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## Who is ConnectGen?

ConnectGen is a renewable energy company comprised of seasoned energy industry professionals focused on developing wind, solar, and energy storage projects across the United States.

Launched in 2018 by private equity firm Quantum Energy Partners, a leading provider of private equity capital to the global energy industry, ConnectGen draws from its extensive experience developing renewable energy and infrastructure projects across the United States. In total, the ConnectGen team has managed the development, financing, construction, and operation of thousands of megawatts (MW) of wind and solar energy across the United States.

## What is ConnectGen’s Development Experience?

The ConnectGen team brings decades of experience from industry-leading companies, including EDP Renewables, E.ON, Invenergy, Clean Line Energy Partners, First Wind, NextEra, RES and Calpine. Collectively over their careers, the ConnectGen team has successfully developed, commercialized, financed, constructed and operated more than 11 gigawatts of renewable energy projects across the U.S. and Canada. See below for a summary of the team’s track record of project execution.

Project Technology	Number of Projects	Aggregate Capacity (MW)
Wind	71	10,762 MW
Solar	10	642 MW
Standalone Battery Storage	2	20 MW

In addition to the projects listed above, ConnectGen, has partnered with EDP Renewables on a 50/50 joint venture to own and operate a 278 MW solar portfolio consisting of three solar projects located in Arizona, California, and Nevada, all of which became operational at the end of 2019.

## What is the Fountain Wind Project?

The Fountain Wind Project is a proposed 216 MW wind project in northeastern Shasta County. The project will be located on privately owned timberlands near Highway 299, approximately 6 miles west of Burney, and is anticipated to be operational by the end of 2023. ConnectGen is currently considering 72 turbine locations for the project, but the final number of turbine locations will depend on the size of the turbine chosen for the project.

## Where is the Fountain Wind Project located?

The Project is located in northeastern Shasta County, California approximately 6 miles west of Burney and one mile west of the existing Hatchet Ridge Wind Farm. To download a map of the project area please visit: <https://www.fountainwind.com>.

### **What is the current status of the Fountain Wind Project development?**

The Fountain Wind Project is currently in the permitting phase of project development. The Project requires various permits or approvals in order to construct and operate the proposed facility, including a Use Permit from Shasta County. In determining whether to issue a Use Permit, the county must perform an environmental analysis pursuant to the California Environmental Quality Act (CEQA). The project began the CEQA process in early 2019 with the publishing of a Notice of Preparation, followed by a public scoping meeting, and the publication of the Public Scoping Report. Shasta County published the Draft Environmental Impact Report (DEIR) on August 3rd, 2020, and the public has been asked to submit comments on the DEIR by October 21st, 2020.<sup>1</sup> Following receipt of Public Comments, the county will prepare the Final Environmental Impact Report (EIR) and response to comments, which is anticipated to be published in Late 2020. The County public hearings and decision-making process is anticipated to begin in early 2021. Information and updates about Shasta County's DEIR process can be found on their website at: <https://www.co.shasta.ca.us/index/drm/planning/eir/fountain-wind-project/draft-eir>.

If the project were to be approved in early 2021, ConnectGen anticipates starting preliminary site work in the second half of 2021, with full project construction commencing in the spring of 2022, and a project completion by the end of 2023.

### **What is Shasta County's role in the Project?**

The Project is seeking a Use Permit as required by the Shasta County Code which would authorize the construction, operation, and decommissioning of the Project. Shasta County is the Lead Agency under CEQA and The Shasta County Department of Resource Management, Planning Division is responsible for preparing an EIR for the project.<sup>2</sup> The EIR presents the analysis of potential project impacts and identifies mitigation measures to avoid or reduce significant environmental effects. Shasta County will consider the information disclosed through the CEQA process along with other factors in determining whether to issue a Use Permit for the Project.

### **Has ConnectGen reduced the size of the Fountain Wind Project?**

Based on feedback received as part of Shasta County's Public Scoping process, conducted in early 2019, ConnectGen reduced the number of proposed turbines from the initial 100 under consideration to the 72 that are currently being analyzed in the EIR.

