SONOMA CLEAN POWER AUTHORITY

2018 INTEGRATED RESOURCE PLAN EXHIBIT A

APPROVED BY SCPA’S BOARD OF DIRECTORS ON JULY 12, 2018
SUBMITTED TO THE CPUC ON AUGUST 1, 2018
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1. Executive Summary

Sonoma Clean Power Authority (SCP) is a Community Choice Aggregator (CCA), a public agency and Load Serving Entity (LSE) formed under California Assembly Bill 117 (2002). SCP is structured as a Joint Powers Authority and is governed by a Board of Directors comprised of elected officials from the counties, towns and cities of its service territory. SCP began serving customers in May 2014 and today (as of 6/1/2018) serves approximately 223,000 accounts across Sonoma and Mendocino counties.

In accordance with California Public Utilities Commission (CPUC) Decision 18-02-018, which requests that CCAs share specific elements of their Integrated Resource Plans (IRPs) with the CPUC by August 1, 2018, SCP hereby submits Exhibit A of its 2018 IRP. Exhibit A consists of four templates (one document and three spreadsheets), as provided by the CPUC. With input from its Community Advisory Committee and with approval from its Board of Directors on July 12, 2018, SCP makes this submission on August 1, 2018.

DISCLAIMER: While SCP fully supports the goal of sharing information to support long-term statewide resource planning, it cautions against relying on the results contained in this Exhibit A, which is based on CPUC templates and methodologies that may create inaccuracies (as detailed in Table 3 below) when applied to an individual LSE. Instead, SCP recommends that statewide resource planning rely on the results found in SCP’s full 2018 IRP, which is currently being finalized and will be posted to SCP’s website by December 2018. In addition to sharing SCP’s best available information on customer load, generation resources and other important data, SCP’s 2018 IRP will include a full overview of the agency (including its goals and customer programs), a chapter explaining its portfolio-related regulatory requirements and several chapters that detail its procurement processes.

In order to produce Exhibit A, SCP has estimated the resources it will need in 2030 to meet its California Energy Commission (CEC) forecasted load, published by the CEC on February 16, 2018 as part of the 2017 IEPR. With these estimated resources and its CEC-published load forecast, SCP has used the CPUC’s “GHG Calculator for IRP v1.4.5” to calculate that its GHG emissions in 2030 will be 0.152 MMT, significantly below the 0.445 MMT benchmark provided by the CPUC. Accordingly, SCP’s estimated 2030 portfolio meets the CPUC’s definition of “conforming.”

Importantly, the estimated resources listed in Exhibit A are for CPUC planning purposes only and do not represent a procurement commitment by SCP.

As requested by the CPUC, SCP’s Exhibit A includes 3 attachments:
- Attachment 1: a completed version of the CPUC’s Baseline Resource Data Template
- Attachment 2: a completed version of the CPUC’s New Resource Data Template
- Attachment 3: a completed version of the CPUC’s GHG Calculator for IRP v1.4.5
2. Study Design

a. Objectives

At the highest level, the objective of SCP’s 2018 IRP Exhibit A is to share with the CPUC SCP’s conforming planned portfolio for 2030.

More specifically, the objectives of SCP’s 2018 IRP Exhibit A are as follows: (A) to demonstrate that SCP has a resource plan to meet its CEC 2017 IEPR load forecast through 2030; (B) to demonstrate that SCP’s resource plan meets the 2030 GHG Emissions Benchmark of 0.445 MMT, when calculated using the CPUC’s GHG Calculator for IRP v1.4.5; (C) to point out the key inaccuracies of the methodologies underlying Exhibit A.

CEC’s Adopted 2017 IEPR Forecast
Mid Baseline mid AAEE mid AAPV version of Form 1.1c
Published by the CEC on February 16, 2018

<table>
<thead>
<tr>
<th>Metric</th>
<th>Unit</th>
<th>2018</th>
<th>2022</th>
<th>2026</th>
<th>2030</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed Retail Sales Forecast for Sonoma Clean Power Authority</td>
<td>GWh</td>
<td>2,665</td>
<td>2,598</td>
<td>2,550</td>
<td>2,507</td>
<td>See Form 1.1c. Includes effect of BTM PV, AAEE etc.</td>
</tr>
</tbody>
</table>

*Note: See disclaimer on data accuracy in the Executive Summary and Table 3.

2030 GHG Emissions
SCP must demonstrate that its estimated 2030 GHG emissions, when calculated using the CPUC’s GHG Calculator for IRP v1.4.5, will be equal to or less than the CPUC Benchmark for SCP, as stated in the CPUC’s 4/3/18 Order.

