

# Development of a Wind Project in the State of California

Prepared by

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# **Background: Statement of Facts**

Chrysanthemum Wind Company ("C-Wind") is developing a 200 MW wind project in Desert County in southern California. The project is part of a multi-phase development that C-Wind eventually plans to build out to 600 MW in several projects of 100 MW to 200 MW each. Site acquisition began in Year 1, with the first 200 MW project slated for a commercial operation date ("COD") by the end of Year 3. The end of Year 3 is also the sunset date for the currently available federal tax subsidies, and Congress is doing its usual dithering with no assurance that the subsidies will be extended before the sunset date.

The portion of the site for the first phase project consists of 50,000 acres owned by 15 different landowners. C-Wind acquired the leases in its own name but has formed a project limited liability company ("LLC"), Chrysanthemum Desert Wind Farm, LLC, to serve as the special purpose vehicle for the project.

The Site is bisected by a river bed that is dry most of the year, but spring rains regularly produce a flowing stream for several months and wet marsh lands while the water lasts. The marshlands encourage certain scrub plants to grow, and migrating birds regularly nest in these shrubs during the spring migration from Central America to Canada.

Most of the land is currently zoned as open space or agricultural use, but a residential subdivision abuts the project boundary to the west. The project boundary primarily covers private land, although one of the feeder lines in the southwestern corner crosses Bureau of Land Management ("BLM") land.

There is an existing substation located five miles from the border of the project site that will serve as the interconnection point. The interconnection will be with CAISO. Because the feeder line to the substation will transverse the sites for the second and/or third phases of the development (depending on the size of subsequent phases, these additional phases could be one or two discrete projects), the feeder line will be constructed to handle 400 MW of output to the substation, with each of the phased projects having rights to use the feeder line to get to the substation.

Of course, each phase of the total development will eventually be owned by separate special purpose LLCs, and, because of the timing for each project, it is expected that each project will ultimately be owned by LLCs that are not related to one another as affiliates or subsidiaries due to having different tax equity investors.

# **Section 1:** Securing the Land Rights.

#### INITIAL SITE CONTROL/OPTIONS FOR LEASE

Based on available wind data charts and general information about the area available to C-Wind, C-Wind identified certain lands in Desert County, California as possible project lands. C-Wind's project team reviewed current ownership information from the Desert County tax and deed records. Based on that information, we sent C-Wind's local property team out to sign up options to acquire wind leases and related easements with landowners of the parcels that C-Wind had preliminarily identified as possible project lands and related transmission, collection, and access corridors. According to the information obtained by C-Wind, 10 of the 15 parcels are owned by individuals, and the remaining five parcels are owned by an assortment of trusts, partnerships, and other entities.

C-Wind initially used options to lease rather than entering directly into the project leases for several reasons:

- (a) to allow C-Wind a due diligence period to obtain project permits; install anemometers and conduct wind and soil studies; investigate wetlands and endangered or threatened species; look for existing dumpsites or contamination; determine to its satisfaction that the property is suitable for the first phase; and negotiate acceptable power purchase agreements ("**PPA**") or other off-take agreements for the power to be generated from the project before entering into the actual lease; and
- (b) to avoid reassessment of the Site that might be triggered if the lease term went to 35 years or more due to the inclusion of the due diligence period in the lease.

With respect to (b) above, under California law, the lease term for the Site (including all extension options) must be less than 35 years in order to avoid reassessment of the underlying lands that can occur. Such reassessment usually results in a significant increase in the applicable property taxes, which under typical wind project leases would be required to be paid by C-Wind. By using an option (which is not considered part of the lease term under applicable California law), C-Wind has the time needed to investigate the physical and legal ability of the parcels to be used for the first hase without causing the Site to be subject to reassessment.

As compared to a lease, options are more at risk of being terminated in a landowner bankruptcy and also present a risk that other intervening rights granted by the landowners will take priority over the option (which risks would be reduced or eliminated by using a lease from the very first rather than an option). There is also the risk that if the option does not include the full terms of the lease, it may be more difficult to negotiate acceptable lease terms when the time comes to exercise the option, since at that point the landowners will know that the C-Wind investigation of the Site during the option period has shown the Site to be a desirable location for a wind project. As a result of these considerations, in some states, developers prefer to use a lease from the very first rather than starting with an option. However, for the reasons noted above, in California the

use of an option enables the project to avoid the risk of property tax reassessment and the resulting significantly higher property taxes that will burden the project. C-Wind has also eliminated the risk of difficulty in coming to acceptable lease terms with the property owners when the time comes to exercise the option by including as an exhibit to the option the complete form of lease that sets forth all the terms. Thus, there will be no need to negotiate the lease terms once the Site has been evaluated. Rather, C-Wind will simply exercise the option on the basis of the lease form included as an exhibit to the option.

# LAND TITLE AND USE ISSUES

Of the 10 optioned parcels owned by individuals, seven are owned by various married couples ("**H&W**"), one parcel is owned by an 80-year-old widower who holds a "life estate with remainder to his children" (he currently has two sons who are both more than 60 years old), one parcel is being purchased on contract from the parcel buyer's mother (who had reserved certain "reserved wind rights" in the contract of sale), and the last parcel is owned by two brothers as tenants in common (with one brother signing the option for himself and as attorney-in-fact for his brother).

C-Wind's team obtained signed options and recordable short forms of each. C-Wind recorded the short forms in the project County records to provide record notice to third parties of C-Wind's option and priority right to lease the parcels. The recorded short form is a public record that anyone can inspect and get a copy of simply by requesting it at the County Recorder's office and paying the copying fee if a copy is desired. Because it is a public record, in order to protect the confidentiality of the option and lease terms, the recorded short form of the option includes only limited information about the landowner and the lessee, the term of the option and lease, and the real property covered by the lease and option. In each case C-Wind confirmed with the individual landowner parties whether they were married or had registered as domestic partners and, for individual owners whose spouse/registered domestic partner was not also a record owner, had the non-record owner spouse/registered domestic partner sign the lease along with the record owner to bind the spouse's/registered domestic partner's community property interest, if any. The lease with the 80-year-old life tenant was signed by the life tenant and his two adult, living sons. C-Wind is considering whether to pay the additional expense of having a guardian ad litem appointed to represent the interests of any potential future children of the life tenant who might be born or adopted (or come to light), a circumstance that could jeopardize the validity of the signed option and, on exercise, the lease. The life tenant assures C-Wind that he has no other children and does not expect to have any others.

The remaining five parcels are owned by, respectively, a revocable trust of a married couple, with the married couple as trustees; the estate of a recently deceased widow; a California corporation wholly owned by a European conglomerate; a family limited partnership; and a California LLC.

To confirm the necessary signatories for grants of rights in the property, C-Wind's team obtained copies of the current and relevant trust agreements, operating agreements, letters testamentary, and court order appointing the executor of the estate, and minutes and other evidence of existence

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and authority from the respective non-individual landowners signing the options. They then double-checked the corporate, partnership, and LLC 'registration status and registered names with the California Secretary of State's office. C-Wind also obtained and got title company approval of the power of attorney that one brother proposed to use to sign for the other co-tenant brother (and related certificate of attorney-in-fact), and had the mother (contract vendor and wind rights reservation holder) execute a subordination and consent agreement, agreeing to be bound by the option and, if exercised, the wind lease, if she or her successors ever re-acquired the property under the contract and subordinating and binding her reserved wind rights to C-Wind's option and lease rights.

In addition to the options for wind project leases, C-Wind's team negotiated transmission, access, and collection easements with neighbors to the project who are not leasing land for the project to C-Wind. C-Wind entered into agreements with the project County to run some of the first-phase project collector lines down the county road right-of-way to the substation site. In addition, one large collector line crosses federal BLM lands to get to the substation site, which required obtaining an entry permit after application and environment review under federal law. These easements allow the project to connect to the transmission site and to cross areas not included in the project leases over which access to transmission or collection lines must run.

# TITLE REPORTS

During the option period, before electing whether or not to enter into the leases, C-Wind ordered detailed title reports from the title company expected to issue leasehold and easement title insurance coverage on the parcels covered by the options and for the related easements. The title reports showed title to the project parcels vested in the respective landowners who had signed the options, with the exception of the parcel being purchased on contract, which showed the mother/contract vendor in title with the daughter/purchaser as contract purchaser. The title company listed all existing, recorded interests in the parcels, including reserved mineral rights, various oil and gas ("O&G") leases, mortgages, and easements, on the various parcels that were in place before the wind options and notice of the leases and project easement rights were created and recorded. The report also showed nine of the parcels subject to Williamson Act contracts for Agricultural Reserve tax abatement treatment (this enables the landowners to be subject to lower property taxes by agreeing to maintain the property for agricultural uses).

C-Wind used the title reports to confirm record ownership of the various parcels and easements, mortgages, and other matters of record affecting each parcel to ensure that the correct parties had signed the documents, and to begin evaluating what title issues C-Wind may have to deal with in developing the project. C-Wind provided its surveyor and legal counsel with copies of the title report and recorded instruments, and provided the surveyor a preliminary Site plan of the proposed project layout. The surveyor used the title reports and C-Wind's preliminary Site plan to prepare an American Land Title Association/American Congress on Surveys and Mapping ("ALTA/ACSM") survey of the project lands, including leased and easement lands and areas affected by any setback relating to the project.