### **How will the Fountain Wind Project benefit Shasta County?**

The Fountain Wind Project will be a total capital investment of approximately \$300 million in Shasta County, which will result in a significant increase in the County's taxable property base. The project will benefit the County by generating more than \$50 million in new tax revenues, while also creating jobs and increasing demand for local businesses.

During construction, the Fountain Wind Project will contribute more than \$3.5 million in sales taxes to Shasta County. During operations, the project will provide a steady stream of property tax revenues to the County, averaging \$1.67 million per year over the expected 30-year project life, totaling more than \$50 million over the life of the project.

During construction, the Fountain Wind Project will support over 200 construction jobs. These construction workers will drive local economic development through increased demand for supply chain businesses, hospitality services, and other local businesses. Once operational, the project will generate up to 12 permanent jobs, which provide well-paying opportunities for young people to remain living and working in Northern California.

### **Will the Fountain Project connect to the electric grid at the Round Mountain substation?**

No. The Fountain Wind Project will interconnect to the electrical grid through a new substation and interconnection switchyard that will be built directly adjacent to the existing Pit #1 to Cottonwood 230 kilovolt transmission line. There are no new high voltage transmission lines required to interconnect the project.

### **Is it safe to interconnect additional generation on the existing transmission line?**

Yes. As is required by the California Independent System Operator (CAISO) and California Public Utilities Commission (CPUC), the project has undergone all the necessary 3<sup>rd</sup> party interconnection studies to ensure that interconnection to the electrical grid will not result in any adverse impacts. The project has completed all necessary studies and signed a Large Generator Interconnection agreement (LGIA) with PG&E in late 2017.

<sup>1</sup> <https://www.co.shasta.ca.us/index/drm/planning/eir/fountain-wind-project/draft-eir>

<sup>2</sup> <https://www.co.shasta.ca.us/index/drm/planning/eir/fountain-wind-project>

### **What is PG&E's role in the project?**

As the owner of the existing Pit #1 to Cottonwood transmission line, PG&E is the transmission service provider for the project. PG&E is required by CAISO to study the immediate and long-term effects of putting additional generation on the grid from projects that are being developed by independent power producers, like ConnectGen. Once PG&E has completed its interconnection studies and the studies have been verified by the CAISO, PG&E works with independent power producers to sign an LGIA.

### **What will the lifespan of the project be?**

The project will be designed and constructed to have an expected minimum useful life of 30 years.

### **What happens at the end of the project life?**

ConnectGen is responsible for the removal of the project at the end of the project's life. At year 15 of project operations, ConnectGen will put a financial security in place to ensure that the landowner and community will bear no responsibility for removal or restoration of the project. The amount of financial assurance will be determined by a third-party engineer and will be re-estimated and adjusted every five years. This financial assurance will remain in place for the remaining life of the project.

### **Has ConnectGen secured a customer for the project?**

At this stage of development, prior to Shasta County approval, ConnectGen has not yet secured a customer for the Project's wind generation. ConnectGen is actively engaging with northern California energy buyers including Cities, Municipalities, and Community Choice Aggregators. ConnectGen must secure a customer for the project before it can begin construction.

### **Will the clean energy generated by the Fountain Wind project have a local benefit?**

Yes, the power from the project will flow to the Cottonwood 230 kV substation, located in the south-central part of Shasta County. From the Cottonwood substation, the electricity will have the ability to move around the regional electrical grid. The added generation capacity from the Fountain Wind project will help Shasta County and the region guard against PG&E blackouts like the one experienced in August of 2020.

