Wind Generation Reporting System

User Guide for Online Data Reporting

Authors: John Hingtgen, Rebecca Vail, Diana Le, Jamie Schreader, & Mathew Prindle
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience</td>
<td>3</td>
</tr>
<tr>
<td>Due dates</td>
<td>4</td>
</tr>
<tr>
<td>Using the online system</td>
<td>4</td>
</tr>
<tr>
<td>Registering</td>
<td>4</td>
</tr>
<tr>
<td>Logging in</td>
<td>5</td>
</tr>
<tr>
<td>Entering data</td>
<td>5</td>
</tr>
<tr>
<td>Editing data already saved</td>
<td>7</td>
</tr>
<tr>
<td>Adding a new quarter to previous report</td>
<td>8</td>
</tr>
<tr>
<td>Starting a report for a new plant</td>
<td>9</td>
</tr>
<tr>
<td>Tips for data entry and using the system</td>
<td>9</td>
</tr>
<tr>
<td>Bulk data upload</td>
<td>10</td>
</tr>
<tr>
<td>Change in basic information</td>
<td>11</td>
</tr>
<tr>
<td>Software requirements</td>
<td>12</td>
</tr>
<tr>
<td>Auto fill/complete</td>
<td>12</td>
</tr>
<tr>
<td>Assistance for data reporters</td>
<td>12</td>
</tr>
<tr>
<td>Corrections to data of previous quarter</td>
<td>13</td>
</tr>
<tr>
<td>Comparison of values between reports</td>
<td>13</td>
</tr>
<tr>
<td>Guidelines on specific data fields</td>
<td>14</td>
</tr>
<tr>
<td>Supplemental information to explain data</td>
<td>14</td>
</tr>
<tr>
<td>Data fields with postal addresses</td>
<td>14</td>
</tr>
<tr>
<td>Company name</td>
<td>14</td>
</tr>
<tr>
<td>Plant name</td>
<td>14</td>
</tr>
<tr>
<td>Identification number fields</td>
<td>15</td>
</tr>
<tr>
<td>Plant location</td>
<td>15</td>
</tr>
<tr>
<td>Plant operator</td>
<td>15</td>
</tr>
<tr>
<td>All schedules</td>
<td>15</td>
</tr>
<tr>
<td>Operator’s turbine ID or group ID, and number of turbines</td>
<td>16</td>
</tr>
</tbody>
</table>
Hub height (m) ........................................................................................................................................ 16
Rotor size (m²) ......................................................................................................................................... 16
Energy generated (MWh) ......................................................................................................................... 16
Rated speed (m/s) ...................................................................................................................................... 17
Station use energy ..................................................................................................................................... 17
Display of net capacity factor ................................................................................................................ 17
Privacy of information ............................................................................................................................... 18
Requesting Confidential Handling of Data ............................................................................................. 18
Acronyms & abbreviations ........................................................................................................................ 19

Audience

This guide is to assist data reporting parties to complete online wind data reports to the California Energy Commission (CEC). The online system is known as the Wind Generation Reporting System (WGRS). Reporting parties are operators of wind generators installed in California with a combined plant capacity of 1.0 MW or more.

Operators are required to report wind energy generation by power plant reporting regulations of the State of California found in 20 CCR Section 1304. There is no distinction between a distributed generator and a central station plant. The minimum plant capacity for reporting is 1 MW.

A “Reporter” in this context is a plant operator required to report data. The “Person Submitting the Report” is the primary point of contact for reporting data to the CEC. Their email address should be the one used to log into the system. “Staff” refers to the staff of the Energy Assessments Division of the Energy Commission. “Company” refers to either a private or a public organization that reports data. The terms “he,” “him,” “himself,” and “his” are used for brevity, but they refer all genders. Generator data from operators of larger plants (that is 10 MW or more) must be monthly data, but it is reported quarterly to the CEC. Smaller plants (that is under 10 MW) must report only annual data. Data reported online is collected, stored, and analyzed at the CEC. Access to online reporting is restricted for security to operators who are registered. Any wind plant operator required by state regulation to report may obtain access to the web portal by contacting staff and registering through the online system.
**Due dates**

Data reports are due on the 15\textsuperscript{th} day of February, May, August, and November, respectively, for the previous calendar quarter. If the due date falls on a weekend or holiday, the data report is due on the next business day.

