Resource Data Template Version 3: User Guide

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Integrated Resource Planning and Energy Resource Modeling Sections,

Energy Division, California Public Utilities Commission

1. Introduction

This document is a user guide to the Resource Data Template (RDT) version 3 (RDTv3). This user guide is intended to be the primary document instructing the user on the proper use of RDTv3. This user guide does not contain the actual dates for any compliance obligations, for example, the contract cutoff date corresponding to finalization of the resource table, or any other compliance obligation due dates. Those dates and any other significant compliance obligation details including the reporting period over which the LSEs are required to submit data are contained in a separate document: 2023 IRP Filing Requirement Overview.

2. Differences from Previous Version

RDTv3 attempts to be as consistent with RDTv2 as possible, with the following exceptions:

- Removal of “monthly_gwh_mw” tab: Based on the feedback received from the stakeholders, and in order to simplify the RDT, staff removed this tab. Additional columns have been added to the "unique_contracts" tab to capture the necessary data.
- New data columns have been added to the "unique_contracts" tab, described in this document.

- Adding “CSPReportSheet” sheet: Staff added the new functionality to the RDTv3 so LSEs only need to enter their contracts in the RDTv3 and copy the numeric values from the "CSPReportSheet" tab from the RDTv3 directly into the "Supply Inputs" tab of the CSP workbook. Please see section 9 for instructions.
- Adding “Reliability” sheet: Staff added new functionality to the RDTv3 to inform whether each LSE is sufficiently planning to meet their reliability needs. Please see section 10 for instructions.
- Error Checking Macro: Staff updated the error checking macro and LSEs are required to run the macro resulting in an error-free "ReportSheet" before their final submission. Please see section 11 for instruction.
- Addition of the “*mtr_nqc_validation_tool*” and “*mtr_nqc_summary”* sheets: Staff added new functionality to the RDTv3 to allowing LSEs to describe how contracts will be used the respective mid-term reliability obligations. Please see section 12 for instructions.

3. Instructions for the fields in the template

The "unique_contracts" tab is the only table in RDTv3 for reporting the LSE’s existing and planned energy and capacity contracts. A few general notes/instructions:

- As the name of this tab implies, each row entered into "unique_contracts" tab should describe one and only one contract. When something fundamental about the contract changes (e.g., the resource’s nameplate is expanded), please enter them as separate contracts (in separate lines). For more details, please read section 8.
- Please note that all the values should be entered as positive numbers (even when the contract is a sale).

The following table provides detailed instructions for all the fields in the "unique_contracts" tab.

Field Name	Instructions	Required data type
lse_unique_contract_id	An identifier provided by the LSE to distinguish unique contracts with a given resource. Where possible, please use the same "cpuc_contract_id" you used in your most recent RDT submission.	string
resource	The resource name, which must come from list RDTv3.resources.resource.	string
alternative_resource_name	Please provide other names that this project has or had if any. If more than one, please separate them with a comma. If there are not any alternative names, leave this column blank.	string
contract_status	Status showing maturity of contracting process for this resource: One of online, development, review, plannedexisting or plannednew, as defined in section 5.	string
project_interconnection_position	If available, please provide the CAISO Queue Position or Wholesale Distribution Access Tariff (WDAT)/Wholesale Distribution Tariff (WDT) identifier for each resource that has one. For a list of the most current CAISO Queue Positions and WDAT numbers, please refer directly to the CAISO or PTO websites, or visit the CPUC's Tracking Energy Development (TED) page to be redirected to the	string

	appropriate source. Contracts with multiple numbers should separate the numbers by a comma (,). Please do not include cluster numbers with the CAISO Queue Numbers. Please format the queue positions as Q-#### for CAISO queue positions and as WDT-##### for WDT identifiers. For example: • Q-1016 • WDT-1454, WDT-1455 For resources that do not yet have a CAISO Queue Position/WDAT identifier, LSEs should use a standardized title with the following format: *resourcetype_caiso_planned* or *resourcetype_wdat_planned.* For example, a wind resource that will be connected to the CAISO grid should be called wind_caiso_planned. Imports without a CAISO queue number should include "Import" in this column. Imports should follow a similar format as above: *resourcetype_import_planned* or *resourcetype_import_existing.* Planned imported resource should be called *wind_import_planned*.	
interconnection_substation	If CAISO Queue Position or WDAT identifier is not known or is outside of the state, then please provide interconnection substation of the resource or planned CAISO scheduling point if an out-of-state resource. Otherwise, enter “NA”.	string
marginal_addition	If the contracted resource includes a marginal addition to an existing resource, report NQC value attributable to the marginal addition in September for the first year of contract delivery using the Resource Adequacy (RA) program credit. If the marginal addition comes online after the last program credit year, use the values from the last program credit year.	string

	If the project is not a marginal addition to an existing resource, enter “NA”.	
marginal_addition_to	If the contracted resource includes one or more marginal additions to an existing resource from list RDTv3.resources.resource, report the existing resource name here. The resource name must come from list RDTv3.resources.resource. Otherwise, leave this column blank. For more instruction regarding marginal additions please see section 8.	string
total_nameplate_capacity	Please provide the total nameplate capacity of the whole project (maximum MW it can deliver) if the RDTv3 does not have specific MAXGEN for this resource (when the RDTv3.resources.MAXGEN is blank). This means for resources with supertype = existinggeneric, newresolve, newgeneric, newloadmod, supplierschoice, unspecifiedimport, unspecifiednonimpor, unbundledrec. <u>Note 1:</u> *This field is for the whole project and not the LSE’s portion of the project (LSE’s contract).* <u>Note 2:</u> *For hybrid/paired projects, this is the maximum rate* (interconnection capacity) resource that can send energy to the grid. In most cases this will be less	numeric

	than the generator portion of the hybrid, plus the storage portion of the hybrid/paired. <u>Note 3:</u> *If LSE report this field for the resources that have MAXGEN values in the* RDTv3.resources.MAXGEN, RECART will overwrite the LSE's reported value with the one in the RDTv3.resources.MAXGEN in the aggregation process.	
contracted_nameplate_capacity	Please provide LSE's contracted nameplate capacity of the project. This information must be provided when resource is hybrid. <u>Note 1:</u> *This field is for LSE's contracted amount and not the whole project (resource).* <u>Note 2:</u> If this is a hybrid/paired project, report the maximum rate (interconnection capacity) that the LSE can receive from this resource. In most cases this will be less than the LSE's generator portion of the hybrid, plus the LSE's storage portion of the hybrid/paired. *Note 3: The contracted nameplate capacity of the project may differ from the contracted Net Qualifying Capacity, which is reported separately in the RDT.*	numeric

sep_contracted_mw_nqc	Please enter the contracted September Net Qualifying Capacity (NQC) value that counts for Resource Adequacy (RA) program credit for the project's first year online. If the contract either does not exist yet, or does not have a known NQC value, please estimate this value using the current methodologies in use by the CPUC's Resource Adequacy Program. If the contract is energy only, enter 0 here. Do not leave this blank. *Note 1: The contracted NQC of the project may differ from the contracted nameplate capacity, which is reported separately in the RDT.*	numeric
contract_gwh_annual	Enter the annual amount of energy contracted for, in GWh. If this is an RA only contract, enter zero here. Do not leave this blank. If the amount changes over the course of contract, please provide the average annual amount.	numeric
	Drop down list; "no" and possible hybrid and paired technology combinations. 1. null	string

is_hybrid_paired	2. NotHybrid 3. ExistingBiomassExistingStorage 4. ExistingBiomassNewStorage 5. ExistingGeothermalExistingStorage 6. ExistingGeothermalNewStorage 7. ExistingSolarExistingStorage 8. ExistingSolarNewStorage 9. ExistingThermalExistingStorage 10. ExistingThermalNewStorage 11. ExistingWindExistingStorage 12. ExistingWindNewStorage 13. NewBiomassExistingStorage 14. NewBiomassNewStorage 15. NewGeothermalExistingStorage 16. NewGeothermalNewStorage 17. NewSolarExistingStorage 18. NewSolarNewStorage 19. NewThermalExistingStorage 20. NewThermalNewStorage 21. NewWindExistingStorage 22. NewWindNewStorage *Note: For the purpose of IRP, "Paired" refers to generation and storage resources that share the same grid interconnection and "Hybrid" resources as paired resources with constraints that require storage charging to occur using the paired generation resource rather than the grid.*	

can_charge_from_grid	Drop down list: yes, no. “Yes” for when storage can charge from grid. “No” for when storage can ONLY charge from the associated generator. For non hybrid/paired contracts, leave this column blank. *Note: For the purpose of IRP, “Paired” refers to generation and storage resources that share the same grid interconnection and “Hybrid” resources as paired resources with constraints that require storage charging to occur using the paired generation resource rather than the grid. Seleting “No” in this column means the project is hybrid.*	string
total_generator_mw	A hybrid/ paired resource consists of a generator and storage. This is the nameplate of the generator portion of the resource, in MW (the whole project). Only report this for hybrid or paired projects. For non hybrid/paired contract, leave this column blank. *<u>Note 1:</u> This field is for the whole generator capacity and not the LSE’s portion of that.*	numeric

	Note 2: Section 8 provides more details regarding how to report hybrid/paired projects.	
contracted_generator_mw	A hybrid/paired resource consists of a generator and storage. Please provide LSE's contracted nameplate of the generator portion of the project, in MW. Only report this for hybrid or paired projects. For non hybrid/paired contract, leave this column blank. *<u>Note 1:</u> This field is for the LSE's contracted amount from the generator and not the whole generator capacity.* *<u>Note 2:</u> Section 8 provides more details regarding how to report hybrid projects.*	numeric
total_storage_mw	A hybrid/paired resource consists of a generator and storage. This is the nameplate of the storage portion of the project, in MW (the whole project). Only report this for hybrid or paired projects. For non hybrid/paired contract, leave this column blank.	numeric