### **How do wind turbines work?**

When the wind blows past a wind turbine, its blades capture the wind's energy and rotate, turning the wind's kinetic energy into mechanical energy. Inside the wind turbine, this rotation turns an internal shaft connected to a gearbox, which then spins a generator that produces electricity. The wind turbine will rotate to face the strongest wind and will angle its blades to best capture the wind energy.<sup>3</sup>

### **What size wind turbine will the Fountain Wind Project use?**

ConnectGen is considering a number of potential turbine models for the Fountain Wind Project and will ultimately select the best technology that is suitable for the project area. At this point in the project's development, it is too soon to know which specific turbine model will be used; however, ConnectGen is working with top tier turbine manufacturers (Vestas, GE, Nordex Acciona, and Siemens Gamesa) to determine which options would be appropriate for the project site. At the smaller end, ConnectGen is considering a turbine with a 3-megawatt (MW) nameplate capacity and a total height of 500 ft. At the upper end, ConnectGen is considering a turbine with a 6 MW nameplate capacity and a total height of 679 ft. ConnectGen is also considering a number of turbine models that fall within this range.

The wind industry is trending towards larger, more efficient turbines, which is a positive trend because it means that wind projects require fewer turbines and less ground disturbance to produce more energy.

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3 <https://www.awea.org/wind-101/basics-of-wind-energy>

## Are the proposed wind turbine models appropriate for use on land?

The wind turbines that will be used for the Fountain Wind Project are designed for on land use. ConnectGen is considering turbine models between approximately 500 and 679 feet tall (measured from the base of the tower to the tip of the blade). Technological advances over several decades have resulted in taller towers, longer blades and improved turbine efficiencies. While the underlying technology that has been used for over 30 years remains the same, these taller turbines and longer blades now allow for an exponential increase in output with fewer turbines, which reduces the footprint of wind projects.<sup>4</sup>

Increased wind turbine height is an industry-wide trend, and ConnectGen is not alone in considering taller turbine technology. In 2018 and 2019, the Federal Aviation Administration (FAA)\* reviewed and approved applications for 2,997 land-based wind turbines with a maximum tip height of 650 feet or greater spread across 28 states. An additional 3,488 planned wind turbine locations with a tip height of 650 feet or greater are under FAA review as of April 2020.<sup>5</sup> The Big Level Wind Farm, which is using wind turbines with a tip height of 654.5 feet, went into operation in December 2019.<sup>6</sup> By the time the Fountain Wind Project begins construction in the first half of 2022, this taller turbine technology will be even more commonplace.

\*The FAA is the sole government agency that can determine no hazard for purpose of aircraft safety, as such each proposed wind turbine location for any wind project in the United States must receive FAA approval in order to be constructed.

## Where are wind turbines manufactured?

U.S.-based wind turbine manufacturing has continued to grow, and most of the components of wind turbines installed in the U.S. are manufactured here.<sup>7</sup> Today, more than 500 U.S. factories across 41 states build wind-related parts, creating economies of scale and lowering transportation costs.<sup>8</sup> ConnectGen is working with top tier turbine manufacturers (Vestas, GE, Nordex Acciona, and Siemens Gamesa) to determine which turbine model is appropriate for the project site. ConnectGen is committed to purchasing turbines from one of these major providers, all of which have some form of manufacturing facility located in the U.S.

## Will the Fountain Wind Project affect water flows and water supply to the surrounding communities?

Construction and operation activities are not anticipated to affect local water supplies. The Project will employ a host of best management practices such as material handling procedures, pre-construction inspection, and environmental monitoring that directly and indirectly protect aquatic resources. Additionally, a Water Quality Assessment was performed to identify available water supplies for the Project. Section 3.12 of the draft EIR provides more detailed information on potential impacts to local hydrology and water quality as well as specific mitigation measures that would further reduce impacts. The draft EIR concludes that all potential impacts related to Hydrology and Water Quality would be either less than significant, or less than significant with mitigation.<sup>9</sup>

## Will the Fountain Wind Project negatively affect local water supplies?

No, wind turbines do not require water to produce electricity or cool power generating equipment, so the project will not have a negative impact on local water supplies.<sup>10</sup> A majority of the water needed for the project is related to construction related dust suppression control. During construction it is anticipated that water will be purchased from a near-by water control district, such as the Burney Water District. Section 3.12 of the draft EIR states that “The water supply assessment prepared for the Project (see Appendix I) determined that the potential impact of the Project’s water demand (with respect to groundwater supply) would be negligible and represents a de minimis use of groundwater compared to existing production capacity.”<sup>11</sup>

## Are there rare earth materials contained within wind turbines?

No, based on conversations with the turbine suppliers we are considering, there are no rare earth materials contained within the modern on shore turbines being considered for the project.