**Using the online system**

Data reports are made by completing online forms and submitting them in the system. Reporting is automated and requires only minimal assistance from CEC staff.

The 2022 revision of online reporting continue the use of online reporting that data reporters have been using since 2014. It is updated to be consistent with the revision in 20 CCR 1304 effective January 1, 2022. It enables reporters to use a modern, online system and is designed to be efficient for those reporting data and for the CEC. Reporters see reporting forms displayed in online versions to enable easy data entry. Online data that must be reported is consistent with 20 CCR 1304 reporting of non-wind California power plants and includes data fields for wind plants as described in the regulation. Wind plant reports are accessed in the system by plant name and CEC ID #.

Following this is a detailed explanation of the steps to use the online system. There is also a summary in the Quick Start Guide, which is posted on the Support section of the Wind Generation Reporting System web site.

**Registering**

Before entering data, users must register and receive confirmation that their user account is active. A user who is required to report should send an email request to wgrshelp@energy.ca.gov

Registering and online reporting requires use of an email account. Business email accounts should be used rather than personal accounts. If you do not receive an email notification, adjust your email filtering to allow messages from wgrshelp@energy.ca.gov

After reviewing the request, staff will generate a notification from the system by email including a registration code (RegCode). The user should access the online system using the address of wgrs.energy.ca.gov

At this web page, the user should enter the RegCode provided along with his email address (which is his username) and then create a new password in the system. For security, this
password should be different from the one used to log into your email and is also not easy for others to guess.

**Logging in**

After the user registers, staff will activate the new account, and the system will send an email confirming the new registration. When you receive that, you can log into your new account. When logging in, you must agree to Internet security procedures used in State of California computer systems. Unauthorized access to or modification of the database is prohibited by State regulations. Each time you return to the website, simply log into the site using the same email and password. If the password is forgotten, there is a button on the home page to reset it. Staff cannot retrieve the password.

More than one employee of the same company may register himself in the WGRS if needed to meet company procedures. If someone else in your company also wishes to enter data or submit reports for the company, email the staff with his email address and name. After he completes registration and his account is activated, he will have access to reports of the company.

**Entering data**

A generation operator should contact the staff to obtain the CEC ID # for the generator before reporting on a new project. The project name must be unique. If you refer to two projects within your organization by the same name, create a variation of the name for entering information in the forms, so that each project has a unique name.

To report data from a project or company for the first time, create a new project or company report from the home page by clicking on the button to start a new report.

At “Company Responsible for Submitting the Report,” the Operator field will accept names from a drop-down list after the first character is entered. Operator name choices in the list are based on information that the user provides to staff. The software uses an intelligent list menu in the drop-down lists to display allowable choices for the field. Complete the data in the boxes as shown on the form, save the form, and then submit it online. An operator listed should be consistent with the company submitting the report. The reporting regulation specifies that the operator is responsible to submit the report for a generation project.

The database (DB) stores CEC ID #'s, plant names, and company names and checks for inconsistencies. If a user attempts to enter a plant name with which a different company is
associated, an error message will appear. This indicates that the plant name and CEC ID # are in use by another company. When entering a plant name in the form, select the new plant name from the drop-down list. You may need to double-click on the box to see the drop-down list.

Pink entry cells indicate data is missing or there is an error in the value or the formatting of the value. These must be corrected and saved. If you have entered data, saved the page, no fields are highlighted in pink, and you cannot proceed, then re-load the plant in the browser and proceed. If data is in correct format and a pink highlight does not appear, but data cannot be saved, check the tool tip (pop-up message in a field) for the correct format.

Follow the sequence of data entry shown starting with the verification and proceed through the energy generation reporting section.

There is no auto-save feature in the software to avoid entering false data or generating extraneous error messages. The program saves data after the Save button is clicked. Before leaving a page, be sure to save the data entered by clicking to save. If you navigate away from a page before clicking to save, the browser may not cache the data. The browser’s back button (icon/arrow) should not be used, to avoid losing data that has not been saved. The software does not use data cached in browser files.

If there is no generation for the current period, enter a zero in the cell. Users should enter data in all cells on the forms. Missing data should be explained in the Operator Comments box. With generation data, also record station use data.