<table>
<thead>
<tr>
<th>Metric</th>
<th>2030 GHG Emissions (MMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPUC Benchmark for SCP, Per 4/3/18 Order</td>
<td>0.445</td>
</tr>
</tbody>
</table>
Key Inaccuracies Underlying Exhibit A
As mentioned in the Executive Summary above, SCP cautions against relying on the results contained in this Exhibit A, which are based on current CPUC templates and methodologies that may be inaccurate for individual LSEs. The inaccuracies of the CPUC methodology as they relate to SCP are as follows:

Table 3

<table>
<thead>
<tr>
<th>Category</th>
<th>Exhibit A</th>
<th>SCP 2018 IRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Load Forecast</td>
<td>CEC 2017 IEPR Mid Baseline mid AAEE mid AAPV Form 1.1c</td>
<td>SCP-specific assumptions on:</td>
</tr>
<tr>
<td></td>
<td>Does not incorporate local and LSE-specific forecasts</td>
<td>- population growth</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- housing stock and fire rebuild efforts in Sonoma and Mendocino Counties</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- SCP opt-out rate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Electric vehicle growth</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Other Electrification</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- BTM Solar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Expected energy efficiency</td>
</tr>
<tr>
<td>Hourly Load Profile</td>
<td>Provided by CPUC in GHG Calculator for IRP v1.4.5. Assumes same profile for all LSEs</td>
<td>Developed internally by SCP, using up-to-date metered data and location-specific trends</td>
</tr>
<tr>
<td>Hourly Resource Profile</td>
<td>Provided by CPUC in GHG Calculator for IRP v1.4.5</td>
<td>Based on resource and location-specific forecasts</td>
</tr>
<tr>
<td>GHG Emissions Target</td>
<td>CPUC Benchmark for SCP (Per 4/3/18 Order): 0.445 MMT in 2030</td>
<td>SCP emissions intensity target: 0.034 MT/MWh (75 lbs/MWh) CO2e by 2030</td>
</tr>
<tr>
<td>GHG Emissions Calculation</td>
<td>Calculation done using the CPUC’s GHG Calculator for IRP v1.4.5. This calculator does not recognize PCC 2 resources as GHG-free, even when the imported physical energy is from a GHG-free resource</td>
<td>Calculation done internally (using an annual calculation in line with The Climate Registry) and recognizes PCC 2 resources as GHG-free</td>
</tr>
<tr>
<td>Renewables Portfolio Standard (RPS) Target</td>
<td>No specific RPS target stated</td>
<td>50% RPS by 2020 and thereafter</td>
</tr>
<tr>
<td>RPS Calculation</td>
<td>No RPS calculation stated, but GHG methodology is inconsistent with RPS program</td>
<td>Includes PCC 2 as eligible renewable resources, per CPUC rules</td>
</tr>
<tr>
<td>T&amp;D Losses</td>
<td>Uses 7.3% loss factor to scale up retail load to loss-adjusted load</td>
<td>SCP uses SCP-specific losses and UFE to calculate retail vs. loss-adjusted load. Per Renewables Portfolio Standard, Power Source Disclosure and Climate Registry guidelines, SCP uses retail load, not loss-adjusted load</td>
</tr>
</tbody>
</table>
b. Methodology

i. Modeling Tool(s)

To produce Exhibit A, SCP used the CPUC’s GHG Calculator for IRP v1.4.5 (attachment 3) in conjunction with the CEC’s 2017 IEPR load forecast.

ii. Modeling Approach

To produce Exhibit A, SCP used the templates provided by the CPUC to create one conforming portfolio.

iii. Assumptions

SCP has listed its conforming portfolio in the two resource data templates provided by the CPUC: Baseline Resource Data Template (attachment 1); New Resource Data Template (attachment 2). In addition, SCP has used the CPUC’s GHG Calculator for IRP v1.4.5 (attachment 3) to calculate its 2030 emissions. To produce Exhibit A, SCP is therefore relying upon the assumptions incorporated into the GHG calculator.

SCP notes a potential source of confusion:

In the Baseline and New Resource Data Templates, SCP provided its best estimates of energy production. Such estimates may not necessarily match the energy production figures from the GHG Calculator, as the Calculator automatically uses default resource profiles rather than project-specific profiles.