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C-Wind applied to the County and the County determined that development of the proposed wind project on the parcels subject to the Williamson Act contracts was compatible with agricultural use of those parcels so the project would not violate those contracts. Because C-Wind had not yet determined exactly which areas are to be allocated to which project phase, the surveyor was told to include all areas of the larger project lands to be divided later once the final boundaries for each phase area determined.

C-Wind's counsel reviewed the title report and exceptions and preliminary Site plan, and, once available, the ALTA survey and Site plan overlay to determine the potential impacts on the project of existing third-party rights to and in the parcels. As the Site plan changed, C-Wind had the surveyor update the survey to show the current plan.

C-Wind's practice is to seek appropriate non-disturbance or subordination agreements from holders of prior interests, such as mortgages, deeds of trust, farm leases, blanket easement holders, mineral rights (which typically have surface use rights unless restricted), and the like, wherein the interest holder agrees to subordinate its prior interest(s) to the terms of the options and, once exercised, the project leases. C-Wind attempted to obtain these key agreements with others before it exercised the options and continued to seek and obtain similar curatives from prior interest holders during the initial portion of the lease terms, before construction commenced. When C-Wind had its Site plan; turbine and other facility locations and access roads; and collector and transmission line routes finalized, C-Wind approached the holders of prior easement or use rights for crossing agreements or joint use agreements that helped set the parameters and sometimes the specific locations, specifications, and plans for the respective crossing of project facilities and the uses by prior interest holder(s).

# **EXERCISE OF OPTION**

C-Wind obtained its project permits for the Phase I Site and gathered sufficient due diligence analyses and micro-siting data to make its near-final determination of the on-the-ground locations of the proposed project facilities; had appropriate PPA, interconnection, transmission, and other necessary arrangements in place; and was satisfied that the property could support the desired project. C-Wind then exercised all of the options, making effective the long-term leases for each Site as contemplated in the options to lease, and at that point the lease terms began. C-Wind continued with its efforts to cure title problems and executed various amendments to the existing leases adjusting certain aspects of the original lease form to better match the project as it evolved.

C-Wind determined that four of the original leases each covered areas that needed to be split between two or more of the project phases. The lease form allowed C-Wind to split the lease into multiple, stand-alone leases that are not cross-defaulted and have the same priority as the original lease to the respective areas allocated to the split leases. The lease form also allowed C-Wind to grant subleases, licenses, subeasements, or other rights of use under the main lease. It also provided typical protections for the holders of subeasesments or subleases, and provided that such subinterests will survive and be honored by the landowner even if the main lease is in default or terminates, so long as the subinterest holder is not in default of its sublease or applicable

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subinterest. The form of lease also allowed flexibility in the application of lease terms that are triggered by the COD of the applicable phase in case of any split to follow the phase of the larger project to which such interest is allocated in any split, so that the Phase I leases and subinterests would not be affected by the COD dates on the Phase II or III developments or vice versa. C-Wind decided to formally split the affected leases to make the demarcation and independence between the different project phases more clear to future investors and lenders in the respective phases.

The stand-alone split leases each reserved cross-easements for any existing or planned access or egress to transmission or distribution lines for electrical power, communications, drainage, sewer, water, or other utility services or facilities serving one split area over the other(s), and provided for the non-exclusive right to use such areas for uses that are consistent with and that do not materially interfere with the other party(ies)'s easement rights. Also, the splits provided that the various phase C-Wind entities were to cooperate and coordinate in a commercially reasonable manner respecting the use and operation of any common access ways and of their respective use of any easements on the premises leased the other(s).

C-Wind planned for the overall larger project (all three phases) to use a single O&M building, on an area on the Phase I premises close to the junction of all three phases with access off the abutting state highway for routine maintenance, control, and operations. The respective project entities entered into a common-use agreement for the O&M site, with the right to opt out if a particular phase wished to have separate O&M facilities.

# TITLE INSURANCE/COMPLETION OF PROJECT

Once C-Wind completed the needed lease splits and obtained such stand-alone transmission rights, C-Wind purchased its leasehold title policy insuring its leasehold and easement estates for the full, expected built-out value of the Phase I improvements (including the Phase I share of common facilities). The prior encumbrances that had been subordinated to the project agreements were deleted from the title policy coverage exceptions, or specifically endorsed and insured as subordinate to the project interest, as were other matters that the title company agreed to insure over. The title policy included an endorsement that specifically provided coverage for project facilities that might otherwise be considered personal property under state law (and thus otherwise excluded from coverage under the policy) because they could and would be removed from the premises by C-Wind during or at the end of the lease term. The title policy also included various other endorsements contemplating continued coverage under the title policy and possible future investment in the phase LLC, contiguity of the phase and related larger project parcels, and easements and other matters.

C-Wind then completed work on the Phase I facilities and related common facilities required to support Phase I in conjunction with the development of the other two phases, which shared contractors and facilities for economies of scale and allocated costs based on relative use.

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# **Section 2: Permitting.**

C-Wind approached project permitting in a step-by-step manner, beginning even before final Site selection, with a fatal flaw assessment of potential permitting issues that could interfere with project development. Based on this early assessment, which was conducted in coordination with the team responsible for securing land rights and with input from C-Wind's environmental consulting team, C-Wind was able to rule out sites that presented significant obstacles because of the presence of endangered avian species. Once C-Wind selected its final Site, the next step was to identify the permits that would be required for the project.

# **REQUIRED PERMITS**

Wind projects in California generally require siting approval from the local jurisdiction where the project is located, which in this case is the County. The siting approval that is required depends on the General Plan land use designation and zoning district applicable to the site and the zoning code requirements for siting a wind facility within the applicable district. In California, every County is required to adopt a General Plan, which is the constitution for development in the County. The General Plan sets forth all the goals and policies with respect to development in the County, and includes a land use element that specifies the land use designations the County imposes on all property within the County. C-Wind's project Site is within the County's open space land use designation. Based on the General Plan land use designations, the County is then required by law to adopt a zoning code and identify applicable zoning districts on all property within the County. The zoning code must be consistent with the General Plan, but there may be multiple zoning districts that are consistent with each General Plan land use designation. In this case, the zoning districts that are allowed in the open space land use designation include open space, agricultural, and park uses. The zoning district on C-Wind's Site is agricultural use. Pursuant to the County zoning code, a wind energy generating facility can be located in the agricultural zone upon issuance of a conditional use permit ("CUP") from the County.

The project also includes construction and operation of a mechanics shop for maintenance and operation of the wind facility. The County zoning code considers this type of use an industrial or commercial use and does not permit this type of use in the agricultural zone, even though it is appurtenant to the wind facility. As a result, C-Wind determined that it would need to subdivide the project Site so that the mechanics shop would be located on a separate parcel, then rezone that separate parcel to the industrial zone district and obtain a CUP for the mechanics shop on that separate parcel. However, because the industrial zone is not consistent with the open space General Plan land use designation, rezoning this separate parcel to industrial also requires an amendment to the General Plan to change the land use designation on the parcel to industrial.

C-Wind also determined that the project requires construction of transmission facilities across federal land in the jurisdiction of the BLM. The BLM must issue a right-of-way grant to C-Wind to allow transmission lines across BLM land.

C-Wind also determined, based on initial avian studies, that it may need to obtain permits pursuant to the state and federal Endangered Species Act ("ESA"). State ESA permits are issued by the Department of Fish and Game, while federal ESA permits are issued by the U.S. Fish and Wildlife Service. In both cases, if necessary, permits would be sought to allow incidental take of endangered species that may be harmed by project construction or operation. Further environmental review would determine whether incidental take permits would be required or whether other measures could be incorporated into the project to avoid harm to any endangered species.

The project site includes a river and marsh areas, and early in the project development process, C-Wind determined that it may need to construct access roads across or through the river and marsh areas. Thus, C-Wind determined that it may also need to obtain a Streambed Alteration Agreement from the Department of Fish and Game to cross the river, and a Section 404 permit from the U.S. Army Corps of Engineers for dredging and/or filling in the marsh areas, if environmental assessments identify those marsh areas as wetlands subject to the Corps' jurisdiction.

Finally, the project would require stormwater discharge permits to regulate discharge of stormwater during both construction and operation of the project. These permits are issued by the Regional Water Quality Control Board, which is a division of the State Water Resources Control Board.

# PERMIT APPLICATIONS

With the list of required permits complete, C-Wind was ready to initiate the permitting process. The first step was to submit an application for a wind CUP and mechanics shop General Plan Amendment, rezone, and CUP to the County, as well as an application for a right-of-way grant to the BLM. The application included a detailed project description as well as information regarding the character of the project Site and surrounding environment. Included with the applications were a description of the turbine type, including height, blade length, performance, noise, and power rating; data regarding the wind characteristics; geotechnical analysis of local soils; slope and stability analysis; preliminary Site layout map, showing proximity of turbines and other project facilities to property lines and structures on nearby properties; a description of construction procedures, including the anticipated construction schedule, types and number of construction vehicles and equipment that would be used, number of construction employees, and construction dust suppression measures that would be implemented; information regarding interconnection and transmission; and a description of decommissioning activities. With respect to the character of the Site, the application included detailed biological surveys, including one year's worth of avian studies and surveys of terrestrial and plant species on-site; the results of a literature survey to determine whether there would be any historic or cultural resources on-site; a description of the vegetation and soils on-site; and a description of neighboring and nearby structures and uses that could be impacted by a new wind development.