4 <https://www.energy.gov/eere/next-generation-wind-technology>

5 <https://oeaaa.faa.gov/oeaaa/external/public/publicAction.jsp?action=showCaseDownloadForm>

6 <https://transalta.com/facilities/plants-operation/big-level/>

7 <https://www.energy.gov/eere/wind/articles/top-10-things-you-didnt-know-about-wind-power>

8 <https://www.aweablog.org/the-truth-about-wind-power/>

9 <https://www.co.shasta.ca.us/index/drm/planning/eir/fountain-wind-project/draft-eir>

10 <https://www.awea.org/wind-101/benefits-of-wind/environmental-benefits#:~:text=Wind%20energy%20also%20saves%20billions%20of%20gallons%20of,substantial%20amounts%20of%20water%20for%20cooling%20the%20plant.>

11 <https://www.co.shasta.ca.us/index/drm/planning/eir/fountain-wind-project>

### How many turbines will be installed for the project?

The final number of turbines will depend on the turbine model that ConnectGen selects for the project, which has not yet been determined. If ConnectGen uses a smaller turbine model, the project could include up to 72 turbines. Conversely, if ConnectGen uses a larger turbine model, the project could include as few as 35 turbines.

### What will the footprint of the project be?

Although the Project Area encompasses approximately 29,500 acres of leased land, the actual Project infrastructure will encompass a much smaller area. Specifically, the total area required to construct the Project would encompass approximately 1,384 acres of temporary disturbance, of which 713 acres would be permanently disturbed to host the facility infrastructure and to accommodate operations and maintenance activities. After construction, the temporary disturbance areas will be restored and replanted in accordance with landowner and CAL FIRE requirements. Table 2.1 of the draft EIR provides more detailed information on project components and disturbance areas.<sup>12</sup>

### Is wind energy cost competitive?

Yes. Wind energy is a low-cost resource that is competitive with conventional energy sources. The cost of wind energy has declined by 69% over the last decade,<sup>13</sup> and with improved technology and U.S.-based manufacturing, wind energy is “cost competitive with other energy sources and the cheapest source of new electricity in many parts of the country.”<sup>14</sup>

### Does wind power benefit from federal subsidies?

Wind power does not receive any direct subsidies or payments from the federal government. Wind power does however benefit from a federal tax credit known as the Production Tax Credit (PTC). The PTC was created by legislation with bipartisan support and is scheduled to be phased out after 2019.<sup>15</sup> It represents only a small fraction of the money U.S. taxpayers are spending each year to subsidize other forms of energy production, including fossil fuels. Just as tax treatment for other energy sources has enabled growth and development, the PTC has helped wind developers access the capital needed to build new projects.

Over the last century, the energy industry as a whole has received more than \$500 billion in tax incentives.<sup>16</sup> Yet, according to the Nuclear Energy Institute and other third party sources, only 2.8% of all federal energy incentives have gone to wind energy over the last 70 years.<sup>17</sup> The share of these energy incentives breaks down as follows: 65% of the incentives have gone to fossil fuels, 21% have gone to nuclear, 2.8% have gone to wind, and the remaining 12% have been split between all other forms of renewable energy, including biofuels. With over 80% of these incentives going to fossil fuel and nuclear energy, wind power receives a benefit of mere cents on the dollar comparatively.

Once the PTC phase-out is complete, wind will be the only major energy source in the U.S. without any federal tax incentives or subsidies, yet it will remain cost-competitive with all other forms of electric generation.<sup>18</sup>

### Will the clean energy generated by the Fountain Wind project offset the carbon footprint of manufacturing and constructing the project?

Yes. A typical wind energy project repays its carbon footprint in six months or less, providing decades of zero emissions energy that displaces the fossil fuel energy that was used to manufacture the turbines and construct the wind project.<sup>19</sup> As wind turbine technology continues to improve with longer lifetimes and larger nameplate capacities, the length of the energy payback period will continue to decrease.