3. Study Results

a. Portfolio Results

For Exhibit A, SCP is submitting one portfolio, its “conforming” portfolio. SCP’s conforming portfolio consists of the resources listed in the Baseline Resource Data Template (attachment 1) and in the New Resource Data Template (attachment 2). SCP’s conforming portfolio consists of the following types of resources:

Geothermal (RPS Portfolio Content Category 1)
SCP currently has 50 MW of geothermal resources under contract, and SCP’s estimated 2030 portfolio assumes that comparable resources will be procured through 2030.

Solar (RPS Portfolio Content Category 1)
SCP currently has 70 MW of utility-scale solar and 6 MW of Feed-In-Tariff Solar under contract, and SCP’s estimated 2030 portfolio assumes that its total solar portfolio will grow to 146 MW.
Wind (RPS Portfolio Content Category 1)
SCP currently has 46 MW of utility-scale wind under contract, and SCP’s estimated 2030 portfolio assumes that its utility-scale wind portfolio will grow to 126 MW.

Large Hydro
SCP currently has several energy contracts for large hydro. Using the “Hydro Dispatch” assumptions from the CPUC’s GHG Calculator, SCP has calculated that such energy contracts are equivalent to 379 MW in 2018. SCP’s estimated 2030 portfolio assumes that such contracts will grow to an equivalent capacity figure of 415 MW, again based on the “Hydro Dispatch” assumptions from the CPUC’s GHG Calculator.

RPS Portfolio Content Category 2
SCP currently has energy contracts for renewable power that is generated within the Western Interconnection and delivered (using substitute power) to CAISO within the calendar year. Such contracts are known as Portfolio Content Category 2 (PCC 2) and qualify as renewable contracts under California RPS regulations. Unfortunately, the CPUC’s GHG Calculator does not allow such contracts to be treated as GHG-free, even when the firming and shaping energy (delivered to CAISO) is generated by a GHG-free facility. As a result, SCP did not enter its current PCC 2 contracts into the GHG calculator, and SCP’s 2030 conforming portfolio does not include any PCC 2 contracts.

Storage
In accordance with CPUC Decision 13-10-040, SCP must demonstrate storage equal to at least 1% of its 2020 annual peak load, with such systems online and delivering by the end of 2024.1 Accordingly, SCP is actively working on a contract for 5 MW of storage starting in 2023. SCP is also allowed to count portions of customer-installed storage projects towards its 1% requirement, and such portions totaled 0.77 MW2 as of 6/1/18. This totals 5.77 MW of currently planned storage in 2030. However, to be conservative, SCP has only listed the 5 MW of planned capacity in its New Resource Data Template (attachment 2) starting in 2023. SCP has also listed 5 MW of storage in the GHG Calculator (attachment 3) for 2026 through 2030.

CAISO System Power
SCP bids/schedules all of its load and contracted supply into the markets run by the California Independent System Operator (CAISO), the largest of 38 balancing authorities that comprise the Western Interconnection. From a net settlements perspective, this means that SCP buys CAISO system power when its load is greater than its contracted supply, and SCP sells power to the CAISO when its contracted supply is greater than its load.

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1 SCP’s energy storage procurement obligation is subject to an “automatic limiter,” per CPUC D.17-04-039, that proportionately reduces SCP’s one percent procurement obligation by the amount that SCP’s own procurement plus its customers’ share of non-bypassable charges exceeds PG&E’s bundled customer obligation as a percentage of load.
2 According to PG&E’s Advice Letter 5304-E, filed on 6/1/2018
Resource Adequacy (RA)-Only
SCP currently has numerous RA-only contracts that it uses to supplement the long-term RA provided by its RPS PCC 1 contracts to comply with California’s Resource Adequacy (RA) program. The RA program requires LSEs to demonstrate specific quantities of system, local and flexible capacity in the year-ahead and month-ahead time frames. SCP has listed its current RA-only contracts (as of 6/1/2018) in the Baseline Resource Data Template, but (in accordance with CPUC instructions) SCP has not listed any estimated future RA-only contracts. However, SCP will continue to fully comply with all RA requirements, and SCP will continue its practice of procuring long-term, multi-year, year-ahead and month-ahead RA.

2030 GHG Results
As highlighted in Table 4 directly below, SCP’s estimated 2030 GHG emissions, when calculated using the CPUC’s GHG Calculator, are significantly less than the CPUC Benchmark for SCP, as stated in the CPUC’s 4/3/18 Order. For more detail, please refer to SCP’s completed version of the CPUC’s GHG Calculator (attachment 3).