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# **CEQA AND NEPA**

In California, all projects that require a state or local agency to issue a discretionary permit, such as a CUP, require compliance with the environmental review procedures in the California Environmental Quality Act ("CEQA"). Under CEQA, the agency with the primary permitting authority has responsibility for complying with CEQA. Here, as the agency with siting jurisdiction, the County is the primary permitting agency and would be the lead agency under CEQA. All other state and local agencies with permitting authority over the project would be responsible agencies under CEQA.

CEQA requires the County to prepare an environmental analysis that identifies all potentially significant impacts that may result from the project, and proposes feasible mitigation measures or alternatives to lessen or avoid those significant impacts. As lead agency, the County is required to consult with the other permitting agencies during preparation of the CEQA review to ensure that impacts to resources within the jurisdiction of the responsible agencies are fully assessed and mitigated to the extent feasible.

With respect to the federal right-of-way approval, federal law requires the BLM to conduct a similar environmental review prior to approval, pursuant to the National Environmental Policy Act ("NEPA"). NEPA and CEQA have parallel and somewhat overlapping environmental review requirements, but each statute has its own set of specific requirements that must be independently met. Nonetheless, both CEQA and NEPA encourage coordination and preparation of a single environmental document to satisfy both laws. In this instance, therefore, a joint CEQA/NEPA document would be prepared allowing the County and other state agencies to rely on the CEQA document for their approvals, and the BLM to rely on the NEPA document for its approval.

Both CEQA and NEPA provide for various levels of environmental review, depending on the potential for the project to cause significant impacts to the environment. If there is a potential for the project to cause significant impacts that cannot be mitigated to less than significant levels, the highest, most comprehensive level of environmental review must be conducted. If there is not likely to be significant impact, or all such impacts can be mitigated, a lesser, more streamlined review can be completed.

The required level of review is determined based on an Initial Study under CEQA and an Environmental Assessment under NEPA. The Initial Study and Environmental Assessment allow the lead agency (the County and BLM) to conduct a preliminary consideration of the potential impacts of the project. Based on the application's description of the Site characteristics and project components, the County and BLM reviewed a series of questions regarding impacts to all natural resource areas, to assess preliminarily whether there is any potential for significant impacts to the environment. In this case, based on the Initial Study and Environmental Assessment, the County and BLM identified potentially significant impacts that could result to avian species as well as water quality because of the river and marshes and visual resources. Thus, the County and BLM determined it was necessary to conduct the most comprehensive level

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of environmental review and prepare an Environmental Impact Report/Environmental Impact Statement ("**EIR/EIS**") under CEQA and NEPA, respectively.

It is worth noting that the project description prepared by C-Wind for its application and reviewed by the County and BLM to make their initial determination about the scope of environmental review is a critical piece of the permitting process. Under both CEQA and NEPA, the project description need not describe every detail of the project, but it must be detailed enough to allow the public and decision-makers to fully assess the potential impacts of the project. More importantly, the project that is ultimately approved and constructed must fit within the envelope of the project that was evaluated in the EIR/EIS. Thus, in preparing its proposed project description, C-Wind developed a proposed project that identified the "worst case" scenario – a project description that defined the maximum potential for development - allowing C-Wind flexibility to ultimately build a project within those described parameters. Thus, for example, at the initial application stage, C-Wind had not finally settled on a type and size of turbine, nor the final number of turbines it would install. The project description, therefore, described the maximum number of turbines that might be installed, as well as the maximum height and blade length that might be installed. While C-Wind recognized that it would not likely build a project with the maximum number of turbines, maximum height, and maximum blade length (indeed, if larger turbines were installed, it was likely that fewer turbines would be required, and vice versa), describing the project in this manner would allow C-Wind to install any combination of turbines within the maximum defined envelope.

# THE ENVIRONMENTAL REVIEW AND PERMITTING PROCESS

As lead agency under CEQA and NEPA, the County and BLM are responsible for preparing the EIR/EIS. However, as is typical in California, the County and BLM contracted with an environmental consultant to conduct the CEQA/NEPA review and prepare the EIR/EIS. The County and BLM consulted with C-Wind in the selection of the environmental consulting firm, and the three parties mutually agreed to select a consulting firm that had previously prepared numerous EIRs for wind projects, including three projects within the County. Also, as is standard in California, C-Wind entered into a reimbursement and indemnification agreement with the County and BLM requiring C-Wind to pay all costs associated with environmental review and permitting of the project, including consultant costs and agency staff costs, and providing that C-Wind would pay to defend the permitting decisions if anyone ultimately filed a lawsuit to challenge the County and BLM's permitting actions.

The environmental consultant prepared a Notice of Preparation of EIR/EIS, describing the project and disclosing that an EIR/EIS was being prepared, which was circulated for public review for 30 days. During that 30-day period, the consultant held a scoping meeting to take public comments on the appropriate scope of the environmental review. The consultant then prepared an administrative draft EIR/EIS, and provided it to the County and C-Wind for review. This document included a full description of the project and the existing environment, described the potential environmental impacts that could be caused by the project, identified mitigation measures to lessen or avoid those impacts, identified alternatives that could meet the project

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objectives but avoid or lessen project impacts, and identified cumulative impacts that could result from the project's impacts when combined with other projects in the area.

Particular issues that were focused on in the EIR/EIS are as follows:

Biological and Avian Impacts. The biological and avian studies identified the river and marsh areas on the project Site, and identified that the threatened desert tortoise and the endangered southwestern willow flycatcher, both listed under the federal ESA, had historical ranges that include the project vicinity. The U.S. Fish and Wildlife Service designated critical habitat for the flycatcher in 2005, but the affected counties were to the south of the project. Still, Fish and Wildlife required at least a full year of biological surveys to assess whether the flycatcher would be impacted by the project (as noted, C-Wind anticipated this and prepared those surveys prior to submitting its applications to the County and BLM). The project site is also within the Northwest Flyway for migratory birds, triggering the requirement to assess impacts to species protected by the Migratory Bird Treaty Act ("MBTA").

Simultaneous with preparation of the EIR/EIS, C-Wind was consulting with Fish and Wildlife regarding compliance with the ESA and MBTA. C-Wind planned to include sufficient proactive measures in the project itself to demonstrate that the project would result in no net loss to the protected species or their habitats, thereby avoiding significant additional mitigation and avoidance measures that might be imposed by Fish and Wildlife. As part of this approach, C-Wind hired a local ornithologist to help construct a turbine array design that minimized the risk of blade strike during bird migration, but maximized energy generation. C-Wind selected a turbine layout design such that the number of turbines would be reduced, reducing potential avian impacts and also sited the turbines to avoid areas that were more likely to result in bird strikes. C-Wind obtained and provided a comprehensive avian study that identified bird shelters and known nesting or resting areas. C-Wind also presented project construction schedules to avoid heavy activity during the spring breeding season for relevant species.

Based on C-Wind's studies and information, the environmental consultant determined that potential impacts to biological species would be less than significant with the implementation of the measures C-Wind described. However, Fish and Wildlife has authority to issue permits under the ESA, so it was also necessary to get their concurrence with this conclusion.

In order to comply with the ESA, C-Wind submitted a biological assessment to Fish and Wildlife, describing the project, the biological environment, and the measures C-Wind would take to avoid impacts to the species. Fish and Wildlife reviewed the assessment and issued a no-jeopardy determination, eliminating the need for C-Wind to obtain incidental take permits. The operational changes C-Wind had identified were incorporated into the EIR/EIS as mitigation measures that C-Wind would be required to implement once the project was approved.

<u>Water Quality and Related Impacts.</u> As noted, there was some question as to whether a Section 404 Clean Water Act dredge and fill permit would be required from the U.S. Army Corps of Engineers. The early design documents included a turbine access road crossing a small

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marshland next to the ephemeral stream (the Wind River), running through the project site. Project engineers, however, found an alternative access point that avoided the marsh area.

Access roads would ultimately cross the Wind River, however, which would require the California Department of Fish and Game to approve a streambed alteration agreement for any activity within the bed and bank of the river. The environmental consultant and C-Wind conferred with Fish and Game to obtain input on mitigation measures that would be necessary to address any potential impacts to the river and its habitat. Those measures were then incorporated into the EIR/EIS and would ultimately become conditions of the streambed alteration agreement issued by Fish and Game.

As noted, the project would also require permits governing discharge of stormwater during construction and operation of the project. In both cases, California has adopted general permits governing these activities and applicants are required to submit a Notice of Intent to be covered by the General Permits. The General Permits include management practices and conditions to reduce or eliminate the potential for stormwater runoff to surface waters. The EIR/EIS identified that the project would implement the measures required by the General Permits for construction and operation stormwater control.

