

Turlock Irrigation District

**Request for Proposals for
Portfolio Content Category 1 Renewable Energy**

Issued: 02/05/2021

Pre-Bid Conference Call: 02/12/2021

Questions Due: 03/05/2021

Proposal Due Date: 03/19/2021 (5:00 p.m. PPT)

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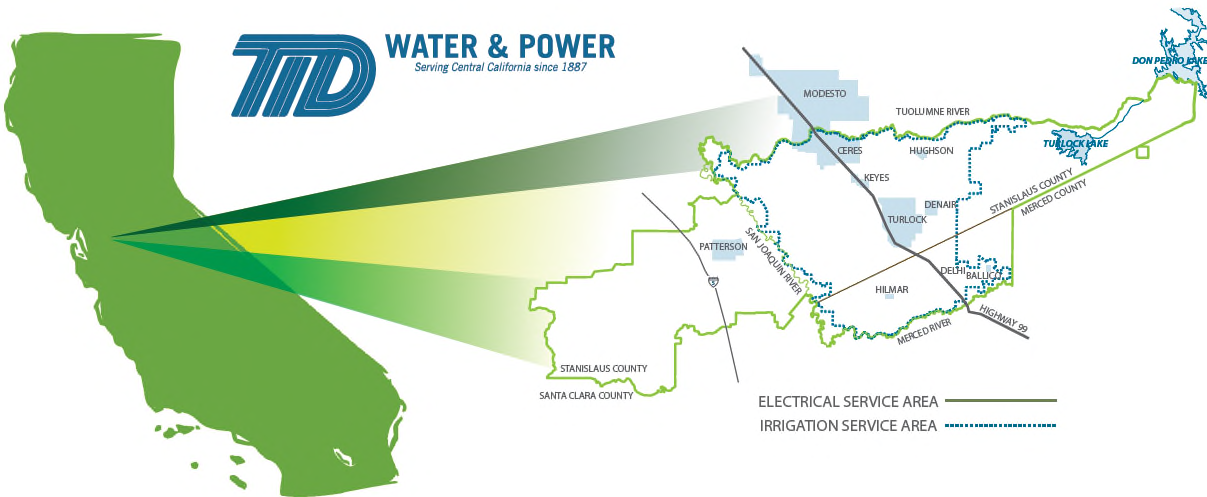
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INTRODUCTION

The Turlock Irrigation District (“TID”) is seeking competitive proposals for renewable energy projects, including storage, to help TID meet the California Renewable Portfolio Standards (“CA RPS”) as outlined in California Public Utilities Code (PUC) § 399.30, and TID Board Resolutions No. 2018-66 and 2018-67 (“TID RPS”).

About TID

TID was established in 1887 as a publicly owned irrigation district. Since 1923, TID has been providing safe, affordable and reliable electricity to a growing retail customer base that now numbers in excess of 100,000 residential, farm, business, industrial and municipal accounts in an electric service area that encompasses 662 square-miles in portions of Stanislaus, Merced, Tuolumne and Mariposa counties. TID is one of five California Balancing Authorities (“BA”) and operates independently within the Western United States power grid. As a Balancing Authority, TID is fully responsible for generating, securing, scheduling, and reliably delivering electricity to its customers. TID is governed by a five-person Board of Directors and operates with a high level of fiscal responsibility with solid financial performance indicated by an AA- rating with S&P and Fitch.



TID delivers over 2,000 GWh of electricity to its retail customers annually with electric revenue in excess of \$250 million. Load peaks in the summer months, primarily June-September, and represents about 42% of annual load. On a typical summer day, the load peaks between 4 pm to 8 pm. The primary generation sources that TID uses currently are hydroelectric, natural gas, and renewable resources such as Don Pedro Hydro Project, Tuolumne Wind Project, and Rosamond Solar Facility. Currently, 29% of TID’s retail sales are supplied from renewable resources, and 53% of TID’s retail sales are supplied from GHG free resources.

Renewable Requirements

In September 2018, the 100 Percent Clean Energy Act of 2018, Senate Bill (SB) 100 was signed into California law amending PUC § 399.30. SB 100 require Publicly Owned Utilities (POU) such as TID to increase their use of Eligible Renewable Energy Resources in order to serve retail load to 44 percent by 2024, 52 percent by 2027, and finally 60 percent by 2030 and thereafter. TID’s original Renewable

Portfolio Standard was approved in February 2004, and has since been amended several times. TID's current Renewable Portfolio Standard is documented in Resolution 2018-66 Renewable Energy Resource Procurement Plan and Resolution 2018-67 Renewable Portfolio Standard Enforcement Program, both approved in December 2018 formalizing TID's commitment to comply with PUC § 399.30.

