

**Integrated Resource Planning (R.16-02-007)
2019-2020 Cycle**

Filing Requirements' Questions and Answers

This document is a reference guide for LSEs required to file Plans in the IRP process. It provides clarifying instructions on how to fulfill the LSE Plan requirements detailed in D.18-02-018 and D.19-11-016. The questions included in this document reflect some of the questions IRP staff has received from various LSEs through emails and during the webinar on Filing Requirements' Templates held by staff on January 16, 2020. Staff has documented and shared the questions and answers to ensure all LSE Plans are developed in a consistent and comprehensive manner.

This will serve as a living document. IRP staff will continue to update this document until the July 1 filing deadline with added guidance for LSEs as new questions arise. All updates will be posted to the [IRP Filing Materials webpage](#).

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- 9- What assumptions for departing load should be used by all LSEs to allocate costs and resources? Should all LSEs apply existing PCIA rules?
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- 12- Does the requirement to identify "total disadvantaged population number" refer to a count of customer accounts or total residential population in a community or something else?
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- 2- What delivery term should be included?
- 3- How should contracted sales be entered?
- 4- Should LSEs update the Resource Data Template to reflect their actual contracts?
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- 2- How should LSEs enter hybrid resources into the CSP tool?
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- 6- Will the CSP Calculator include the ability to view more cost information from the LSEs?
- 7- What is the process for LSEs to ask questions on the final CSP tool?
- 8- Will the CSP provide options to customize battery storage inputs? For example, Will the CSP allow different durations beyond 4-and 8-hour to be input?
- 9- Will LSEs be able to set discharging hours?
- 10- In the Supply Inputs tab of the tool, if the GWh dropdown is selected in Column C, are the GWh to be entered in the pink rows or is this all accounted for in the custom profile below starting on row 50?
- 11- Do IEPR forecasts account for load departure in 2021 and 2022 due to the Direct Access lottery expansion?
- 12- How should users enter unspecified PCC 1 Energy Only contracts, or Seller's choice contracts?
- 13- When entering load figures, should ESPs enter retails sales or gross their sales up for T&D losses?
- 14- For forecasting 2030 load to calculate their GHG benchmark, which year-ahead RA load forecast should ESPs use?

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15- In what ways can LSEs deviate from form 1.1c of the IEPR for their demand forecasts. Can they customize load shape?

16- How does the CSP determine whether or not natural gas & unspecified imports is the marginal unit. In other words, what is the marginal unit methodology employed in the CSP tool?

17- Can LSEs enter custom inputs for the last 24 hours of 2020, which is a leap year? If so, can staff advise on how to input hours 8761-8784?

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Narrative Template and General Guidance

1- What are the differences between Standard Plan vs. Alternative Plan? Could smaller LSEs still file an alternative plan (LSEs smaller than a certain size)?

Per D.18-02-018 (p.127), in 2017-18 IRP, three plan types were permitted to be filed by CPUC-jurisdictional LSEs depending on LSE size/type:

- 1) Standard Plan: LSEs with load greater than 700 GWh/yr
- 2) Alternative Type 1 Plan: Small IOUs, electric service providers, and community choice aggregators assigned a load of less than 700 GWh in California in each of the first five years of the IRP planning horizon.
- 3) Alternative Type 2: Multijurisdictional LSEs that submit IRPs in other jurisdictions, such as PacifiCorp

In 2019-20 IRP, it is proposed that the Alternative Type 1 Plan will no longer be available for use by LSEs. Multijurisdictional LSEs that submit IRPs in other jurisdictions, such as Pacificorp, would be permitted to file a Non-Standard LSE Plan. All other LSEs would be required to file a Standard Plan in IRP if they serve load within the CAISO balancing authority area (unless the LSE demonstrates exemption from the IRP process). See Section 2.b of Filing Requirements Staff Proposal.

2- What is expected, in general from LSE plans filed in 2020, with context from the 2017-18 IRP cycle?