	<u>Note 1:</u> This field is for the whole storage capacity and not the LSE's portion of that. *<u>Note 2:</u> Section 8 provides more details regarding how to report hybrid projects.*	
contracted_storage_mw	A hybrid/paired resource consists of a generator and storage. Please provide LSE's contracted nameplate of the storage portion of the project, in MW. Only report this for hybrid or paired projects. For non hybrid/paired contract, leave this column blank. *<u>Note 1:</u> This field is for the LSE's contracted amount from the storage and not the whole storage capacity.* *<u>Note 2:</u> Section 8 provides more details regarding how to report hybrid projects.*	numeric
solar_technology_sub_type	If the resource is a standalone solar, or a hybrid/paired with solar as the generator, report the technology type. Drop down list: Fixed, SolarThermal, 2Axis, 1Axis . Otherwise, leave this column blank.	string

storage_technology_sub_type	If the resource is a standalone storage, or a hybrid/paired with storage, report the technology sub type. Drop down list: Li, Flow, PSH, Other. Otherwise, leave this column blank.	string
total_storage_depth_mwh	If the resource is a standalone storage or a hybrid/paired (generator + storage) resource, report the storage total depth in MWh here. Otherwise, leave this column blank. *Note: This field is for the whole storage resource and not the LSE's portion of the project.*	numeric
contracted_storage_depth_mwh	If the resource is a standalone storage or a hybrid/paired (generator + storage) resource, report the storage total depth in MWh that LSE has contracted for. Otherwise, leave this column blank. *Note: This field is for the LSE's contracted amount from the storage and not the whole storage resource.*	numeric
viability_cod_reasonableness	Choose 1 - 4 below to report on project viability. This is only necessary for projects not online yet. 4 - Interconnection studies complete, and agreement signed consistent with reported COD; permitting application complete.	string

	3 - Interconnection Phase II study complete; permitting application approved; these support reported COD. 2 - Interconnection Phase II study in progress; permitting application in progress; LSE has plan that supports reported COD. 1 - Interconnection Phase II study not begun.	
viability_technical_feasibility	Choose 1 – 3 below to report on technical feasibility. This is only necessary for resources not online yet. 3. Project-specific independent engineering assessment is complete and supports the delivery profile (capacity and/or production) AND Project uses commercialized technology. 2 - Project will use a commercialized technology solution that is currently in use at a minimum of two operating facilities of similar or larger size. 1 – Project uses NEITHER commercialized technology NOR has project specific engineering assessment.	string
viability_financing_sitecontrol	Choose 1 - 5 or N/A below to report on financing. This is only necessary for resources not yet online. 5 - All Financing Secured. 4 - Partial Financing Secured. 3 - Seeking Financing. 2 – Project has site control but not Yet Seeking Financing. 1 – Project does not yet have site control.	string

	NA-No Financing Required.	
resource_mix	Please fill this field only if for the following resources. Otherwise, leave this column blank. - The resource has supertype = unspecifiedimport, unspecifiednonimpor, supplierschoice - The resource has resolve_final_group = caiso_unkown (this is for newgeneric and newresolve) _EXISTING_GENERIC_UNKNOWN, _NEW_GENERIC_UNKNOWN "supertype" and "resolve_final_group" are specified for each resource in the RDTv3.resources.resource. Please specify technology mix of energy making up a contract in the following form: [techtype1, value1] [techtype2, value2]… For techtype please use only the following values (case insensitive): thermal, solar, wind, wind_low_cf, wind_hi_cf, hydro, battery, geothermal, biogas, biomass, ct, ccgt, chp, nuclear, dr, other, unknown. The values should be equal to the MW of each technology and the sum of values should be equal to the total MW of the LSE's contract.	string
cam_d1911016_vamo_ghgfreepcia	Drop down list: CAM, D.19-11-016, VAMO, GHG-free PCIA	string

	"CAM" refers to eligible resources that are currently subject to the cost allocation mechanism. "D.19-11-016" refers to eligible resources that are procured by IOUs on behalf of other LSEs for compliance with the D.19-11-016 procurement decision either because an LSE opted out of its D.19-11-016 procurement requirements or was not assigned a procurement obligation under D.19-11-016, and thus will have a certain amount of procurement occurring on their behalf "VAMO" refers to the attributes of resources subject to the Voluntary Allocation and Market Offer mechanism, established in D.21-05-030, whereby IOUs offer PCIA-eligible LSEs an allocation of the attributes of an IOU's PCIA-eligible RPS portfolio and attempt to sell any unallocated resources through an annual market offer process. "GHG-free PCIA" refers to allocation of the GHG-free energy attributes of non-RPS, PCIA-eligible, GHG-free energy (I.e., nuclear and large hydro) from IOUs to PCIA-eligible LSEs, which has thus far been approved for PG&E and SCE on an interim basis. Note: for more details, please see section 8	
buy_sell_own	Select from the Drop down list: Buy, Sell, Own	string

	Own: If LSE owns the project/resource. Buy: If LSE is buying the capacity/energy from another LSE. If it is buy from a non-LSE supplier, leave this column blank. Sell: if LSE is selling the capacity/energy to another entity (LSE or non-LSE) Note: for more details, please see section 8	
counterparty	Drop down list including lse names and some generic options. Leave this column blank if not applicable. Note: for more details, please see section 8	string
generator_supplier	Name of supplier selling capacity. No drop down. Please capitalize all names, include no special characters, and underscore instead of spaces between words. This column is only required when the resource is "_SUPPLIERS_CHOICE." Otherwise, leave this column blank. Note: for more details, please see section 8	string

developer_name	If the project is new construction, please enter the name of the developer. If the project is not new construction, please enter “NA”	string
capacity_area	Drop down list; Options include CAISO local areas, PTO area in CAISO if not Local Area, or PTO of interconnection in WECC if not in CAISO.	string
capacity_sub_area	Drop down list: North Coast – Eagle Rock North Coast – Fulton Sierra – Placer Sierra – Pease Sierra – Gold Hill-Drum Stockton – Lockeford Stockton – Tesla-Bellota Greater Bay – Llagas Greater Bay – San Jose Greater Bay – South Bay – Moss Landing Greater Bay – Oakland Greater Fresno – Panoche Greater Fresno – Herndon	string

	Greater Fresno – Hanford Greater Fresno – Coalinga Greater Fresno – Borden Greater Fresno – Reedley Kern – Westpark Kern – Kern Power-Tevis Kern – Kern Oil Kern – South Kern PP Big Creek/Ventura - Vesta Big Creek/Ventura - Santa Clara LA Basin – Eastern LA Basin – Western LA Basin – El Nido San Diego/Imperial Valley – San Diego San Diego/Imperial Valley – El Cajon San Diego/Imperial Valley – Border No_sub_area	
cpuc_approval_ref	Insert the Decision # or Advice Letter # by which the resource was approved by the CPUC, if applicable. If pending approval by the CPUC, enter “FILED”. This field can be left blank for LSEs who do not have their contracts approved by the CPUC.	string

county	Select the county the project is located in from the drop-down list. If the project is not located in California, select the state it is located in. Drop down list; counties in CA, other states in WECC.	string
COD_year	Enter the commercial operation date of the project (year). If the project is not yet online, enter the projected COD. Please select from the drop-down list.	numeric
COD_month	Enter the commercial operation date of the project (month) If the project is not yet online, enter the projected COD. Please select from the drop-down list.	numeric
COD_day	Enter the commercial operation date of the project (day) If the project is not yet online, enter the projected COD. Please select from the drop-down list.	numeric
contract_start_date_year	Enter the date (year) when energy/capacity deliveries are contracted to start, or planned to start if the project is yet contracted. Please select from the drop-down list.	numeric
contract_start_date_month	Enter the date (month) when energy/capacity deliveries are contracted to start, or planned to start if the project is yet contracted. Please select from the drop-down list.	numeric

contract_start_date_day	Enter the date (day) when energy/capacity deliveries are contracted to start, or planned to start if the project is yet contracted. Please select from the drop-down list.	numeric
contract_end_date_year	Enter the date (year) when energy/capacity deliveries are contracted to end, or planned to end if the project is yet contracted. Please select from the drop-down list.	numeric
contract_end_date_month	Enter the date (month) when energy/capacity deliveries are contracted to end, or planned to end if the project is yet contracted. Please select from the drop-down list.	numeric
contract_end_date_day	Enter the date (day) when energy/capacity deliveries are contracted to end, or planned to end if the project is yet contracted. Please select from the drop-down list.	numeric
contract_execution_date_year	Enter the date (year) when the contract was executed. If the contract has not been executed, enter “NA”. Please select from the drop-down list.	numeric
contract_execution_date_month	Enter the date (month) when the contract was executed. If the contract has not been executed, enter “NA”. Please select from the drop-down list.	numeric

contract_execution_date_day	Enter the date (day) when the contract was executed. If the contract has not been executed, enter “NA”. Please select from the drop-down list.	numeric
tx_upgrades	Please report if any upgrade(s) [Reliability Network Upgrade (IRNU or GRNU), a Local delivery Network Upgrades (LDNUs) or an Area Delivery Network Upgrades (ADNU)] is needed for this project. if the project is already online, enter “NA”. If the resource is generic or is pre-phase 1 and upgrade information is not yet known, enter “NA” Please select from the drop-down list.	string
tx_upgrade_date_year	Enter the date (year) when the transmission upgrade is scheduled to come online. Please select from the drop-down list.	numeric
tx_upgrade_date_month	Enter the date (month) when the transmission upgrade is scheduled to come online. Please select from the drop-down list.	numeric
tx_upgrade_date_day	Enter the date (day) when the transmission upgrade is scheduled to come online. Please select from the drop-down list.	numeric
tx_upgrade_description	Brief identifying description of upgrade(s) including type of upgrade(s) and any additional information that LSEs want to provide about upgrade(s) needed for this project	string
	Please indicate using the drop-down list whether this project satisfies tranche requirements per D.19-11-016. If this project does not count toward D.19-11-016	string

d1911016_tranche	requirements, enter NA. Select only tranches applicable to this project (do not select multiple tranches unless applicable). Projects will only be counted towards a tranche obligation where indicated. Drop down list: NA, 1, 2, 3, 1 & 2, 1 & 2 & 3, 1 & 3, 2 & 3	
d2106035_procurement_cat	Please indicate using the drop-down list whether this project is planned to be used to meet procurement requirements of D.21-06-035. If this project does not count toward D.21-06-035 requirements, enter "NA" or leave blank. Select only procurement categories applicable to this project (do not select multiple categories unless applicable). If the combination of procurement categories you are using this contract to meet is not available below, select "other combination" and input a note explaining what procurement categories this contract is meeting. This is not a formal compliance filing for D.21-06-035 and this data will only be used for project tracking purposes.	string