Historic and Cultural Resources. As part of the NEPA process, the BLM was required to comply with the National Historic Preservation Act ("NHPA"). C-Wind provided the BLM and the environmental consultant with the results of its search of the National Register of Historic Places, which concluded that there were no resources on-site that are listed on the National Register. Pursuant to the NHPA, on the BLM's behalf, the environmental consultant coordinated with the California Office of Historic Preservation and with interested Native American Tribes, and solicited comments regarding potential cultural impacts. A single Tribe requested a meeting with the BLM to discuss the project and, upon receiving additional information about the project location, determined that it would not impact any Tribal cultural resources. The EIR/EIS, therefore, concluded that there was no potential for significant impacts to historic or cultural resources. As is customary, however, the EIR/EIS included mitigation measures requiring that an archaeologist remain on-site during construction and, if any historic or cultural artifacts were discovered, construction would cease until the appropriate federal, state, or Tribal entity was contacted to determine how to treat the discovered resource.

Air Quality Impacts. The EIR/EIS determined that the project would not result in any air quality impacts during operations, but that there would be potential for air emissions of particulate matter from dust during construction (including the on-site cement plant that would be needed in connection with the pouring of the pads to serve as the base for the wind turbine towers), as well as emissions from construction vehicles. The EIR/EIS, therefore, incorporated dust suppression measures and measures to address vehicle emissions, such as limiting idling time and utilizing mufflers, to reduce the significance of impacts on air quality to the extent feasible. Despite these measures, however, the EIR/EIS concluded that, because the County is in a non-attainment area for certain air pollutants associated with vehicle emissions, the short term construction air quality impacts would remain significant and unavoidable.

Other Impacts. As part of its application, C-Wind submitted a detailed analysis of the turbine noise and a demonstration that the project would meet the County's noise ordinance, which requires that the project not cause noise levels to exceed 55 dB at the nearest sensitive receptor, occupied houses on the adjacent property. The EIR/EIS, therefore, did not include any mitigation measures for noise impacts. The EIR/EIS also included an expert analysis of the project's potential impacts on adjoining wind farms, such as possible wake effect interference with existing turbines and the impacts on the use of roads, transmission, and other infrastructure. The EIR/EIS also evaluated potential visual impacts by identifying roads, highways, and hiking trails that could provide a view of the project. C-Wind proposed to apply a non-reflective turbine paint coating to reduce potential visual impacts, such as glare, but there was no question that the project would change the visual character of the area and would be visible from nearby residences. Thus, the EIR/EIS concluded that visual impacts would be significant and unavoidable.

The County, the BLM, and C-Wind completed their review of the administrative draft EIR/EIS and provided comments to the environmental consultant to ensure that all issues were clearly identified and explained in a manner that could be understood by a lay-person. The environmental consultant then revised the EIR/EIS and prepared a Draft EIR/EIS for public review. Pursuant to CEQA and NEPA, the Draft EIR/EIS was circulated for a 45-day public review and comment period. Comments were submitted by Fish and Wildlife, Fish and Game, the Regional Water Quality Control Board, two environmental groups, and several local residents.

At the close of the comment period, the consultant prepared written responses to all comments that were received. The Draft EIR/EIS, the comments, and the written responses were compiled to comprise the Final EIR/EIS. The Final EIR/EIS was then circulated to the public and commenting agencies along with notice that the County and the BLM would be holding public hearings to approve the Final EIR/EIS and approve the permits for the project.

Following that public review and notice, the County Planning Commission held a public hearing to consider approval of the Final EIR/EIS and the project. The Planning Commission has authority to issue the CUPs for the wind facility and the mechanics shop, as well as the subdivision to accommodate the rezone, but the elected County Board of Supervisors must approve the General Plan Amendment and rezone for the mechanics shop. At the hearing, the Planning Commission allowed short statements to be made by C-Wind and all attendees who wanted to comment on the project. The Planning Commission, after considering the Final EIR/EIS, all submitted evidence, and all comments, approved the Final EIR/EIS along with findings that the benefits of the project outweighed the short-term significant construction air quality impacts and the significant visual impacts. The Planning Commission then approved the CUP for the wind facility, and approved the subdivision and CUP for the mechanics shop, conditioned on the Board of Supervisors approving the General Plan Amendment and rezone. Three local residents filed a joint appeal of the Planning Commission's decision to the Board of Supervisors. The County then provided public notice of the Board of Supervisors hearing to consider the General Plan Amendment and rezone, as well as the appeal. At the Board of

Supervisors hearing, the same members of the public submitted comments and, after an exhaustive review of the project impacts and mitigation measures, the Board of Supervisors approved the General Plan Amendment and rezone and confirmed approval of the findings adopted by the Planning Commission.

The next step in the approval process was for the BLM to take action. The BLM also held a public hearing to take comments on the proposed right-of-way grant and associated environmental review. At the conclusion of that hearing, the BLM approved the Final EIR/EIS and issued a Record of Decision granting the right-of-way appeal.

Neither the County nor the BLM approvals were challenged in court. Although several local residents remained dissatisfied with the project, they did not have the financial resources to file a legal action. The state agencies and environmental groups that had commented on the EIR/EIS were sufficiently satisfied that impacts had been mitigated to the extent feasible.

Once the County and the BLM had acted, the other agencies with permitting authority could rely on the Final EIR/EIS to issue their permits. As noted, Fish and Wildlife had issued a no-jeopardy determination, so no further action was required by them, and no Section 404 permit was required from the Army Corps of Engineers because the marsh area had been avoided through project design. Fish and Game issued the Streambed Alteration Agreement, incorporating the conditions and mitigation measures that had been identified during the environmental review process. Finally, C-Wind filed its Notices of Intent to be covered under the General Permits for construction and operation stormwater discharges, and the Regional Water Quality Control Board confirmed coverage under those permits.

C-Wind then had all the discretionary permits it needed to proceed with the project, with no legal action pending. Thus, C-Wind proceeded to apply for and obtain building permits from the County and upon issuance of the building permits, C-Wind began construction.

# **Section 3:** The Interconnection Process.

C-Wind submitted a 400 MW interconnection request to the CAISO during one of the two application windows that are open each year. The C-Wind project was required to post an Interconnection Study Deposit in the amount of \$250,000, which deposit is used to cover the costs of the C-Wind interconnection studies. The study deposit becomes less and less refundable over time, finally becoming non-refundable not long after the Phase I study discussed below. C-Wind's leasehold interest in 50,000 acres of private land is sufficient to show the required Site Exclusivity, thus relieving C-Wind of having to post an additional \$250,000 to the CAISO.

Upon submitting the application and study deposit, C-Wind was assigned a Queue Cluster that would aggregate and study geographically and electrically related interconnection customers together throughout the study process. C-Wind was required to identify a proposed COD, which cannot exceed seven years from the date of the interconnection request unless CAISO grants its consent. Consequently, C-Wind may be required to place its full 400 MW in commercial operation within seven years or risk breaching its interconnection agreement.

The CAISO will perform a Phase I interconnection study that evaluates the impacts of all interconnection requests received during the two application windows that year. The Phase I study will identify the Network Upgrades (i.e., those upgrades built at and beyond the point of interconnection) for which C-Wind is either fully or partly financially responsible. In addition, the Phase I study will identify C-Wind's maximum cost responsibility for Network Upgrades. C-Wind will be required to post financial security for a percentage of the estimated cost of the Network Upgrades, although the financial security that is required may be reduced to the extent C-Wind modifies its interconnection request to alter the upgrades needed to provide interconnection service. However, if C-Wind modifies its interconnection in such a way that materially affects the costs or timing of later-queued customers, C-Wind risks being withdrawn from the interconnection queue and having to start anew.

The Phase II interconnection study refined the cost estimates for interconnecting C-Wind's generating facility. Prior to the start of construction, C-Wind was obligated to post financial security equal to 100% of the total cost responsibility assigned to it. If C-Wind withdraws from the interconnection queue or terminates its interconnection agreement, then much of its posted financial security may be liquidated with the exception of partial liquidation in a few limited circumstances. If, on the other hand, C-Wind proceeds to commercial operation, then it is entitled to repayment for the cost of Network Upgrades over a five-year period from the commercial operation date or an alternative agreed-upon schedule.

<u>C-Wind May Lose Its Rights to the 200 MW of Unused Network Capacity</u>. C-Wind's initial build-out of 200 MW will use only 50% of the interconnection capacity created for, or allocated to, C-Wind's interconnection request, but C-Wind desires to retain the right to build out the additional 200 MW of generating capacity and utilize the remaining network capacity. The general understanding among transmission providers is that a failure to build out the full requested generating capacity within three years of the identified commercial operation date

constitutes, at a minimum, a waiver of an interconnection customer's rights to any network capacity that remains unused after three years. That general understanding is widespread and incorrect. Federal agency rulings provide that an interconnection customer may extend its commercial operation date almost indefinitely, provided that any such extension does not adversely affect the timing or costs of later-queued interconnection customers. The difficulty is that many transmission providers are unaware of, and will argue against, this interconnection customer right. Consequently, to the extent C-Wind fails to build out its fully generating capacity within three years of the requested commercial operation date, CAISO may attempt to terminate C-Wind's rights to utilize the remaining network capacity with subsequent phases. C-Wind must be ready to respond to CAISO's threatened termination, by engaging in negotiations with CAISO, turning to dispute resolution procedures, or resorting to filing a complaint with the Federal Energy Regulatory Commission ("FERC").

