| DOCKETED |  |
| ---: | :--- |
| Docket Number: | 22-IEPR-03 |
| Project Title: | Electricity Forecast |
| TN \#: | 246131 |
| Document Title: | PWRPA IEPR 2022 PDF |
| Description: | N/A |
| Filer: | Tracy Silva |
| Organization: | Power and Water Resources Pooling Authority |
| Submitter Role: | Applicant |
| Submission Date: | $9 / 16 / 2022$ 10:04:02 AM |
| Docketed Date: | $9 / 16 / 2022$ |

State of California
California Energy Commission
ELECTRICITY RESOURCE PLANNING FORMS
Administrative Information

| Name of Load Serving Entity ("LSE") | Power and Resources <br> Pooling Authority (PWRPA) |
| :--- | :--- |
| Name of Resource Planning Coordinator | Cori Bradley |


| Persons who prepared Supply Forms | S-1 Requirement | S-2 Supply | S-2 Addendum | S-3 Small POU Hourly Loads | S-5 Bilateral Contracts | Application for Confidentiality |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name: | Cori Bradley | Cori Bradley | Cori Bradley | Cori Bradley | Cori Bradley |  |
| Title: | Operations Manager | Operations Manager | Operations Manager | Operations Manager | Operations Manager |  |
| E-mail: | cb@pwrpa.org | cb@pwrpa.org | cb@pwrpa.org | cb@pwrpa.org | cb@pwrpa.org |  |
| Telephone: | 916-405-8923 | 916-405-8923 | 916-405-8923 | 916-405-8923 | 916-405-8923 |  |
| Address: | 3100 Zinfandel Drive | 3100 Zinfandel Drive | 3100 Zinfandel Drive | 3100 Zinfandel Drive | 3100 Zinfandel Drive |  |
| Address 2: | Ste. 300 | Ste. 300 | Ste. 300 | Ste. 300 | Ste. 300 |  |
| City: | Rancho Cordova | Rancho Cordova | Rancho Cordova | Rancho Cordova | Rancho Cordova |  |
| State: | CA | CA | CA | CA | CA |  |
| Zip: | 95670 | 95670 | 95670 | 95670 | 95670 |  |
| Date Completed: | 8/26/2022 | 8/26/2022 | 8/26/2022 | 8/26/2022 | 8/26/2022 |  |
| Date Updated by LSE: |  |  |  |  |  |  |
| Back-up / Additional Contact Persons for Questions about these Forms (Optional): |  |  |  |  |  |  |
| Name: | Tracy Silva | Tracy Silva | Tracy Silva | Tracy Silva | Tracy Silva |  |
| Title: | Staff Analyst | Staff Analyst | Staff Analyst | Staff Analyst | Staff Analyst |  |
| E-mail: | tas@pwrpa.org | tas@pwrpa.org | tas@pwrpa.org | tas@pwrpa.org | tas@pwrpa.org |  |
| Telephone: | 916-714-1801 | 916-714-1801 | 916-714-1801 | 916-714-1801 | 916-714-1801 |  |
| Address: | 3100 Zinfandel Drive | 3100 Zinfandel Drive | 3100 Zinfandel Drive | 3100 Zinfandel Drive | 3100 Zinfandel Drive |  |
| Address 2: | Ste. 300 | Ste. 300 | Ste. 300 | Ste. 300 | Ste. 300 |  |
| City: | Rancho Cordova | Rancho Cordova | Rancho Cordova | Rancho Cordova | Rancho Cordova |  |
| State: | CA | CA | CA | CA | CA |  |
| Zip: | 95670 | 95670 | 95670 | 95670 | 95670 |  |