The filing templates already contain descriptions of what is expected from LSEs in each section. For context from the 2017-18 IRP cycle, D.19-04-040, Section 2.4, provides a review of each LSE plan filed in 2017-18 IRP, including scorecards.

3- Can an LSE submit an IRP which includes a Conforming Portfolio using a lower GHG target than the GHG target assigned by Energy Division?

Yes, as long as the submitted IRP plan meets all other established requirements.

4- Why were the reliability assessments (local, system, and/or flex reliability) excluded from the LSE Plan filing requirements?

Staff considered party comments and found that establishing a reliability planning standard at this stage would be premature. The capacity contribution assumptions that LSEs would need to make for their planned resources would be speculative without seeing total

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aggregated resources. Staff is still requesting information in the data template that will allow staff to do a quantitative reliability evaluation after aggregating portfolios and better understanding the ELCC of each resource type under that future. Furthermore, staff found during the 2018 LSE IRP plan review process that the information provided by LSEs in the narrative in regards to Local RA compliance did not provide any information incremental to that already obtained by the Resource Adequacy program.

5- Can LSEs use updated baseline generation fleet information in their Conforming Portfolios that includes recently procured resources or other updated baseline information?

The baseline resources should align with staff's definition in the Glossary of Terms in the narrative template. Detailed instructions for contract reporting can be found in the Resource Data Template. Also, see questions 2 and 4 in the "Resource Data Template" section.

6- Will LSEs be allowed to update the adopted 2019 IEPR forecast or ESP RA load forecasts to reflect recent CCA load departure or ESP load growth that is not reflected in those forecasts?

Pursuant to a Ruling issued by ALJ Fitch on January 24, 2020, there is a window of opportunity to update load forecasts for CCAs who may not be included in the 2019 IEPR or otherwise wish to update their IEPR forecast, and for ESPs who wish to deviate from their confidential 2019 year-ahead RA load forecasts. All non-IOU LSEs are permitted to file load forecast information that deviates from the IEPR (e.g., CCAs that have very recently expanded) or 2019 RA forecasts by February 28, and parties will be allowed to respond in comments by March 13. Load forecast adjustments and GHG benchmarks for all LSEs will be addressed in a subsequent ruling (to ensure all loads and benchmarks add up to their share of the system total). The CPUC reserves the right to maintain 2019 IEPR load forecasts for LSEs if a CCA and incumbent IOU cannot agree on an updated load forecast. The CPUC may also default to an ESP's prior RA load forecast if that ESP submits an updated load forecast that is found to be deficient for any reason. LSEs that do not submit forecast revisions must use their 2019 IEPR forecast for 2030 (for IOUs and CCAs) or their 2019 year-ahead forecasts in the RA program extended to 2030 (for ESPs).

7- Does Energy Division still anticipate the CEC to adopt the 2019 IEPR at the January 22 CEC business meeting as noted in the December 26 Narrative Template or will it likely be adopted at the subsequent February 20 meeting?

The CEC adopted the CED 2019 along with any changes identified at its January 22, 2020 Business Meeting.¹

¹ https://ww2.energy.ca.gov/2019_energypolicy/documents/

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- 8- Will LSEs be allowed to use the draft IEPR forecast in their IRPs or are they required to use the final adopted IEPR forecast?**

LSEs should use the final adopted IEPR forecast.

- 9- What assumptions for departing load should be used by all LSEs to allocate costs and resources? Should all LSEs apply existing PCIA rules?**

LSEs should not deviate from their assigned load forecast in preparing their proposed resource portfolios. LSEs may describe in their narrative (Study Results and Action Plan sections) how PCIA rules may affect their costs and planned resources.

- 10- D.18-02-018 requires that for long-term contracting, outreach is described. Can this be included within the template?**

LSEs would enter this information in section III.a. (Study Results/Preferred and Conforming Portfolios), and in Section IV. Action Plan. No revision to the template necessary.

