy supply.
6. Possible Yield From Alternative Sources. It is possible that alternative source of energy that may be environmentally less damaging or less hazardous (See Energy Element Chapter 5-9) than the sources shown in most conventional electricity supply projections may make a greater contribution to future electricity supply than is presently acknowledged. A hypothetical alternative scenario for future electrical generation capacity in California suggests that alternative energy sources for electric power generation might be provided by the following sources by the year 2000:

Solar	16,900 Mw
Geothermal	12,800 Mw
Wastes	3,200 Mw
Wind	3,000 Mw
Pumped hydroelectric	7,500 Mw
TOTAL	43,400 Mw

This hypothetical scenario is based on estimates of possible technological developments published in journals of science and technology; assumes a strong policy commitment by government bodies and electric utilities to high levels of research and development of alternative energy technologies, and to extensive marketing and public education; and recognizes that economic variables are difficult to define.

This capacity represents 2/3 of all new generating capacity that would be constructed between 1973 and 2000 (based on the Rand Case (2) - base case plus price increases). If pumped hydroelectric were excluded, the total capacity from alternative sources would represent half of new capacity requirements. However, the future share of generation provided by each of these technologies is indefinite and depends on such things as lead time involved from date of feasibility, comparative economics, and environmental acceptability.

7. Number of sites cont. for some e fossil fue a possible sites. G will also environme alternati set the l

Wind energy facilities offer a romantic memory out of the past of windmills, but such facilities seem to offer only modest potential as major power plants. Large wind energy facilities would require considerable land areas and have a visual impact. Both of these characteristics probably preclude such facilities in the coastal zone. On the other hand, there is considerable potential for individual windmill units. These could make single buildings or small building clusters nearly energy self-sufficient if used in conjunction with new energy storage techniques presently being developed. This would again reduce overall energy demand for non-renewable fossil fuels and electricity.

Tidal power is enormous and constantly replenishable, but harnessing it would require massive installations along many miles of the coast, with such minimal energy potential that its development is not warranted.

There is also growing interest in nuclear fusion. Nuclear fusion facilities would present several public safety hazards in the event of an accident, but other environmental effects would be negligible. However, nuclear fusion technology is decades away. Cooling requirements would be reduced, and land use considerations would allow siting of facilities almost anywhere in the State—most likely away from population centers.

New methods to store energy are also being developed. For example, hydrogen fuel cells are presently planned for operation in 1978 by the Southern California Edison Company, but widespread commercial use seems decades away. Fuel cells would require small land areas and few environmental effects. Storage batteries are also an important method of storing electrical energy, particularly in conjunction with such new sources of energy as wind or solar.

California Coastal Plan

*California Coastal Zone
Conservation Commissions*



and real estate industries are slow to adopt and promote any new device that raises capital costs even if long-term overall costs are lower; there are no published building design guidelines for solar energy utilization; and there are no known existing building code regulations for solar units. In addition, although some electric utilities have made low-level research commitments to development of individual solar units, there has until recently been little or no serious commitment from electric utilities, State and county energy planners, or legislators to this application of solar energy. The Los Angeles City Council has begun a program of solar energy investigation and development, and as an initial step will heat municipal swimming pools with solar energy.

Solar Energy Use Needs Legislative Support. New legislation is needed to encourage the use of solar energy systems. Florida has passed a measure requiring new home plumbing to be designed to facilitate future installation of solar water heating equipment. Arizona and Indiana have passed tax legislation encouraging installation of solar equipment. Essential to any solar energy program would be a public information program.

Sun Rights Legislation Will Ensure Access to Solar Radiation. "Sun rights" legislation is also needed to ensure user's access to solar radiation free and clear of potential obstructions on contiguous property. Appropriate regulations must consider the shadows, angles, and orientation of buildings varying with the time of day, the season, climatological conditions, and the slope of the building site. Setback regulations in zoning codes are precedents for sun rights laws.

Large-Scale Electricity Generation Needs Further Development. The full potential of solar energy can be realized only after large-scale generation of electricity from solar energy becomes technically and economically feasible. Steam-electric systems based on the initial conversion of solar energy to heat have yet to be built on any but the smallest scale, and the necessary technology for large-scale plants, though well understood theoretically, has not been adequately demonstrated on a commercial scale. The principal problem scientists and engineers face is making solar-generated power economically competitive with other electric power sources. The constraint of high initial costs may without government encouragement, delay the commercial testing of large-scale solar-thermal power generation until 1990, although unforeseen and unprecedented rises in fossil fuel prices since mid-1973 have suddenly made solar-thermal power significantly more competitive.

High Solar Plant Potential in Southeast California. Solar collecting equipment for large-scale solar-thermal plants can be centralized for commercial production of power only in areas with high annual sunlight-hour values. Much of southern, and particularly southeastern California, receives as much solar radiation and annual sunshine — up to 4,000 hours per year — as any other area in the U.S.

Solar-Thermal Power Plants Need Large Amounts of Land. The principal environmental concern about large-scale solar-thermal power plants is the commitment of many square miles of land to collecting surfaces. The NSF/NASA Solar Energy Panel estimated that at 20 per cent efficiency a 1,000 Mw solar generating plant — about the size of the nuclear power plant units being built today — will require about 15 square miles or 9,600 acres of land. It is difficult

to compare this with the amounts of land required by different methods of electrical energy generation, but the 2,000 Mw coal-burning plant in the Four Corners area, for example, will require the strip mining of 40 square miles of land for fuel during its operating lifetime. Improved technology resulting in better efficiency would significantly reduce land use for solar plants.

Solar-Thermal Power Plants Create Heat Waste Disposal Problem. The potential for waste heat disposal problems would still be present in large-scale solar-thermal power plants. Such plants would still require cooling water, and this may be a problem since the optimal locations for solar plants will be arid. There is also some concern that large-scale solar collecting surfaces may upset local thermal balances, but the consequences, if any, are thus far expected to be quite small.

Solar Cells Offer Alternative to Solar-Thermal Power Generation. A second approach to production of electricity from solar energy involves the use of solar cells. Solar cells convert sunlight directly into electricity without the need for intermediate thermodynamic cycles. Solar cells were used to power manned orbiting spacecraft. Presently, however, solar cells are too costly, too inefficient, and not sufficiently durable to have practical application for large-scale commercial electricity production. Some scientists believe, however, that solar cell technology is sufficiently far advanced that mass production of rooftop units for new housing could become competitive within three to five years, and that use of solar cells to power new houses may be common in 10 years.

Potential for Ocean Thermal Gradient Electricity Generation Is Small. A less-promising approach to production of energy from solar energy involves the use of the difference in temperature between the sun-warmed ocean surface and the cold ocean depths in a heat engine to produce low pressure steam to drive a turbine and produce electricity. Ocean waters off the California coast, however, offer insufficient temperature differences.

WIND ENERGY

Wind Is Potentially Important Energy Source. Wind energy is pollution-free, involves no fuel costs, and is non-depletable. If wind were actively promoted, and its problems solved, it could become an important auxiliary energy source. Various sources indicate that by the year 2000 wind energy could provide from 1 to 20 per cent of total national electrical energy needs. Thus far, however, no California public agency or electric utility forecast for future California energy supply includes any contribution from wind energy.

Some Potential for Individual Windmill Units. Individual windmill generating units can make single buildings or small building clusters wholly or partially energy self-sufficient, but such units are no longer manufactured in quantity, and individual unit capital cost (including battery storage) is presently high.

Problems of Wind Energy Must Be Solved. Wind is a problematic source of electrical energy. It is erratic, low in average velocity and density, and variable in direction, and its energy is not easily stored on a large scale. Wind will make its most significant contributions to energy needs

only when systems have been developed that can efficiently and inexpensively convert wind to electricity or other energy forms on a very large scale. Scientists believe that these problems are not technologically difficult. The principal environmental concern is with the appearance and noise of individual and large-scale wind generation equipment. Some scientists have suggested installations far offshore to maximize wind potential and to mitigate environmental concerns. Additional wind research is required to establish the ultimate potential of California's coastal and inland wind resource.

SOLID WASTES

Solid Wastes Are a Potentially Important Energy Resource.