Power and Resources Pooling Authority (PWRPA)
Bold font cells sum automatically. Data input by User are in dark green fon

| Bold font cells sum automatically. Data input by User are in dark green font. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| line | Capacity Procurment Requirement (MW) | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|  | PEAK LOAD CALCULATIONS | (Actual Load) | (Actual Load) | (Forecast Load ->) |  |  |  |  |  |  |  |  |  |
| 1 | Forecast Total Peak-Hour 1-in-2 Demand | 113 | 114 | 114 | 110 | 105 | 100 | 100 | 100 | 95 | 95 | 95 | 95 |
| 2 a | ESP Demand: Existing Customer Contracts | 113 | 114 | 114 | 110 | 105 | 100 | 100 | 100 | 95 | 95 | 95 | 95 |
| 2b | ESP Demand: New and Renewed Contracts |  |  |  |  |  |  |  |  |  |  |  |  |
| 2c | ESP Demand in PG\&E service area | 113 | 114 | 114 | 110 | 105 | 100 | 100 | 100 | 95 | 95 | 95 | 95 |
| 2d | ESP Demand in SCE service area |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 e | ESP Demand in SDG\&E service area |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Additional Achievable Energy Efficiency (-) |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Demand Response / Interruptible Programs (-) | 0 | (12) | (10) | (15) | (15) | (20) | (20) | (25) | (25) | (30) | (30) | (30) |
| 5 | Adjusted Demand: End-Use Customers | 113 | 102 | 104 | 95 | 90 | 80 | 80 | 75 | 70 | 65 | 65 | 65 |
| 6 | Coincidence Adjustment (-) | (10) | (10) | (10) | (10) | (10) | (10) | (10) | (10) | (10) | (10) | (10) | (10) |
| 7 | Coincident Peak-Hour Demand | 103 | 92 | 94 | 85 | 80 | 70 | 70 | 65 | 60 | 55 | 55 | 55 |
| 8 | Required Planning Reserve Margin | 15 | 14 | 14 | 13 | 14 | 12 | 12 | 11 | 10 | 9 | 9 | 9 |
| 9 | Credit for Imports That Carry Reserves (-) | -6 | -6 | -6 | -6 | -6 | -6 | -6 | -6 | -6 | -6 | -6 | -6 |
| 10 | Firm Sales Obligations |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Firm LSE Procurement Requirement | 113 | 100 | 102 | 92 | 88 | 76 | 76 | 70 | 64 | 59 | 59 | 59 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| line | Energy Procurement Requirement (GWh) |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ENERGY DEMAND CALCULATIONS | (Actual Load) | (Actual Load) | (Forecast Lo | - $->$ ) |  |  |  |  |  |  |  |  |
| 12 | Forecast Total Energy Demand / Consumption | 438 | 512 | 486 | 450 | 300 | 450 | 500 | 450 | 300 | 450 | 500 | 480 |
| 13a | ESP Demand: Existing Customer Contracts | 438 | 512 | 486 | 450 | 300 | 450 | 500 | 450 | 300 | 450 | 500 | 480 |
| 13b | ESP Demand: New and Renewed Contracts |  |  |  |  |  |  |  |  |  |  |  |  |
| 13c | ESP Demand in PG\&E service area |  |  |  |  |  |  |  |  |  |  |  |  |
| 13d | ESP Demand in SCE service area |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 e | ESP Demand in SDG\&E service area |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Additional Achievable Energy Efficiency (-) |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Demand Response / Interruptible Programs (-) | 0 | (5) | (4) | (7) | (7) | (9) | (9) | (11) | (11) | (13) | (13) | (13) |
| 16 | Adjusted Demand: End-Use Customers | 438 | 507 | 482 | 443 | 293 | 441 | 491 | 439 | 289 | 437 | 487 | 467 |
| 17 | Firm Sales Obligations |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | Firm LSE Procurement Requirement | 438 | 507 | 482 | 443 | 293 | 441 | 491 | 439 | 289 | 437 | 487 | 467 |


|  |  | MW | MW |
| :---: | :---: | :---: | :---: |
| line | Historic LSE Peak Load: | Year 2020 | Year 2021 |
| 19 | Annual Peak Load / Actual Metered Deliveries | 113.0 | 114.0 |
| 20 | Date of Peak Load for Annual Peak Deliveries | 6/24/20 | 6/16/21 |
| 21 | Hour Ending for Annual Peak Deliveries | 12 | 14 |
| 22 | Interruptible Load called on during that hour (+) |  |  |
| 23 | Self-Generation and DG Adjustments |  |  |
| 24 | Adjustments for Major Outages |  |  |
| 25 | Adjusted Annual Peak Load | 113.0 | 114.0 |