Table 4

<table>
<thead>
<tr>
<th>2030 GHG Emissions (MMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPUC Benchmark for SCP, Per 4/3/18 Order</td>
</tr>
<tr>
<td>SCP Calculation, Using GHG Calculator for IRP v1.4.5</td>
</tr>
</tbody>
</table>

Note: SCP’s forecasted 2030 GHG emissions are even lower than what is listed above, due to differences outlined in Table 3 above.

b. Preferred Portfolio
SCP requests that the Commission certify the completeness of this Exhibit A, which contains SCP’s conforming portfolio, as summarized above in Section 3a. SCP’s conforming portfolio is consistent with each relevant statutory and administrative requirement stated in Public Utilities Code Section 454.52(a)(1):

(a) (1) Beginning in 2017, and to be updated regularly thereafter, the commission shall adopt a process for each load-serving entity, as defined in Section 380, to file an integrated resource plan, and a schedule for periodic updates to the plan, to ensure that load-serving entities do the following:

(A) Meet the greenhouse gas emissions reduction targets established by the State Air Resources Board, in coordination with the commission and the Energy Commission, for the electricity sector and each load-serving entity that reflect the electricity sector’s percentage in achieving the economywide greenhouse gas emissions reductions of 40 percent from 1990 levels by 2030.
SCP has demonstrated that its conforming portfolio 2030 GHG emissions, when calculated using the CPUC’s GHG Calculator for IRP v1.4.5, are significantly less than the CPUC Benchmark for SCP, as stated in the CPUC’s 4/3/18 Order. For more detail, please refer to SCP’s completed version of the CPUC’s GHG Calculator (attachment 3).

(B) Procure at least 50 percent eligible renewable energy resources by December 31, 2030, consistent with Article 16 (commencing with Section 399.11) of Chapter 2.3.

Through its conforming portfolio (listed in attachments 2 and 3) SCP has demonstrated that it will achieve 50% RPS before 2030.

(C) Enable each electrical corporation to fulfill its obligation to serve its customers at just and reasonable rates.

Under the direction of its Board of Directors, SCP sets rates that are competitive with the rates of PG&E. As a public agency with no fiduciary obligation to shareholders, any revenues in excess of cost-to-serve are returned to ratepayers via rate reductions or customer programs. SCP’s customers pay for and receive the CARE and FERA discounts and Medical Baseline, as these programs operate through the delivery charges and are available to all eligible bundled and unbundled customers.

(D) Minimize impacts on ratepayers’ bills.

In addition to setting rates that are competitive with PG&E, SCP works to minimize rate volatility by constructing a balanced and conservatively-hedged power supply portfolio, building significant financial reserves and by making rate changes only once per year whenever possible. SCP has invested significant financial and human resources to reduce the volatility of the PCIA, which represents approximately a third of generation rate charges.

(E) Ensure system and local reliability.

In order to meet CPUC and CAISO Resource Adequacy (RA) requirements, SCP procures system, local and flexible RA on a long-term, multi-year, year-ahead and month-ahead basis. In addition, SCP works to structure its supply portfolio in a manner that minimizes the hourly imbalances between its load and supply.

(F) Strengthen the diversity, sustainability, and resilience of the bulk transmission and distribution systems, and local communities.

As part of its core mission, SCP works to make the bulk electric system more diverse, sustainable and resilient. For example, SCP procures power from a variety of generation technologies with geographic diversity (minimizing risk associated with congestion and losses) and across a spectrum of capacities (from small Feed-In-Tariff projects to large utility-scale projects). SCP carefully evaluates the long-term
generation load-matching and congestion risks of new resources and weighs its options in the context of its existing supply and net demand on an hourly basis for the full duration of any contract period.

\textit{(G) Enhance distribution systems and demand-side energy management.}

SCP has a number of customer programs that are designed to enhance distribution systems and demand-side energy management. For example, SCP is creating a platform (called GridSavvy) to allow the aggregation and automated dispatch of EV charging stations, heat pump water heaters, smart thermostats and other technologies to support grid reliability and integrate with CAISO and other markets, with a goal of reducing reliance on natural gas power for hourly shaping services.