	Please choose the year based upon the obligation you are meeting (not the online year if the resource will be online early). "general" refers to procurement that is not planned to meet any of the other procurement categories of D.21-06-035. "ZE_gen_paired_dr" refers to the procurement category: Zero-emissions generation, generation paired with storage, or demand response resources, required by 2025, not necessarily in 2025. "long_duration_storage" refers to the long-duration storage resource procurement category due by 2026, with the possibility of extension to 2028 (choose _ext only if extension has been granted by CPUC). "firm_ZE" refers to firm zero-emitting resource procurement category due by 2026, with the possibility of extension to 2028 (choose _ext only if extension has been granted by CPUC). Drop down list: NA firm_ZE firm_ZE_&_firm_ZE_ext	

	firm_ZE_ext general general_&_firm_ZE general_&_firm_ZE_ext general_&_long_duration_storage general_&_long_duration_storage_ext general_&_ZE_gen_paired_dr long_duration_storage long_duration_storage_&_firm_ZE long_duration_storage_&_firm_ZE_ext long_duration_storage_&_long_duration_storage_ext long_duration_storage_ext long_duration_storage_ext_&_firm_ZE long_duration_storage_ext_&_firm_ZE_ext ZE_gen_paired_dr ZE_gen_paired_dr_&_firm_ZE ZE_gen_paired_dr_&_firm_ZE_ext ZE_gen_paired_dr_&_long_duration_storage ZE_gen_paired_dr_&_long_duration_storage_ext	

mtr_tranche1_NQC	Please enter the NQC value you expect this project will contribute to meeting your 2023 D.21-06-035 (MTR) obligation. The NQC entered should be based upon the ELCCs established for the MTR procurement, as well as the procedures regarding use of the ELCCs. The ELCC *Staff Transmittal Memo* and *Incremental ELCC Study for Mid-Term Reliability Procurement* contain this guidance and can be found on the IRP Procurement Track webpage, under "Additional Procurement Guidance." Note: this column is not asking whether or not this contract will be delivering in 2023. This is ONLY asking whether this contract is contributing to meeting an LSE's 2023 obligation, and if so, what the NQC will be. For the vast majority of projects, an LSE should expect to fill in only one of these columns and leave blank the other columns (i.e., the initial NQC shown will be assumed to carry forward at that level). An LSE will use multiple columns if one project or contract is being used to meet multiple tranches of an LSE's requirement. NOTE: Please enter any Long-Lead Time Procurement in whatever tranche you are using it to meet. Most, but not all, Long Lead Time Procurement will be in tranche 6.	numeric
mtr_tranche2_NQC	Please enter the NQC value you expect this project will contribute to meeting your 2024 D.21-06-035 (MTR) obligation. The NQC entered should be based upon the ELCCs established for the MTR procurement, as well as the procedures regarding use of the ELCCs. The following materials on ELCCs contain guidance	numeric

	and can be found on the IRP Procurement Track webpage, under "Additional Procurement Guidance": • June 2023 Staff Memo • 2023 Staff Transmittal Memo • Incremental ELCC Study for Mid-Term Reliability Procurement (January 2023 Update) • 2021 Staff Transmittal Memo • 2021 Incremental ELCC Study for Mid-Term Reliability Procurement by E3 and Astrapé Note: this column is not asking whether or not this contract will be delivering in 2024. This is ONLY asking whether this contract is contributing to meeting an LSE's 2024 obligation, and if so, what the NQC will be. For the vast majority of projects, an LSE should expect to fill in only one of these columns and leave blank the other columns (i.e., the initial NQC shown will be assumed to carry forward at that level). An LSE will would use multiple columns if one project or contract is being used to meet multiple tranches of an LSE's requirement. NOTE: Please enter any Long-Lead Time Procurement in whatever tranche you are using it to meet. Most, but not all, Long Lead Time Procurement will be in tranche 6.	

mtr_tranche3_NQC	Please enter the NQC value you expect this project will contribute to meeting your 2025 D.21-06-035 (MTR) obligation. The NQC entered should be based upon the ELCCs established for the MTR procurement, as well as the procedures regarding use of the ELCCs. The following materials on ELCCs contain guidance and can be found on the IRP Procurement Track webpage, under "Additional Procurement Guidance": • June 2023 Staff Memo • 2023 Staff Transmittal Memo • Incremental ELCC Study for Mid-Term Reliability Procurement (January 2023 Update) • 2021 Staff Transmittal Memo • 2021 Incremental ELCC Study for Mid-Term Reliability Procurement by E3 and Astrapé Note: this column is not asking whether or not this contract will be delivering in 2025. This is ONLY asking whether this contract is contributing to meeting an LSE's 2025 obligation, and if so, what the NQC will be. For the vast majority of projects, an LSE should expect to fill in only one of these columns and leave blank the other columns (i.e., the initial NQC shown will be assumed to carry forward at that level). An LSE will would use multiple columns if one project or contract is being used to meet multiple tranches of an LSE's requirement.	numeric

	NOTE: Please enter any Long-Lead Time Procurement in whatever tranche you are using it to meet. Most, but not all, Long Lead Time Procurement will be in tranche 6.	
mtr_tranche4_NQC	Please enter the NQC value you expect this project will contribute to meeting your 2026 D.23-02-040 (Supplemental MTR) obligation. The NQC entered should be based upon the ELCCs established for the MTR and Supplemental procurement, as well as the procedures regarding use of the ELCCs. The following materials on ELCCs contain guidance and can be found on the IRP Procurement Track webpage, under "Additional Procurement Guidance": • June 2023 Staff Memo • 2023 Staff Transmittal Memo • Incremental ELCC Study for Mid-Term Reliability Procurement (January 2023 Update) • 2021 Staff Transmittal Memo • 2021 Incremental ELCC Study for Mid-Term Reliability Procurement by E3 and Astrapé Note: this column is not asking whether or not this contract will be delivering in 2026. This is ONLY asking whether this contract is contributing to meeting an LSE's 2026 obligation, and if so, what the NQC will be. For the vast majority of projects, an LSE should expect to fill in only one of these columns and leave blank the other columns (i.e., the initial NQC shown will be assumed to carry	numeric

	forward at that level). An LSE will would use multiple columns if one project or contract is being used to meet multiple tranches of an LSE's requirement. NOTE: Please enter any Long-Lead Time Procurement in whatever tranche you are using it to meet. Most, but not all, Long Lead Time Procurement will be in tranche 6.	
mtr_tranche5_NQC	Please enter the NQC value you expect this project will contribute to meeting your 2027 D.23-02-040 (Supplemental MTR) obligation. The NQC entered should be based upon the ELCCs established for the MTR and Supplemental MTR procurement, as well as the procedures regarding use of the ELCCs. The following materials on ELCCs contain guidance and can be found on the IRP Procurement Track webpage, under "Additional Procurement Guidance": • June 2023 Staff Memo • 2023 Staff Transmittal Memo • Incremental ELCC Study for Mid-Term Reliability Procurement (January 2023 Update) • 2021 Staff Transmittal Memo • 2021 Incremental ELCC Study for Mid-Term Reliability Procurement by E3 and Astrapé	numeric

	Note: this column is not asking whether or not this contract will be delivering in 2027. This is ONLY asking whether this contract is contributing to meeting an LSE's 2027 obligation, and if so, what the NQC will be. For the vast majority of projects, an LSE should expect to fill in only one of these columns and leave blank the other columns (i.e., the initial NQC shown will be assumed to carry forward at that level). An LSE will would use multiple columns if one project or contract is being used to meet multiple tranches of an LSE's requirement. NOTE: Please enter any Long-Lead Time Procurement in whatever tranche you are using it to meet. Most, but not all, Long Lead Time Procurement will be in tranche 6.	
mtr_tranche6_NQC	Please enter the NQC value you expect this project will contribute to meeting your 2028 D.21-06-035 (MTR) obligation. The NQC entered should be based upon the ELCCs established for the MTR procurement, as well as the procedures regarding use of the ELCCs. The following materials on ELCCs contain guidance and can be found on the IRP Procurement Track webpage, under "Additional Procurement Guidance": • June 2023 Staff Memo • 2023 Staff Transmittal Memo • Incremental ELCC Study for Mid-Term Reliability Procurement (January 2023 Update) • 2021 Staff Transmittal Memo	numeric

	• 2021 Incremental ELCC Study for Mid-Term Reliability Procurement by E3 and Astrapé Note: this column is not asking whether or not this contract will be delivering in 2028. This is ONLY asking whether this contract is contributing to meeting an LSE's 2028 obligation, and if so, what the NQC will be. For the vast majority of projects, an LSE should expect to fill in only one of these columns and leave blank the other columns (i.e., the initial NQC shown will be assumed to carry forward at that level). An LSE will would use multiple columns if one project or contract is being used to meet multiple tranches of an LSE's requirement. NOTE: Please enter any Long-Lead Time Procurement in whatever tranche you are using it to meet. Most, but not all, Long Lead Time Procurement will be in tranche 6. While this tranche 6 column should contain mostly Long Lead Time Procurement, any other procurement using tranche 6 ELCCs should be entered in this column.	
mtr_NQC_ZE_gen_paired_dr	Please enter the NQC value you expect this project will contribute to meeting your obligation for zero-emission generation, generation paired with storage, or demand response resources. The NQC entered should be based upon the ELCCs established for the MTR procurement, as well as the procedures regarding use of the ELCCs. The following materials on ELCCs contain guidance and can be found on the IRP Procurement Track webpage, under "Additional Procurement Guidance":	numeric