Solid wastes represent still another resource with substantial energy potential already exploited in other parts of the world, although recycling of suitable waste material may result in greater overall benefits to society from both an energy and a resource preservation point of view. Half of the 75 million tons of solid wastes produced annually in California is collectable, and that refuse could furnish 10 per cent of the fuel oil needed by utilities at prices competitive with other power generation fuels, or could furnish gas for direct use by residential and commercial customers. Despite the significant potential of solid waste conversion for reducing the demand for depletable fossil fuels and nuclear expansion in California, few efforts have been made to realize the potential. The State Solid Waste Management Board, established in 1972, may help overcome institutional problems that partially impede development of State and county programs for the recovery of energy — and materials — from solid waste. Detailed below are four principal methods of energy recovery from wastes.

Incineration Already in Use in Two Major American Cities.

Incineration, or direct burning, of refuse can produce recoverable heat for production of steam, which in turn can be used in power plants (St. Louis), in industry, and in local heating and cooling systems (Nashville). Incineration systems can present air pollution problems.

Pyrolysis Pilot Project Proposed for El Cajon.

Pyrolysis is a flexible method by which separated, shredded, treated wastes are heated in a kiln to cause their chemical decomposition into various low heat-value gaseous or liquid hydrocarbons. These can be utilized with other fuels in conventional fossil fuel plants. SRI expects commercial systems will be available in 1976-77. An EPA-funded pilot plant proposed for El Cajon would process about 200 tons of solid wastes per day, with each ton ultimately producing one

barrel of low heat-value oil. San Diego Gas & Electric burn the oil either directly or mixed with No. 6 fuel to produce steam for electric power generation. A B&E pilot project newly in operation will convert 1,000 tons of refuse per day into gas for steam generation.

Hydrogenation Most Efficient System for Obtaining Energy from Wastes. Hydrogenation involves adding steam, hydrogen monoxide and a catalyst to organic wastes in a pressurized container and applying heat to cause chemical reduction. The system using dry waste solids can produce as much as 10 barrels of oil per ton of solids. Several pilot plants are in operation or are planned with commercial application expected by 1980.

Bacterial Conversion Can Produce Methane Gas from Solid and Liquid Wastes. Bacterial conversion is a process in which anaerobic bacteria (which flourish without free oxygen) decompose organic wastes to produce a mixture that is 72 per cent methane — the principal component of gas. A ton of dry organic waste can produce 10-20,000 cubic feet of methane. Commercial recovery of methane is feasible at sanitary landfills. Sanitary engineering has long utilized anaerobic digestion, but use of this process to maximize methane recovery has received little or no attention. Methane recovery from the secondary treatment of liquid wastes makes an important incremental contribution to natural gas supplies.

METHANOL

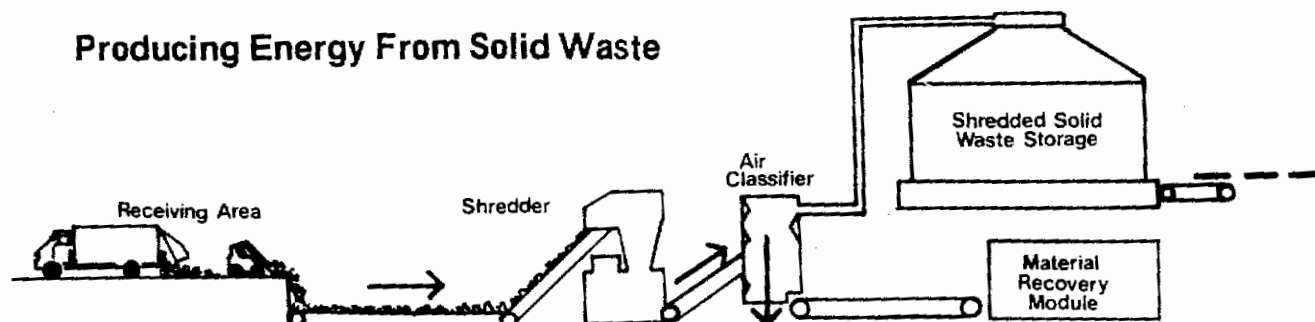
Methanol Provides a Versatile Fuel for Immediate Use.

Methanol, or methyl alcohol, constitutes an alternative fuel form whose widespread use could immediately help to solve both energy supply and pollution problems. Methanol is a colorless, odorless liquid which can be made from practically any other fuel — natural gas, petroleum, coal, oil shale, wood, and farm and municipal wastes — giving methanol practically unlimited flexibility in utilizing various energy sources as the economy and conditions dictate, and offering a means of reducing the nation's waste disposal problems.

Methanol Can Be Easily Implemented into Present Fuel Economy.

Methanol use would not require any major change in current technology to accommodate its integration into the present economy. It can be easily stored in tanks in the same manner as conventional fuels and can be shipped or piped, as can conventional petroleum products. More importantly, up to 15 per cent methanol can be added to commercial gasoline in cars now in use without requiring engine modification. Some carburetor adjustment would be

Producing Energy From Solid Waste



MARIN COUNTY
LOCAL COASTAL PROGRAM

UNIT II

Amended

ADOPTED BY MARIN COUNTY BOARD OF SUPERVISORS

December 9, 1980

CERTIFIED BY STATE COASTAL COMMISSION

April 1, 1981

The following document is the current amended version of the 1981 Marin County LCP Unit II, which reflects all policy text amendments approved by the California Coastal Commission from 1982 to 2004. Following each amended policy is a note that provides the details of the Resolution(s)/Ordinance(s) passed by the Marin County Board of Supervisors that proposed and adopted each text amendment, as well as the corresponding action(s) of the California Coastal Commission. All information contained herein is current as of April 16, 2010, and is the most accurate portrayal of the amended LCP Policies to the best knowledge of the Marin County Community Development Agency at this time.

Unit II LCP 1980

Development can have several impacts on the quality of coastal waters and on the visual appearance of natural landforms. Land disturbances can result in the loss of soil and slope stability as well as increased erosion. The removal of vegetation eliminates stabilizing roots, increases erosion, and thus lowers downstream water quality as a result of siltation. Heavy rains on unstable slopes can cause landslides and slumping. Development also increases the rate and volume of runoff by increasing the amount of impermeable surfaces, causing increased erosion and flood hazards, and reduced groundwater recharge. Finally, runoff from developed land surfaces is often contaminated with a wide variety of commercial, agricultural, or domestic residues which can adversely effect marine organisms and habitats. All of these development impacts can result in high costs to property owners and local communities, either for repairs or for protective measures to prevent further damage. In addition, the loss of scenic values and reduced biological productivity of streams and wetlands can have other public costs.

In order to minimize adverse impacts from development in a manner consistent with the Coastal Act policies cited above, additional grading standards are proposed in the Unit II LCP, similar to those adopted in Unit I.

ENERGY AND INDUSTRIAL DEVELOPMENT

The Coastal Act, while stressing the protection of coastal resources, recognizes that some development of energy facilities and resources is necessary for the social and economic well-being of the State and Nation. In Sections 30260 through 30264, the Act contains provisions for several types of energy development, including oil and gas development, thermal power plants, liquefied natural gas, and other related facilities. The coastal zone of Marin County currently has no energy or industrial facilities, although the possibility of two types of energy development has been considered: power plants and offshore oil development.

✓
✓
The Coastal Act requires the Coastal Commission to designate specific areas of the coastal zone that are not suitable for siting new power plants or related facilities. In September 1978, the State Commission adopted "negative designations" for the coastal zone (subsequently revised in January 1980). In Marin County's Unit 11, all lands were negatively designated (or excluded) for potential power plant development except those agricultural lands located north of Walker Creek, in spite of a recommendation from the Regional Commission supporting total exclusion of all Unit II lands. Thus, these agricultural areas are still open for potential development of power plants as far as the State Coastal Commission is concerned.

The second major potential energy development in Unit II (considerably more likely than power plants) is oil and gas drilling offshore or outer continental shelf (OCS) development. The federal government's Department of Interior has proposed a five-year lease plan calling for three OCS lease sales off the northern coast of California by 1984. Lease Sale #53, the first of these sales which is now in the environmental review stages, includes eight tracts off the Marin/Sonoma Coast covering 72 square miles in waters up to 600 feet deep.