**Submitting data report**

When all forms have been saved with no error highlights or messages, check the box to acknowledge the accuracy of the data, and click the button to submit the data. The signature box must be checked before the data is submitted to the system. To access the same plant report later, simply login, go to the period in which the report was made, and load the plant report.

For large plants, only one quarter at a time has editing enabled for each wind plant. For example, Qtr. 1 data must be completed before accessing Qtr. 2. If you have not completed entering data for one quarter, complete all data fields for that quarter, save the forms and submit them.

A key with color-coding for report status appears on the page to load reports. Report status for the quarter is shown as one of the following.
### Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>User started data entry but has not entered all data in the report.</td>
</tr>
<tr>
<td>Pending</td>
<td>User entered all data but has not submitted it online.</td>
</tr>
<tr>
<td>Submitted</td>
<td>Report has been submitted for staff review.</td>
</tr>
<tr>
<td>Adjusting</td>
<td>Report needs corrections or additions and can be changed by user.</td>
</tr>
<tr>
<td>Reviewed</td>
<td>Report has been reviewed by staff.</td>
</tr>
<tr>
<td>Completed</td>
<td>Report is complete for the quarter and can only be viewed.</td>
</tr>
</tbody>
</table>

### Follow-up after report submittal

After the forms for a period have been submitted, staff will review them and mark them as complete or enable adjustments and notify the user to make corrections.

If forms need adjustments, the user should log on, load the forms, adjust or correct the data, and then re-submit the forms online. Staff will re-check the forms.

### Editing data already saved

Data in the form from the current period may be edited any time before the report is submitted online. To edit data that has been saved but not submitted, simply load the plant in the online form, make changes, re-save the data, and then submit the report. Once submitted, the form is locked from further editing unless the staff unlock it.

If the staff have reviewed a form and notified the user that corrections are needed for the reporting period, they will unlock the form for making adjustments online. The user should logon, load the form, and make adjustments or corrections. Then, re-sign and re-submit the form for staff to recheck.

If you create a new plant report from a previous quarter, you can’t modify data for the previous quarter in the later report, for example, modify Q1 data in the Q2 report. If changes are needed to earlier (Q1) data, they must be made in both reports. Otherwise, only the later report will contain the revised data of the earlier period, and the earlier report will contain the un-revised data.
Adding a new quarter to previous report

After a completed data report for a plant has been submitted and staff have accepted the data as complete, the reporter may enter data for the next period without reentering basic plant parameters. Adding new data is done by loading the previous period report and selecting the button at the bottom of form for the next reporting period. In this example, click the button saying, “Data entry for ....”

The reports are designed to allow updating in sequence, with the next one being open for editing after the last one has been marked as complete by the staff. To enter data for a new period, continue from the most recent period that is in completed status, rather than from an earlier quarter. If the last period report is in the status of adjusting or it is incomplete, complete it first, submit it online, and then request that the staff review and mark it as completed.

When the previous report exists, do not use the command to "Start New Report" when proceeding from a previous period into the next period. Using the undo command will cause the new report to lose data integrity.

Users should take care to enter data in the year, so their data is accurately reported. When entering later data in an existing plant for the next period, the CEC ID # and the plant name are kept constant. Any change in CEC ID # would require staff action, rather than an update of an existing report.

After entering and saving the data with no blank fields, if the page does not display the most recently entered data, re-load the page in the browser. In some cases, the browser may load cached data instead of more recently entered data. If the browser still displays earlier-entered data (which should be overwritten), logout and login again to see the data. Also, if the page does not calculate a total correctly, save the data, close and re-open the browser, and then reload the data page.

A timeout feature is built into the online portal so that if a user begins entering data, stops work and does not return, the account will be logged off. If he continues to enter data, the timeout will not come into effect. Currently the timeout limit is one hour.

If users find problems using the website, they should email staff at wgrshelp@energy.ca.gov
Starting a report for a new plant

When a new plant starts generating, a new series of reports must be started. First, inform the staff of the details for the new operator and plant. The staff will enter information for the new report series, such as company name, email address, and plant name. Then, the user should log in and click the button to start a new report from the home page.

Then, proceed through the webpage sections, entering all information, saving, and submitting the report online. Do not use the Start New Report feature to add new reports to an existing series of reports of a generation plant. Doing that would require entering all previous information again, and it could lead to stranded reports that do not appear in the series.