\textit{(H) Minimize localized air pollutants and other greenhouse gas emissions, with early priority on disadvantaged communities identified pursuant to Section 39711 of the Health and Safety Code.}

Please refer to the section directly below

\textbf{i. Local Air Pollutant Minimization and Disadvantaged Communities}

As part of its core mission, SCP works to minimize criteria air pollutants. For this reason, SCP has a clean supply portfolio that depends in large part on zero-emission generation technologies. In addition, SCP is actively working to promote the adoption of electric vehicles in its service territory. Through its Drive EV Program, SCP enables bulk discounts averaging more than $11,000 per car for the purchase or lease of electric vehicles. Since the fall of 2016, 773 electric vehicles have been sold or leased through the program. SCP also provides nearly free grid-enabled EV charging equipment. As of June 1, 2018, SCP had deployed 1,932 Level 2 smart-grid charging units, with 690 customers opting to enroll their equipment in SCP’s automated demand response program to promote renewable integration and reliability.

As required by the CPUC, SCP has used CalEnviroScreen 3.0 to identify one census tract within SCP’s service territory that is within the top 25% of impacted census tracts on a statewide basis, based on overall score. However, the pollution burden percentile in this tract is not identified as being within the top 25%. SCP estimates that this tract represents 1.3% of its service territory. SCP does not have any power supply contracts with resources located in or adjacent to this tract.

More generally, SCP is highly committed to helping its local communities. As part of this commitment, SCP is helping to rebuild the communities impacted by the October 2017 wildfires. More specifically, SCP lent staff to manage the protection of creeks and watersheds, committed $1 million to relief efforts and aided in coordinating funding requests for the region. SCP has recruited PG&E to partner on a joint program for the rebuild effort to incentivize deep energy efficiency, EV charging, onsite renewable energy with storage, and the avoidance of natural gas connections. Finally, SCP is
exploring an expansion of community solar that could be used for future Title 24 energy compliance to help enable infill housing and not discriminate against denser urban development. Customers would be able to pre-purchase a 20-year commitment to local, renewable energy. This customer payment would be used to help facilitate the development of additional clean energy resources.

ii. Cost and Rate Analysis

Under the direction of its Board of Directors and with the recommendation of its Community Advisory Committee along with input from the public, SCP sets its rates in accordance with its Board-approved financial policies.

To support the development of new generation resources to ensure electric reliability, the CPUC adopted the Cost Allocation Mechanism (CAM), which allows the costs and benefits of new generation to be shared by all benefiting customers in an IOU’s service territory. Accordingly, on a year-ahead and quarter-ahead basis, SCP is currently allocated Resource Adequacy volumes, and SCP’s customers pay for the corresponding costs.

Unfortunately, SCP has very little visibility into or control over the amount of RA that it will be allocated through CAM, which therefore makes RA procurement more difficult and can result in over-procurement. In addition, the existing rules limit CAM reliability resources to those procured by IOUs.

c. Deviations from Current Resource Plans

As required by the CPUC, SCP will be submitting an RPS Procurement Plan on August 20th, 2018. While much of the data within SCP’s RPS Procurement Plan will be consistent with this Exhibit A, there will be few key differences:

1. SCP’s RPS Procurement Plan will be based on SCP’s own retail sales forecast (updated, local and LSE-specific), whereas Exhibit A is based on the CEC’s 2017 IEPR forecast. Please refer back to Table 3 for more detail.

2. SCP’s RPS Procurement Plan will be based on unit-specific anticipated generation output, consistent with the CPUC’s Baseline and New Resource Data Templates. In contrast, the CPUC’s GHG Calculator is based on generic profiles that do not match the locational, technology and unit-specific forecasts.

3. SCP’s RPS Procurement Plan will include RPS PCC 2 resources, consistent with the CPUC’s Baseline Resource Data Templates. In contrast, the CPUC’s GHG Calculator does not allow PCC 2 resources to be entered as GHG-free resources, even when the firming and shaping energy (delivered to CAISO) is generated by a GHG-free facility.
d. Local Needs Analysis

In accordance with CPUC and CAISO Resource Adequacy (RA) requirements, SCP procures system, local and flexible RA on a long-term, multi-year, year-ahead and month-ahead time frames. In order to meet its local RA requirements, SCP must demonstrate that it has secured capacity in specific transmission-constrained (i.e., “local”) areas equal to its assigned share of the CAISO’s need for each month of the year. For the year-ahead filing (October 31st of the preceding year), SCP must demonstrate 100% of its assigned local capacity requirements for each month of the coming year. The assigned requirement for each local area is one MW quantity for the entire year, but SCP must show that it has secured enough capacity in each month to meet this quantity.

SCP will continue to fully comply with all RA requirements, and SCP will continue its practice of procuring long-term, multi-year, year-ahead and month-ahead RA.