UNIT II
LCP
1980

- d. Temporary vegetation, seeding, mulching, or other suitable stabilization methods shall be used to protect soils which have been exposed during grading or development. Cut and fill slopes shall be stabilized immediately with plantings of native species, appropriate non-native plants, or with accepted landscaping practices.
- e. Where topsoil is removed by grading operations, it shall be stockpiled for reuse and shall be protected from compaction and wind or erosion during stockpiling.
- f. The extent of impervious surfaces shall be minimized to the greatest degree possible. Provisions shall be made to conduct surface water to storm drains or suitable watercourses to prevent erosion. Drainage devices shall be designed to accommodate increased runoff resulting from modified soil and surface conditions as a result of development. Grassed waterways are preferred to concrete storm drains, where feasible, for runoff conveyance. Water runoff beyond natural levels shall be retained on site whenever possible to facilitate groundwater recharge.

7. Energy and industrial development. The Unit II coastal zone contains unique natural resources and recreational opportunities of nationwide significance. Because of these priceless resources and the very significant adverse impacts which would result if major energy or industrial development were to occur, such development, both on and offshore, is not appropriate and shall not be permitted. The development of alternative energy sources such as solar or wind energy shall be exempted from this policy.

8. Location and density of new development.

a. Olema.

- (1) The community expansion boundaries for Olema shall be defined by surrounding federal parklands.
- (2) Changes in commercial land use and zoning as specified in LCP Policy 3Q on Recreation and Visitor-Serving Facilities, page 44, shall be adopted.
- (3) Additional changes in land use and zoning shall be adopted in order to meet Coastal Act objectives of concentrating new development, protecting visual resources, and ensuring that adequate public services are available. Residential areas permitting 10,000 square foot lots shall be rezoned to 20,000 square feet and agricultural areas shall be rezoned from A-5 to ARP-5, as follows:

A.P. number	Existing Zoning	LCP Zoning
166-182-01	A-20-2	R-A:B-3
166-183-01	A-20-2	R-A:B-3
166-230-04	A-20-2	ARP- 5
166-230-08-10, 12-19	A-5	ARP- 5

MARIN COUNTY BOARD OF SUPERVISORS

RESOLUTION NO.

ACTUAL IN
MCBOS PACKET
ON 12-14-10

A RESOLUTION DENYING THE NEXTERA ENERGY RESOURCES APPEAL AND
SUSTAINING THE SALZMAN ET AL. APPEAL OF THE
JABLONS COASTAL PERMIT (10-30) AND USE PERMIT (10-15)
5488 MIDDLE ROAD, PETALUMA
PROJECT ID 10-0005

ASSESSOR'S PARCEL 100-050-29

SECTION I: FINDINGS

- I. WHEREAS NextEra Energy Resources, on behalf of property owners David Jablons and Tamara Hicks, proposes to install a temporary 197.7-foot high meteorological research tower (met tower) on a 157-acre agricultural parcel. The stand-alone tower would be a 10-inch diameter galvanized steel tube that tapers to 8 inches at the top. The tower would be anchored by twenty-four 1/4-inch guy wires: three guy wire anchors placed on each of four axes at intervals of 131, 148, and 167 feet from the tower. The tower would be located on a ridge and maintain the following setbacks: 572 feet from the northerly property line, 400 feet from the easterly property line, and 1,046 feet from the southerly property line. Small meteorological research and bat monitoring devices will be attached to the tower, along with a solar panel to power the instruments. Installation of the met tower would not result in substantial grading. Access to the tower would be by existing farm roads. The meteorological instruments would collect data to inform future decisions regarding the suitability of the area for wind energy production. The collected data would be transmitted wirelessly for further analysis off-site. The temporary research tower would be removed within 3 years of installation. The subject property is located at **5488 Middle Road, Petaluma** and is further identified as **Assessor's Parcels 100-050-29**.
- II. WHEREAS the Marin County Deputy Zoning Administrator (DZA) held a duly-noticed public hearing August 26, 2010 to consider the merits of the project and hear testimony in favor of and in opposition to the project, after which the DZA, in accordance with Marin County Code Sections 22.56.130I (Coastal Permit) and Section 22.88.020I (Use Permit), issued a conditional approval of the project. Approval included a post-construction avian and bat monitoring program that would be submitted to the Marin County Community Development Agency every six months. The monitoring program would consist of monitoring during periods of nesting, roosting, foraging, and migration, including nocturnal migration. The monitoring program would be in accordance with criteria established by the U. S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), or PRBO Conservation Science. The required monitoring program would be conducted by a professional biologist or an ornithologist approved by the Marin County Environmental Coordinator. The purpose of the monitoring is to gather additional research data to evaluate the need for any resources protection measures.
- III. WHEREAS on September 2, 2010, Barbara Salzman, Nona Dennis, Carolyn Longstreth, Louise Gregg, Susie Schlesinger, Beverly McIntosh, Helen Kozoriz, Kit McSweeney, and Chips Armstrong filed a timely appeal objecting to the Jablons Coastal Permit and Use Permit approval. The appellants asserted that the project may result in adverse environmental impacts and does not qualify for a Categorical Exemption.

- IV. WHEREAS the Marin County Planning Commission held a duly noticed public hearing on October 25, 2010, to consider the merits of the project and appeal, and hear testimony in favor of, and in opposition to, the project. After which, the Planning Commission determined, in accordance with the requirements of the California Environmental Quality Act (CEQA), that the project does not qualify for an exemption pursuant to CEQA Guidelines Section 15303, 15304, and 15306, because these categorical exemptions cannot be used in cases where there is a reasonable possibility that it will have a significant environmental impact due to unusual circumstances (CEQA Guidelines Section 15300.2(c).) Unusual circumstances include the project's location on a ridge line, in an area close to a tidal creek and estero that has large avian populations, and in an area subject to heavy, frequent fog in combination with the network of guy wires to support the proposed tower. The Planning Commission determined that an Initial Study is required to assess the unusual circumstances that could lead to a significant environmental impact. Until an Initial Study is conducted, no determination can be made on the merits of the Jablons Coastal Permit and Use Permit.
- V. WHEREAS on November 1, 2010, NextEra Energy Resources filed a timely appeal objecting to the Planning Commission's decision, asserting that the Commission's conclusions were erroneous and heavily influenced by disinformation and speculation, particularly in regards to CEQA.
- VI. WHEREAS the Marin County Board of Supervisors held a duly noticed public hearing on December 14, 2010, to consider the merits of the project and appeal, and hear testimony in favor of, and in opposition to, the project.
- VII. WHEREAS, the Board of Supervisors upheld the Planning Commission's determination that an Initial Study is required to assess the unusual circumstances that could lead to a significant environmental impact, as discussed below:

A. *The appellant asserts that the Planning Commission applied an inappropriate standard of significant effect.*

The appellant asserts that the Planning Commission provided no evidence that there were any "significant effects" that would warrant an Initial Study. In particular, they cite CEQA Guidelines Section 15065(a)(1) which identifies the following finding for a significant effect: a project would have the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare or threatened species. Studies of other existing met towers indicate there is no significant impact to birds and bats from temporary met towers.

The Planning Commission found that both projects do not qualify for a Categorical Exemption pursuant to California Environmental Quality Act (CEQA) Guidelines Sections 15303, 15304, and 15306 because there is a reasonable possibility that they would have a significant effect on the environment due to unusual circumstances. Pursuant to CEQA Guidelines Section 15300.2(c) - Exceptions to Categorical Exemptions, a project cannot be considered Categorical Exempt when a significant effect could occur due to unusual circumstances. In this case, unusual circumstances include the projects' location in the coastal zone, on ridge lines, within an area close to the Estero de San Antonio that has large avian populations, in the Pacific Flyway, and in an area subject to heavy, frequent fog. The Local Coastal Program (LCP) Unit II identifies Estero de San Antonio as a unique

"seasonal estuary" whose connection to the ocean is periodically closed. According to the LCP, animal life in both the Estero de San Antonio and northerly Estero Americano includes 71 species of water and marsh-related birds and 66 species of terrestrial birds. The mouth of the Estero de San Antonio is over 1.5 miles from the Jablons site and 2.5 miles from the Cornett site. While there is uncertainty regarding whether the projects would result in significant impacts, the Planning Commission determined that the appropriate means to address this uncertainty is through the process of preparing an Initial Study.