Tips for data entry and using the system

Data is limited in most cases to either digits or alphabetic characters. Although a few special characters are allowed, most are not allowed, e.g., apostrophes, periods, or semicolons. This is to ensure consistency of unchanging data over time, e.g., in the spelling of a company name. Instead of entering abbreviations with periods, spell out the full word. If the actual spelling changes, this should be reported to staff so they can update the name.

Tool tips on the forms will show required formats, e.g., CEC ID # must be a “W” followed by four digits, without spaces in the middle.

If you have entered data that fits the format, and the page still shows a pink indicator in the data field, save the form with the data that is valid, and then contact staff for assistance. In many cases, this may occur when data entered does not fit the expected format for the field.

The software will show an error when data entered does not meet the logic or quality control checks built in. These are to provide a check on reasonableness of entered data, e.g., comparing the total MW and number of turbines. The user will see an error message on the form or a (pink) colored field. These types of problems should be corrected by checking the quality and type of the data entered. Data should be within the bounds of reasonable physical parameters. When the data meets the quality-control checks, the form with data may be saved.

Other problems like those where data cannot be saved may generate an error message. If the message states the problem is being reported, re-enter and save data. If the error message re-occurs, log out, close and re-open the browser, log in, and reload the report. If a message
saying “Server Error” appears, there is a problem with the web server rather than in the WGRS software; try again in a few minutes to enter the data.

If the page does not state that the problem is being reported to staff automatically, a request should be emailed to wgrshelp@energy.ca.gov. When a data file or other file needs to be sent to illustrate a problem, email it. It may be helpful to capture a screen shot of the page, paste this into an email or Word document, and send this to illustrate the problem. Any supporting information files should be attached to a request. Please describe how serious the problem appears to be to help us prioritize assistance.

The online pages do not automatically refresh themselves when data is changed. This feature is to prevent mismatches between data a user sees and data in the DB. To refresh an online page, save the page with any data that has been revised since the page was loaded, then click the button to reload the page. Do not use the Back button in the browser. The software does not access previous pages in the browser cache of the user’s PC.

**Bulk data upload**

From the Support page, there is a downloadable data template in the form of an Excel spreadsheet (ES). This may be used to upload data to the corresponding fields in the online form, more useful when there is more data to report. Using the upload feature is not required, but it should allow a user to enter more data more quickly. To use this feature, take the following steps:

1. Save the bundled upload template from the Support page of the website to your PC.

2. Enter energy data in your copy of the template (on your PC) in the appropriate form for the latest reporting period. Delete values from any cells which contain values that are not valid for your company in this period, but do not change the structure or layout of the template.

3. Save the template file on your PC.

4. Use the upload command in the online form to upload your data and then save the page online. When you have entered the station use data in the saved template, check the box for station use data. The upload command does not submit the form to the system: it simply uploads the data to the form, where it is part of all other data on the form.

5. Complete all required forms and schedules for the plant.

Note that the upload feature accepts data within the current period, but it does not accept corrected data for earlier periods once the report has been submitted and accepted by the
staff. This is to avoid accidentally overwriting data saved earlier. When data corrections are needed, send an email to the wgrshelp mailbox as described below.

Users are free to keep the current version of the upload template on their computer and add additional data to it in each new period. However, ensure that the current template version is used by downloading a new template at least once per year, such as when preparing to enter Quarter 1 data in the next year.

Do not modify the structure of the template, such as changing rows, columns, or tabs. Only the values in the cells should be changed.

The order of the turbine groups in the online form must be the same as on the user’s data upload template, and the number of groups must be the same in both places. This is to ensure that turbine groups are associated with corresponding energy data. The software will not re-order the turbine groups. Therefore, the user must use the same order for groups in the template as in the groups already entered in the form. Do not alphabetize or sort the rows on the template unless it is to match the order displayed online. The order displayed online cannot be changed.

If there is more than one row of energy data on in the wind energy generation section enter the station use data in the one data row only. The upload function will ignore any station use data entered in rows below this. Do not try to upload any other file except the bulk upload template. The offline QFER Excel data reporting form cannot be uploaded.

**Change in basic information**

For regular, periodic reporting, users should be able to enter all data online without staff assistance. When generation plants change basic parameters, the data reporter should contact staff for assistance and provide data about the change. Such basic changes can include a new owner, plant name or operator; merging or splitting; re-powering; or making other changes. Staff will provide a new CEC ID #(s) when appropriate.