As outlined in the TID's [Integrated Resource Plan \(https://issuu.com/turlockirrigationdistrict/docs/tid_irp_updated2?e=15635682/69580934\)](https://issuu.com/turlockirrigationdistrict/docs/tid_irp_updated2?e=15635682/69580934), TID projects to need an additional 300,000 MWh of energy from generating resources that qualify as an "Eligible renewable energy resource" as defined in PUC 399.12 and meet the criteria specified in PUC §399.16(b)(1) (i.e. PCC1) before 1/1/2024 to meet the CA RPS and TID RPS. TID is soliciting proposals through this Request for Proposals ("RFP") to either 1) sell to TID Portfolio Content Category 1 ("PCC1") energy from Eligible renewable energy resources or 2) sell to TID an Eligible renewable energy resource that qualifies as PCC1 that have achieved or are expected to achieve commercial operation date no later than 1/1/2024 (see next Proposal Requirements section below for more details). Any offers made pursuant to this RFP must also meet all applicable CA RPS, TID RPS, and California Energy Commission ("CEC") rules and regulations such as but not limited to those described in the [CEC RPS Guidebook \(https://efiling.energy.ca.gov/getdocument.aspx?tn=217317\)](https://efiling.energy.ca.gov/getdocument.aspx?tn=217317).

Proposals from intermittent generating resources that will directly interconnect to the TID's Balancing Authority Area ("TID BA") will be required to include a minimum amount of electric storage system.

Proposal Requirements

Under this RFP, TID is seeking proposals:

1. To sell to TID energy that qualifies as PCC1 from Eligible renewable energy resources that have achieved or are expected to achieve commercial operation date no later than 1/1/2024 ("PPA").
2. To sell to TID a generating resource that qualifies as a PCC1 Eligible renewable energy resources that have achieved or are expected to achieve commercial operation date no later than 1/1/2024 ("Asset Purchase").

Any offers made pursuant to this RFP must also meet all applicable CA RPS, TID RPS, and California Energy Commission ("CEC") rules and regulations such as but not limited to those described in the [CEC RPS Guidebook \(https://efiling.energy.ca.gov/getdocument.aspx?tn=217317\)](https://efiling.energy.ca.gov/getdocument.aspx?tn=217317).

The general requirements of each proposal type are summarized in the table below, with further details following the table.

Proposal Structure	PPA	Asset Purchase
Annual Energy and Category	50 – 400 GWh of PCC1 energy	50 – 400 GWh of PCC1 energy
Initial Delivery Date	No earlier than 7/1/2021 and not later than 1/1/2024.	No earlier than 7/1/2021 and not later than 1/1/2024.
Term	10, 15, 20, or 25 years	N/A
Price	Required <ol style="list-style-type: none"> 1. Fixed price (\$/MWh) over the term of the PPA. 2. Escalating price, initial price (\$/MWh) plus annual escalator. Optional <ol style="list-style-type: none"> 1. Index price plus adder (\$/MWh) 2. Purchase option price 3. Prepayment amount 	Required <ol style="list-style-type: none"> 1. Asset upfront one-time purchase price.
Delivery Point	Specify point of interconnection with the applicable Balancing Authority, CAISO LMP node (if applicable), and delivery point.	Specify point of interconnection with the applicable Balancing Authority, CAISO LMP node (if applicable), and delivery point.
Scheduling	Default will be Seller as SC with option for TID to be the SC.	N/A
Electric Storage System	<p>Required for Intermittent Resource that will interconnect with or have a delivery point within TID BA.</p> <p>For Intermittent Resource that will not interconnect with or have a delivery point within TID BA, proposal is required to either i) include an electric storage system or ii) available land for future installation of an electric storage system.</p>	<p>Required for Intermittent Resource that will interconnect with or have a delivery point within TID BA.</p> <p>For Intermittent Resource that will not interconnect with or have a delivery point within TID BA, proposal is required to either i) include an electric storage system or ii) available land for future installation of an electric storage system.</p>
Curtailment Rights with Make Whole Provision	Required	N/A
Environmental, AS, Capacity, and RA Attributes	All environmental, ancillary services, capacity, resource adequacy, and any other similar rights (except income tax related benefits and rights) shall be granted to TID.	All environmental, ancillary services, capacity, resource adequacy, and any other similar rights (except income tax related benefits and rights) shall be granted to TID.
Performance Security	\$2/MWh of the projected energy to be delivered during the term of the PPA.	\$125/kW

Details

1. Structure:

A respondent must submit either a proposal for a PPA, or for an Asset Purchase or both. Respondents proposing a PPA may (but are not required to) offer TID an option to purchase the generating resource at a specified purchase price during the term of the PPA. Furthermore, respondents proposing a PPA may (but are not required to) offer a prepaid PPA (Pre-pay PPA") wherein TID will pre-pay for energy deliveries upfront.