	• June 2023 Staff Memo • 2023 Staff Transmittal Memo • Incremental ELCC Study for Mid-Term Reliability Procurement (January 2023 Update) • 2021 Staff Transmittal Memo • 2021 Incremental ELCC Study for Mid-Term Reliability Procurement by E3 and Astrapé Note: The NQC value entered in this column should be only the value being applied toward this procurement category. This column will not be added for annual NQC purposes, so make sure the total procurement toward an annual obligation is reported in one of the appropriate columns above.	
previous_COD_year	If this project was included on a previous CPUC filing, please indicate the previously submitted COD (year). If this has not been included on a previous report, enter "NA". If this project is not pursuant to an IRP Procurement Order, please leave this field blank. Please select from the drop-down list.	numeric
previous_COD_month	If this project was included on a previous CPUC filing, please indicate the previously submitted COD (month). If this has not been included on a previous report, , enter "NA". If this project is not pursuant to an IRP Procurement Order, please leave this field blank. Please select from the drop-down list.	numeric

previous_COD_day	If this project was included on a previous CPUC filing, please indicate the previously submitted COD (day). If this has not been included on a previous report, enter “NA”. If this project is not pursuant to an IRP Procurement Order, please leave this field blank. Please select from the drop-down list.	numeric
remediation_plan	Please indicate whether you are submitting a remediation plan with this report. This indicates that the project has failed to meet one or more milestone requirements on time. If this project is not pursuant to an IRP Procurement Order, please choose “NA”. Please select from the drop-down list: “Yes”, “No”, “NA”.	string
signed_contract	Indicate whether or not an executed contract with the entity with contractual rights to the resource for a commercially viable technology exists. No indicates the project does not yet have an executed contract. Please select from the drop-down list: “Yes”, “No”	string
notice_to_proceed	Indicate whether or not a "notice to proceed" or similar contractual evidence of construction commencement has been submitted to the CPUC with this report. If this project is not pursuant to an IRP Procurement Order, please leave this field blank. Please select from the drop-down list: “Yes”, “No”	string
public_contract	Is this contract publicly announced? Please provide description.	string

	Note: As long as the contract has been announced publicly in some way, please report it. If some contract information is public and other information is confidential, please make that clear here. This will inform how much the Commission can say about the contract in public documents. If you think you need to add more details, please add to the note column.	
buying_energy_capacity	Please report if this is an energy only contract, capacity only contract, or it delivers both energy and capacity. Please select from the drop-down list: drop-down options of "EnergyCapacity, EnergyOnly, CapacityOnly"	string
NQC_reporting_source	Select if the reported the NQC values(s) for this contract were specified in the contract itself or if these values are the result of an estimation. MTR NQC values are assumed to be calculated. Please select from the drop-down list: "In the contract" or "Calculated"	string
procurement_origin	Please report the origin for procuring this project. Some examples are: RPS, D1911016, D2106035, emergencyreliability, storagemandate, selfgenerationincentiveprogram, localcapacityrequirement Note: If it's more than one, please list all.	string
csp_resource_category	For each contract, select the appropriate CSP category from the drop-down list. Please review section 9 for more details. A resource is considered "existing" in the CSP calculator if it is a baseline resource or, in the case of planned existing, is	string

	expected to be a baseline resource, in the RDT “resources” tab. Note that the units to be used in the proceeding csp_annual_YYYY columns are specified for each selectable resource type in the dropdown. These include: • NA • Large Hydro (GWh) • Imported Hydro (GWh) • Asset Controlling Supplier (GWh) • Nuclear (GWh) • Biogas (GWh) • Biomass (GWh) • Geothermal (GWh) • Small Hydro (GWh) • Wind Baseline California (GWh) • Wind New PG&E (GWh) • Wind New SCE SDG&E (GWh) • Wind Pacific Northwest (GWh) • Wind Wyoming (GWh) • Wind New Mexico (GWh) • Wind Offshore Morro Bay (GWh) • Wind Offshore Humboldt (GWh) • Solar Baseline California (GWh) • Solar New PG&E (GWh) • Solar New SCE SDG&E (GWh) • Solar Distributed (GWh) • Hybrid_or_Paired_Solar_and_Battery (GWh) • Shed DR (MW) • Pumped Storage (MW) • Battery Storage (MWh Energy Capacity) • Storage Resource Custom Profile (MW) • RPS Resource Custom Profile (GWh)	

	• GHG-free non-RPS Resource Custom Profile (GWh) • Coal (GWh) Note: Please review section 9 for more details.	
csp_annual_2024	Report the project's delivery for the CSP's 2024 study years based on the specified unit. Please review section 9 for more details.	numeric
csp_annual_2026	Report the project's delivery for the CSP's 2026 study years based on the specified unit. Please review section 9 for more details.	numeric
csp_annual_2030	Report the project's delivery for the CSP's 2030 study years based on the specified unit. Please review section 9 for more details.	numeric
csp_annual_2035	Report the project's delivery for the CSP's 2035 study years based on the specified unit. Please review section 9 for more details.	numeric
macro_supertype	This is a field reserved for RDTv3 macro use. Please do not enter any data into this field. This field will be automatically populated with supertype value by RDTv3 macro based on supertype value (RDTv3.resources.resource_supertype) corresponding to resource name.	
notes	Any additional information that LSEs want to provide and was not captured in the existing fields.	string

4. Resources

RDTv3 defines a list of valid resource names. This list is defined as of the Cutoff Date defined in the contract status section, below. In RDTv3 this list is located in RDTv3.Resources.resource. This list contains specified physical resources, unspecified resources that are delivered over a specific transmission branch group, or unspecified resources that are from a specific competitive renewable energy zone (CREZ)[1]. There are also options for resources that have less specific information.
The types of resource names in the resource list are:

- Baseline resources (either CAISO ID, ADS name, RPS name, name from the Mid-Term Reliability Baseline Generator List, or other name like DR program)
- Branch Group names of the form "GENERIC_BRANCH_branchname" where "branchname" is the name of the transmission branch name.
- CREZ names of the form "GENERIC_CREZ_crezname" where "crezname" is the name of the CREZ.
- Unbundled recs from a particular CREZ of the form "UNBUNDLED_crezname."
- Special case values ("unspecified", "unbundledrec", "sellerschoice")

5. Contract Status

"contract_status" takes one of the following values: Online, Development, Review, Plannedexisting and Plannednew. These are the only accepted values for "contract_status" (case insensitive). The meanings of these terms are defined in the table below.

contract_status	Meaning
Online	Contract has been signed (or LSE owns the resource) and the resource is online as of Cutoff Date. The Cutoff Date is defined in the 2022 IRP Filing Requirements Overview.
Development	Contract has been signed and approved by CPUC and/or LSE's highest decision-making authority as applicable (or LSE owns the resource), but resource is still under development and not yet online (as of Cutoff Date).

[1] Please note that while CREZ is the old terminology, it basically means transmission zones as per section 4.2.1 of the 2019 the Inputs and Assumptions document.

Review	Contract has been selected and is under review by LSE's highest decision-making authority (e.g. board of directors) as of final resource table Cutoff Date. For LSE-owned resources, this means that the decision-making authority is reviewing whether to authorize an LSE-owned resource. This includes contracts shortlisted as a result of an RFO or a similar procurement method. It can also include bilateral contracts not resulting from a Request for Offer (RFO).
Plannedexisting	Contract is not yet (as of Cutoff Date) signed, and resource has a valid Resource ID in the resources table (RDTv3.resources.resource)
Plannednew	Contract is not yet (as of Cutoff Date) signed, and resource does not have a valid Resource ID in the resources table (RDTv3.resources.resource)

6. Supertype

Supertype is a property that is defined for each physical or generic resource defined in the resources table (RDTv3.resources.supertype). The table below defines meanings for the various supertypes.

supertype	**Meaning**
physical	A specific existing resource.
existinggeneric	Unspecified existing physical resource
newresolve	New resource that can be mapped to a particular CREZ
newgeneric	New resource that cannot be mapped to a particular CREZ or for which the LSE has not planned to procure a particular technology
newloadmod	New load modifier resource
specifiedimport	Specific existing resource with a CAISO ID that is imported from outside of the CAISO.
supplierschoice	LSE buys capacity/energy from a non-LSE entity that is able to provide a mix of resources that are not predetermined in a contract.
unbundledrec	A contract for Renewable Energy Credits, not unit specific energy, that is not actually delivered to CAISO. There is no energy or capacity product associated with this contract, and this is primarily for RPS compliance

unspecifiedimport	Imports from outside of the CAISO, delivered over a particular intertie branch group. Resource mix not known.
unspecifiednonimport	A contract for a quantity of energy that is not unit specific, sourced from capacity within the CAISO.

7. Key Relationships

For each entry in the RDT, there are several important relationships that must be maintained between certain fields within the input table.