A Failure to Build Out the Full 400 MW May Cause the Interconnection Agreement to Terminate. If C-Wind fails to build out any generating capacity, then CAISO may go further than claiming C-Wind has merely waived its rights to the remaining unused network capacity and instead take actions to terminate the entire interconnection agreement. If CAISO is successful in those efforts, C-Wind's operational 200 MW, as well as any subsequent build out, will be without any interconnection rights and will be forced to reenter the interconnection queue. This result would have disastrous effects on C-Wind's PPA, among other contractual obligations. In support of its position, CAISO may claim that C-Wind's failure to build out any generating capacity (whether it is 200 MW or 5 MW) is a failure by C-Wind to perform a material obligation under the interconnection agreement. After all, the generating facility's COD will be a milestone that C-Wind is bound to meet under the interconnection agreement. This situation should be dealt with in a number of ways.

First, C-Wind will benefit greatly from managing CAISO expectations from the outset. C-Wind should be forthright and transparent in negotiating the milestones to the interconnection agreement, with the intention being to avoid causing CAISO any reason to expect C-Wind to put the entire generating facility in commercial operation on a timeframe that does not align with C-Wind's own development schedule. Second, C-Wind should consider directly addressing these particular circumstances during negotiations, such that both parties are aware of the other's position. C-Wind may not be able to cause CAISO to agree that any failure to build out generating capacity constitutes a breach, but C-Wind may be successful in establishing thresholds and/or safe harbors, limiting the risks to partial termination, or distinguishing excusable failures from those that are not excusable.

<u>C-Wind Must Protect Its Rights to Interconnection Capacity.</u> C-Wind's generation tie line is subject to transmission open access requirements, and consequently third-party generation developers can request use of, and gain priority to, the 200 MW of remaining tie line capacity. If that happens, C-Wind's subsequent phases may not be able to interconnect using the existing generation tie line and will be forced to reenter the interconnection queue in order to gain access to the transmission grid. To avoid losing rights across its own tie line, C-Wind should consider filing a petition for declaratory order at FERC that asks FERC to declare that C-Wind's

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subsequent phases retain priority rights to the existing tie line. To prevail on the petition, C-Wind will be required to show FERC that C-Wind has established a specific expansion plan for all phases of the build out, and that C-Wind had made material progress toward meeting its development schedule. Generally speaking, FERC will then declare that C-Wind has firm priority rights to generation tie line capacity to the extent C-Wind makes the requisite showing.

C-Wind Will Require at Least One Additional Interconnection Request for Its Last 200 MW. C-Wind's long-term development plans envision a total generating capacity of 600 MW. Thus far, C-Wind has applied for 400 MW of interconnection capacity, and any request to add generating capacity to the original 400 MW request will be treated as a new interconnection request. In other words, C-Wind may not add new generating capacity above 400 MW by simply amending its original interconnection request and interconnection agreement. Instead, each incremental request above 400 MW will be treated as a new interconnection request that will be subject to the interconnection procedures discussed above. Consequently, C-Wind should give careful consideration to its incremental development above 400 MW: if C-Wind pursues too much interconnection capacity, it risks losing its priority to that capacity for failing to have firm development plans; if C-Wind pursues too little capacity, it risks having to reenter the interconnection process multiple times, which may slow the pace of developing the final 200 MW.

C-Wind Will Be Required to File a Transmission Service Rate at FERC. C-Wind's 400 MW of interconnection capacity (and eventually 600 MW) will be divided among affiliated and non-affiliated generating facilities, and the agreement(s) that allows these affiliated and non-affiliated companies access to the generation tie line must be filed and accepted by FERC prior to shared use and/or ownership. Under Section 205 of the Federal Power Act, FERC must accept agreements for transmission service no later than 60 days prior to service commencing. This obligation does not vary depending on how access is structured. Even when two companies own undivided interests in the same generation tie line, every power flow will involve the use of capacity owned by both parties, and the two companies will consequently provide each other with transmission service. As a result, dividing rights to generation tie line capacity, whether through ownership or through access rights, constitutes a transmission service that must be granted FERC's prior approval.

C-Wind May Require FERC Section 203 Approval Prior to Dividing Ownership in the Tie Line. Under Section 203 of the Federal Power Act, a public utility must receive FERC's prior approval before disposing of all, or a part of, its jurisdictional facilities. Once C-Wind's interconnection facilities become operational through testing, they are considered jurisdictional, and any transfer (even to an affiliate) may require FERC's prior approval. A failure to obtain that approval puts the transfer itself at risk and opens C-Wind to FERC's broad civil penalty authority. Consequently, to the extent C-Wind desires to transfer ownership of any percentage of the operational generation tie line to affiliated or non-affiliated companies, C-Wind must obtain FERC's approval in order for the transfer to become effective. If, however, C-Wind is able to transfer ownership prior to the tie line becoming commercially operational, then C-Wind may avoid the need to obtain FERC's prior approval.

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# **Section 4:** The PPA and Renewable Energy Credits.

In Year 2, Big Municipal Utility District ("**BMUD**") issued a request for proposals ("**RFP**") to acquire up to 170 MW of wind energy. C-Wind submitted a proposal to BMUD to sell it a 170/200 slice of the output of the first phase of the project. Numerous other wind developers also submitted bids, with the result that a total of 20,000 MW of wind were bid into this 170 MW RFP.

C-Wind was able to submit a low bid price for the sale of the output by working to get an excellent turbine price from the turbine vendors and also by lowering its expected rate of return on the project. C-Wind knew from prior experience that 90% of the decision that BMUD would make as to which bidder to negotiate with would be based on the price bid, with the lowest price from a capable wind developer being the key to winning the RFP. C-Wind accurately judged the need to submit as low a price as possible, as it was short listed in the RFP and invited to negotiate a PPA with BMUD.

BMUD is located in the northern part of the state. BMUD will take delivery at the project buss bar (the interconnection point). To achieve a low bid price, C-Wind needs the economies of scale that come from building a 200 MW project. No other purchaser can be found to take the other 30 MW on a long-term basis, so C-Wind is planning on selling this portion in the CAISO imbalance market, as it calculates that even at low CAISO prices there is economic benefit to the project in simply generating production tax credits ("PTC") (which will be the tax subsidy that will be utilized for this project).

For wind projects that are totally dependent upon so-called "merchant" sales of renewable energy (i.e., sales made into the market rather than pursuant to a long-term PPA), financing can be difficult, if not impossible, to obtain, as financing parties desire the certainty of revenues from a long-term PPA to help ensure that the project will be economically viable over the term of the financing. However, C-Wind's projections (based on the project size, the wind turbines selected, and the independent reports analyzing the wind data for the project site) showed that in most circumstances, the portion of the project output sold to BMUD under the PPA would be sufficient to support the project. Thus, by building the project at a size that was slightly bigger than the installed capacity and output sold to BMUD under the PPA, C-Wind obtained the benefits of the better economies of scale (lower capital costs per MW of installed capacity) that resulted from building a larger project while preserving the opportunity to generate additional revenues from the sale of the uncommitted energy and renewable energy credits ("RECs") into the CAISO market in merchant sales and also receive the additional PTCs associated with such merchant sales of the uncommitted energy.

In issuing the RFP, BMUD provided a form of PPA for bidders to review and submit comments in connection with their RFP bid. C-Wind's initial review of the PPA form indicated a fairly balanced agreement, but one that nonetheless presented some significant issues for C-Wind. Once C-Wind was shortlisted for PPA negotiations, the issues raised were intensely negotiated by C-Wind and BMUD. BMUD short-listed three bidders and conducted simultaneous PPA negotiations with each of the short-listed bidders. As a result, C-Wind needed to proceed

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cautiously in terms of how hard it pressed BMUD for its favored resolution of the issues identified, as it feared – with justification – that if it took too hard a position on the more significant issues, it would lose the PPA to one of the other bidders who was willing to accept BMUD's terms.

Among the key issues that C-Wind and BMUD dealt with during the course of the PPA negotiations were the following:

**PPA Term and Extension Option.** BMUD desired a PPA with a 20-year base term plus a five-year extension at BMUD's option. C-Wind likewise desired a 20-year base term, but was reluctant to agree to the two five-year extension options. This stemmed from the fact that no wind project using modern turbine technology has yet been successfully operated for 20 years. C-Wind was thus concerned that the project might not be able to economically operate beyond 20 years without a significant investment in refurbishing the project equipment. Furthermore, even if the project were capable of operating for more than 20 years without a significant additional investment, C-Wind was concerned that the performance of the turbines would degrade over time, with the result that C-Wind would not be able to meet its output guarantee to BMUD under the PPA, and as a consequence have to pay BMUD significant liquidated damages for failing to meet the output guarantee.