The Department of Energy’s National Renewable Energy Laboratory (NREL) reviewed all published research and concluded that wind energy’s carbon footprint is lower than nuclear and most other renewable energy resources.<sup>20</sup>

12 <https://www.co.shasta.ca.us/index/drm/planning/eir/fountain-wind-project/draft-eir>

13 <https://www.lazard.com/media/450784/lazards-levelized-cost-of-energy-version-120-vfinal.pdf>

14 <https://blogs.scientificamerican.com/plugged-in/wind-energy-is-one-of-the-cheapest-sources-of-electricity-and-its-getting-cheaper/>

15 <https://www.awea.org/policy-and-issues/tax-policy>

16 <https://www.leahy.senate.gov/imo/media/doc/R41227EnergyLegReport.pdf>

17 <https://www.aweablog.org/14419-2/>

18 <https://www.lazard.com/media/451086/lazards-levelized-cost-of-energy-version-130-vf.pdf>

19 <https://www.sciencedaily.com/releases/2014/06/140616093317.htm>

20 <https://www.nrel.gov/docs/fy13osti/57187.pdf>

## Will the project have an impact on wildlife in Shasta County?

Wind energy projects, like all forms of development, can result in interactions with the natural environment. Wildlife and other resources were an important consideration informing the development of the Project. ConnectGen completed a comprehensive siting and pre-construction study of the Project Area to identify potential impacts to wildlife which included application of the U.S. Fish and Wildlife Service's Land-Based Wind Energy Guidelines and California Energy Commission's Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development. Through this resource assessment effort and agency coordination, a host of avian, bat, amphibian, and plant field studies were performed over multiple years to help determine the presence of sensitive resources and subsequently assess the potential impacts from Project. The studies along with a detailed assessment of potential impacts from the Project are provided in Section 3-4 and Appendix C of the DEIR.<sup>21</sup> Importantly, the DEIR identifies various mitigation measures that when implemented will further avoid, minimize, and mitigate potential impacts to wildlife. These include a commitment to additional pre-construction surveys, seasonal construction, long-term monitoring, and compensatory mitigation actions.

## Does wind energy impact birds in particular?

The operation of wind turbines can result in bird mortality which is why projects like Fountain perform multi-year studies to understand the avian use at the site. This information is used to inform whether significant impacts to a species' population may occur, and to help make siting and design decisions that may reduce avian interactions. Although avian mortality at wind facilities is well documented, the extensive research on this phenomenon suggests properly sited wind projects do not adversely affect bird populations. The U.S. Department of Agriculture noted that wind turbines cause less than 0.01 percent of all human-related bird deaths.<sup>22</sup> According to the American Wind Energy Association, aside from habitat loss, the greatest cause of bird deaths are cats and tall buildings.<sup>23</sup> Detailed information on potential impacts to avian species including the results of various biological studies can be found in Section 3-4 and Appendix C of the DEIR.<sup>24</sup>

## Is ConnectGen considering additional phases of the Fountain Wind Project or other wind projects in Shasta County?

No. The Fountain Wind Project is the only wind project that ConnectGen is considering in Shasta County and there are no additional phases planned.

## Are wind turbines reliable or do they depend on fossil fuel reserves when the wind isn't blowing?

While wind is variable as a power resource, that does not mean that wind projects are backed up with coal or gas should the wind stop blowing. The variability of wind can be predictably forecasted and used to complement other generation sources. No electricity source runs 100% of the time, including coal, gas, hydro, and nuclear plants. Grid operators have decades of experience managing changes in supply and demand, and sudden, unexpected outages at large conventional power plants are more costly and difficult to manage than the gradual, predictable changes in wind output.<sup>25</sup> Because of the balancing efforts grid operators undertake, it's simply untrue that fossil fuel reserves run around the clock for when the wind doesn't blow.