B. The appellant asserts that an Initial Study would be meaningless.

The appellant' asserts that the Commission's interest to review the post-construction biological monitoring protocols should have led to a continuance of the hearing, rather than an approval of the appeal, and that such a desire was not cause to require an Initial Study.

The Planning Commission determined that the monitoring protocol should be developed and evaluated in the Initial Study to ensure that adequate safeguards to prevent undue bird and bat mortality would be put in place before construction. Such safeguards could include a measure that would require the deconstruction of the met towers if a certain threshold of bird or bat strikes occurred. An Initial Study would also allow for a comparison of studies done on similar projects elsewhere to the conditions at the proposed locations. Further, the level of environmental review conducted for the current projects sets a precedent for future met tower applications, particularly in the coastal zone. Item 3 below provides a response regarding the appellant's assertion that the hearing should have been continued.

C. The appellant asserts that a continuance was needed, but not allowed.

The appellant asserts that Marin County's procedural requirements for continuing hearings are an anomaly, and that the Planning Commission should have been allowed to continue the hearing to allow the applicant to provide additional information and to review other studies of similar projects. Government Code Section 65950(b) allows an agency and a project applicant to mutually agree to extend the time limits for a final decision on a project up to a maximum of 90 days, but County policy for appeals allows agreement from an appellant for a continuance. Before the Planning Commission had been informed by staff of this technicality, they voted to continue the Commission's hearing to a future date to allow them to review outside studies of similar projects that had been conducted and for additional site specific biological studies to be submitted by the applicant. It was not possible to secure the approval of the appellants to continue the hearing because some of the appellants had left the hearing before the Commissioners came to the conclusion that they lacked the evidence to determine whether the projects qualify for categorical exemptions.

In response to the Planning Commission's request for more information, NextEra Energy hired Curry & Kerlinger, LLC to conduct a site assessment to determine if there is a potential for significant impacts to birds and bats from the proposed project. Paul Kerlinger is a nationally recognized avian expert cited by Salzman et al. in their appeal to the Planning Commission. In summary, based on a series of site visits and on data available from comparable temporary guyed met towers in the Bay Area, the assessment finds no unusual circumstances and no significant effects anticipated from the proposed projects to warrant an Initial Study. NextEra also submitted a draft protocol for a post-construction avian and bat monitoring program, which expands the scope of the project to identify species in the area that may be impacted by future wind energy facilities. The monitoring

program is intended for informational purposes and is not a study of potential impacts from the temporary met towers. This is included as Attachment 5. In addition, the following outside studies are entered into the record for review as requested by the Planning Commission:

- Shiloh I, Solano County:
<http://www.co.solano.ca.us/civica/filebank/blobdload.asp?BlobID=8914> (Updated version of report previously on record)
- Shiloh II, Solano County:
<http://www.co.solano.ca.us/civica/filebank/blobdload.asp?BlobID=8916>
- Hamilton Ranch, Solano County:
<http://www.co.solano.ca.us/civica/filebank/blobdload.asp?BlobID=8918>

SECTION II: ACTION

NOW, THEREFORE, BE IT RESOLVED that the Marin County Board of Supervisors hereby upholds the Salzman et al. Appeal, finds that the project cannot be exempt from CEQA, and directs the Community Development Agency to prepare an Initial Study for the Jablons Coastal Permit (CP 10-30) and Use Permit (UP 10-15.)

SECTION III: VOTE

PASSED AND ADOPTED at a regular meeting of the Marin County Board of Supervisors of the County of Marin, State of California, on the 14th day of December 2010, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

JUDY ARNOLD, PRESIDENT
MARIN COUNTY BOARD OF SUPERVISORS

Attest:

Matthew H. Hymel
Clerk of the Board of Supervisors

RECEIVED

DEC 28 2010

CALIFORNIA
COASTAL COMMISSION

THIS RESO WAS NOT BEFORE THE
MC BOS ON THE 14TH OF DEC AND
WAS NEVER ADOPTED

RESOLUTION NO. 2010-122
RESOLUTION OF THE MARIN COUNTY BOARD OF SUPERVISORS
A RESOLUTION SUSTAINING THE NEXTERA ENERGY RESOURCES APPEAL AND
CONDITIONALLY APPROVING THE
JABLONS COASTAL PERMIT (10-30) AND USE PERMIT (10-15)
5488 MIDDLE ROAD, PETALUMA
PROJECT ID 10-0005

A MIS-
REPRESENTATION
OF THE MC BOS
ACTION

ASSESSOR'S PARCEL 100-050-29

SECTION I: FINDINGS

- I. WHEREAS NextEra Energy Resources, on behalf of property owners David Jablons and Tamara Hicks, proposes to install a temporary 197.7-foot high meteorological research tower (met tower) on a 157-acre agricultural parcel. The stand-alone tower would be a 10-inch diameter galvanized steel tube that tapers to 8 inches at the top. The tower would be anchored by twenty-four 1/4-inch guy wires: three guy wire anchors placed on each of four axes at intervals of 131, 148, and 167 feet from the tower. The guy wires would be marked with orange aviation warning balls near the top of the tower and with bird deterrent devices in accordance with U. S. Fish and Wildlife Service, California Department. The tower would be located on a ridge and maintain the following setbacks: 572 feet from the northerly property line, 400 feet from the easterly property line, and 1,046 feet from the southerly property line. Small meteorological research and bat monitoring devices will be attached to the tower, along with a solar panel to power the instruments. Installation of the met tower would not result in substantial grading. Access to the tower would be by existing farm roads. Meteorological data would be transmitted wirelessly for further analysis off-site. The project would include a post-construction avian and bat data collection program, with results submitted every four months to the Marin County Community Development Agency; data collection would occur during periods of nesting, roosting, foraging, and migration, including nocturnal migration, and would include carcass counts in the vicinity of the met tower and/or a similar proposed site for the installation of a met tower ((Cornett, Assessor's Parcels 100-050-07.) The data collection program would be in accordance with criteria established by the U. S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), or PRBO Conservation Science. Data collection would be conducted by a professional biologist or an ornithologist approved by the Marin County Environmental Coordinator. The temporary research tower would be removed within 3 years of installation. All gathered information would inform future decisions regarding the suitability of the area for wind energy production. The subject property is located at 5488 Middle Road, Petaluma and is further identified as Assessor's Parcels 100-050-29.
- II. WHEREAS the Marin County Deputy Zoning Administrator (DZA) held a duly-noticed public hearing August 26, 2010 to consider the merits of the project and hear testimony in favor of and in opposition to the project, after which the DZA, in accordance with Marin County Code Sections 22.56.1301 (Coastal Permit) and Section 22.88.0201 (Use Permit), issued a conditional approval of the project.
- III. WHEREAS on September 2, 2010, Barbara Salzman, Nona Dennis, Carolyn Longstreth, Louise Gregg, Susie Schlesinger, Beverly McIntosh, Helen Kozoriz, Kit McSweeney, and Chips Armstrong filed a timely appeal objecting to the Jablons Coastal Permit and Use Permit approval. The appellants asserted that the project may result in adverse environmental impacts and would not qualify for a Categorical Exemption.

11. The applicant/owner hereby agrees to defend, indemnify, and hold harmless the County of Marin and its agents, officers, attorneys, or employees from any claim, action, or proceeding, against the County or its agents, officers, attorneys, or employees, to attack, set aside, void, or annul an approval of this application, for which action is brought within the applicable statute of limitations.
12. This Use Permit is subject to revocation procedures contained in Section 22.88.0401 of the Marin County Code in the event any of the terms of this approval are violated or if the uses are conducted or carried out in a manner so as to adversely affect the public interest, health, safety, convenience, or welfare of the County.

SECTION III: VESTING AND PERMIT DURATION

NOW, THEREFORE BE IT FURTHER RESOLVED that the applicant must vest this approval by substantially completing all conditions of approval and commencing the allowed use by **December 14, 2012**, or all rights granted in this approval shall lapse unless the applicant applies for an extension at least 10 days before the expiration date above and the Community Development Agency staff approves it. An extension of up to four years may be granted for cause pursuant to Section 22.58.050.B.3 of the Marin County Code.