The parties resolved the extension options issue by converting it to a right of first refusal on the following terms: Not later than the beginning of the 19th year of the base PPA term, C-Wind had to notify BMUD as to whether C-Wind would continue operating the project after the 20-year base PPA term ended. This would give C-Wind the opportunity to assess whether continued operation of the project beyond 20 years was technically feasible in light of the state of the equipment at the time and otherwise made economic sense. If C-Wind notified BMUD that it would continue operating beyond the 20-year base term, then BMUD had the right to purchase all resulting energy and RECs at the same price provided for in the PPA for the 20th year (the prices under the PPA started low in the first year and escalated each year of the base 20-year term). Furthermore, there would be no output guarantee with respect to the energy required to be delivered to BMUD during the extension term

If C-Wind notified BMUD that it would not continue operating the project after the base term, then C-Wind was bound by that decision and was prohibited from continuing operations beyond 20 years without first offering to sell the resulting energy and RECs to BMUD. However, an exception to this prohibition was created in the event C-Wind wanted to continue operating the project but could only do so by making significant capital expenditures in excess of \$1 million per turbine. Under this exception, if C-Wind made such capital expenditures, it was then free to sell the project energy and RECs to any purchaser of its choosing, and BMUD had no preferential rights thereto.

<u>Curtailment</u>. BMUD was willing to accept delivery of the energy at the project substation and take responsibility for arranging transmission over the CAISO system from the project substation to BMUD's load. However, BMUD was well aware that the transmission path

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from the project substation to BMUD's load was regularly congested, especially during high-demand times during the hot summer months. As a result, BMUD was not willing to take the risk that deliveries of energy from the project would be curtailed due to periodic congestion on the transmission system. Furthermore, BMUD already had sufficient resources in its portfolio to meet its average demand for the next several years, and was purchasing the wind power because it rightly anticipated that it would eventually be required to do so under the California renewable portfolio standard ("RPS"). It therefore wanted the right to not accept energy from the project any time it determined it had no need for such energy.

C-Wind could not accept unbounded curtailment risk, as it would effectively eliminate the certainty of the revenue stream otherwise provided by the PPA and hence make financing the project difficult or impossible. Instead, it negotiated a splitting of the curtailment risk with BMUD with the following terms:

BMUD agreed to acquire and maintain at all times during the PPA term firm point-to-point transmission from the project substation to the interface between the transmission system and BMUD's distribution system. So long as such firm point-to-point transmission was maintained by BMUD, C-Wind would accept the risk of curtailments resulting from transmission system emergencies (e.g., a tornado that knocks down a transmission line and thus interrupts the transmission path), but not any curtailments resulting from congestion on the transmission system. During any period in which BMUD does not maintain such firm point-to-point transmission and the project is curtailed due to a transmission system emergency when such curtailment would not have occurred if BMUD had firm point-to-point transmission in place, then a "Compensable Curtailment" will occur.

In addition, BMUD and C-Wind determined that curtailments due to congestion on the transmission system were likely to occur approximately 100 hours each year, resulting in a curtailment of deliveries from the project equal to "X" MWh per year. While BMUD could avoid such curtailments by paying the applicable congestion charges, to do so would be very expensive and result in a "delivered cost" for the power that exceeded what BMUD was willing to pay. To share this curtailment risk, BMUD and C-Wind agreed that each year the deliveries of energy from the project could be curtailed due to congestion up to Y2 times "X" MWh per year without the same constituting a Compensable Curtailment, but any congestion curtailments in excess of Y2 times "X" MWh per year would result in a Compensable Curtailment.

BMUD is required to pay C-Wind the "adjusted PPA price" for all Compensable Curtailments plus an amount equal to the REC price and the grossed up (i.e., after-tax) value of the PTCs that would have been generated if such curtailed energy had been generated and sold under the PPA. C-Wind further agreed that during any period of curtailment, it would attempt to sell the curtailed energy into the CAISO market. If C-Wind is successful, then: (a) the "adjusted PPA price" will be an amount per MWh equal to the difference between the PPA price and the CAISO market price received by C-Wind (net of C-Wind's transaction costs); (b) BMUD will not be required to pay the lost PTC value to C-Wind, as the sale of energy into the CAISO market generates PTCs just as sales to BMUD under the PPA would; and (c) BMUD will receive the RECs associated

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with the curtailed energy and pay C-Wind the PPA price for such RECs. If C-Wind was not successful, then (i) the "adjusted PPA price" will be the amount per MWh provided for in the PPA; (ii) BMUD will be required to pay the lost PTC value to C-Wind since PTCs are only generated when renewable energy is sold to an unrelated third party; and (iii) BMUD will receive the RECs associated with the curtailed energy and pay C-Wind the PPA price for such RECs.

Delay Liquidated Damages. BMUD's original PPA form set forth various project construction milestones and provided that if any milestone was not achieved by the date specified in the milestone schedule, then C-Wind would be required to pay BMUD delay liquidated damages equal to a stipulated amount for each day that the milestone was not achieved ("Delay LDs"). While C-Wind was willing to pay Delay LDs if the project did not achieve commercial operation by the date agreed upon by the parties, it argued that so long as the specified target COD was achieved on schedule, BMUD would suffer no damages and hence was not entitled to any Delay LDs. BMUD countered by pointing out that while it was not counting on having energy from the project until the specified target COD, if C-Wind got seriously delayed in achieving the project construction milestones, it was highly likely that commercial operation would be delayed as well, thus causing BMUD to seek other power on an interim basis while waiting for the project to be completed. Seeing that BMUD was not willing to completely forego Delay LDs for the construction milestones prior to commercial operation, C-Wind proposed, and BMUD accepted, the following arrangement: If any interim construction milestone were not met by C-Wind by the date specified in the milestone schedule, then C-Wind would pay Delay LDs to BMUD. However, if C-Wind achieved commercial operation on or before the target COD specified in the milestone schedule, then any Delay LDs previously paid will be refunded in full to C-Wind. Only if commercial operation is not achieved by the target date specified in the milestone schedule would BMUD be entitled to keep the Delay LDs.

# **Renewable Energy Credits**

At the time the PPA was being negotiated and signed by BMUD and C-Wind, BMUD was not subject to the California statutory RPS and thus was willing to allow C-Wind to keep the RECs and sell them for whatever price it can obtain, subject to a claw-back right in the event BMUD becomes subject to the RPS and needs the RECs for its own account. If the claw-back right is exercised, BMUD will pay C-Wind a price per REC equal to the market price for RECs at the time the claw-back right is exercised. Subsequent to the time the PPA was signed but prior to commencement of construction, California revised its statutory RPS requirements by increasing the amount of renewable energy that utilities are required to utilize to 33% (up from 20%) and at the same time subject municipal utilities like BMUD to the statutory RPS requirement. As a result, BMUD exercised its option to take the RECs for its 170/200 share of the project output.

The renewable energy products being sold to BMUD under the PPA consist of two separate commodities: (i) electric energy (and associated capacity) and (ii) the RECs associated with such energy. RECs are given value by state laws that mandate that utilities acquire a certain amount of RECs each year in order to demonstrate compliance with state renewable energy mandates. One

REC is equivalent to one MWh of energy from a qualifying renewable energy facility, such as C-Wind's wind energy facility.

Therefore, under the PPA, BMUD will be buying two separate commodities: (i) the energy produced by C-Wind's energy facility and the related capacity, and (ii) the RECs associated with the energy purchased by BMUD. Under most PPAs, a utility will pay a single price for each MWh of energy and the associated REC.

Under some PPAs, such as BMUD's PPA, the utility and C-Wind agreed upon a separate price for the energy and the RECs due to the fact that at the time the PPA was executed, BMUD was not subject to the RPS requirement and hence wanted to keep the price for energy as low as possible by not paying any amount for the RECs. However, once BMUD became subject to the RPS, it exercised its right to take the RECs associated with the energy purchased under the PPA and pay an additional amount for the RECs based on the market price for RECs at the time this claw-back option was exercised.

BMUD will use the energy produced by C-Wind's energy facility to serve the energy needs of its customers, and it will use the RECs to demonstrate compliance with California's legal requirement that BMUD purchase a certain amount of renewable energy each year.

During the term of the PPA, C-Wind will record, certify, and transfer legal title to its RECs through an accounting system called the Western Renewable Energy Generation Information System ("WREGIS"). WREGIS is sanctioned by the state governments in the western U.S. and is responsible for tracking, monitoring, and accounting for utility compliance with state renewable energy laws.

Since BMUD is acquiring only 170/200 of the RECs generated by the project (i.e., the same proportion of RECs as the proportion of the project output being purchased under the PPA), C-Wind will need to sell the surplus RECs that are not sold to BMUD. Such sales are done, often through brokers, by selling the RECs to private and publicly owned electric utilities seeking to comply with the RPS, utilities purchasing RECs to resell to their utility customers under voluntary "green pricing" programs, corporations that voluntarily purchase RECs in order to demonstrate support for renewable energy, and independent marketers and brokers for RECs.

The price received for the RECs is generally determined by the market, and hence varies from time to time as the demand for RECs varies. Because California recently increased the RPS requirement from 20% to 33% and at the same time subjected municipal utilities (such as BMUD) to the formal requirements of the RPS, the market demand for RECs at the time the project was under construction and headed to commercial operation was quite high, resulting in higher prices for RECs. However, because there is no certainty that such relatively high prices will continue into the future, in the process of financing the project, the projected revenues from the sale of the surplus RECs were heavily discounted by the financing parties. In this way, the financing parties helped assure themselves that the more certain project revenues under the PPA would be sufficient to provide the needed funds to successfully operate the project and repay the financing

parties the amounts invested in the project, without undue reliance on the revenues that might be generated by the sale of the surplus RECs. To the extent the surplus REC sales generate more revenues than the discounted projections used for financing purposes, the amounts invested by the financing parties will be paid earlier and the project will enjoy an additional margin of return.