[^0]
## 

| － |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capacrsupprevesuraces（um） |  |  |  | fuerive |  | вА | batucue | Lompatue | Sorag ioumben | Monty oas | Comationeation | come |  | 202 | 2023 | 2024 | 2205 | ${ }^{2026}$ | ${ }^{2027}$ | 2208 | 208 | 2300 | 209 |
| $\frac{18}{10}$ |  |  |  |  |  |  |  |  |  | Soma | Somet |  |  |  |  |  |  |  |  |  |  |  |  |
| Tronkucarssupuy |  |  |  |  |  |  |  |  |  | amom | amt |  |  | 。 | 。 | 。 | ． |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | $\xrightarrow{\text { a mame }}$ | amem |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | dome | nome |  |  |  |  | 。 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | ， | 。 | 。 | ， | 。 | ． |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | dom | amam |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | atame | Somet |  |  | 6 | ${ }^{75}$ | ${ }^{75}$ | ${ }_{5}{ }^{5}$ | ${ }^{16}$ | ${ }^{5}$ | ${ }^{5}$ | ${ }^{15}$ | ${ }^{15}$ |  |
|  | mans | 5261 | Grsevt 2 ws | \％ |  | caso |  |  |  | ${ }_{\text {a }}^{\text {amem }}$ | $\underset{\substack{\text { aom } \\ \text { doem }}}{\text { dome }}$ | 。 | 。 | ， | ． 2 | 2 | 2. | 2 | 2 | 2.2 | 2 | 2 |  |
|  |  |  | Lomite Pux | Numalas |  | caso |  |  |  |  | $\xrightarrow{\text { amoma }}$ |  |  | 8 |  |  |  |  |  |  |  |  |  |
|  | Mutio | Matio | Metabe |  |  |  |  |  |  | ．me | amm |  |  | ：${ }^{54}$ | ${ }^{65}$ | ${ }_{54}{ }^{65}$ | ${ }_{5}{ }^{\text {en }}$ | ${ }_{24}^{65}$ | ${ }_{24}{ }^{6}$ | ${ }_{24}^{64}$ | ${ }_{24}^{64}$ | ${ }^{5}$ |  |
|  |  |  |  |  |  |  | ${ }^{3} 82266$ | （1987］ |  | ， | Some |  |  | ${ }_{2}^{4}$ | ［ ${ }^{\text {a }}$ | ［ ${ }^{\text {a }}$ | （ ${ }^{\text {a }}$ | － | $\stackrel{4}{6}$ | 20 | ${ }_{20}{ }_{20}$ | ${ }^{\text {a }}$ |  |
|  |  |  |  |  |  |  |  |  |  | amat | uom | 15 | 10 | 10 |  | － |  |  |  |  |  |  |  |
| $\frac{76}{70}$ |  |  |  | oner |  | caso |  |  |  | $\xrightarrow{\text { amam }}$ | $\xrightarrow{\text { Somem }}$ | ${ }^{15}$ | 10 | － 10 |  |  |  |  |  |  |  |  |  |
| ${ }_{79}^{79}$ Remman |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\frac{7}{7}$ |  |  |  |  |  |  |  |  |  | some | some | 。 | 。 | － | － | － | ， | 。 | $\bigcirc$ |  |  |  |  |
| ${ }^{-1}$ |  |  |  |  |  |  |  |  |  | Sasas | omat |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | ${ }_{1}^{28}$ | $\xrightarrow{120}$ | ${ }_{\text {968 }}^{108}$ | ${ }_{9}^{98}$ | ${ }_{8}^{88}$ | ${ }_{\substack{98}}^{\substack{20}}$ | ${ }^{26}$ |  | ${ }_{9}^{98}$ | ${ }_{9}^{98}$ | ${ }_{9}^{98}$ | ${ }_{\text {\％}}^{90}$ |
| 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