4. Action Plan

a. Proposed Activities

SCP’s procurement activities are structured to meet compliance obligations and internal goals. SCP must continually shape the characteristics of its portfolio in accordance with legislative and policy changes, technological improvements, and new information about markets and risk. To manage this uncertainty, SCP continually examines and estimates supply and customer demand, including demand trends as they relate to population of customers served, climate, energy efficiency, distributed generation, electrification of vehicles and buildings, and emerging industries.

SCP structures its procurement efforts to balance customer demand with resource commitments. SCP also considers the deliverability characteristics of its resources and reviews the respective risks associated with short and long-term purchases as part of its forecasting and procurement processes. These efforts have led to a diverse resource mix that addresses grid integration issues, closely matches our electrical supply to our customers’ demand and reduces ratepayer risk. SCP examines the need to procure new resources when significant change in load is expected to occur (e.g. phasing in new territories). If further procurement is deemed necessary, Requests for Offers (RFOs) to fill these needs are issued to the market and offers are assessed to determine the best outcome for SCP’s portfolio.

With respect to disadvantaged communities (in California) as defined by CalEnviroScreen 3.0, SCP has one existing resource and two potential new resources located in such communities. All three resources are solar photovoltaic resources that do not contribute to pollution burden.
b. **Barrier Analysis**

For procurement decisions, SCP considers market factors which may include the following:

- Market price risks (CAISO LMPs, RA prices, RPS prices, specified-source prices, etc.)
- Counterparty credit risk
- Curtailments
- Variance from load forecasts
- SCP’s customer participation/opt-out rate
- Assignment of unplanned resources (for example, through CAM, RMR, CPM)
- Legislative and regulatory changes (for example, RA, RPS, PSD requirements)

c. **Proposed Commission Direction**

This section is not applicable to CCAs.

5. **Data**

a. **Baseline Resource Data Template**

SCP has included (as attachment 1) its completed version of the CPUC’s Baseline Resource Data Template. SCP would like to note the following:

- With respect to RA-only contracts, SCP has listed all of its existing contracts as of 6/1/2018. In accordance with guidance from CPUC staff at a meeting on 5/31/18, SCP has not provided a list of estimated future RA-only contracts. Nevertheless, SCP will continue to fully comply with all RA requirements, and SCP will continue its practice of procuring long-term, multi-year, year-ahead and month-ahead RA.
- SCP has not provided the “Resource ID” and/or “Resource Type” for some of its RA-only and PCC 2 contracts – specifically those that are seller’s choice contracts.
- SCP has provided its best estimates of energy production. Such estimates may not necessarily match the energy production figures from the GHG Calculator, as the Calculator automatically uses default resource profiles rather than project-specific profiles.

b. **New Resource Data Template**

SCP has included (as attachment 2) its completed version of the CPUC’s New Resource Data Template. SCP would like to note the following:

- SCP is defining “new resources” as new steel in the ground with a commercial operation date after 12/31/17.
- SCP has provided its best estimates of energy production. Such estimates may not necessarily match the energy production figures from the GHG Calculator, as the Calculator automatically uses default resource profiles rather than project-specific profiles.
- SCP has listed “NA” for “Total Fixed Costs” associated with its expected new resources, as SCP will be the buyer and not the developer of these projects.
c. Other Data Reporting Guidelines

SCP has included (as attachment 3) its completed version of the CPUC’s GHG Calculator for IRP v1.4.5. SCP would like to note the following:

- In order to account for the GHG-free power associated with its large hydro energy contracts, SCP has back-calculated the implied capacities using the CPUC’s GHG Calculator. In other words, SCP has entered into the calculator (on the Dashboard tab) the hydro capacity figures that – when run through the CPUC’s hydro dispatch profiles – will result in the correct GWhs (i.e., the volumes specified in the contracts or the volumes projected to be under contract in the future).

6. Lessons Learned

While some of the simplifications made by the CPUC in its templates and instructions are likely necessary for making a standard reporting process accessible and understandable, SCP cautions against using the numbers reported under this framework for resource planning purposes. Exhibit A does not represent the best available data about SCP’s resources, load or program impacts, which is why we encourage the commission to use SCP’s full IRP for planning purposes. We are also committed to working collaboratively with the CPUC on finding ways to improve this process so that better data can be shared across LSEs.

While the late instructions on the process made this challenging, SCP is very grateful for the implementation-related conversations with CPUC staff that began in the spring of 2018. These conversations greatly helped to clarify how to interpret the CPUC’s templates.