Data is stored by plant and reporting period. Therefore, if basic plant parameters change in later periods, e.g., plant operator, loading an earlier period will display parameters that were in effect during that period.

The online form contains the name and email of the person responsible for submitting reports for the company. If the person responsible to report changes, the name and email entered on the data form may be changed for a later period by the user. However, the account (email)
used to login to the system for the company will remain the same. If the responsible person in the company changes, contact the staff for assistance.

Software requirements

The online system requires Internet access. It does not require a high-speed connection, although if the data upload option is used for large datasets, a faster connection will improve service. Https protocols are used to safeguard information transfer.

If the software seems slow to respond, delays could be due to having too many windows open on the user’s PC. Try closing un-needed windows and programs running, and then using the WGRS again.

The supported browser is Internet Explorer, version 8 or later, and versions 7 and earlier will not work. Other browsers such as Chrome or Safari should work, but the CEC does not provide support for those. Firefox has limited functionality with the WGRS system, and it is not recommended. WGRS software was designed with Microsoft and IBM-PC compatible systems, but there are no known obstacles to using it with Apple systems; please report any problems to: wgrshelp@energy.ca.gov

Auto fill/complete

Auto-fill or auto-complete is a function of the Internet browser that the user controls, rather than being a function of the WGRS software. Users can switch this function on and off in their own browser. Use caution when this using this feature, as some data may auto-fill that should be updated in current the reporting period.

Assistance for data reporters

Several help documents are available under the Support tab on the WGRS home page. These include:

- Quick-start guide
- Glossary
- CEC ID # list
- FAQs
Before going to the Support section, first save your work with the save button on the data entry form.

For questions that need more information, email the staff at wgrshelp@energy.ca.gov If the problem requires a discussion or extended assistance, it may be faster to resolve by phone. In that case, email wgrshelp@energy.ca.gov to request a phone discussion, and one of the staff members will call you. If you leave a message, include your phone number and business hours.

**Corrections to data of previous quarter**

Occasionally users may discover that data reported earlier is incorrect and needs revision, e.g., incorrect data for Q1 after the Q1 report is submitted. In this case, send a note describing the correction to wgrshelp@energy.ca.gov so staff is aware of the correction. Entry of data in a report for a later period does not automatically update earlier reports.

If the corrected data is within the same report period, e.g., April data correction in the Qtr. 2 report, staff can place this report into Adjusting mode, and the user should make the corrections and re-submit the report. Corrections can also be made by the user in a different report, e.g., an April data correction in the Qtr. 3 report, after the staff places this into adjusting. As another example, if there is a revision of February data that is discovered during the fourth quarter, the user can correct the Qtr. 1 report after staff places this into adjusting mode. However, the February correction must also be made in the Qtr. 2, 3, and 4 reports.

**Comparison of values between reports**

As reports are revised or corrected, discrepancies can arise in the generation values of specific time periods in different reports. To identify such differences, values in reports filed for quarters 2, 3, and 4 of a year are compared to values in reports filed for quarters 1, 2, and 3. For example, values for generation in January are compared between values in the quarter 1 report and values in the quarter 2 report. When the values differ, an advisory message appears near the message about the Net Capacity Factor for the quarter on wind generation reporting form. If this message appears, check the values of like quarters or months in the various reports of the same year, and then correct the filed data to be consistent. Correcting the data will require first asking staff to place a report into adjusting mode to allow revisions in earlier reports.
Guidelines on specific data fields

Supplemental information to explain data

Reporting forms have comment fields for operators to add information that does not fit in the other data fields. Use these comments for supplemental information explaining answers in other data fields. When the comment no longer applies in a new period, delete the comment in the next report.

Data fields with postal addresses

United States zip codes should be entered in the standard format with a minimum of five (or optionally nine) numerical digits. If the nine-digit zip code is available, enter it using a dash, e.g., 12345-6789. For addresses where the first digit is zero, enter the zero in the reporting form in its correct position, e.g., 01234.

Canadian and Mexican postal codes should be formatted according to standard mail formatting in those countries. (See articles in Wikipedia for standard formats.) Examples of valid and invalid Canadian postal codes:

- M6K 1V2 - Valid code
- M6k 1V2 - Invalid due to lowercase k
- M6K1V2 - Invalid due to missing space
- M6K1 V2 - Invalid due to a space in the wrong position

Company name

A company name is entered using a drop-down menu which appears when the first letter is typed. Select a name from the menu displayed. Company name is limited to a standard name in order to ensure that the spelling is correct, as provided to staff.