- **supertype-to-contract_status:** For every value of supertype, "contract_status" can take the values indicated in the table below. Any other choice will be flagged as an error.

supertype	**contract_status**
physical	Online, Development, Plannedexisting
existinggeneric	Online, Plannedexisting
newresolve	Online, Development, Review, Plannednew
newgeneric	Online, Development, Review, Plannednew
newloadmod	Online, Development, Review, Plannednew
specifiedimport	Online, Plannedexisting
supplierschoice	Online, Plannedexisting
unbundledrec	Online, Plannedexisting
unspecifiedimport	Online, Plannedexisting
unspecifiednonimport	Online, Plannedexisting

8. Instructions for specific resources/contracts

A. D.19-11-016

1. If an LSE opted-out of its procurement obligation under D.19-11-016, or was not assigned a procurement obligation under D.19-11-016, and thus will have a certain amount of procurement occurring on their behalf, the LSE must enter the resource(s) that are being procured on their behalf. This way the LSE gets credit for the reliability and emission reduction contribution for the procurements occurring on behalf of them.
    - If the specific resource(s) name being procured on their behalf is not known, the LSE should choose one of the generic resources with specific type. For example, "_NEW_GENERIC_SOLAR_1AXIS", if a solar resource being procured on the LSE's behalf.
    - For these resources, LSE needs to select "d1911016" in column "cam_d1911016_vamo_ghgfreepcia" and select "buy" in column "buy_sell_own". LSE needs to select the counterparty from the drop-down list in the "counterparty" column.
    - The LSE only needs to enter its individual share and do not need to provide information about the whole project.
2. If an LSE is only procuring its own obligations under D.19-11-016, the LSE must enter each project's resource/contract details the same way as it does for other contracts.
    - For these resources, LSE needs to select "d1911016" in column " cam_d1911016_vamo_ghgfreepcia"
    - If the LSE owns the resource, select "own" in column "buy_sell_own." If it is a buy from a non-LSE supplier, leave the "buy_sell_own" column blank.
3. For IOUs that are procuring their own obligation and on behalf of opt-out LSEs, they must report the project(s) in multiple lines.
    - IOUs must report each full project in one line, the same way as other contracts. IOUs need to select "d1911016" in column " cam_d1911016_vamo_ghgfreepcia."
        - If the IOU owns the resource, select "own" in column "buy_sell_own." If it is a buy from a non-LSE supplier, leave the "buy_sell_own" column blank.
    -
    - IOUs must add another line for the certain amount that they are procuring on behalf of the opt-out LSEs. For this line, IOUs need to select "d1911016" in column " cam_d1911016_vamo_ghgfreepcia" and select "sell" in column "buy_sell_own". IOUs need to select the counterparty from the drop-down list in the "counterparty" column.

- For this line, IOUs do not need to report each resource individually. However these sells must be bundled by resource type. For the counter party, IOUs can select one of the generic options from the drop-down list.

B. CAM resources: Each LSE should input any eligible resources that are currently subject to the cost allocation mechanism (CAM). In estimating its share of resources subject to the CAM, each LSE should refer to the most recent year- ahead CAM resource list available on the Commission's Resource Adequacy Compliance Materials webpage.[2] The year-ahead CAM list reflects the contract start and end dates of Commission approved CAM resources. The list itemizes the resource adequacy capacity value by month for each IOU service territory. An LSE's proportional share is determined by its year-ahead share of the total coincident peak load for each IOU service territory, as assigned in the Commission's annual resource adequacy process. The LSE's proportional share of that resource is assumed static through the IRP planning horizon, but it will be updated each IRP cycle based on the current proportional share assignment from the Commission's annual resource adequacy process. LSEs should not make assumptions or predictions on what resources may be procured on behalf of all load and subject to the CAM in the future beyond what is already included in the most recent year-ahead CAM resource list.

LSEs should also enter their RA-assigned DR allocations in a separate line, separate from other CAM resources. When entering their DR allocations, LSEs should report a single annual amount that equals the sum of the system and local DR credits assigned to the LSE by Energy Division staff in the RA proceeding. All LSEs should assume a static DR allocation amount from the latest year assigned by RA staff out to 2035.

1. IOUs that hold the contracts for the CAM and DR allocation resources must report the project(s) in multiple lines.
    - IOUs must report each full project in one line. For this line, LSE needs to select "cam" in column " cam_d1911016_vamo_ghgfreepcia."
        - If the IOU owns the resource, select "own" in column "buy_sell_own". If it is a buy from a non-LSE supplier, leave the "buy_sell_own" column blank

[2] https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/resource-adequacy-homepage/resource-adequacy-compliance-materials

- IOUs must add another line for the certain amount that other LSEs are receiving allocation for. For this line, IOUs need to select "cam" in column "cam_d1911016_vamo_ghgfreepcia" and select "sell" in column "buy_sell_own". IOUs need to select the counterparty from the drop-down list in the "counterparty" column.
    - For this line, IOUs do not need to report each CAM and DR resource individually. However, these sells must be bundled by resource type using the appropriate existing generic resource name for that resource type.
    -
    - IOUs should select the appropriate resource type under the "csp_resource_category" column and, if applicable, the quantity of project delivery associated with the allocations in the "csp_annual_yyyy" columns.
    - For the counter party, IOUs can select one of the generic options from the drop-down list.

2. LSEs that do not hold the contract and only are receiving an allocation of the CAM and DR allocation resource(s), should report their share of resource(s) subject to the CAM. For this, LSE needs to select "cam" in column "cam_d1911016_vamo_ghgfreepcia" and select "buy" in column "buy_sell_own". LSE needs to select the counterparty from the drop-down list in the "counterparty" column.

- For this line, LSEs do not need to report each CAM and DR resource individually. However, these buys must be bundled by resource type using the appropriate existing generic resource name for that resource type.
- LSEs only need to enter their individual allocations and do not need to provide information about the total allocation pool.
- LSEs should select the appropriate resource type under the "csp_resource_category" column and, if applicable, the quantity of project delivery associated with the allocations in the "csp_annual_yyyy" columns.
- For the counter party, LSEs should select the IOU holding the contract.

C. GHG free PCIA resources: LSEs must enter their GHG free Power Charge Indifference Adjustment (PCIA) resources.

1. For reporting the GHG-free PCIA resources agreements, LSEs need to add a separate row and choose one of the generic resources with specific type (e,g, " _EXISTING_GENERIC_NW_HYDRO"). LSEs need to select "ghgfreepcia"

in " cam_d1911016_vamo_ghgfreepcia" column. LSEs also need to select "EnergyOnly" in the "buying_energy_capacity" column. Individual resources should be bundled to aggregate amounts but must be differentiated by resource type. LSEs should use forecasted GWh volumes if contracted amounts are not known.

2. IOUs that are allocating the GHG-free PCIA resources to other LSEs must report the project(s) in multiple lines.
    - IOUs must report each full project in one line. For this line, IOUs needs to select "ghgfreepcia" in the "cam_d1911016_vamo_ghgfreepcia" column.
        - If the IOU owns the resource, select "own" in column "buy_sell_own." If it is a buy from a non-LSE supplier, leave the "buy_sell_own" column blank.
    - IOUs must add another line for the certain amount that other LSEs are receiving allocation for. For this line, IOUs need to select "ghgfreepcia" in column "cam_d1911016_vamo_ghgfreepcia" and select "sell" in "buy_sell_own" column. IOUs need to select the counterparty from the drop-down list in the "counterparty" column.
        - For this line, IOUs do not need to report each resource individually. However these sells must be bundled by resource type and should be entered as existing_generic for that resource type. For the counterparty, IOUs can select one of the generic options from the drop-down list.
        - Energy entered as a "sell" for GHG-free PCIA allocation entries will be subtracted from an IOU's CSP calculator.
3. LSEs accepting GHG-free PCIA resources from IOUs should select "buy" in column "buy_sell_own". LSEs also need to select "EnergyOnly" in the "buying_energy_capacity" column and report the counterparty
    - These LSEs do not need to report each resource individually. However these sells must be bundled by resource type and should be entered as existing_generic for that resource type. For the counterparty, LSEs should select the IOU holding the contract.
    - LSEs only need to enter their individual allocations and do not need to provide information about the total allocation pool.
    - Energy entered as a "buy" for GHG-free PCIA allocation entries will be added to an LSE's CSP calculator.
4. LSEs are not required to coordinate with one another about GHG-free PCIA allocations and buys/sells when putting together their plans. However, LSEs are encouraged to do so. Staff will evaluate the reasonableness of LSEs reporting during the aggregation process.

D. VAMO: LSEs must enter their known voluntary allocations and market offers (VAMO) agreements and then make their own assumptions about future allocations and buy/sell out to 2035.

1. For reporting the VAMO agreement, LSEs need to add a separate row and choose one of the generic resources with specific type (e,g, "_EXISTING_GENERIC_SOLAR_1AXIS"). LSEs need to select "VAMO" in " cam_d1911016_vamo_ghgfreepcia" column. LSEs also need to select "EnergyOnly" in the "buying_energy_capacity" column. Individual resources should be bundled to aggregate amounts but must be differentiated by resource type. LSEs should use forecasted GWh volumes if contracted amounts are not known.
2. IOUs that are allocating VAMO to other LSEs must report the project(s) in multiple lines.
    - IOUs must report each full project(s) in one line. For this line, IOUs need to select "vamo" in the "cam_d1911016_vamo_ghgfreepcia" column.
        - If the IOU owns the resource, select "own" in column "buy_sell_own." If it is a buy from a non-LSE supplier, leave the "buy_sell_own" column blank.
    - IOUs must add another line for the certain amount that other LSEs are receiving allocation for. For this line, LSE needs to select "vamo" in column "cam_d1911016_vamo_ghgfreepcia" and select "sell" in "buy_sell_own" column.
        - For this line, IOUs do not need to report each resource individually. However these sells must be bundled by resource type and should be entered as existing_generic for that resource type. For the counterparty, IOUs can select one of the generic options from the drop-down list.
        - Energy entered as a "sell" for VAMO allocation entries will be subtracted from an IOU's CSP calculator.
3. LSEs that accepting VAMO from IOUs should select "buy" in column "buy_sell_own". LSEs also need to select "EnergyOnly" in the "buying_energy_capacity" column. If it is a buy, LSE needs to select the counterparty from the drop-down list in the "counterparty" column and report the counterparty
    - These LSEs do not need to report each resource individually. However these sells must be bundled by resource type and should be entered as existing_generic for that resource type. For the counterparty, LSEs should select the IOU holding the contract.
    - LSEs only need to enter their individual allocations and do not need to provide information about the total allocation pool.
    - Energy entered as a "buy" for VAMO allocation entries will be added to an LSE's CSP calculator.

4. LSEs are not required to coordinate with one another about VAMO allocations and buys/sells when putting together their plans. However, LSEs are encouraged to do so. Staff will evaluate the reasonableness of LSEs reporting during the aggregation process.