2. Annual Energy and Category:

- a. TID will only accept proposals that can deliver between 50 – 400 GWh/yr of PCC1 energy from Eligible renewable energy resource pursuant to the CA RPS, TID RPS, CEC RPS Guidebook and any other applicable law, regulations, rules, and procedures.
- b. For PPA proposals, respondent should indicate the guaranteed amount of annual energy to be delivered and penalty provisions for not delivering the guaranteed amount.

3. Initial Delivery Date:

Energy deliveries under any proposal must commence no earlier than 7/1/2021 and no later than 1/1/2024.

4. PPA Term:

TID is seeking terms of 10, 15, 20, and 25 years. Respondent can offer just one of the terms described, some, or all (i.e. Respondent can just offer a 10 year PPA, offer a 10 year and 20 year PPA, or offer 10, 15, 20, and 25 year PPAs.). Any Pre-pay PPA shall be limited to the above-described terms.

5. Pricing Structure:

For Asset Purchase proposal, specify the upfront one-time purchase price.

For PPA proposal:

PPA pricing must be for delivered energy only in \$/MWh. Proposal must include:

- a. Fixed over the term of the PPA ("Fixed Price").
- b. Increasing annually based on an initial price plus a specified annual percentage increase ("Escalating Price"). Escalator must be specified upfront and not based on an index such as a CPI.

PPA Proposal may include (but not required) the following pricing structure:

- a. Index price plus adder ("Index Price"). The index price should represent the price at the point of delivery. This option can only be offered in addition to (a) and (b) above.

- b. If offered, purchase option prices must be shown separate from the energy prices and illustrates variation by year (if any).
- c. If offered, the prepayment amount shall also be specified accompanied by the forecasted annual energy volumes and other pertinent assumptions on which the prepaid amount is based on.

Energy prices should be specified by month and by On-Peak and Off-Peak periods. On-Peak and Off-Peak periods as such periods are defined by North American Energy Standards Board as On-Peak and Off-Peak. **Differing prices by period or by month is not required (i.e. prices for each time period and month can be the same).** Pricing shall be for delivered energy only, no capacity or fixed prices or minimum take-or-pay amounts will be accepted. Energy prices must be entered into the attached TID_RFP2021.xlsx workbook on the 'Pricing' worksheet.

6. Delivery Point:

Any delivery point within California or at the California-Oregon Border Intertie (COB) is acceptable provided it does not impair the PCC1 qualification of the resource. Seller shall be financially and operationally responsible to deliver the product to the agreed upon point of delivery, including any required transmission and failure to qualify as PCC1:

- a. If the point of delivery is within the TID BA, then the proposal must specify the point of interconnection.
- b. If the point of delivery is outside the TID BA but within the California Independent System Operator operated Balancing Authority Area ("CAISO BA"), the point of interconnection with the CAISO and the applicable LMP price nodes within the CAISO BA must be specified. TID will include the cost of delivery from the CAISO node to the TID BA when evaluating the proposal.
- c. If the point of delivery is outside the TID BA and outside the CAISO BA, then the first point of interconnection and delivery point must be specified and any pertinent information/agreement that enables it to qualify as PCC1. TID will include the cost of delivery from the delivery point to the TID BA when evaluating the proposal.

7. Scheduling

- a. Respondent (or its agent) shall be the default scheduling coordinator ("SC").
- b. TID shall have the option to serve as the SC for the facility. Respondent shall specify an amount of credit to TID if they exercise the option to become the SC for the facility.

8. Electric Storage System:

- a. **Proposals based on intermittent resources located within the TID BA** must include an electric storage system sized and configured **no less than** as described below, such that the resource does not increase net load ramps of the TID BA.

