## **Appendix C2: Renewable Net Short Calculation**

Net Short Calculation Using PG&E Bundled Retail Sales Forecast

|   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016    | 2017    | 2018   | 2019    | 2020    | 2021    | 2022    | 2023    | 2024    | 2025    | 2026    | 2027     | 2028     | 2029     | 2030     |
|---|--------|--------|--------|--------|--------|---------|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|
| [ {Redacted}  |        |        |        |        |        |         |         |        |         |         |         |         |         |         |         |         |          |          |          |          |
| Voluntary Margin of Over-Procurement (GWh)                | 0      | 0      | 0      | 0      | 0      | 0       | 0       | 0      | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0        | 0        | 0        | 0        |
| Aggregate Volumes (GWh)                                   | 14,473 | 14,576 | 18,548 | 21,930 | 24,435 | 24,752  | 25,075  | 23,444 | 22,715  | 22,088  | 21,640  | 19,313  | 18,987  | 18,722  | 18,596  | 17,981  | 17,635   | 17,531   | 16,948   | 16,887   |
| Annual RPS Position (%)                                   | 19.3%  | }      |        |        |        | 32.0%   | 32.2%   | 30.0%  | 28.9%   | 27.8%   | 27.0%   | 23.9%   | 23.3%   | 22.7%   | 22.4%   | 21.4%   | 20.9%    | 20.5%    | 19.8%    | 19.5%    |
| Gross Surplus/(Deficit) compared to Annual Targets* (GWh) | (500)  |        |        |        |        | 5,413   | 4,076   | 752    | (1,684) | (4,122) | (4,781) | (7,356) | (7,924) | (8,447) | (8,808) | (9,684) | (10,270) | (10,627) | (11,339) | (11,621) |
| Volumes (Banked) or Withdrawn from Bank                   | 0      |        |        |        |        | (5,413) | (4,076) | (752)  | 1,684   | 4,122   | 4,781   | 7,356   | 6,732   | 0       | 0       | 0       | 0        | 0        | 0        | 0        |
| Net Surplus/(Deficit) (GWh)                               | (500)  |        |        |        |        | θ       | 0       | 0      | 0       | 0       | 0       | 0       | (1,193) | (8,447) | (8,808) | (9,684) | (10,270) | (10,627) | (11,339) | (11,621) |
| Net Annual RPS Positions (%) with Use of Bank             | 19.3%  |        |        |        |        | 25.0%   | 27.0%   | 29.0%  | 31.0%   | 33.0%   | 33.0%   | 33.0%   | 31.5%   | 22.7%   | 22.4%   | 21.4%   | 20.9%    | 20.5%    | 19.8%    | 19.5%    |
| Cumulative Banked Volumes (GWh)                           | 0      | }      |        |        | 14,434 | 19,847  | 23,922  | 24,674 | 22,991  | 18,869  | 14,088  | 6,732   | 0       | 0       | 0       | 0       | 0        | 0        | 0        | 0        |
|   |        |        |        |        |        |         |         |        |         |         |         |         |         |         |         |         |          |          |          |          |
| Forecast Failure Rate (%) for New Projects not yet online | 0.0%   | 0.0%   | 0.0%   | 1.0%   | 4.0%   | 13.2%   | 20.4%   | 20.0%  | 20.1%   | 19.8%   | 19.9%   | 19.9%   | 20.0%   | 20.1%   | 20.1%   | 20.2%   | 20.2%    | 20.4%    | 20.4%    | 20.4%    |
| Forecast Failure Rate (%) for Existing Generation         | 0.0%   | 1.8%   | 2.3%   | 1.6%   | 0.7%   | 0.6%    | 0.6%    | 0.5%   | 0.4%    | 0.1%    | 0.1%    | 0.1%    | 0.1%    | 0.1%    | 0.1%    | 0.1%    | 0.1%     | 0.1%     | 0.1%     | 0.1%     |