## Are wind turbines safe to live or work around?

Millions of people around the world live and work near more than 340,000<sup>26</sup> operating wind turbines without any health or safety effects.<sup>27</sup>

According to a 2018 study by NREL, there are more than 1.3 million homes located within five miles of a utility-scale wind turbine.<sup>28</sup> The study also found that 92 percent of survey respondents living within five miles of a wind turbine reported positive or neutral experiences and that 90 percent of survey respondents would prefer to live near a wind farm over any type of centralized power plant, whether coal, natural gas or nuclear.

21 <https://www.co.shasta.ca.us/index/drm/planning/eir/fountain-wind-project/draft-eir>

22 [http://cleangridalliance.org/\\_uploads/\\_media\\_uploads/\\_source/Wind\\_Energy\\_and\\_Birds\\_-\\_CGA\\_-\\_ver2.pdf](http://cleangridalliance.org/_uploads/_media_uploads/_source/Wind_Energy_and_Birds_-_CGA_-_ver2.pdf)

23 <https://www.awea.org/policy-and-issues/project-development/wildlife>

24 <https://www.co.shasta.ca.us/index/drm/planning/eir/fountain-wind-project/draft-eir>

25 <https://www.forbes.com/sites/joshuarhodes/2018/08/21/what-does-100-renewable-energy-really-mean/#39a8655d1ac8>

26 <https://gwec.net/global-figures/wind-in-numbers/>

27 <https://www.awea.org/wind-101/benefits-of-wind/wind-in-my-community/living-near-wind-turbines>

28 [https://emp.lbl.gov/projects/wind-neighbor-survey?utm\\_source=Hoen-Wind+Acceptance+Survey&utm\\_campaign=Hoen-Wind+Acceptance+Survey&utm\\_medium=email](https://emp.lbl.gov/projects/wind-neighbor-survey?utm_source=Hoen-Wind+Acceptance+Survey&utm_campaign=Hoen-Wind+Acceptance+Survey&utm_medium=email)

## Do wind turbines impact human health?

Numerous peer-reviewed, third-party studies have shown that wind turbines do not have adverse, direct impacts on human health. The Massachusetts Institute of Technology published a study in the Journal of Occupational and Environmental Medicine titled, “Wind Turbines and Health: A Critical Review of the Scientific Literature.” A panel of experts with professional experience and training in occupational and environmental medicine, acoustics, epidemiology, otolaryngology, psychology, and public health was commissioned to “assess the peer-reviewed literature regarding potential health effects among people living in the vicinity of wind turbines.” Upon review, they concluded, “No clear or consistent association is seen between noise from wind turbines and any reported disease or other indicator of harm to human health.”<sup>29</sup>

Further, Health Canada, in partnership with Statistics Canada, conducted a major study of over one thousand homes and reached the same conclusion, stating, “No evidence was found to support a link between exposure to wind turbine noise and any of the self-reported illnesses.”<sup>30</sup>

Wind projects do not burn fossil fuel to generate electricity, and as a result, do not emit any air pollutants such as carbon dioxide, sulfur dioxide, nitrogen oxide, or particulate matter. In 2018, wind energy reduced carbon dioxide emissions by 200 million metric tons – equivalent to over 11 percent of annual U.S. electric sector emissions, or nearly 43 million cars’ worth of carbon emissions.<sup>31</sup> It is estimated that by reducing harmful emissions that contribute to chronic illness and premature death, wind projects reduced public health costs by \$9.4 billion in 2018 alone.<sup>32</sup>

## How do wind projects impact the property values of surrounding properties?

Many studies have shown that wind projects do not have long-term negative impacts on the value of neighboring properties. Wind projects benefit all local property owners by driving economic investment and tax revenue. These funds improve roads, schools, and community services, while also keeping local taxes low – all of which factor into property values.