- i. Useable power capacity (MW_{AC}) of the electric storage system must, at minimum be 100% of the intermittent resources rated capacity (MW_{AC}). Useable power capacity must be maintained and guaranteed throughout the term of the proposal.
- ii. Proposals should include a price for both 2-hour and 4-hour durations. Useable energy capacity (MWh_{AC}) must be maintained and guaranteed throughout the term of the proposal.
- iii. **PPA proposals** must specify the price of the electric storage system in $\$/MWh$ separate from the price for the renewable power. **Asset Purchase proposals** must specify the price of the electric storage system separately from the price for the renewable asset.
- iv. Must provide full control and dispatch of the electric storage system to TID.
- v. All revenues from market activities (i.e. energy price arbitrage, ancillary services) and any other benefits (except income tax related benefits and rights) shall belong to TID.

Electric storage systems proposed within the TID BA will be mainly used to offset the variability of the intermittent resource such that it does not increase the net load ramps within the TID BA and to provide capacity during high load periods. Ancillary service provision and price arbitrage will be secondary uses.

- b. **Proposals based on intermittent resources located outside the TID BA** must either i) include an electric storage system, or ii) include 0.25 acres per MW of renewable resource capacity of available land for installation of a future electric storage system.

The following only applies to proposals that include an electric storage system:

- i. **PPA proposals** that elect to include an electric storage system must specify the price of the electric storage system in $\$/MWh$ separate from the price for the renewable power. **Asset Purchase proposals** that elect to include an electric storage system must specify the price of the electric storage system separately from the price for the renewable asset.
- ii. Must provide full control and dispatch of the electric storage system to TID.
- iii. All revenues from market activities (i.e. energy price arbitrage, ancillary services) and any other benefits (except income tax related benefits and rights) shall belong to TID.

Electric storage systems proposed outside the TID BA will be mainly used to maximize the revenue of the resource from RA capacity, ancillary service, and price arbitrage.

- c. **Proposals not based on intermittent resources** (regardless of location) may include an electric storage system, but is not required.

The following only applies to proposals that include an electric storage system:

- i. **PPA proposals** that elect to include an electric storage system must specify the price of the electric storage system in \$/MWh separate from the price for the renewable power. **Asset Purchase proposals** that elect to include an electric storage system must specify the price of the electric storage system separately from the price for the renewable asset.
- ii. Must provide full control and dispatch of the electric storage system to TID.
- iii. All revenues from market activities (i.e. energy price arbitrage, ancillary services) and any other benefits (except income tax related benefits and rights) shall belong to TID.

Electric storage systems proposed outside the TID BA will be mainly used to maximize the revenue of the resource from RA capacity, ancillary service, and price arbitrage.

Please note, TID is not accepting bids for standalone storage projects through this RFP.

9. Curtailment Rights:

All PPA proposals must provide unlimited curtailment rights to TID subject to make whole provisions. Respondent must specify the specific make whole provisions they are proposing.

10. Environmental, AS, Capacity, and RA Attributes:

Proposals must grant to TID all environmental, ancillary services, capacity, resource adequacy attributes and any other rights (except income tax related benefits and rights) that are associated with or may in the future become associated with the underlying resource that supports the offer made pursuant to this RFP.

Response Requirements

The following is a list of information that must be submitted with each proposal in addition to addressing the items listed under the Proposal Requirements section above. Respondents are requested to structure their proposal consistent with this outline to ease evaluation and comparison by TID.

1. Sponsor and Resource Information:

a. Developer/Owner/Operator Information

- i. **Contact Information:** Provide name, address, phone and email for the main point of contact for this proposal.
- ii. **General Description:** Provide a description of the firm that will serve as the counterparty for the proposed transaction including organization, key staff, parents/affiliates, etc.

- iii. **Past Experience:** Describe any prior power resource development and operating experience, particularly in California.
- iv. **Financial Information:** Provide information on financial status, including relevant financial statements (balance sheets, 10K, etc.) and credit rating information.
- v. **Partners:** Indicate all partners in the resource, their percent ownership, experience, parents/affiliates and other information.
- vi. **Operator:** Indicate what entity is or will be responsible for resource operations including experience, staffing, parents/affiliates and other information.