E. Inter LSE Transfers: For all other inter LSE transfers that are different from A-D above, LSEs need to enter them by selecting the resource being either purchased or sold in the resource column selected from the drop-down list, indicating whether it is a purchase (buy) or a sale (sell) in the "buy_sell_own" column.

1. LSE needs to select the counterparty from the drop-down list in the "counterparty" column. If the resource is being sold by the LSE to a non-LSE counterparty, select "non-LSE counterparty" from the drop-down list.
2. it is a buy from a non-LSE supplier, leave the "buy_sell_own" column blank.
3. LSEs do not need to report buy/sell for each resource individually. However, these must be bundled by resource type.

F. suppliers_choice: This listing is only for when the LSE is purchasing from a non-LSE counterparty AND the resource being procured is not unit specific or the LSE does not know the specific mix of generation. If the counterparty is an LSE, then please follow directions for either unspecified import or unspecified non-import resources. In the event of a supplier's choice, the LSE is requested to select "suppliers_choice" in the drop down in the resource tab and use the "generator_supplier" field to name the non-LSE supplier with whom the LSE has a contract. Please also use the resource_mix field to describe the estimated mix of resource types in the contract. Also estimate the resource nameplate for the contract.

G. Resources with changing operational characteristics over the course of the time horizon: Some resources, like a hybrid resource that will charge from the grid in later years, may have operational characteristics that change over the course of the time horizon. In these cases, please enter them as two (or more) separate lines in the "unique_contracts" table.

H. **Marginal additions:** Marginal additions refer to the resources that their capacity has been expanded (e.g. adding batteries to an existing solar facility, adding additional solar to an existing solar facility, etc.) over the reporting time frame.

1. If this project is based on expanding an already existing resource in the "RDTv3.resources.resource" (e.g. adding more solar capacity to one of the existing solar resources in the resource tab):

- Select one of the generic resources from "RDTv3.resources.resource" with a specific type that reflects this resource.
- Follow the instruction for marginal_addition field
- Report the existing resource name in the "marginal_addition_to" field (the resource that has been expanded)
- Report the rest of the fields for the expanded project

2. IF this project is based on adding storage to an already existing generator, follow the “Hybrid/paired resource” instruction.

I. **Hybrid/paired resource:** A hybrid/paired resource consists of a generator and storage. For reporting such a contract in RDTv3's "unique_contracts" tab, please follow this instruction:

1. Select one of the generic resources from "RDTv3.resources.resource" with a specific type that reflects the generator portion of the hybrid/paired resource.
2. Follow the instruction for marginal_addition field
3. If this resource has become hybrid/paired by adding storage to an already existing generator listed in the "RDTv3.resources.resource", report the existing resource name in the "marginal_addition_to" field
4. In the "total_nameplate_capacity" field, report the maximum rate (interconnection capacity) that this hybrid/paired project can deliver. In most cases, this will be less than the generator portion of the hybrid, plus the storage portion of the hybrid.
5. In the "contracted_nameplate_capacity" field, report the maximum rate (interconnection capacity) that the LSE can receive from this hybrid/paired project. In most cases, this will be less than the LSE’s generator portion of the hybrid, plus the LSE’s storage portion of the hybrid.
6. Select the hybrid technology combinations from the drop-down list in the "is_hybrid_colocated" field.

7. In the "can_charge_from_grid", specify if the storage can charge from the grid or if it can only charge from the paired generator.
8. In the "total_generator_mw" field, report the nameplate of the generator portion of the resource, in MW (the whole project).
9. In the "contracted_generator_mw" field, report LSE's contracted nameplate of the generator portion of the project, in MW.
10. In the "total_storage_mw" field, report the nameplate of the storage portion of the resource, in MW (the whole project).
11. In the "contracted_storage_mw" field, report LSE's contracted nameplate of the storage portion of the project, in MW.
12. specify solar - if the generator portion is solar - and storage technology types in "solar_technology_sub_type" and "storage_technology_sub_type."
13. In the "total_storage_depth_mwh" field, report the storage total depth in MWh (the whole project).
14. In the "tcontracted_storage_depth_mwh" field, report the storage total depth in MWh that LSE has contracted for.

9. CSP fields instructions

For each contract reported in the RDTv3's "unique_contracts" tab, LSEs need to specify what CSP category the contract falls under and also report the associated MW or GWh for the CSP's study years: 2024, 2026, 2030, and 2035. After filling out the RDT, the LSE should copy the numeric values from the "CSPReportSheet" tab from the RDTv3 directly into the "Supply Inputs" tab of the CSP workbook using the "paste values" option in Excel. Resources, including dedicated imports, count towards an LSE's CSP portfolio only if their power output is delivered to (1) a California Balancing Authority area, if RPS- eligible, or (2) the CAISO system if the resource is not RPS-eligible.

A. This CSP portfolio includes:

a. RPS-eligible delivered resources (whether within CAISO or a dedicated import; includes RPS Bucket 1 and any other RPS-eligible resources that meet the criteria to qualify as RPS Bucket 1 except for the contract execution date of the resource)
b. Large hydro within CAISO
c. Dedicated imports of Pacific Northwest hydro (under control of an Asset Controlling Supplier)
d. Nuclear (whether within CAISO or a dedicated import)
e. Coal (dedicated import)
f. Shed demand response (load shedding at peak)
g. Standalone Battery storage
h. Pumped hydro storage
i. Hybrid or paired solar and battery resources
j. Generation with a defined hourly profile that:
    i. Does not fit into one of the categories above, and
    ii. Does not produce GHG emissions
k. Standalone storage with a defined hourly profile that:
    i. Does not fit into one of the categories above

B. The CSP portfolio excludes:
    a. Dispatchable gas resources (combined cycle, combustion turbine, etc.)
    b. Unspecified imports
    c. Gas-fired combined heat and power

For each contract in the "unique_contracts" tab, select the appropriate CSP category in the “csp_resource_category” column according to A and B above.

- The available CSP categories are: Large Hydro (GWh); Imported Hydro (GWh); Asset Controlling Supplier (GWh); Nuclear (GWh); Biogas (GWh); Biomass (GWh); Geothermal (GWh); Small Hydro (GWh); Wind Existing California (GWh); Wind New PG&E (GWh); Wind New SCE SDG&E (GWh); Wind Pacific Northwest (GWh); Wind Wyoming (GWh); Wind New Mexico (GWh); Wind Offshore Morro Bay (GWh); Wind Offshore Humboldt (GWh); Solar Existing California (GWh); Solar New PG&E (GWh); Solar New SCE SDG&E (GWh); Solar Distributed (GWh); Hybrid or paired solar and battery (GWh); Shed DR (MW);

Pumped Storage (MW); Battery Storage (MWh Energy Capacity); Storage Resource Custom Profile (MW); RPS Resource Custom Profile (GWh); GHG-free non-RPS Resource Custom Profile (GWh); Coal (GWh)
    - A resource is considered “existing” in the CSP calculator if it is a baseline resource or, in the case of planned existing, is expected to be a baseline resource, in the RDT “resources” tab.
- The CSP categories have different units based on resource type (as specified for each)
    - Installed capacity for shed demand response, pumped hydro, and storage resource custom profile (MW)
    - Installed discharge depth for standalone batteries (MWh Energy Capacity)
    - and annual energy for all other resources (GWh)
- After choosing the CSP category, LSE must report the projects delivery for the CSP's study years: 2024, 2026, 2030, and 2035 based on the specified unit. Leave the study year fields blank if the CSP category is “NA”.
    - There are for columns in the "unique_contracts" tab to cover the CSP's study years: csp_annual_2024, csp_annual_2026, csp_annual_2030, csp_annual_2035.
- For resources that must be excluded from CSP portfolio based on A and B above (e.g. unspecified imports, Combined Cycle Gas Turbine Power Plant, etc.), please select “NA” for the CSP category. Please do not leave this field blank.

10. Reliability worksheet instructions

The purpose of the "Reliability" worksheet is to inform whether there are sufficient capacity contracts to meet each LSE’s reliability needs. The worksheet is organized as follows:

Section Name	Instructions
MMT	Drop down list of GHG scenarios for 2035: 30MMT and 25MMT. Please select the appropriate scenario for each RDT.
Reliability Need	

	Please enter LSE's % share of the CAISO managed coincident peak that staff released on 7/1/22. Note: Since marginal ELCCs are used in the RDT, the total reliability need is adjusted to represent the marginal need.
BTM PV	Please enter the installed capacity values based on LSE's allocation that staff released on 7/1/22.
ELCC (%)	No LSE inputs required. This section pulls in marginal ELCCs (%) from the "misc" worksheet based on the MMT scenario selected. Staff will provide these ELCCs (%) in the final release.
Contract ELCC (MW)	This section aggregates contract ELCCs calculated in the "Calcs" worksheet. Please follow the instruction in the "Calcs" worksheet so that all contracts are included in the reliability calculation. For more details on the logic used in the "Calcs" worksheet, please see paragraphs below.
Load and Resource Table by Resource Type	Summary table and chart. No LSE inputs required.
Load and Resource Table by Contract Status	Summary table and chart. No LSE inputs required.

LSEs should be aware for their planning purposes that contracts with "EnergyCapacity" and "CapacityOnly" under the "buying_energy_capacity" column in the "unique_contracts" worksheet are considered capacity contracts. Contracts with "EnergyOnly" are not considered capacity contracts and will get zero ELCC vales in the reliability calculations. For a capacity contract to contributes to the LSE's reliability needs in a specific year, the contract start date must be on or before June 1st of that year and

the end date must be on or after October 1st of that year. Also, capacity contracts with “sell” under the “buy_sell_own” column in the “unique_contracts” worksheet are subtracted from the total available capacity to meet the LSE’s reliability need. LSEs should enter positive numbers under columns related to contract capacities in the “unique_contracts” worksheet; the “Calcs” worksheet automatically subtracts “sell” contracts.