According to the Energy Policy Institute, 10 major studies spanning three countries and 1.3 million property transactions over 18 years have found that wind projects do not decrease property values:

The U.S. Department of Energy’s Lawrence Berkeley National Lab collected data from more than 50,000 home sales among 27 counties in nine states. These homes were within 10 miles of 67 different wind facilities, and 1,198 sales were within one mile of a wind turbine. The data span the periods well before announcement of the wind facilities to well after their construction. The research found no statistical evidence that home values near turbines were affected in the post-construction or post-announcement/preconstruction periods.<sup>33</sup>

The Massachusetts Clean Energy Center studied the relationship between wind turbines and residential property values in Massachusetts to assess whether home values were affected by proximity to wind turbines. An analysis of more than 122,000 Massachusetts home sales between 1998 and 2012 found no statistically significant evidence that proximity to a wind turbine affects home values.<sup>34</sup>

Another study by the Centre for Economics and Business Research argues that wind turbines do not negatively affect property values, and, in some cases, may increase home prices.<sup>35</sup>

Numerous other property value studies based on statistical analysis of real estate transactions have found that wind facilities have no consistent significant impact on property values (Sterzinger et al. 2003; Hoen et al. 2009; Hinman 2010; Carter 2011).

29 [https://journals.lww.com/joem/Fulltext/2014/11000/Wind\\_Turbines\\_and\\_Health\\_\\_A\\_Critical\\_Review\\_of\\_the.9.aspx](https://journals.lww.com/joem/Fulltext/2014/11000/Wind_Turbines_and_Health__A_Critical_Review_of_the.9.aspx)

30 <https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/everyday-things-emit-radiation/wind-turbine-noise/wind-turbine-noise-environmental-workplace-health.html>

31 <https://www.awea.org/wind-101/benefits-of-wind/environmental-benefits>

32 <https://www.awea.org/wind-101/benefits-of-wind/environmental-benefits>

33 <https://emp.lbl.gov/sites/all/files/lbnl-6362e.pdf>

34 <https://www.masscec.com/relationship-between-wind-turbines-and-residential-property-values-massachusetts>

35 <https://www.renewableuk.com/news/304411/RenewableUK--Cebr-Study---The-effect-of-wind-projects-on-house-prices.htm>



### **Will the Fountain Wind Project produce loud noise and be disruptive to neighbors?**

Today's wind turbines take advantage of over 30 years of design, engineering, manufacturing and operating experience to minimize sound from operations. Further, the Fountain Wind Project will be designed to comply with local and state laws to limit sound impacts. ConnectGen has designed the Fountain Wind Project within Shasta County's regulations, which will minimize additional sound impacts on nearby residences.

Shasta County's noise regulations mandate that any noise associated with the project shall not exceed 55 dBA during daytime hours (7 a.m. to 10 p.m.) and 50 dBA during nighttime hours (10 p.m. to 7 a.m.) as measured at the nearest existing noise sensitive receptors, as is outlined in section 3-13 of the Draft EIR.<sup>36</sup> For comparison, a 55 dBA sound level is equivalent to a household refrigerator.<sup>37</sup>

As part of the Shasta County Planning Division's preparation of the Environmental Impact Report, an Acoustical Assessment has been performed on the Fountain Wind Project and has determined that the project as currently proposed will be in compliance with Shasta County's noise regulations.

### **Will the Fountain Wind project enhance the fire safety and fire protection of the property and adjacent landowners?**

Yes. Fire safety is being comprehensively addressed both by the landowner, Shasta Cascade Timberlands (SCT), and Fountain Wind.

SCT has a very comprehensive fire prevention and safety plan, based on industry best practices, for its timber holdings and has made a summary of its plan available on the project website (<https://www.fountainwind.com>). For example, SCT has installed a series of 'dip tanks' on ridges of the estate so that helicopters fighting fires within the region can have easier access to water, making responses faster and more effective for SCT and neighboring lands.

Safety measures to prevent fires include systems that prevent the turbine blades from rotating too fast, temperature monitors, and automatic shut off systems to prevent over-heating, lightning protection and arc-flash detection, as well as the ability to shut-down a turbine from a remote operating control center. The turbines at the Fountain Wind project will also be equipped with comprehensive fire detection and fire extinguishing systems, including an automated system in the tower nacelle that can release a burst of inert gas, displacing the oxygen contained in the nacelle.