- 11- Does the requirement to identify customers in disadvantaged communities include only residential customers or both residential and non-residential customers? If non-residential customers are included, are there any differences to the requirements for such customers? If so, how do the requirements differ?**

Each LSE should provide a qualitative description of the demographics of the DAC customers it serves, including both residential and non-residential customers. The finest level of granularity would be census tracts, but LSEs may summarize at the zip code level if that is all that is available to them. If census tracts granularity is not being used, LSEs must explain the reason for the level of granularity they are providing.

- 12- Does the requirement to identify “total disadvantaged population number” refer to a count of customer accounts or total residential population in a community or something else?**

Total residential population in a community. If that granularity is not available, LSEs must explain the reason for the level of granularity they are providing.

- 13- How are the planning standards incorporated in the filing requirements' templates?**

The CSP tool provides calculations for some quantitative planning standards such as GHG emissions and local air pollutants. For other planning standards that are not specific outputs of the CSP tool, LSEs should look to the Narrative Template for instructions on how to provide that information.

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14- What is the cut-off date to apply when categorizing each resource's Contract Status?

April 30, 2020. For example, for a resource for which there is an approved contract in place as at this date, the LSE would categorize the resource as "Development".

Resource Data Template

1- How do the proposed filing requirements and resource data template prevent the aggregated LSE IRP plans from exceeding the maximum amount of existing resources available to LSEs if LSEs use 'generic existing resources' in their respective individual plans?

There is no way to prevent this before staff receives all of the completed templates. After receiving all of the templates, staff will aggregate the plans, examine the amount of generic resources that are being planned for, and determine if that exceeds available capacity.

2- What delivery term should be included?

Please include all contracts with delivery start dates on or after January 1st, 2020, and before January 1st, 2031.

3- How should contracted sales be entered?

Per the instructions_1_general tab, all numbers should be entered as 0 or positive numbers. Indicate the resource as transfer_sale, per part 9 of the instructions. Provide an explanatory note to help staff determine approximate resource mix. This is reflected in the updated instructions

4- Should LSEs update the Resource Data Template to reflect their actual contracts?

Yes.

5- Inland Empire and Sutter Energy Center (Row 2430) do not appear to be incremental for D. 19-11-016 in contrast to the decision. Is this an error?

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It is indeed incorrect. Due to a desire to get party feedback on the template sooner rather than later, staff had to release the template before the baseline ruling was finalized on January 3rd, so the list in the current iteration of the template does not exactly match the ruling. Staff will update the baseline list to reflect the ruling in the next iteration of the Resource Data Template.

6- Questions related to the 'Monthly_gwh_mw' tab:

- a- Column C 'cpuc_contract_id'; is there a specific format or can each LSE name the contract id as they see fit if there is currently no Contract ID in the CPUC Contracts Database.**

If there is currently no contract ID in the CPUC contracts database, you can use whatever unique identifier you like, as long as it allows staff to uniquely identify a contract. If the resource name and contract ID alone does not uniquely ID the resource, you need to write a note per part 5 of the instructions so that staff can uniquely identify a contract.

- b- For unit specific purchases from another LSE, should the LSE report the Resource ID in the "resource" field, or should such contracts be listed as "transfer_purchase" with unit information provided in the notes section?**

List these contracts as "transfer_purchase" and use a note to explain what the unit is.

- c- For resources that are identified as "existing_generic" what should the entry be for the "max_mw" field. This information is not known for a generic resource.**

Please estimate the maximum rate at which the resource can provide energy, in MW. Staff understands that this is not a nameplate value.

- d- how should an LSE report a PCC 2 contract? If the renewable resource is specified in the contract, should the LSE enter the out-of-state resource id in the "resource" field? If the renewable resources are identified as part of a portfolio of resources (i.e. multiple units without specific unit volumes), should the LSE enter this as an "unspecified_import" and provide clarification in the notes?**

Staff agrees with this approach. For a specified resource, enter the resource ID in the "resource" field and write "pcc2" in the notes. For a portfolio of resources, use "unspecified_import" and, in the notes column, provide information on the approximate resource mix and carbon content, along with "pcc2."