NOW, THEREFORE BE IT FURTHER RESOLVED that this Use Permit shall be valid for up to **3 years** of operation from the date of the Final Building Permit Inspection, unless the conditions of approval are violated, in which case the Use Permit may be revoked. The applicant shall submit an application to renew the Use Permit at least 60 days prior to the expiration of the Use Permit. Should the Use Permit expire without benefit of a renewal, all equipment and structure shall be removed and the site shall be returned to its preexisting conditions.

SECTION IV: VOTE

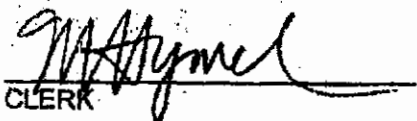
PASSED AND ADOPTED at a regular meeting of the Marin County Board of Supervisors of the County of Marin, State of California, on the 14th day of December 2010, by the following vote:

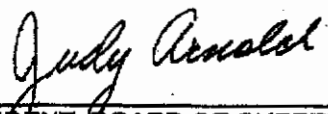
AYES: SUPERVISORS Susan Adams, Harold C. Brown, Jr., Charles McGlashan, Steve Kinsey,
Judy Arnold

NOES: NONE

ABSENT: NONE

ATTEST:


CLERK



PRESIDENT, BOARD OF SUPERVISORS

DRAFT

SEE ITEM #19

REGULAR MEETING OF THE MARIN COUNTY BOARD OF SUPERVISORS HELD TUESDAY,
DECEMBER 14, 2010, AT 9:32 A.M.

Roll Call

Present: Supervisor Adams; Supervisor McGlashan; Supervisor Kinsey; Supervisor Arnold

Absent: Supervisor Brown

The Board recessed at 9:33 a.m. to convene in closed session.

1. CLOSED SESSION

The Board met in closed session for a conference with legal counsel regarding existing litigation pursuant to California Government Code Section 54956.9(a). Name of case: *Peter McFarland v. County of Marin, et al.*, United States District Court, Northern District, Case No. CV 103862.

The Board reconvened in open session at 10:12 a.m. Supervisor Brown was absent.

The President reported that the Board had met in closed session and there was nothing to report.

2. BOARD OF SUPERVISORS' MATTERS

In Memoriam

Supervisor Adams requested an urgency finding to adjourn the meeting in memory of Theodore (Ted) Posthuma, a strong advocate for affordable housing in Marin County.

M/s Supervisor Adams - Supervisor McGlashan to determine that the need to take action arose subsequent to the agenda being posted and to adjourn the meeting in memory of Theodore Posthuma.

Vote: Motion carried 4-0

AYES: Supervisor Adams, Supervisor McGlashan, Supervisor Kinsey, Supervisor Arnold

ABSENT: Supervisor Brown

Ted's brother, Richard Posthuma, spoke briefly to thank the Board for honoring his brother's memory.

Acknowledgement

Supervisor Adams acknowledged President Arnold for her leadership as this year's Board President.

Disaster Communications

Supervisor Adams reported that during a recent meeting of Ham Radio Operators licensed to assist the County during a disaster, she learned that the Pacific Gas & Electric ("PG&E") SMART meters are causing radio interference. Supervisor Adams requested that the Board send a letter to the County's State and Federal legislators, the Federal Communications Commission ("FCC") and the Public Utilities Commission ("PUC") to request their review and assistance. Supervisor Adams also requested that the Board consider adopting a resolution imposing a moratorium on further deployment of SMART meters until all questions are answered.

Cal Park Hill Tunnel

Supervisor Adams acknowledged all those involved in the Cal Park Hill Tunnel project.

State Bank

Supervisor Adams commented briefly on the recent public forum she hosted regarding state banks and noted that the presentation is available on the County's G-Channel.

Disaster Council

Supervisor Adams spoke briefly on a recent meeting of the Marin County Disaster Council which included a discussion regarding disaster communication guidelines.

PG&E SMART Meters

Supervisor McGlashan expressed support for Supervisor Adams request to consider adopting a resolution imposing a moratorium on further deployment of SMART meters.

Forest Replanting

Supervisor McGlashan requested staff to review California Air Resources Board ("ARB") rules regarding clear cut forest replanting.

In Memoriam

Supervisor Arnold requested an urgency finding to adjourn the meeting in memory of Les Shorter, the founder and owner of Western Dock Enterprises and a resident of Bel Marin Keys.

M/s Supervisor Arnold - Supervisor Adams to determine that the need to take action arose subsequent to the agenda being posted and to adjourn the meeting in memory of Les Shorter.

Vote: Motion carried 4-0

AYES: Supervisor Adams, Supervisor McGlashan, Supervisor Kinsey, Supervisor Arnold

ABSENT: Supervisor Brown

Novato Youth Football

Supervisor Arnold acknowledged the Novato Yellow Jackets junior midgets football team, who won the American Youth Football Division II Championship.

Sonoma-Marín Rail Transit Authority ("SMART")

Supervisor Arnold requested that an item be scheduled in January 2011 for the Board of Supervisors to hear a report from the Metropolitan Transportation Committee ("MTC") regarding SMART.

PG&E SMART Meters

Supervisor Arnold relayed information she obtained from speaking with staff at the Public Utilities Commission ("PUC") regarding SMART meter installation.

3. ADMINISTRATOR'S REPORT

Agenda Modification

County Administrator Matthew Hymel advised that revisions had been submitted for Consent Calendar Items CA-1b and CA-9.

Cal Park Hill Tunnel Opening

On behalf of employees of the Public Works Department, Public Works Director Farhad Mansourian presented the members of the Board of Supervisors with a framed wall plaque commemorating the opening of the Cal Park Hill Tunnel.

Thereafter, the vote on the pending motion was

Vote: Motion carried 4-0

AYES: Supervisor Adams, Supervisor McGlashan, Supervisor Kinsey, Supervisor Arnold

ABSENT: Supervisor Brown

The clerk read the ordinance by title only and the merit hearing was scheduled for January 4, 2011, at 10:30 a.m.

11. REQUEST FROM THE DEPARTMENT OF HEALTH AND HUMAN SERVICES TO AUTHORIZE APPROPRIATION OF \$200,000 TO IMPLEMENT A HOUSING FIRST PROGRAM

By letter dated December 14, 2010, Health and Human Services Director Dr. Larry Meredith submitted his report and recommendations regarding the above-captioned matter.

M/s Supervisor Adams - Supervisor McGlashan to approve appropriation and related budget adjustments as detailed in staff report dated December 14, 2010.

A representative of the Marin Organizing Committee spoke briefly to urge the Board to approve the expenditure for the Housing First Program, and expressed support for an open and transparent bidding process which includes community participation.

Thereafter, the vote on the pending motion was

Vote: Motion carried 4-0

AYES: Supervisor Adams, Supervisor McGlashan, Supervisor Kinsey, Supervisor Arnold

ABSENT: Supervisor Brown

12. REQUEST FROM COUNTY COUNSEL TO DISCONTINUE THE RESIDENTIAL REHABILITATION LOAN COMMITTEE AS A FORMALLY-APPOINTED COMMISSION TO THE BOARD OF SUPERVISORS

By letter dated December 14, 2010, Deputy County Counsel Mari-Ann Rivers submitted her report and recommendations regarding the above-captioned matter.

M/s Supervisor Kinsey - Supervisor McGlashan to discontinue the Residential Rehabilitation Loan Committee as a formally-appointed commission to the Board of Supervisors.

Vote: Motion carried 4-0

AYES: Supervisor Adams, Supervisor McGlashan, Supervisor Kinsey, Supervisor Arnold

ABSENT: Supervisor Brown

13. REQUEST FROM THE HUMAN RESOURCES DIRECTOR TO APPROVE ADJUSTMENTS TO THE FRINGE BENEFIT PACKAGE FOR NON-REPRESENTED EMPLOYEES

By letter dated December 14, 2010, Human Resources Director Joanne Peterson and Principal Personnel Analyst Larry Daniel submitted their report and recommendations regarding the above-captioned matter.

M/s Supervisor Kinsey - Supervisor McGlashan to approve adjustments to the fringe benefit package for non-represented employees, as detailed in staff report dated December 14, 2010.