A fire at a wind turbine is a rare event, with only a handful of incidents over decades of operation of hundreds of thousands of turbines sited around the world. However, extensive precautions are taken to prevent them and ensure the safety of the project and surrounding areas should one occur.<sup>38</sup> For an overview of the Fire Safety and Risk Reduction measures that Shasta County is requiring of the project, see section 3.16 of the draft EIR.<sup>39</sup>

Prior to starting construction, ConnectGen will develop a Fire Protection and Prevention Plan in accordance with CalFIRE and Shasta County, as is laid out in section 3.16 of the Draft EIR. The plan will be implemented for the life of the project and provides emergency response, evacuation, fire agency notification and fire prevention procedures. The construction and enhancement of up to 57 miles of access roads will serve as fire breaks along with 2.5 acre cleared areas for each wind turbine site. A full-time staff presence on site will ensure the project site and surrounding properties are continuously monitored. Any signs of fire will be immediately reported to the appropriate authorities. All of these measures are part of the plan to enhance fire safety and protection for the area.

### **Is renewable energy needed? What are California's renewable energy mandates?**

On September 10, 2018, then Governor Jerry Brown signed into law Senate Bill 100 (SB 100).<sup>40</sup> The law requires all retail electricity to be 100% carbon-free by 2045, and therefore impacts the procurement of energy for all energy service providers in the state of California. SB 100 also requires that at least 60% of electricity be generated for CA by 2030 from eligible renewable energy resources (solar, wind, geothermal, biomass, small hydro, renewable methane, ocean wave or thermal, or fuel cells using renewable fuels) and advances the previous standard to 50% by 2025.

<sup>36</sup> <https://www.co.shasta.ca.us/index/drm/planning/eir/fountain-wind-project/draft-eir>

<sup>37</sup> <https://ehs.yale.edu/sites/default/files/files/decibel-level-chart.pdf>

<sup>38</sup> <https://www.aweablog.org/the-truth-about-wind-power/>

<sup>39</sup> <https://www.co.shasta.ca.us/index/drm/planning/eir/fountain-wind-project/draft-eir>

<sup>40</sup> [https://leginfo.ca.gov/faces/billTextClient.xhtml?bill\\_id=201720180SB100](https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB100)

### Who is the landowner?

SCT was formed to purchase and manage approximately 170,000 acres of private forestland in Shasta, Trinity, and Siskiyou Counties in early 2018. SCT's management objectives seek to deliver long-term sustainable forestry outcomes, including the production of certified timber for local processing markets and the generation of carbon credits that contribute to California's greenhouse gas emissions reduction targets through natural climate solutions. The SCT estate is managed by LandVest Inc. from its Shasta and Redding offices.

### Has ConnectGen been active in the Community?

ConnectGen has met with dozens of local stakeholders within Shasta County, including those communities directly adjacent to the project, to provide accurate information and better inform the broader community. Starting in November of 2019, ConnectGen started hosting regular Project office hours in Round Mountain at the Round Mountain Community Center. ConnectGen was able to hold seven meetings prior to the implementation of Covid-19-related meeting restrictions. Since then, ConnectGen has continued to meet with project stakeholders via phone and video conference, including hosting a virtual Local Vendor Faire in July of 2020, a video of which can be found on our website at (XXXXX). Based on stakeholder feedback, ConnectGen donated a total of \$12,000 to six separate organizations in Shasta County, including One Safe Place, KKRN Radio, Burney Food Co-Op, Montgomery Creek School, and the Tri-County Community Network. ConnectGen is committed to staying active in the community and is working to establish a community benefit fund for the Round Mountain, Montgomery Creek, and Intermountain area in excess of \$1MM. ConnectGen is committed to being an active community member and good neighbor for the remainder of the development and construction processes and throughout the operational life of the project.

### Why Shasta County?

ConnectGen has identified Shasta County for wind energy development because of its proximity to the existing transmission system that has sufficient capacity, a strong wind resource, and favorable site suitability with limited design constraints.

**CONNECTING POWER, PROJECTS & PEOPLE.**