- e- how will the Resource Data template and CSP Calculator interact?**

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The CSP and Resource Data Template are for different purposes and are not intended to be explicitly linked. LSEs should use the CSP to guide planning, but ultimately it is not a contracts data tool (which is what the Resource Data Template is).

7- Question related to the Column K "max_mw":

a- This column requires LSEs to fill in the resource's nameplate in MW or the max MW amount the resource can deliver. For contracts with a pool of resources and no capacity values, the CSP will determine a share and capacity value based on the composition of the pool. Do entries for columns F (energy in GWh) and K in the Resource Data Template for these resources need to align with the shape and capacities provided by the CSP?

Please estimate the maximum rate at which the resource can provide energy, in MW. You can use what the CSP tool determines. Staff understands that this is not a nameplate value.

Filing Requirements' Questions and Answers

Clean System Power (CSP) Calculator

- 1- Does the calculator account for the emissions from spinning reserves and when units are operated at partial load?**

Emissions from units operating at less than their full capacity are included in the system power emissions factors. The SERVVM production cost model co-optimizes energy and ancillary services, so the resulting fuel burn and emissions values include the impact of operating resources as spinning reserves.

- 2- How should LSEs enter hybrid resources into the CSP tool?**

While the CSP tool does not have a specific option that allows LSEs to simulate hybrid resources, it is possible to represent hybrid solar + storage resources by either adding battery and solar capacity separately so that the tool will in-effect add the profiles together; or using the user-defined custom GHG-free generation profile to model hybrid resource dispatch with a production shape that has been defined outside of the tool. There are more instructions on how to enter hybrids at the end of the CSP tool instruction document.²

- 3- Can LSEs use specific actual emission factors for specific resources?**

The tool is not designed to allow for user-specified emissions factors. Using standard emissions factors in the tool allows for a like-for-like comparison of LSE plans.

- 4- Is there a document describing the emissions factors used and the specific calculations and sources used to develop them?**

Hourly emissions factors are included in the "Emission Profiles" tab. There is also a section in the CSP Tool documentation titled "Hourly emissions factors used in the CSP tool" that describes how emissions factors were calculated.

- 5- Is there any way to separate emissions into air basins using the calculator and add more criteria pollutants from biomass resources?**

The tool does not have the functionality to provide more granular air emissions outputs. Moving forward, staff will continue working with parties to refine how air emissions and other important planning outputs can be best conveyed in IRP modeling.

² See CSP tool documentation here: <https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442463630>

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6- Will the CSP Calculator include the ability to view more cost information from the LSEs?

The tool does not have the functionality to provide cost and revenue requirement outputs. In future cycles as we continue to refine the CSP Tool, staff will consider adding cost functionality so that we can compare LSE portfolio costs in a more systematic way. For now, LSEs should continue to calculate cost and rates information about the incremental resources proposed in their respective IRPs on their own using the 2019 I&A cost documentation.

7- What is the process for LSEs to ask questions on the final CSP tool?

Staff will hold office hours with LSEs to answer any questions about the Filing Requirements including the Tool.

8- Will the CSP provide options to customize battery storage inputs? For example, Will the CSP allow different durations beyond 4-and 8-hour to be input?

Users can choose between 2-hour and 4-hour battery storage options. If users wanted to model, for example, a 3 hour battery, they could enter half of the capacity as a two hour battery and half as a four hour. The pumped storage resource provides an example of a long-duration storage profile.

9- Will LSEs be able to set discharging hours?

The tool does not let LSEs set discharging hours. The assumption is that a "4 hour" battery has 4 hours of storage capacity (MWh) relative to the charging/discharging capacity (MW). Charging and discharging capacity are assumed to be the same.