|  | actasisiomy | ${ }^{202}$ | ${ }^{203}$ | 2024 | 2025 | 208 | 2027 | 208 | 2020 | 2300 | 2091 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | － | 0 | 0 | 0 |  |  | 0 |  | 0 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| $\bigcirc$ | － | 。 | － | 0 | $\bigcirc$ | － | － | － | － | － |  |
| $\bigcirc$ | － | 。 | － | － | $\bigcirc$ | $\bigcirc$ | － | － | － | － |  |
| $\bigcirc$ | － | 。 | － | ， | $\bigcirc$ | $\bigcirc$ | － | － | － | 0 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 219 | ${ }^{128}$ | 8 | ${ }^{27}$ | ${ }^{2792}$ | ${ }^{234}$ | ${ }^{232}$ | ${ }^{234}$ | ${ }^{2792}$ | ${ }^{234.2}$ | ${ }^{2442}$ | ${ }^{244}$ |
| $\bigcirc$ | 。 | 。 | 13 | ${ }^{13}$ | ${ }^{13}$ | 13 | ${ }^{13}$ | ${ }^{13}$ | ${ }^{13}$ | 13 |  |
|  |  |  |  |  |  |  | 460 |  |  |  |  |
| － | $\underset{\substack{124 \\ 34}}{\substack{14}}$ | （is | ${ }_{\text {d }}^{\text {dis }}$ |  |  |  |  |  |  |  |  |
| ${ }^{28}$ | ${ }^{30}$ |  | ${ }^{\frac{32}{32}}$ | ${ }^{\frac{38}{15}}$ |  | ${ }^{30}$ | ${ }_{4}$ | ${ }_{\substack{29 \\ 13}}^{\substack{29\\}}$ | ${ }_{\substack{29 \\ 18}}^{\substack{29}}$ | ${ }_{\substack{28 \\ 12 \\ 12}}^{\substack{28 \\ \hline}}$ |  |
| 80 | ${ }^{\circ}$ | 5 | ${ }^{25}$ | 0 | ${ }_{25}$ | ${ }^{25}$ | ${ }^{25}$ | － | ${ }^{25}$ | 25 | ${ }^{25}$ |
| 8 | ${ }^{\circ}$ | ${ }_{50}$ | 25 |  | 25 | 25 | ${ }^{25}$ |  | ${ }^{25}$ | 25 | 25 |
| ${ }^{0}$ | 0.35 | 0.5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  | 10 | 10 |  |  |  |  |  |  |  |  |  |
| $\frac{3186}{\substack{\text { 368 }}}$ |  | ${ }_{\substack{201 \\ 482}}^{4}$ | ${ }^{338}$ | ${ }_{\text {¢ }}^{218}$ | ${ }_{\text {3 }}^{316}$ | ${ }_{\substack{394 \\ 990}}$ | ${ }_{\substack{39 \\ 49}}^{4}$ | ${ }_{211}^{40}$ | ${ }_{3}^{398}$ | ${ }_{\substack{387 \\ 887}}$ | ${ }_{\substack{36 \\ 487}}^{\substack{\text { a }}}$ |
| ${ }^{182}$ | ${ }^{248}$ | ${ }^{201}$ |  |  | ${ }_{4}{ }^{4}$ | ${ }_{9}$ | ${ }_{48}^{48}$ | ${ }^{29}$ | ${ }_{4}$ | ${ }^{\text {400 }}$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

$+3$


.

.



State of California
California Energy Commission
ELECTRICITY RESOURCE PLANNING FORMS
CEC Form S-3: 2021 SMALL POU HOURLY LOADS


Power and Resources Pooling Authority (PWRPA)
For Publicly Owned LSEs with Annual Peak Loads under 200 MW not submitting demand forms If load is reported for more than one LSE, load for each LSE should be reported in a separate column Report actual hourly demand in calendar year 2021, in megawatts, for each hour of each day.

Begin with the hour that ended at 1 a.m. on January 1, 2021.
Show the load measured at the balancing authority load take-out point (or points).
Add columns for any additional metered take-out points.
The time basis should be Pacific Standard Time (PST) throughout the entire year.
Adjustments for spring and fall daylight saving time have already been included in the form below.