Contracts with “NotHybrid” under the “is_hybrid_paired” column in the “unique_contracts” worksheet are considered standalone contracts. Contracts with other entries are considered hybrid/paired contracts. The ELCC of a standalone contract is calculated by multiplying the “contracted_nameplate_capacity” with the ELCC % value of the corresponding ELCC type of the “resource”. For a standalone storage contract, its ELCC type is based on the storage duration, which is determined by “contracted_nameplate_capacity” and “contracted_storage_depth_mwh”. Storage durations that are not integers (for example, 4.5 hours) are rounded down to the nearest integer (4 hours in this example). Contracts with durations greater than or equal to 9 hours have the same ELCC % values as 8-hour storage. They are grouped under “8hr_batteries” in the summary tables and charts. The ELCC % for contracts with durations less than 4 hours are calculated by multiplying the 4-hour storage ELCC % with a derate based on contract duration and the 4-hour duration. These contracts are grouped under “4hr_batteries” in the summary tables and charts.

The ELCC of a hybrid/paired contract is the sum of the generator ELCC and the storage ELCC, subject to certain considerations as follows. The generator ELCC is calculated by multiplying the “contracted_generator_mw” with the ELCC % value of the corresponding ELCC type of the “resource”. The storage ELCC is calculated by multiplying the “contracted_storage_mw” with the ELCC % value of the corresponding ELCC type of the storage duration, which is determined by “contracted_storage_mw” and “contracted_storage_depth_mwh”. Storage durations that are not integers (for example, 4.5 hours) are rounded down to the nearest integer (4 hours in this example). Contracts with durations greater than or equal to 9 hours have the same ELCC % values as 8-hour storage. The ELCC % for contracts with durations less than 4 hours are calculated by multiplying the 4-hour storage ELCC % with a derate based on contract duration and the 4-hour duration.

The storage ELCC of a hybrid contract (i.e. a contract with “NO” under “can_charge_from_grid”) may be subject to a cap on its capacity contribution if it is a solar-storage or wind-storage contract and does not meet a minimum threshold of generator to storage MW ratio. For solar-storage contracts, the minimum generator MW (as % of 4-hr storage MW) is 100%. For wind-storage contracts, the minimum is 200%. If a contract does not have enough generator capacity to meet the threshold, the storage capacity used in the ELCC calculation is derated to the maximum capacity that meets the threshold.

In addition to potential storage ELCC derates for hybrid contracts, the ELCCs of hybrid/paired contracts may be limited by their interconnection capacity. The "contracted_nameplate_capacity" represents the interconnection capacity of a hybrid/paired contract and thus limits the maximum ELCC of the contract. When the sum of the generator ELCC and the storage ELCC is greater than the "contracted_nameplate_capacity", the final ELCC of this contract is equal to the "contracted_nameplate_capacity".

For contracts with an "elcc_type" of "unspecified_import" (see the "resources" worksheet for "elcc_type"), LSEs should enter the contracted firm MW in the "contracted_nameplate_capacity" column in the "unique_contracts" worksheet since "unspecified_import" has 100% ELCC.

Contract status is not directly used in any reliability calculation (i.e. the ELCC of a contact is not impacted by its contract status), but it is used for grouping in one of the summary tables in the "Reliability" worksheet to show LSE's capacity position.

11. Error Checking Macro Instructions

LSEs are required to run the macro resulting in an error-free ReportSheet before their final submission.

11.1 Recommendations:

- Because Excel's undo feature does not revert changes made by macros, it is highly recommended that a backup version of RDTv3 file is saved before running the macro.
- It is not recommended to have other Excel documents open when running the macro, as conflicts can arise.
- Most errors arise when a required field of data has been left blank. It is recommended that LSEs review each of the requirements for the different contract attributes when error-checking.
- If the macro takes a long time to complete (i.e., more than 1 to 2 minutes) or any errors are shown for rows that contain no contract data, check for any invisible characters have been inadvertently pasted/entered on the "unique_contracts" tab. LSEs are again reminded to paste data into the RDT as values only.

- The Visual Basic rdt_v3_0_error_checker project has intentionally been left unlocked so that LSE may, separate from their official submissions, suggest corrections to the code.

Instructions:

1. Once contract data has been entered in the RDTv3, go to the "README" tab and click on the button titled **Run error check macro.**
    a. If no errors are encountered with the macro itself, the "ReportSheet" tab should be shown. If the macro encounters an error, a message box will be shown describing which sub procedure the error occurred in. Note that the logic for each sub procedure is outlined below.
    b. The macro can be rerun as many times as needed following to above steps. Each time, it will automatically clear the ReportSheet of previous errors and recheck for errors.
2. Due to the diversity of submissions and nature of Visual Basic for Applications projects in Excel, some errors in the macro are likely to eventually be identified. If such an error occurs, LSEs are instructed to send staff an email with an attached RDTv3 showing example inputs that recreate the error only.
3. Do not make any changes the VBA code or formulas for official data submissions.

11.2 Macro Report sheet:

The following table describes the RDTv3 ReportSheet fields and a description of the entry errors it will identify:

RDT ReportSheet field	Description	Involved unique_contracts Fields
Duplicated Contract IDs	The macro has detected one or more duplications of an entered contract ID or a blank ID. Returns Contract IDs.	1. lse_unique_contract_id
Entry with non-positive values	The macro has detected negative values in a numeric column. Returns column name and row. As noted in section 3, all the values	1. total_nameplate_capacity 2. contracted_nameplate_capacity 3. sep_contracted_mw_nqc 4. contract_gwh_annual

	should be entered as positive numbers (even when the contract is a sale).	5. total_generator_mw 6. contracted_generator_mw 7. total_storage_mw 8. contracted_storage_mw 9. total_storage_depth_mwh 10. contracted_storage_depth_mwh 11. COD_year 12. COD_month 13. COD_day 14. contract_start_date_year 15. contract_start_date_month 16. contract_start_date_day 17. contract_end_date_year 18. contract_end_date_month 19. contract_end_date_day 20. contract_execution_date_year 21. contract_execution_date_month 22. contract_execution_date_day 23. tx_upgrade_date_year 24. tx_upgrade_date_month 25. tx_upgrade_date_day 26. mtr_tranche1_NQC 27. mtr_tranche2_NQC 28. mtr_tranche3_NQC 29. mtr_tranche4_NQC_LDES 30. mtr_tranche4_NQC_firm_ZE 31. previous_COD_year 32. previous_COD_month 33. previous_COD_day 34. csp_annual_2024 35. csp_annual_2026 36. csp_annual_2030 37. csp_annual_2035

Invalid resource error rows	The macro has detected values in the resource column that are not in the resources sheet's resource field. Returns row numbers.	1. resource
Rows missing required project viability associated data	The macro has detected a contract row lacks one or more of the required values in the viability fields. Returns row numbers. As noted in the instruction, these fields are only necessary for projects not online yet.	1. viability_cod_reasonableness 2. viability_technical_feasibility 3. viability_financing_sitecontrol
Rows missing required hybrid associated data	The macro has detected a contract row lacks one or more of the required values in a hybrid-related fields. Returns row numbers.	1. can_charge_from_grid 2. contracted_generator_mw 3. contracted_nameplate_capacity 4. contracted_storage_depth_mwh 5. contracted_storage_mw 6. is_hybrid_paired 7. total_generator_mw 8. total_nameplate_capacity 9. total_storage_depth_mwh 10. total_storage_mw
Supertype Contract Status Error or Null Rows	The macro has detected that a contract row has an invalid entry in the contract_status field or lacks an entry in one or more of the other required fields. Returns row numbers.	**specifiedimport** 1. contract_status: online, plannedexisting **physical** 1. contract_status: online, development, plannedexisting **unbundledrec** 1. contract_status: online, plannedexisting 2. **newresolve, newgeneric, or newloadmod** 1. contract_status: online, plannedexisting,

		2. existinggeneric, unspecifiedimport, unspecifiednonimport 1. contract_status: online, plannedexisting **2. supplierschoice** 1. contract_status: online, plannedexisting 2.
Transaction counterparty error rows	The macro has detected that a contract row is marked as "buy" or "sell" but no counterparty was provided. Returns row numbers.	1. buy_sell_own 2. counterparty
Rows missing CSP GWh	The macro has detected that a contract row is marked as a CSP category but lacks any entries in the csp_annual_YYYY fields. Returns row numbers.	1. csp_resource_category 2. csp_annual_2024 3. csp_annual_2026 4. csp_annual_2030 5. csp_annual_2035
Rows with invalid buying_energy_capacity and csp_resource_category:	The macro has detected that a contract row meets the following conditions: 1. the csp_resource_category field is marked as a CSP category other than "NA" or blank. 2. The buying_energy_capacity field is marked as CapacityOnly 3. The selected csp_resource_category category is not a form of storage	1. the csp_resource_category 2. buying_energy_capacity
Rows missing MTR NQC	The macro has detected that a contract row is marked as meeting MTR compliance, but lacks any entries in the mtr_tranche#_NQC fields. Returns row numbers.	1. d2106035_tranche 2. mtr_tranche1_NQC 3. mtr_tranche2_NQC 4. mtr_tranche3_NQC 5. mtr_tranche4_NQC_LDES 6. mtr_tranche4_NQC_firm_ZE

Warning-total capacity is equal to or greater than generator plus storage MWs for rows	This is warning (not an error) occurs when for a hybrid/paired projet : **total_nameplate_capacity** <= **total_generator_mw** + **total_storage_mw** Returns row numbers.	1. total_nameplate_capacity 2. total_generator_mw 3. total_storage_mw