b. Resource Information

- i. **Project Name:** Provide the name of the project.
- ii. **Location:** Provide the county and state in which the resource is located as well as the relevant balancing authority, the point of interconnection, and the delivery point.
- iii. **Technology Employed:** Indicate the technology that is or will be employed (e.g. Solar Thermal, Solar PV, Wind, Geothermal, etc.)
- iv. **Size and Performance:** Provide the forecast capacity, energy production, reliability, availability, and any operating history (if applicable), etc. For PPA proposals, provide the guaranteed amount of annual energy to be delivered and penalty provisions for not delivering the guaranteed amount.
- v. **Expected Online Date:** For an existing resource, provide the actual online date. For a proposed new resource, provide the expected online date.
- vi. **Initial Delivery Date:** Provide expected initial delivery date.
- vii. **Generation Profile:** The following must be provided in the TID_RFP2021.xlsx workbook on the relevant 'Generation' worksheet:
 - 1. For an existing resource, provide at least three years (2018-2020) of historical hourly energy production data (8760 hour strip).
 - 2. For a proposed new resource, provide a forecast of hourly energy production (8760 hour strip) for a typical year. Describe the basis of the forecast (e.g. solar TMY or wind met tower data). Provide separate years if there are year-over-year changes.
 - 3. For a proposal that includes DC-coupled electric storage system, include an AC generation profile (#2 above) as well as a DC generation profile.

- viii. LMP Pricing:** For resources located within the CAISO BA, provide the appropriate Day Ahead and Hour Ahead CAISO LMP hourly pricing from 2018-2020.
- ix. Major Equipment Components:** Specify the manufacturer and model of the major equipment components, such as panels, wind turbines, etc.
- x. Development Status:** Indicate the point at which the resource is in the development process. Include a timeline indicating the key milestones that must be met towards commercial operation.
- xi. Permitting Status:** Indicate which permits have already been obtained, which are currently in process and which will still need to be obtained.
- xii. Financing Status:** Indicate if the resource is fully financed or is pending additional financing. Describe current financing arrangements.
- xiii. Interconnection Status:** Indicate the stage at which the resource is in the interconnection process. Any Interconnection costs are at the sole responsibility of the seller.
- xiv. Land Information:** Describe all relevant land rights including easements, rights of way, etc. Indicate whether or not site control has been obtained and what form of site control will be obtained.
- xv. Other lienholders:** Describe any liens or similar encumbrances that have been or are expected to be placed on the resource or underlying property.
- xvi. Other off takers/owners:** Indicate any other partners or off takers that have claim on energy from the resource.
- xvii. Electric Storage System:** Please provide the following information on the electric storage system aspect of the proposal if applicable.
 - 1. Technology (if a battery, please include the battery chemistry).
 - 2. Power Capacity in MW_{AC} over the contract term.
 - 3. Energy Capacity in MWh_{AC} over the contract term.
 - 4. Coupling: AC coupling (after generator inverter) or DC coupling (before generator inverter).
 - 5. Percent of time the electric storage system resource can charge from the grid (as opposed to charging from the generation of the co-located renewable resource).
 - 6. Round Trip Efficiency.

7. Annual degradation (if different specify separately for discharging, charging, duration, and round trip efficiency).
8. Minimum and Maximum State of Charge limits (if any).
9. Number of Cycles/Throughput limits (if any).
10. Guarantees for relevant items above.

c. Other

i. Performance Security: Proposals must include performance security in the form of a letter of credit from a financial institution in an amount, based on the following guidelines:

1. For PPAs

- a. Amount that will be posted and maintained by the respondent upon execution of the PPA and until the project commercial operation, shall be equal to \$2/MWh of the projected energy to be delivered during the term of the PPA.
- b. Amount that will be posted and maintained upon commercial operation of the project and remain in place during the term of the PPA, shall be equal to \$2/MWh of the projected energy to be delivered during the remaining term of the PPA (adjusted annually).

2. For Asset Purchase Agreement

- a. Amount that will be posted and maintained by the respondent upon execution of the asset purchase agreement and until the project commercial operation, shall be equal to \$125/kW.

3. Letter of credit shall be issued by an institution that meets all of the following criteria:

- a. either a U.S. commercial bank, or a foreign bank issuing a through its U.S. branch
- b. with a credit rating of at least (i) "A-, with a stable designation" from S&P and "A3, with a stable designation" from Moody's, if such bank is rated by both S&P and Moody's; or (ii) "A-, with a stable designation" from S&P or "A3 with a stable designation" from Moody's, if such bank is rated by either S&P or Moody's, but not both.

ii. Risks: Outline any potential risks toward resource completion and classify them as high/medium/low risk.

iii. **Other information:** Provide any additional information that may assist TID in making the most informed decision on the proposal.