**Current Expected Need Scenario (Compliance Period)** 

| Carron Lapotta i tea Setimio (Compinie i eri                 |            |        |      |      |            |      |      |      |      |      |         |         |         |         |         |         |          |          |          |          |
|--|------------|--------|------|------|------------|------|------|------|------|------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|
|  | 2011       | 2012   | 2013 | 2014 | 2015       | 2016 | 2017 | 2018 | 2019 | 2020 | 2021    | 2022    | 2023    | 2024    | 2025    | 2026    | 2027     | 2028     | 2029     | 2030     |
| 12{Redacted}   |            |        |      |      |            |      |      |      |      |      |         |         |         |         |         |         |          |          |          |          |
| 13 Voluntary Margin of Over-Procurement (GWh)                |            | 0      |      |      | 0          |      |      | (    | )    |      | 0       | 0       | 0       | 0       | 0       | 0       | 0        | 0        | 0        | 0        |
| 14Aggregate Volumes (GWh)                                    |            | 47,596 |      |      | 71,117     |      |      | 93,  | 321  |      | 21,640  | 19,313  | 18,987  | 18,722  | 18,596  | 17,981  | 17,635   | 17,531   | 16,948   | 16,887   |
| 15RPS Position (%)   | {Redacted} |        |      |      | {Redacted} |      |      | 29.  | 7%   |      | 27.0%   | 23.9%   | 23.3%   | 22.7%   | 22.4%   | 21.4%   | 20.9%    | 20.5%    | 19.8%    | 19.5%    |
| 16 Gross Surplus/(Deficit) (GWh)                             |            |        |      |      | l          |      |      | (9'  | 78)  |      | (4,781) | (7,356) | (7,924) | (8,447) | (8,808) | (9,684) | (10,270) | (10,627) | (11,339) | (11,621) |
| 17 Volumes (Banked) or Withdrawn from Bank (GWh)             |            |        |      |      | l          |      |      | 9'   | 78   |      | 4,781   | 7,356   | 6,732   | 0       | 0       | 0       | 0        | 0        | 0        | 0        |
| 18 Net Surplus/(Deficit) (GWh)                               |            |        |      |      | l          |      |      | (    | )    |      | 0       | 0       | (1,193) | (8,447) | (8,808) | (9,684) | (10,270) | (10,627) | (11,339) | (11,621) |
| 19 Net RPS Positions (%)                                     |            |        |      |      |            |      |      | 30.  | 0%   |      | 33.0%   | 33.0%   | 31.5%   | 22.7%   | 22.4%   | 21.4%   | 20.9%    | 20.5%    | 19.8%    | 19.5%    |
| 20 Cumulative Banked Volumes (GWh)                           | {Redacted} | }      |      |      | 19,847     |      |      | 18,  | 869  |      | 14,088  | 6,732   | 0       | 0       | 0       | 0       | 0        | 0        | 0        | 0        |
|  |            |        |      |      |            |      |      |      |      |      |         |         |         |         |         |         |          |          |          |          |
| 21 Forecast Failure Rate (%) for New Projects not yet online |            | 0.0%   |      |      | 6.1%       |      |      | 20.  | 1%   |      | 19.9%   | 19.9%   | 20.0%   | 20.1%   | 20.1%   | 20.2%   | 20.2%    | 20.4%    | 20.4%    | 20.4%    |
| 22 Forecast Failure Rate (%) for Existing Generation         |            | 1.4%   |      |      | 1.0%       |      |      | 0.4  | 1%   |      | 0.1%    | 0.1%    | 0.1%    | 0.1%    | 0.1%    | 0.1%    | 0.1%     | 0.1%     | 0.1%     | 0.1%     |

23 Total RPS Risk Adjusted Net Short (2011-2030) (GWh) (71,988)

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<sup>\*</sup> Assumed annual targets are: 2011-2013 (20% annually), 2014 (21.7%), 2015 (23.3%), 2016 (25%), 2017 (27%), 2018 (29%), 2019 (31%), and 2020 (33%). These targets are illustrative only and not enforceable.