Vote: Motion carried 4-0

AYES: Supervisor Adams, Supervisor McGlashan, Supervisor Kinsey, Supervisor Arnold

ABSENT: Supervisor Brown

15. APPOINTMENTS

County Service Area ("CSA") #18 - Las Gallinas

One term expiration. Incumbent John Manchip reapplied.

M/s Supervisor Adams - Supervisor McGlashan to appoint John Manchip.

Vote: Motion carried 4-0

AYES: Supervisor Adams, Supervisor McGlashan, Supervisor Kinsey, Supervisor Arnold

ABSENT: Supervisor Brown

The Board recessed at 12:18 p.m. to meet was the Marin County Redevelopment Agency Board of Commissioners and the Marin County Open Space District Board of Directors and reconvened at 12:30 p.m. Supervisor Brown was absent.

The Board recessed at 12:31 p.m. to meet in closed session.

18. CLOSED SESSION

The Board met in closed session for a conference with legal counsel regarding existing litigation pursuant to California Government Code Section 54956.9(a). Name of Case: *County of Marin v. Deloitte Consulting*. Marin County Superior Court Case No. 1002787.

The Board reconvened in open session at 1:30 p.m. Supervisor Brown was absent.

The President reported that the Board met in closed session and advised that the Board authorized Counsel to file further legal actions related to the installation of SAP for public sector software by Deloitte Consulting LLP, noting a copy of the lawsuit will be available when it is filed.

19. HEARING: NEXTERA ENERGY RESOURCES APPEAL OF THE MARIN COUNTY PLANNING COMMISSION'S ACTION ON JABLONS AND CORNETT COASTAL PERMITS AND USE PERMITS

By letter dated December 14, 2010, Community Development Agency Director Brian Crawford and Planner Lorene Jackson submitted their report and recommendations regarding the above-captioned matter.

(Supervisor Brown present at 1:35 p.m.)

Ms. Jackson provided a brief overview of the scope of the project involving the installation of two new meteorological research towers (met towers) on the Jablons agricultural parcel and on the Cornett agricultural parcel. Ms. Jackson described the construction of the met towers and scope of the research project, reviewed the bases of appeal and summarized the Planning Commission's consideration of the project. Ms. Jackson recommended that the Board review the administrative record, conduct a public hearing and consider adopting resolutions sustaining the Planning Commission's decision requiring an Initial Study.

Ms. Jackson concluded her remarks, briefly commenting on correspondence received regarding the project, clarifying actions taken by the Deputy Zoning Administrator, and noting that correspondence has also been received from the Point Reyes Bird Observatory ("PRBO") supporting the project.

- The hearing was declared open to receive public testimony.

NextEra Energy Environmental Project Manager Louis Coakley addressed the Board. Mr. Coakley briefly commented on efforts to address the concerns of the community, emphasized the project involves installation of temporary met towers, noted project alternatives would have greater environmental impact, commented on proposed bird diverters and aviation warning balls and outlined the project's proposed data collection plan.

On behalf of NextEra Energy, Mike Burke addressed the Board regarding application of the California Environmental Quality Act ("CEQA") categorical exemption requirements. Mr. Burke briefly commented on the Planning Commission's consideration of the project and their incorrect application of a "significant effect" standard. Mr. Burke concluded his remarks noting the PRBO's support of the project.

On behalf of NextEra Energy, Dick Curry briefly commented on the Avian and Bat Risk Assessment prepared by Curry & Kerlinger, LLC. Mr. Curry reported that there would be no biologically significant impacts as a result of the two proposed towers.

Representatives of the Environmental Action Committee, the Marin Conservation League, the Marin Audubon Society and six other speakers addressed the Board. The speakers generally commented on the Planning Commission's consideration of the project, encouraged the Board to support the Planning Commission's decision and require the preparation of an Initial Study, suggested revisions to County Ordinance No. 3548 relating to Wind Energy Conversion Systems ("WECS"), challenged the results of the Avian and Bat Risk Assessment prepared by Curry & Kerlinger, asserted the project was incomplete and commented on the project history and the introduction of new information during the various project hearings.

A member of the International Brotherhood of Electrical Workers and property owner David Jablons addressed the Board to express support for the project.

Seeing no one else present to speak, the hearing was closed.

Mr. Crawford emphasized that the scope of the project is narrowly limited to the collection of data and does not commit the County to approving any future WECS project. Mr. Crawford also noted that the underlying purpose of this project is consistent with the Countywide Plan that calls for identifying and mapping sites for renewable energy.

Mr. Crawford responded to questions from the Board regarding data collection activities related to birds and briefly commented on PRBO's qualifications.

Supervisor Adams briefly commented on the Planning Commission's consideration of the project, noted that her appointee to the Commission, who is a strong environmentalist, supported moving forward with the project, advised that in considering the project, she met with members of the environmental community and NextEra Energy representatives, and noted that a temporary met tower was erected for data collection purposes at the San Rafael Rock Quarry site and has been removed. Supervisor Adams concluded her remarks requesting NextEra to consider voluntarily including bird and bat mortality as part of their data collection.

Supervisor Kinsey acknowledged the shared interest of protecting the West Marin community and its natural species, commented on the Board's commitment to a renewable energy strategy, and commented on the significance of PRBO's support for the project.

Mr. Crawford responded to questions from the Board regarding the sharing of research data. He noted that information from the bird and bat data collection program would be submitted to the County and available to the public, while the wind data would be proprietary.

Supervisor Adams repeated her suggestion for NextEra to voluntarily conduct a bird and bat mortality assessment as part of their data collection and received acknowledgment from NextEra's representatives of their willingness to do so.

M/s Supervisor Kinsey - Supervisor Brown to (1) adopt Resolution No. 2010-122 sustaining the NextEra Energy Resources Appeal and conditionally approving the Jablons Coastal Permit (10-30) and Use Permit (10-15) 5488 Middle Road, Petaluma (APN 100-050-29); and (2) adopt Resolution No. 2010-123 sustaining the NextEra Energy Resources Appeal and conditionally approving the Cornett Coastal Permit (10-31) and Use Permit (10-16) 2640 Whitaker Bluff Road, Petaluma (APN 100-050-07).

AYES: ALL

The meeting was adjourned at 2:20 p.m. in memory of Theodore Posthuma and Les Shorter.

SINE DIE

PRESIDENT

ATTEST:

CLERK

DVD OF 12-14-10 MEETING
ENCLOSED
A REVIEW OF MEETING,
MC BOS, 12-14-10,
SHOWS THE MOTION BY
KINSEY WAS NOT WHAT
THESE MINUTES SHOW.
NO REFERENCE TO FINDINGS
OR ANY RESOLUTION.

Avocet Research Associates

wildlife biology

P.O. Box 839 Point Reyes Station, CA 94956 <avocetra@gmail.com>

Memorandum

Date: December 10, 2010

To: Marin County Board of Supervisors

From: Jules Evens, Principal, ARA

Re: Comments on the proposed installation of meteorological towers by NextEra near Dillon Beach

The proposed MET sites lie mid-way between Bodega Harbor and Tomales Bay, and within a network of important coastal estuaries.

Location

Tomales Bay was designated September 30, 2002 by the RAMSAR Convention "Wetland of International Importance."¹

Tomales Bay, 30/09/02. California. 2,850 ha. 38°09'N, 123°23'W. Part of Marine Sanctuary. Tomales Bay is a marine-coastal wetland consisting of geomorphologically dynamic estuaries, eelgrass beds (*Zostera marina*), sand dune systems, and restored emergent tidal marshes which floods the northern 20 km of the San Andreas Fault-generated Olema Valley on the central California coast. The site fulfills all eight Ramsar Criteria. Approximately 90% of the bay's 28.5 km² area is subtidal with a much greater area of open water at low tide than most other Pacific coast estuaries, thus becoming a suitable waterbird habitat through the tidal cycle. Because the 58,000 ha. watershed is non-industrial and has a low human population density, the bay is relatively pristine. The site supports several endangered or threatened plant and animal species, and is an important waterbird migratory stopover site and over-wintering ground along the Pacific flyway - it regularly hosts over 20,000 individuals in the winter months, most notably of surf scoter (*Melanitta perspicillata*), bufflehead (*Bucephala albeola*), and greater scaup (*Aythya mariloides*). In the past, the site has been affected by industrial and agricultural activities, which have since been terminated or mitigated. Local authorities and private and non-governmental organizations have conducted a number of watershed protection measures and conservation and restoration projects over the past 40 years in the area. Ramsar site no. 1215. Most recent RIS information: 2002.