| Total MWh | 514,140 |
| :---: | ---: |
| Maximum | 114 |
| Average | 59 |
| Minimum | 6 |


| Date (PST) | Hour Ending <br> (PST) | Recorded Demand at Take Out (MW) |
| ---: | :---: | ---: |
| $1 / 1 / 2021$ | 1 | 9 |
| $1 / 1 / 2021$ | 2 | 9 |
| $1 / 1 / 2021$ | 3 | 9 |
| $1 / 1 / 2021$ | 4 | 9 |
| $1 / 1 / 2021$ | 5 | 9 |
| $1 / 1 / 2021$ | 6 | 9 |
| $1 / 1 / 2021$ | 7 | 9 |
| $1 / 1 / 2021$ | 8 | 9 |
| $1 / 1 / 2021$ | 9 | 9 |
| $1 / 1 / 2021$ | 10 | 9 |
| $1 / 1 / 2021$ | 11 | 9 |
| $1 / 1 / 2021$ | 12 | 9 |
| $1 / 1 / 2021$ | 13 | 8 |
| $1 / 1 / 2021$ | 14 | 9 |
| $1 / 1 / 2021$ | 15 | 9 |
| $1 / 1 / 2021$ | 16 | 9 |
| $1 / 1 / 2021$ | 17 | 8 |
| $1 / 1 / 2021$ | 18 | 9 |
| $1 / 1 / 2021$ | 19 | 9 |
| $1 / 1 / 2021$ | 20 | 8 |
| $1 / 1 / 2021$ | 21 | 7 |
| $1 / 1 / 2021$ | 22 | 8 |
| $1 / 1 / 2021$ | 23 | 8 |
| $1 / 1 / 2021$ | 24 | 7 |
| $1 / 2 / 2021$ | 1 | 7 |
| $1 / 2 / 2021$ | 2 | 7 |
| $1 / 2 / 2021$ | 3 | 7 |
| $1 / 2 / 2021$ | 4 | 7 |
| $1 / 2 / 2021$ | 5 | 9 |

State of California
California Energy Commission

## ELECTRICITY RESOURCE PLANNING FORMS

## CEC Form S-5: Bilateral Contracts Table

Do not delete any rows or columns or change headers.


Power and Resources Pooling Authority (PWRPA)
Yellow fills indicate confidentiality is being requested pursuant to Appendix A.

| S-2 line | Contract Name: | Supplier / <br> Seller: | Unit Contingent: | Generating Unit(s) <br> Specified |
| :--- | :--- | :--- | :--- | :--- |
| 6 b | Solar Astoria | Recurrent <br> Energy | Unit Contingent: | ASTORA_2_SOLAR2 |
| 6 c | Solar WP | NextEra | Unit Contingent | WHITNY_6_SOLAR |
| 6 d | Solar plus Battery: Slate | Canadian Solar | Unit Contingent | SLATE_2_SLASR5 |
| 6 e | Small Hydro: Warm Springs | Sonoma <br> County | Unit Contingent | GYSRVL_7_WSPRNG |
| 5 g | Natural Gas: Lodi Energy Center | NCPA | Unit Contingent | LODIEC_2_PL1X2 |
| 5 h | Other: Wapa Large and Small Hydro | WAPA | WAPA | various |
| 7 c | System: Bilateral Contract (Supplier Various) | Various <br> Markters; <br> Shell, NextEra, <br> etc. | LD Contract | none |


| Supply Resoucre(s) Delivery <br> Zone/Point | Contract Start <br> Date | Contract Expiration <br> Date | Capacity (MW) Under <br> Contract: | Contract $/$ <br> Agreement <br> Products |
| :--- | ---: | ---: | ---: | :--- |
| POD_ASTORA_2_SOLAR2-APND | $1 / 17 / 2017$ | $1 / 17 / 2037$ | 10 | PPA |
| NP15 | $4 / 17 / 2017$ | $4 / 17 / 2037$ | 11 | PPA |
| Mustang_6_N001 | $1 / 1 / 2022$ | $12 / 31 / 2042$ | 26 | PPA |
| POD_GYSRVL_7_WSPRNG-APND | $11 / 3 / 2009$ | $11 / 3 / 2019$ | 2.79 | PPA |
| LODIEC_2_PL1X2-APND | $11 / 25 / 2012$ | $11 / 25 / 2032$ |  | 8 PSA |
| Import at Tracy | $1 / 1 / 2005$ | $12 / 31 / 2024$ | percent output |  |
| NP15 |  |  | varies | Fixed |


[^0]:    Lines Notes

    | 9 | $5 \%$ of Capacity from WAPA Contrac |
    | :---: | :---: |
    | $x$ |  |