11.4 Macro Logic

1. rdt_v3_error_checker
    a. Checks that the required worksheets are in the workbook (no worksheets have been removed/renamed).
    b. Activates the other sub procedures
    c. Error handling
2. get_unique_contracts_data
    a. Creates dictionaries of the data entered into the unique_contracts sheet.
3. get_resources_data
    a. Creates dictionaries of the data on the resources sheet for reference.
4. create_reports
    a. Checks if ReportSheet exists.
        i. If not, creates a sheet with the name.
        ii. If so, clear the contents from the sheet.
    b. Adds and formats headers
5. check_values
    a. checks that all entered values in numeric fields are positive
6. get_super_type
    a. Determines the supertype for each resource entered and pastes to macro_supertype field
7. check_resources

    a. Flags any duplicated contract IDs
8. check_duplicated_ids
    a. Creates dictionary of the used contract IDs, creates array of any IDs appearing more than once or left blank. Prints array
9. check_viability
    a. checks that any projects with contract_staus “development" or "plannednew" have values in all viability fields.
10. check_hybrid
    a. Checks that any field flagged as a hybrid contains an entry in the hybrid fields described in 11.2.
    b. Checks if total capacity is greater than or equal to total generator plus total storage—prints warning for non-conforming row numbers in the ReportSheet
11. check_super_status
    a. Checks that the contract_status field and other required fields of the contract complies the supertype as described in
12. check_transaction
    a. If contract marked as “buy” or “sell”, checks that counterparty was provided.
13. check_csp_year
    a. Reports any contracts that do now have entries in csp_resource_category
14. check_d2106035_tranche
    a. Reports any d2106035 contracts that lack entries into one of the mtr_yyyy_nqc columns

12. MTR NQC Validation Tool and Summary

The purpose of the addition of the *mtr_nqc_validation_tool* and *mtr_nqc_summary* sheet is to allow each LSE to describe how contracts are used to satisfy its mid-term reliability obligations. LSEs are also required to include and provide information in the RDTv3 for any projects intended to meet D.21-06-035 (the Mid-Term Reliability, MTR, Procurement Decision) and D.23-02-040 (The Supplemental MTR Procurement Decision). LSEs should include information for all applicable columns in the RDTv3. Information on these resources should be filed in the same RDT and LSEs should follow all instructions above regarding milestone reporting and the table of contents cover pages. The following constitutes additional instructions to follow for D.21-06-035 and D.23-02-040 resources.

Each row in the *mtr_nqc_validation_tool* represents the contribution of the contract towards meeting respective obligation in a given tranche. In other words, a separate row is required for each instance where a contract is used per MTR tranche.

Please see step by step instructions below:

Steps	Instructions
1	LSE completes RDT on "unique_contracts" tab of their RDT as instructed in the LSE filing requirements document. Please note: the contracts that LSEs enter on their RDT will carry over to the next two tabs used to validate NQCs "mtr_nqc_validation_tool" and "**mtr_nqc_summary**." Any errors made to the RDT will flow to the NQC validation portions of the RDT. The remaining instructions are applicable only to D.21-06-035 and D.23-02-040 contracts (LSEs are instructed to not complete the steps listed below for contracts that are only being used for D.19-11-016 compliance. If an LSE is using excess D.19-11-016 capacity for compliance with D.21-06-035 and/or D.23-02-040, just the excess capacity portions should be completed).
2	Once the RDT values are entered on the "unique_contracts" tab, go to the "mtr_nqc_validation_tool" tab The "mtr_nqc_validation_tool" tab is where LSEs will go through each contract and provide CPUC Staff with the specific ELCC tranche allocations for each contract. Completing this tab is a required component of LSE's August 1, 2023, Compliance Filing submittal. This tool will help outline how LSEs are thinking about their NQC calculations as well as planning for compliance across all tranches of D.21-06-035 and D.23-02-040. Contracts that are being used for more than one tranche will need a separate row for *each* tranche where the specific contract will be used. For example, a contract being used toward tranche 1 (2023) and tranche 2 (2024) would be split into two separate rows. However, a contract being used toward general procurement in only one year and Diablo Canyon procurement only requires one row. LSEs are required only to fill out blue cells. Other colors will be automatically updated.
3	In the "mtr_nqc_validation_tool" tab, start in column A. Select the first contract you would like to enter tranche information about *Example 1: select the contract "sample_1_non-hybrid" in A2* *Example 2: select the contract "sample_1_hybrid" in A3*
4	Go to column B: "resource_type" Select the resource type for the contract you have selected in Column A. If the resource is a hybrid resource, choose the gen-storage match that best fits the contracted selected in Column A.
5	Go to Column C: LSE_Selected_Tranche

	Select the tranche that you are counting this specific contract to count towards for D.21-06-035 and D.23-02-040 compliance year/Tranche. For more information about which Tranche to select, please see CPUC Staff guidance on ELCCs available on the IRP Procurement Track website. *Example 1: for the contract "sample_1_non-hybrid" the LSE is using this for Tranches 1 and 2. The LSE should select tranche_1 for one row and tranche_2 for the second row*
6	Go to columns E-G. For each contract row, LSEs should select what % of a specific contract will count for the tranche it identified in step 5. If the resource is **not** a hybrid, fill in the percentage of the resource that you will be counting for the specified tranche in column D. *Example 1: LSE_1 is using 50% of "sample_1_non-hybrid" for tranche 2 of its MTR procurement obligation. LSE will type 50 in Column D2.* If the resource **is** a hybrid, fill in the percentage of the generation component and the storage component that you will be counting for the specified tranche in columns E and F, respectively. *Example 2: LSE_1 is using 50% of both the generation and storage components of "sample_1_hybrid" for tranche 2 of its MTR procurement obligation. LSE will type 50 in Column E3 and 50 in F3.*
7	Go to columns G-I: "elcc_non_hybrid" or "elcc_hybrid_gen/storage" If the resource **is** not a hybrid, fill in Column G with the correct ELCC value. *Example 1: "sample_1_non-hybrid" is a stand alone 4-hour storage project that an LSE us using for tranche 2 of its MTR procurement obligation. The LSE signed the contract **after** November 30, 2022 and selects the following ELCC: mtr_2_post_nov302022* *Example 2: "sample_1_hybrid" is solar+storage project that an LSE us using for tranche 2 of its MTR procurement obligation. The LSE signed the contract **after** November 30, 2022. In column Q, the LSE selects "solar_2024-mtr_2_post_nov302022," and in Column R, the LSE selects "mtr_2_post_nov302022".* For a list of the ELCCs available in the drop-down menu, LSEs are directed to the ELCC tab. Please note: LSEs **must** select an ELCC. ELCCs values are available in the “misc” tab.
8	LSEs should repeat these steps for every contract and every tranche in which the contract will be counted towards for their IRP procurement obligations.
9	Go to the "summary" tab. In cell B3, enter the abbreviation for your specific LSE. Note: ESPs will need to manually enter their procurement obligations in cells D3-J3; please overwrite the formulas here. LSEs should look at the summary table at the top of this tab to see if the NQC the reported in the RDT is a close match to the workbook's calculated NQC.

	Where there are significant discrepancies, Energy Division Staff will likely reach out to LSEs for an explanation. LSEs should investigate any discrepancies before submittal. Please note: the NQC calculation methodology is complex and this workbook may not be able to perfectly capture every LSE's situation. LSEs are permitted to submit this workbook with discrepancies between the calculated and reported NQC as long as the LSE has investigated the discrepancy and is confident in their reporting. If an LSE has a pending compliance trade, pursuant to D.23-02-040, they should include the NQC MW value in the corresponding Tranche where the LSE has filed an Advice Letter or plans to file one. If an LSE is taking on additional procurement in one tranche, it should enter a positive (+) number. If it is removing part of its procurement obligation, it should enter a negative (-) number. For example, If an LSE proposed to trade 5 MW of compliance with an LSE such that its Tranche 2 obligation would increase by 5 MW and its Tranche 5 obligation decrease by 5 MW, it would enter 5 in cell E12 and –5 in cell H12. Please note: LSEs must enter a numeric value, and correctly make the number positive and negative. Please note, the tool and the information included represent IRP staff's understanding of CPUC Decisions and expected MTR NQC methodology. It is possible that your reported NQC may differ from the Tool's calculated NQC due to different methodology assumptions. CPUC Decisions are the official directions of the Commission, and Energy Division staff may not modify Decisions. This tool will help staff better comply with official Commission Decisions and any outputs should not be taken as final NQC values or compliance decisions. This template includes a number of columns with TRUE/FALSE flags. These are intended to expedite staff review of these workbooks. LSEs do not need to clear all error flags prior to submission but may use them as an indicator of whether they are using this template correctly. For questions about this process, please contact irpdatarequest@cpuc.ca.gov

Notes on Data entry

1	Do not paste data unless you are pasting as values. Pasting in any other format will remove formulas and/or conditional formatting currently needed in this workbook.
2	Paste RDT in confidential test tab - update contracts in ELCC - summary tab, column A, if not all show you may need to refresh Excel. Press F9 on keyboard or refresh under data tab

The fields in the sheet that require LSE entry include:

1. **lse_unique_contract_id**
    - Dropdown menu: Choose a contract applicable to an MTR tranche.
2. resource_type
    - Dropdown menu: Choose the appropriate resource type for the contract.

3. **LSE_Selected_MTR_Tranche**
    - Dropdown menu: Choose the applicable tranche for the contract.
4. **%_nameplate/tranche_non_hybrid**
    - Percentage. Enter the proportion of a non-hybrid resource contract's nameplate being used to calculate the NQC for the given tranche. Fill in red cells.
5. **%_nameplate/tranche_hybrid_gen**
    - Percentage. Enter the proportion of a contract's hybrid generation resource nameplate being used to calculate the NQC for the given tranche. Fill in red cells.
6. **%_nameplate/tranche_hybrid_storage**
    - Percentage. Enter the proportion of a contract's hybrid storage resource nameplate being used to calculate the NQC for the given tranche. Fill in red cells.
7. **elcc_non_hybrid**
    - Dropdown menu: Choose the contract's applicable non-hybrid ELCC for the given resource type and tranche.
8. **elcc_hybrid_gen**
    - Dropdown menu: Choose the contract's applicable hybrid generator ELCC for the given resource type and tranche.
9. **elcc_hybrid_storage**
    - Dropdown menu: Choose the contract's applicable hybrid storage ELCC for the given resource type and tranche.

The *mtr_nqc_summary* sheet provides summary information and highlight potential errors using LSE entries in the *mtr_nqc_validation_tool* and the *unique_contracts* sheets.