10- In the Supply Inputs tab of the tool, if the GWh dropdown is selected in Column C, are the GWh to be entered in the pink rows or is this all accounted for in the custom profile below starting on row 50?

Any resource entered in the Custom Profile section of the Supply Inputs worksheet should not be entered in the rows with suggested resources (rows the GWh/MW toggles). Entering a resource in both places would result in it being double counted.

11- Do IEPR forecasts account for load departure in 2021 and 2022 due to the Direct Access lottery expansion?

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Yes, the tool uses the load forecast from the 2019 IEPR Form 1.1c, which includes 4,000 GWh of DA service expansion under SB 237 (Hertzberg, 2018).

12- How should users enter unspecified PCC 1 Energy Only contracts, or Seller's choice contracts?

LSEs reporting these types of contracts that do specify the nameplate capacity of the delivering resource(s) should enter the annual GWh for the resource(s) that it believes most closely matches the energy source or sources(s) for the contract in the *Supply Inputs* worksheet.

13- When entering load figures, should ESPs enter retails sales or gross their sales up for T&D losses?

ESPs should enter retail sales. The CSP tool grosses those figures up for T&D losses when appropriate.

14- For forecasting 2030 load to calculate their GHG benchmark, which year-ahead RA load forecast should ESPs use?

ESPs should enter the year-ahead load forecast that they submitted last year for RA purposes last year.

15- In what ways can LSEs deviate from form 1.1c of the IEPR for their demand forecasts. Can they customize load shape?

Users have the option of specifying custom 8760 demand profiles for each component of the demand forecast on the "Custom Hourly Load Profiles" section of the *Demand Inputs* worksheet as long as the assigned annual energy volumes remain unchanged. This option is appropriate for LSEs that know the hourly shape of their demand components and wish to reflect those projections in their plan. Custom hourly shapes are applied to the annual demand forecasts in the *Demand Inputs* worksheet. Users may also specify a percentage of their baseline demand that comes from C&I loads in each year using the "Use Custom?" toggle in Column C of the *Demand Inputs* tab. A C&I baseline hourly demand shape will be applied to the C&I percentage, and the remaining baseline demand will receive a non-C&I hourly demand shape. If a custom C&I percentage is not entered, the default percentage will be used.

16- How does the CSP determine whether or not natural gas & unspecified imports is the marginal unit. In other words, what is the marginal unit methodology employed in the CSP tool?

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Average emissions factors, as opposed to marginal, are used in the tool. The decision to use average rather than marginal emissions factors for system power reflects the underlying goal of the CSP method: to attribute system-wide emissions to multiple LSEs in a consistent manner, so that the aggregation of their portfolio emissions will be comparable to those of the system. One benefit of using average emissions factors is that multiplying an average emissions factor by a given level of demand will sum to the total emissions for that level of demand. In California, where there is a single dominant dispatchable fuel (natural gas), marginal emissions factors will tend to overestimate aggregate emissions because the marginal generator tends to be less efficient than generators further down in the stack of dispatchable resources.

17- Can LSEs enter custom inputs for the last 24 hours of 2020, which is a leap year? If so, can staff advise on how to input hours 8761-8784?

The tool does not allow users to enter data for the last 24 hours of 2020 because the tool does not simulate leap years. Each future year is modeled with 8760 hours. All future years in the tool are built using the 2007 weather year, with demand shapes that use the 1990 calendar of weekend/weekday and holidays and 2007 weather. Neither 2007 nor 1990 were leap years, so the renewable profile and demand data, and the resultant SERVM production cost shapes (including battery dispatch, system power emissions factors, etc.) are based on a year that does not have a leap day.

LSEs should make their best effort to align hourly custom profiles with the underlying weather and calendar conditions. One important consideration for demand profiles is to align weekend/weekend status, because demand can vary significantly between weekends and weekdays.