# **Section 5:** TSA and Construction Contract.

As C-Wind looked to the design and construction of this project, it considered a number of options for structuring the purchase, installation, and operation of the wind turbine equipment and the overall wind farm infrastructure. Many industrial projects of this scope in the United States are built under a single contract for engineering, procurement, and construction ("EPC"). This is the contracting structure of choice for combined-cycle gas-fired generating facilities. Such contracts offer fixed pricing and guaranteed schedule and performance, and are well understood and accepted by project financing parties. C-Wind recognized early on that there are a limited number of qualified entities in the market who could offer such EPC options for a wind energy project, and instead turned to what has become the predominant model, which is the bifurcated turbine supply and construction contract structure. Under this structure, C-Wind first engages in negotiations with one or more wind turbine vendors for the supply and delivery to the site of the turbine equipment, and then hires a construction contractor for the erection and mechanical completion of the wind turbines. Typically, 70% or more of the project cost is related to the purchase of turbine equipment, so this structure allows C-Wind to directly control this important contractual relationship.

The fact that the project is part of a multi-phase development that C-Wind eventually plans to build out to 600 MW in several projects of 100 MW to 200 MW each, means that C-Wind was in a good position to obtain favorable pricing and terms from the leading wind turbine manufacturers. The turbine equipment market in the U.S. is in a state of oversupply in 2011, which was not the case only a few years ago and may not be the case in years to come. C-Wind initially engaged three turbine manufacturers for discussion of proposals for supply of the several phases.

A review of technical details concluded that Turbine Vendor A's turbines offered superior performance given the anticipated wind regime based on site meteorological data. However, Turbine Vendor B offered a better price and was quite willing to offer an extended warranty and full-service O&M agreement as part of it offering. Turbine Vendor C's price was higher and its proposed delivery schedule did not support the aggressive schedule for the project. C-Wind chose to engage with Turbine Vendor B in negotiations of commercial terms of both a Turbine Sales Agreement ("TSA") and a Services Agreement ("SA"), with Turbine Vendor A serving as a back-up plan if C-Wind was unable to come to an agreement with Turbine Vendor B.

Key commercial terms in the TSA for C-Wind, in addition to the price, were the delivery schedule and terms of delivery, warranty, limits of liability, performance guarantees, and payment provisions.

<u>Delivery Schedule and Terms</u>. C-Wind wanted to lock in a delivery schedule for the turbine equipment to the Site, particularly in light of the expiration of the incentive program and its requirement that a certain portion of equipment must be committed to the project by the end of 2011. In exchange for this commitment, Turbine Vendor required a significant down payment in order to secure equipment manufacturing capacity. Turbine Vendor's standard offer is to deliver

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the equipment "ex-works" at the place of manufacture, leaving transportation risk in the hands of the buyer. C-Wind negotiated a change so that Turbine Vendor would be responsible for delivery of complete wind turbine equipment units to each particular turbine location at the project Site. This change required careful consideration of transportation charges and risk allocation, including title transfer and risk of loss provisions, with appropriate treatment of Turbine Vendor's concerns for timely revenue recognition under applicable accounting rules.

<u>Warranty</u>. Warranty provisions were negotiated carefully, given the extensive and unfortunate history of widespread equipment breakdowns in the wind turbine industry. Turbine Vendor was careful to offer a defects warranty, covering title, workmanship, and manufacturing defects, disclaiming all implied warranties including any warranty that the equipment would be fit for the intended purpose of producing electrical output. After negotiation, the parties agreed to a two-year defect-based warranty, and Turbine Vendor warranted its design was suitable for the project based on Site data provided by C-Wind with certain upper limits on climactic conditions.

Limits of Liability. As is typical in the industry, the TSA contained several provisions that limit the parties' liability for damages that are recoverable by the other party in the event of a dispute between the parties. First is a waiver of consequential damages, which eliminates claims for lost profits, loss of project revenue, cost of capital, and other indirect and special damages. As a result, as between the parties, each will be liable for direct foreseeable damages as specified in the TSA. The second type of limitation in the TSA is an overall liability cap. As here, the limitation is often set at 100% of the contract amount. As a practical matter, this overall cap is typically ample to allow a full recovery of damages, even in the event of a mid-project termination. In this instance, C-Wind and Turbine Vendor specifically negotiated a suite of "subcaps" for a particular type of liquidated damages: a 20% cap on late delivery liquidated damages, a 20% cap on late commissioning liquidated damages, and a combined overall cap of 30% for both types of liquidated damages. C-Wind carefully considered the amount of liquidated damages and the number of days represented by these caps in its overall risk profile for the project.

Performance Guarantees. C-Wind and Turbine Vendor negotiated carefully concerning the extent to which Turbine Vendor guarantees the performance of the wind turbines as installed at C-Wind's site. Turbine Vendor agreed to guarantee that the turbines will perform in accordance with a published "power curve" that requires a stated minimum expected electrical output over a range of wind speeds. The power curve is qualified by reference conditions and test protocols. Turbine Vendor guarantees the output of each wind turbine, but as is typical, is not required to test the power curve of each turbine unless C-Wind requires it, and in that event, the power curve test will be at C-Wind's expense. Given the proven track record of Turbine Vendor's turbines in similar wind regimes, both C-Wind and its lenders are satisfied with this arrangement. The TSA also contains a noise-level guarantee, which may be necessary to meet certain landowner and permit requirements.

<u>Payment Provisions – Credit Support.</u> C-Wind and Turbine Vendor had extensive discussions regarding the TSA price and payment timing. Turbine Vendor requires a significant payment upon execution of the TSA in order to secure the manufacturing commitment and to

cover the significant costs associated with production. C-Wind is concerned about advanced payment prior to delivery of the equipment. C-Wind was successful in arranging for a reduced down payment in advance of financial close (and the reduction of project risk) and upon due diligence as to Turbine Vendor's balance sheet, arranged for appropriate credit support for the risk of Turbine Vendor's advance payment. This resulted in a payment schedule in the TSA that is based on milestones that are a mix of calendar dates, and dates for shipment, delivery, commissioning of individual turbines, and overall final project completion.

**Frame Agreement.** The fact that C-Wind intends to purchase turbines for several phases led to a structure known as a "Frame Agreement" under which the parties utilize the same commercial terms for the project phases, with different delivery schedules and guaranteed dates. In this way, C-Wind achieved a pricing advantage and Turbine Vendor locked in a long-term commercial relationship that will allow it to extend firm pricing to its plans to develop future phases of the project.

Services Agreement. As part of the TSA negotiations, C-Wind and Turbine Vendor discussed and ultimately entered into a long-term SA. Under this agreement, Turbine Vendor agreed to operate and maintain the wind turbines from the time that each unit achieves commercial operation until five years after the entire facility enters commercial operation. For its fixed annual fee, Turbine Vendor will perform all recommended planned maintenance at the intervals required and will perform unplanned maintenance as necessary at an additional cost. During the two-year warranty period under the TSA, the operator will be responsible for monitoring and reporting performance and maintenance data for all of the equipment, implementing the requirements of the warranty, and performing an inspection of all turbines prior to the end of the warranty period. Although C-Wind considered an offer from a third-party O&M company, it decided to retain Turbine Vendor under the SA to provide extended warranty coverage in Y3-Y5 on a similar basis as the TSA warranty. Turbine Vendor offered a full-service arrangement, whereby it would perform all planned and unplanned maintenance and replace all parts that fail for any reason (including ordinary wear and tear), but C-Wind rejected this offer as too expensive.

**BOP Contract.** While it was negotiating with the Turbine Vendors, C-Wind also engaged several qualified contractors in discussions regarding a contract for the design and construction of site improvements (site roads, drainage improvements, turbine foundations, and electrical systems) and the erection and mechanical completion of the wind turbines that are supplied by the Turbine Vendor. There are a number of qualified national contractors who specialize in wind farm Balance of Plant ("BOP") construction, and C-Wind quickly narrowed the field to one company that was actively engaged in building a wind farm in the vicinity of the project site for another project developer. Because of this, BOP Contractor was highly knowledgeable about local labor, local availability of materials (such as road building rock and concrete), reinforcing steel for turbine foundations, and the local construction permitting requirements. In these discussions, which formed the basis for an eventual BOP contract, C-Wind was careful to match the terms of the TSA with the BOP Contract, particularly with regard to delivery and necessary coordination between the BOP Contractor and the Turbine Vendor. Specifically, once the

turbines are delivered to the site, which is a requirement of the TSA, the BOP Contractor accepts the equipment and proceeds to erect the turbines onto the foundations it has designed and built for that purpose. Once the turbines are individually completed mechanically, the BOP Contractor, the Turbine Vendor, and C-Wind jointly inspect the turbines. Once the turbines are approved by all three as mechanically complete, the BOP Contractor transfers responsibility for the turbines to the Turbine Vendor, who completes necessary electrical testing and equipment commissioning so that the turbines can be put in commercial operation. The TSA and the BOP Contract must be coordinated so that all three parties clearly understand their respective duties and responsibilities.