Plant name

Enter the first letter of the plant name and select the plant from the drop-down menu. If the plant name does not appear after the first letter is entered, check the plant name provided to staff; the name you provided should appear on the drop-down menu. If you see an error message that the plant name is already in use, check the name and spelling to ensure that it is from your own company rather than another company.
Identification number fields

For plant identification fields, specific formats should be used. Those formats are indicated in the tool tips. By holding the cursor over the data field, a tool tip will describe the data format.

If more than one identification number applies to the plant, pick the one that is primary or most significant and enter the other number in the operator comments box.

Plant location

If the plant falls near an Existing Wind Resource Area (WRA) but outside the formal boundaries of it, select Outside of Existing on the menu. If it does not fall near an existing WRA, select "Other" on the menu. One of the WRA choices must be selected before you may proceed to the next schedule.

Plant operator

If the wind plant operator name needs to be changed, contact WGRS staff. Staff will correct the name in the DB. The next time the operator signs on to fill out a report, the report will still show the previous operating company name. To correct this, go to the second form and delete the plant name by clicking the “x” on the gray box that contains the plant name. When the plant name is re-entered in the name box, the operating company name will automatically be corrected. This process must be repeated for each plant undergoing an operating company name change.

All schedules

Enter the cumulative numbers of available turbines, i.e., the old plus any newly available turbines, and the change in number for each turbine group. The user should check these numbers to ensure accuracy.

Available turbines include those that are undergoing short-term maintenance. However, they do not include turbines that have been decommissioned or retired.

Turbine groups should be added in form 3, with the latest group at the bottom of the list. Users should not enter individual turbine data in the form. Rather, they should aggregate similar turbines into groups and enter group data. For each group, the manufacturer, model, turbine size (kW), and other parameters should be the same.
Operator's turbine ID or group ID, and number of turbines

The number of turbines in the turbine groups must sum up to the total number installed listed. A turbine (group) that was “available to generate” in the reporting period includes those that were operable and able to generate electricity in the period. It includes turbines that could operate but may not have been generating due to temporary outages, contractual issues, or short-term equipment repair. “Available to generate” does not include those turbines that were permanently out of service, on indefinite shutdown, retired, or decommissioned.

If the available capacity declines below 1.0 MW in the new reporting period, the plant need not report in the new period. However, if plant capacity increases to at least 1.0 MW later, the plant must resume reporting capacity. Contact the staff in that case for detailed instructions.

Please use a unique ID for each turbine group. For example, if “WTG 100” is used for the first group, do not use that ID again for another group in the report. The second group could be “WTG 101” or another ID that the operator chooses.

Hub height (m)

The height above ground of the hub of the turbines in the turbine group. Turbine groups should include only turbines of the same hub height. If the plant includes turbines that are the same except for hub height, split them into groups so that each group has the same height within the group. Commercial turbines in California are currently horizontal axis turbines. If a plant brings vertical axis turbines into service, contact the staff for further instructions.

Rotor size (m²)

Rotor size (area) should match the turbine model and diameter. If the rotor size in m² is needed, either refer to the manufacturer’s specification sheet or convert to m² using the rotor diameter. For assistance in conversions, refer to online tools or contact the staff. To calculate the area using the radius or diameter of the rotor, use the following facts. The formula for the area of a circle is Area = π x Radius squared, i.e. A=π x R². Πi is approximately 3.1416, and the radius is half the diameter. For example, if the diameter is 50 m, the radius is 25 m, and the area is 1,964 m². Be sure to use metric units rather than English units: m and m², but not feet or square feet. To convert English to metric units, refer to online unit conversion websites.

Energy generated (MWh)

For each month or year, enter the energy generated in MWh in the following categories: energy used onsite, energy sold for re-sale, and energy sold to end user. The total of these three categories should equal the net plant energy output in the same month or year. Net output is
the difference of gross energy generated and station use energy. Note that starting in 2022, energy is reported in MWh rather than kWh.

If the division of energy generated broken out by hub height is unknown, enter an estimate of the energy production for each group that includes turbines that are the same. The sum of energy for all turbine groups must equal the total plant generation.