Both Tomales Bay and Bodega Harbor are recognized as "Important Bird Areas"

¹ The Convention on Wetlands (Ramsar, Iran, 1971) -- called the "Ramsar Convention" - is an intergovernmental treaty that embodies the commitments of its member countries to maintain the ecological character of their Wetlands of International Importance and to plan for the "wise use", or sustainable use, of all of the wetlands in their territories.

by the National Audubon Society (NAS). Important Bird Areas, or "IBAs", are sites that provide essential habitat for one or more species of bird. IBAs include sites for breeding, wintering, and/or migrating birds. IBAs may be a few acres or thousands of acres, but usually they are discrete sites that stand out from the surrounding landscape. IBAs may include public or private lands, or both, and they may be protected or unprotected. <http://web4.audubon.org/bird/iba/iba_intro.html>

The NAS Important Bird Area website describes Bodega Harbor as follows:

The Bodega Harbor area features a natural, protected estuary/harbor fed by several small, freshwater creeks that flow out of the surrounding hills. Tidal action transforms the harbor into a vast mudflat, making it attractive to large numbers of waterbirds year round. A sand-spit juts out across its southern end, protecting extensive Doran Marsh, a brackish, tidal wetland. Another peninsula comes down from the north, and forms grassy Bodega Head, surrounded by sand dunes. The area is a popular destination for tourists exploring the California coast and with fishermen. The U.S. Coast Guard maintains a station on the sand spit, and UC Davis operates the Bodega Marine Lab on Bodega Head. **Just south of Bodega Harbor, two major estuaries flow into Bodega Bay, Estero Americano (on the Marin/Sonoma county line) and Estero San Antonio (Marin County).** [Emphasis added]. Estero Americano is accessible through a purchase by the Sonoma Land Trust, however Estero San Antonio is located on private ranches and is virtually unstudied and inaccessible.

WATERBIRDS

These two estuaries—Bodega and Tomales—in concert with Estero Americano and Estero San Antonio, are embedded within a system of interrelated coastal wetlands—San Francisco and San Pablo bays, Bolinas Lagoon, Drake's and Limantour esteros, and Abbot's Lagoon—that provide a mosaic of habitats that host as diverse an array of waterbirds as any coastal wetland system on the west coast of North America (Shuford *et al.* 1989, Stenzel *et al.* 2002, Page *et al.* 2002). As stated above, Bolinas Lagoon and Tomales Bay have been designated by the Ramsar Convention on Wetlands as "Wetlands of International Importance." San Francisco Bay and its associated wetlands, including "the Point Reyes esteros" and Tomales Bay, are identified as wetlands of *hemispheric importance* (Harrington and Perry 1995). This network of habitats holds more total shorebirds in all seasons than any other wetland in the conterminous U.S. Pacific coast (Stenzel *et al.* 2002). Movement of migratory birds between and among the S.F. Bay Area complex of wetlands is well-documented (Shuford *et al.* 1989) and the connectivity adds to the value of each site within the network.

Maximum annual fog frequency along the shoreline between Bodega Harbor and Tomales Bay is among the highest in the continent (Barbour et al. 1973, Evens 2008, p.22) Waterbirds commute along the shoreline and often navigate along topographical contours, especially under high wind or stormy conditions. Under such conditions, visibility is reduced and anomalous structures, like towers and guy wires, are likely to increase the incidence of collision and avian mortality. A list of 102 migratory waterbirds that occur regularly (excluding rarities and raptors) in this wetland complex is attached (Appendix 1). Twelve of those species which have been documented as occurring are included on special status lists (CDFG 2010). Those species most prone to striking anomalous structures located along the coast (because of their flocking behavior and habitat preferences) are indicated (*).

RAPTORS

The location of the proposed project site, and its proximity to the esteros and Bodega Harbor and Tomales Bays, is of concern not just to waterbirds, but also to raptors that are attracted to these waterfowl-rich wetlands. It is a well-documented fact that diurnal raptors follow topographical features like coastlines and ridgelines as they migrate and travel (Peeters and Peeters 2005, p 74). Marin County hosts the largest concentration of Osprey (*Pandion haliaeetus*) in California, and these fish-eating raptors move regularly between the various estuaries within their foraging range (Evens 2009). Additionally, the State endangered Bald Eagle and the State endangered Peregrine Falcon (CDFG 2010), both species now nesting in coastal Marin County, commute regularly between Bodega, the esteros, and Tomales Bay during the nesting season as well as at other times of year. Other raptors susceptible to mortality from anomalous structures, and which occur regularly in coastal Marin and Sonoma counties, include White-tailed Kite*, Northern Harrier*, Sharp-shinned Hawk*, Cooper's Hawk*, Red-shouldered Hawk*, Red-tailed Hawk*, Rough-legged Hawk, Ferruginous Hawk, Golden Eagle*, Merlin, American Kestrel*, Barn Owl*, Great horned Owl*, and Burrowing Owl. (* indicates locally nesting.)

At Altamont Pass, one half of the estimated 1000 birds killed annually were raptors. Although this proposal does not involve wind turbines (yet), avian mortality due to collisions with "communication towers" is analogous to the meteorological tower scenario. Numerous studies exist regarding avian mortality associated with towers and their associated structures (guy wires) (NWCC 2001). These various studies show high

variability among sites based on climatic conditions, topography, tower design (lighting vs no lighting, tower height, etc.) and other factors. One lesson that is clear from a review of these studies is that avian mortality associated with tower strikes is highly site specific. Any extrapolation from other sites—Altamont Pass or Montezuma Hills—is highly speculative and not likely to address the conditions associated with another site. The Dillon Beach location is unique in its relationship to avian communities as well as topographical and climatic conditions. This uniqueness alone argues for a site specific initial study.

LANDBIRDS

The attached list (Appendix A) does not include landbirds, although passerine migrants account for a large proportion of avian mortality associated with towers, guy wires, etc. (NWCC 2001). At an Oregon wind turbine site, passerines accounted for 69 percent of avian mortality (West 2007), but other studies have reported passerines representing up to 80% of avian fatalities. A 2000 review of communication tower studies provides some relevant analogies to this project and provides references that emphasize the variables that contribute to increases or decreases in avian mortality rates (height, guy wires, and visibility factors) (Kerlinger 2000).

The Point Reyes Peninsula and the coastal environs of Marin and Sonoma counties are well known as migratory routes for passerine birds attracting as diverse an array of species as can be found nearly anywhere in the U.S. (Stallcup 2005, Evens 2008, Bolander and Parmeter 2001). Migrating landbirds, especially "bird-of-the-year" (immatures) exhibit the "coastal effect" during autumn migration, i.e. they tend to concentrate along coastal environments (Stewart 1972, Newton 2008). Bird strikes at anomalous structures at local coastal sites have not been studied systematically, but anecdotal information from the Point Reyes Lighthouse and the Farallon Islands suggests it can be significant.

Because of the diversity of habitats—grasslands, forest, coastal scrub, wetlands—available to landbirds along the Marin-Sonoma coast, avian species diversity is high. It would be a mistake to infer from studies at Montezuma Hills or Altamont, areas surrounded by grassland and relatively low avian species diversity, that anomalous structures would produce comparable rates of avian mortality.

Summary

Public agencies are mandated to protect of migratory birds (See Executive Order 13186, 66 Fed. Reg. 3853 and "Memorandum of Understanding to Promote the Conservation of Migratory Birds" between U.S. Department of the Interior and the U.S. Fish and Wildlife Service, April 12, 2010.)

The proposed project site is located amidst wetlands and coastal environments that have been designated as protected areas because of their great natural diversity and biological value, especially to birds. It is important to consider these unique values when evaluating the impacts of adding anomalous structures to the landscape and introducing potential hazards to the species that inhabit the area. The meteorological and topographical features of the landscape—especially the coastal fog, wind, and abrupt ridgelines—introduce variables that pose unique circumstances that should be considered before any project is approved. An initial study to define and identify these variables is critical to ensure that this project does not result in adverse impacts to native wildlife.