# **Section 6:** Tax and Financing.

The U.S. government and various state and local governments provide an ever-changing array of financial incentives for renewable energy projects. In order to successfully finance its project and maximize the usefulness of the available incentives, C-Wind hired tax counsel to provide detailed tax planning advice. Together, the C-Wind team and counsel took time to carefully identify the available incentives based on the particular project and its location.

The attached model illustrates the primary federal incentives available with respect to wind, solar, geothermal, biomass, landfill gas, and certain other qualifying projects. The owner of a qualifying project that is placed in service within the applicable timeframe generally can elect to claim either (i) a PTC based upon the number of kilowatt hours of electricity generated and sold to an unrelated party each year during the 10-year period beginning when the project is placed in service, (ii) an investment tax credit ("ITC") based on the cost of qualified equipment used in the project, or (iii) a grant from the U.S. Department of the Treasury (the "Treasury Department Grant") that, like the ITC, is based on the cost of qualified equipment used in the project. The ITC and the Treasury Department Grant are designed to work in essentially the same manner, except that the ITC is a credit against U.S. federal income tax liability and the Treasury Department Grant is a cash payment from the U.S. Department of Treasury.

Determining which option will provide the greatest incentive for a particular project depends on a number of factors, such as the size and capacity factor of the project, when the project will be placed in service, the terms of the PPA, and whether C-Wind has sufficient federal income tax liability to fully utilize a credit against income tax liability. As a very general matter, the more efficient the project, the more likely it is that the PTC will provide a greater incentive than the ITC or the Treasury Department Grant. If, however, C-Wind does not have a sufficiently taxable appetite, the ITC or the Treasury Department Grant may be more useful finance incentives. C-Wind modeled the relative benefits of the PTC and the ITC/ Treasury Department Grant in order to gain a better understanding of the impact of choosing one subsidy over another, with the summary results of such model being set forth in the spreadsheet attached as Appendix A. Because the project has a relatively high capacity factor and C-Wind has access to tax equity investors who are interested in PTCs, C-Wind opted to use PTCs as the principal tax subsidy for this project.

The C-Wind team also recognized that it could take advantage of the accelerated depreciation deductions the U.S. government allows for certain types of renewable energy projects. Equipment included in many types of projects, such as wind facilities, can be depreciated over a five-year period using a double declining balance method of depreciation. This creates tax losses for C-Wind and its tax equity investors in the early years after the project is placed in service that can be used to offset C-Wind's taxable income from other sources. The attached model illustrates the general scope and value of these losses based on the assumption that all project costs qualify for five-year accelerated depreciation. Because this project involves a wide range of assets with different applicable depreciable periods and methods, it was important that C-Wind carefully analyze depreciation calculations when planning for its project.

Once the C-Wind team understood its portfolio of federal incentives, it turned its attention to California state and local tax benefits to add further value to the project. Applicants for state incentives may be required to describe any federal financing the project will receive and carefully consider whether or how the project fits the particular state requirements. Potential state incentives include, for example, sales tax rebates, property tax exemptions, state income tax credits, loan guarantees, or cash payments for a state or local government agency. These incentives are highly site specific and, for the sake of simplicity, the attached model does not take into account any such incentives.

After carefully identifying the available incentives, C-Wind's counsel advised the team on how to best monetize the incentives. Because C-Wind does not have sufficient U.S. tax liability to fully utilize the tax-based incentives, the team focused on how to structure the project such that the equity investors could make use of the early years losses and PTCs. Although there are a number of transaction structuring alternatives for involving equity investors, the "partnership flip" model is perhaps the most common, and it is the structure C-Wind used. development team formed a partnership entity with the equity investors to own and operate the facility. In the early years, the equity investors will own the bulk of the partnership so that the tax credits and losses can be allocated disproportionately to the equity investor partners. However, the management and control of the project remain in C-Wind's hands, as the tax equity investors act more as lenders with only such rights as aimed at protecting the return on their investment. Counsel advised on specific requirements that must be satisfied in order for this method to be acceptable to the Internal Revenue Service. On a fixed date that is calculated to allow the equity investors to earn a predetermined rate of return, the ownership percentages flip so that C-Wind then owns the bulk of the partnership. In addition, C-Wind will have an option to purchase the remaining interest of the investor partners at that time.

# <u>Appendix A</u> <u>Modeling of PTC and ITC/Treasury Department Grant Options</u>

ITC/Grant Model	odel		į,									
		Year 1		Year 2		Year 3		Year 5		Year 10		Year 15
Gross Revenue	W	59,588,000	69	\$ 000'895'65	6/9	59,568,000	69	\$ 0000'895'65		59,568,000	69	59,568,000
Operating Costs	W	(20,000,000)	69	(20,000,000) \$	000	(20,000,000)	69	(20,000,000) \$		(20,000,000)	69	(20,000,000)
Net Revenue	(A)	39,558,000	69	39,568,000 \$	6/9	39,568,000	69	39,568,000	69	39,568,000	69	39,568,000
Tax Depreciation	69	\$ 183,600,000 \$ 48,960,000 \$ 29,376,000 \$	69	48,960,000	6/9	29,376,000	69	17,625,600 \$	6/9		6/9	•
Taxable Income (Loss)	49	(144,032,000)	69	(9,392,000) \$	6/9	10,192,000	69	21,942,400	69	39,568,000	69	39,568,000
Tax Benefit (Cost)	49	50,411,200 \$		3,287,200 \$	6/9	(3,567,200)	69	(7,679,840)	6/9	(3,567,200) \$ (7,679,840) \$ (13,848,800) \$ (13,848,800)	6/9	(13,848,800)
ITC/Grant	49	\$ 108,000,000	69	•	60		69	•	69	•	69	•
Overall After-Tax Benefit	(A)	\$ 197,979,200 \$ 42,855,200 \$ 36,000,800 \$ 31,888,160 \$ 25,719,200 \$ 25,719,200	69	42,855,200	6/9	36,000,800	69	31,888,160	6/9	25,719,200	69	25,719,200

PTC Model												
		Year 1		Year 2		Year 3		Year 5		Year 10		Year 15
Gross Revenue	49	59,568,000	69	\$9,568,000 \$	6/9	59,568,000	69	29,568,000	69	59,568,000	69	59,568,000
Operating Costs	49	(20,000,000)	69	(20,000,000)	60	(20,000,000)	69	(20,000,000)	10	(20,000,000) \$ (20,000,000) \$ (20,000,000) \$ (20,000,000) \$ (20,000,000)	49	(20,000,000
Net Revenue	49	39,568,000	69	39,568,000	6/9	39,568,000	69	39,568,000	69	39,568,000	69	39,568,000
Tax Depreciation	49	216,000,000 \$ 57,600,000 \$	69	57,600,000	60	34,560,000 \$		20,736,000	49	٠	69	٠
Taxable Income (Loss)	49	(176,432,000) \$ (18,032,000) \$	69	(18,032,000)	6/9	5,008,000	69	18,832,000 \$	6/9	\$ 000'895'66		39,568,000
Tax Benefit (Cost)	643	61,751,200 \$	49	6,311,200	6/9	(1,752,800)	69	(6,591,200)	6/9	6,311,200 \$ (1,752,800) \$ (6,591,200) \$ (13,848,800) \$ (13,848,800)	49	(13,848,800
PTC	49	15,417,600	69	15,417,600	49	15,417,600	69	15,417,600	649	15,417,600 \$ 15,417,600 \$ 15,417,600 \$ 15,417,600 \$ 15,417,600	69	•
Overall After-Tax Benefit	6/9	116,736,800	69	61,296,800	49	53,232,800	69	48,394,400	6/9	\$ 116,736,800 \$ 61,296,800 \$ 53,232,800 \$ 48,394,400 \$ 41,136,800 \$ 25,719,200	69	25,719,200

Assumptions	
Nameplate Capacity (mW)	200
Total Project Cost	\$ 400,000,000
ITC/Grant-Eligible Cost	\$ 360,000,000
Capacity Factor	40%
Annual Generation (mW)	700,800
PPA Price per mW	\$ 85
Annual PPA Revenue	\$ 59,568,000
Annual Operating Costs	\$ 20,000,000
ITC/Grant Depreciable Basis	\$ 306,000,000
PTC Depreciable Basis	\$ 360,000,000
PTC Rate (per mW)	\$ 22.00
Annual PTC Amount	\$ 15,417,600
Federal Income Tax Rate	35.0%
Bonus Depreciation Percentage	50.0%

This model is intended to illustrate the different timing of benefits depending on whether the project owner elects to claim (i) the production tax credit (PTC) or (ii) the investment tax credit (ITC) or Treasury Department grant in lieu of the ITC. It is not intended to show all of the complexities that will arise in modeling an actual project. Also, this model is based on a number of assumptions, including without limitation (a) revenue and expenses will be the same each year, (b) all depreciable basis will qualify for five-year accelerated depreciation for tax purposes, (c) the PTC rate is fixed at 2.2¢ per killowat hour of production, (d) operation at the stated capacity factor, and (e) all federal tax benefits can be fully utilized by the project owner or tax equity investor. This model also is not intended to illustrate the consequences of involving a tax equity investor or the various structuring alternatives for doing so