**Rated speed (m/s)**

Enter the manufacturer’s rated speed in meters/second, (m/s). If the speed is known only in mph, multiply the mph value by 0.44704 to obtain m/s. If the speed is known only in feet/second, multiply that value by 0.3048 to obtain m/second.

**Station use energy**

For each month or quarter, the station use should be entered in the forms along with the gross generation. Using these values, the software will calculate and display the net generation.

If only the gross and the net generation are known for the period, but the station use is not known, calculate the difference between the two values and enter that in the station use field, along with the gross generation; note this in the operator comments box.

If generation for the period is zero, but the station use is positive, enter these values in the form, which will calculate the net generation to be negative. This station use data is useful to the CEC even for periods when the plant has no gross generation.

If the station use exceeds 8% of gross generation, the value in the field may be saved, but it will show in purple highlighting to indicate that it is a high value compared to most other wind generators. In this case, please double check the source data to ensure it is accurate. After entering changes or notes, click the save button to save the data and any note.

**Display of net capacity factor**

An information display appears on the online generation reporting form showing the net capacity factor for the plant in the reporting period. After entering all data, the user should click to save data, and the net capacity factor will be displayed near the Operator Comments box. This provides feedback on the reported generation and station use data. The calculation uses the gross generation and station use data reported on the form. If the value displayed does not agree with the operator’s own calculations, check the reported data to be sure it is accurate. Net capacity factors are displayed in percent for the period, considering the number
of hours in the period. The software counts the actual (unequal) numbers of days in different
months, as well as the extra day in leap years.

Privacy of information

Data collection requirements were designed to exclude commercial, proprietary, and sensitive
data with the input of industry representatives. Personal contact information should not be
entered online; only organizational contact information should be entered.

Users retain the right to request that specific information be treated as confidential. This
treatment is done after the user obtains approval for confidentiality status of specific data
through a formal procedure. Determination of confidential status is made at the executive level
of the CEC, in conjunction with the Chief Counsel’s Office. Staff and counsel will review the
application and make recommendations to the Executive Director. The decision is based upon
law and regulations, considering the need for confidentiality and the public need to know
information. Users who wish to apply for confidential treatment of data should submit reports
through the CEC’s docketing system, rather than the online system. The docketing process
is described here: http://www.energy.ca.gov/commission/chief_counsel/docket.html

Data reporters are required to report all data by due dates, regardless of an application for
confidential treatment or the outcome of a determination.

In addition to analysis of statewide or regional data, the CEC may prepare comparisons showing
the top companies in the state in various categories, such as energy production or capacity.
Information on generation by power plants is posted on the Commission’s web site.

Requesting Confidential Handling of Data

Users requesting designation of specific data as confidential should download reporting forms
from this page:

https://www.energy.ca.gov/data-reports/forms-instructions-reporting-electric-and-natural-gas-
sales-and-electric

Complete the forms and submit them to the Docket of the CEC. Docketing instructions are
given here: http://www.energy.ca.gov/commission/chief_counsel/docket.html

Requested confidential data cells should be indicated on the forms using yellow-highlighted
cells before submitting to the Docket. A Request for Confidential Designation form should also
be completed, signed, and submitted. After a formal review of the application by the CEC Chief
Counsels Office and the Executive Director, the data reporter will be notified whether the request for confidential status is granted. Confidential data is due on the same dates as other data. The determination on confidentiality status will be made after reviewing the data and the reasons for the request.

**Acronyms & abbreviations**

Acronyms and abbreviations in this guide are listed below. A glossary of terms is posted in the Support section of the WGRS web site.

CEC or Energy Commission: California Energy Commission

DB: Database

e.g.: for example (*exempli gratia*)

ES: Excel spreadsheet

F&I: Forms & Instructions

FEA: Front-end application: the interface that users see in their browser.

IE: Internet Explorer of Microsoft

i.e.: that is (*id est*)

IT: The Information Technology office of the Energy Commission

PC: Personal computer (of any brand) of the user who reports data

QFER: Quarterly fuel and energy report.

Q1 or Qtr. 1: Quarter 1 of a calendar year

RegCode: The code used to register a new account (that is emailed to the user).

WGRS: Wind Generation Reporting System. (The current system used to report wind data, used for 2022 and later data.)

WRA: Wind Resource Area