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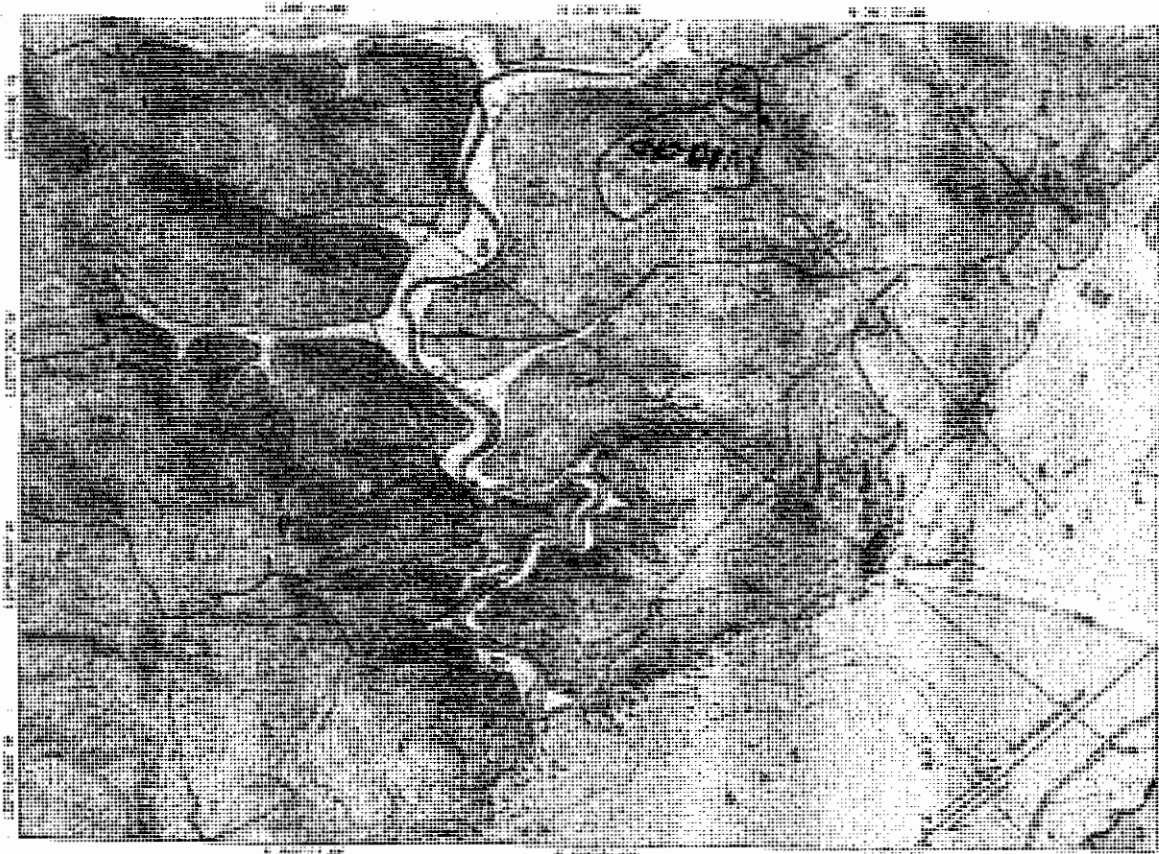
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Appendix 1. Regularly occurring waterbirds in the Tomales bay –Bodega Harbor complex.

Greater White-fronted Goose	Brandt's Cormorant	Thayer's Gull
Snow Goose	Double-crested Cormorant	Western Gull
Ross's Goose	Pelagic Cormorant	Glaucous-winged Gull
Brant	American Bittern	Caspian Tern
Cackling Goose	Great Blue Heron	Forster's Tern
Canada Goose*	Great Egret	Elegant Tern
Tundra Swan	Snowy Egret	Common Murre
Wood Duck	Green Heron	Pigeon Guillemot
Gadwall	Black-crowned Night-Heron	
Eurasian Wigeon	Peregrine Falcon	102 species
American Wigeon*	Black Rail	
Mallard*	Clapper Rail	
Blue-winged Teal	Virginia Rail	
Cinnamon Teal	Sora	
Northern Shoveler	Common Moorhen	
Northern Pintail*	American Coot	
Green-winged Teal	Black-bellied Plover*	
Canvasback	American Golden-Plover	
Redhead	Pacific Golden-Plover	
Ring-necked Duck	Snowy Plover	
Tufted Duck	Semipalmated Plover*	
Greater Scaup	Killdeer	
Lesser Scaup	American Avocet	
Harlequin Duck	Spotted Sandpiper	
Surf Scoter	Greater Yellowlegs	
White-winged Scoter	Willet	
Black Scoter	Lesser Yellowlegs	
Long-tailed Duck	Whimbrel	
Common Goldeneye	Long-billed Curlew	
Barrow's Goldeneye	Marbled Godwit	
Hooded Merganser	Ruddy Turnstone	
Common Merganser	Black Turnstone	
Red-breasted Merganser	Sanderling	
Ruddy Duck	Western Sandpiper*	
Red-throated Loon	Least Sandpiper*	
Arctic Loon	Baird's Sandpiper	
Pacific Loon	Pectoral Sandpiper	
Common Loon	Dunlin	
Yellow-billed Loon	Short-billed Dowitcher*	
Pied-billed Grebe	Long-billed Dowitcher*	
Horned Grebe	Wilson's Snipe	
Red-necked Grebe	Red-necked Phalarope	
Eared Grebe	Heermann's Gull	
Western Grebe	Mew Gull	
Clark's Grebe	Ring-billed Gull	
American White Pelican	California Gull	
Brown Pelican	Herring Gull	

Wilson Grove formation



- Explanation**
- Strike and dip of beds
 - Cross section line
 - Fault, arrows show direction of movement
 - Thin section locality facility
 - Forman locality discussed in report
 - Measured sections

Geologic Units

- Quaternary**
 - Quaternary alluvium
 - Quaternary sandstone
- Paleozoic**
 - Franciscan Complex
 - West of San Anthon Hill
 - Sedimentary Black, Franciscan rocks

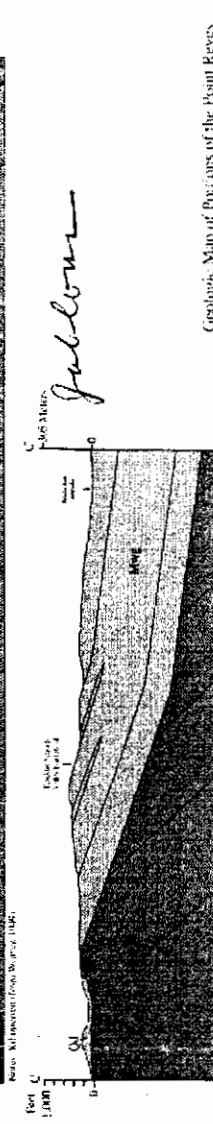
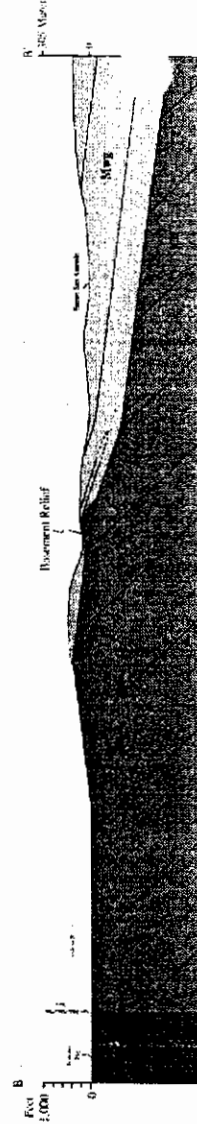
Wilson Grove Formation

Predominantly fine to medium-grained, thickly bedded to massive, light-colored, silty, micaceous sandstone with one or two local graded to yellow sandstone members (shown in gray).

Franciscan Complex

Predominantly graywacke and shale with some red chert.

Map sources: Computations from Waver (1949) and Toms (1983), Toms and Valley, Part 2, S.S.S. quadrangle, Additional mapping by James Allen (1989, 2002).



Geologic Map of Portions of the Point Reyes and Tomales U.S.G.S. 7.5' Quadrangles



Plate 1