2. **Respondent Documentation/Registration Requirements:** Respondent shall be obligated to perform all the necessary actions (including but not limited to maintaining required permits, registrations, records and filing of necessary documents) to ensure that energy delivered to TID shall qualify as PCC1 pursuant to state law (PUC § 399.16(b)(1)) and applicable CEC regulations, rules, and procedures.
3. **Binding Offer:** The proposal must specify that the proposal is valid and binding until 12/31/2021.
4. **Respondent Representations:** The respondent must explicitly state in its proposal that its offer is valid and binding on the respondent until 12/31/2021, that the respondent has the necessary authority to make the offer, and that all statements are true and accurate as represented in the proposal.

General Evaluation Criteria

TID will take into account the following criteria when evaluating proposals, in no particular order of importance:

- Contract Price
- Delivery Point/Costs
- Delivery/Generation profile
- Value of Energy (delivery node, time of delivery)
- Resource Integration Costs
- Resource Capacity Value
- Initial Delivery Date
- Impact to TID's BA
- Technology Maturity
- Developer Experience and Financial Strength
- Project Status
- Any other criteria TID deems appropriate

RFP Submittal Instructions

1. The timeline for issuance and response to this RFP is summarized in the table below:

RFP Issue Date:	02/05/2021
Pre-bid call:	02/12/2021 9:00 a.m. – 10:30 a.m. PPT
Dial-In Number: (669) 900-9128 Conference Code: 437 794 7064	
Written question due:	02/19/2021
Answers to written questions:	03/05/2021 (estimated)

Proposal due date:	03/19/2021 (electronic) by 5:00 p.m. PPT
	03/24/2021 (hardcopy)

2. A complete proposal will consist of the following:
 - a. Proposal cover letter
 - b. Narrative proposal that addresses each item in the Proposal and Response Requirements sections in the RFP structured in the order shown in such section of this RFP and numbered as such. Sections that are not applicable should be marked 'N/A'. For information that was provided in the completed TID_RFP2021.xlsx workbook, respondents may indicate "refer to the attached TID_RFP2021.xlsx workbook" in their narrative proposal.
 - c. Completed all applicable worksheets of the TID_RFP2021.xlsx workbook. Please rename the submitted workbook to *TID_RFP2021_<PROJECT NAME>.xlsx*
3. Responses shall be submitted via email by the due date and time shown above to EnergyRFP@TID.ORG, with the subject line of "TID Renewable RFP 2021", with one(1) bound hardcopy identical to the email response by due date and time shown above, and sent to:

If via USPS:

Owen Goldstrom
Turlock Irrigation District
P.O. Box 949
Turlock, CA 95381-0949

If via non-USPS (e.g. Fedex, UPS, etc.):

Owen Goldstrom
Turlock Irrigation District
333 East Canal Drive
Turlock, CA 95380

4. A proposal must be signed by an authorized officer of the respondent and shall contain the respondent representations required above.
5. A proposal must include contact information.

TID Disclaimers

1. TID reserves the right to cancel the RFP at any time.
2. TID is not required to make any award.
3. TID is not responsible for any costs to the respondent for responding to the RFP.

4. TID holds no liability to the respondents whatsoever.
5. TID may amend the RFP at any time prior to the proposal due date. It is the respondent's responsibility to make sure that they are aware of any such changes. TID will make reasonable efforts to make such amendments, as may happen, publicly and widely known.
6. TID reserves the right to dismiss any proposal that does not meet the requirements outlined in this RFP.
7. All evaluations to responses of the RFP are at the sole discretion of TID.
8. TID reserves the right to request clarifying information from respondents at any time, but will not accept unsolicited information after the proposal due date.
9. Upon selection, a respondent will be required to enter into an exclusivity agreement with TID regarding the proposal while a formal agreement is negotiated.
10. No part of this RFP and no part of any subsequent correspondence by TID, its officers or employees, or its consultants or counsel shall be taken as providing legal, financial, or other advice, nor as establishing a contract or contractual obligation on TID.
11. TID may, in its sole and absolute discretion and without limitation, refuse to accept any and all proposals, and evaluate proposals and proceed in the manner it deems appropriate, which may include, without limitation, deviation from its expected evaluation process, the waiver of any requirements, and the request of additional information. Respondents shall not have any claim whatsoever against TID, its officers or employees, nor against its consultants or counsel.

Contact/Questions

For general question regarding TID please visit TID's website at <http://www.tid.org>.

For general questions about this RFP, TID will maintain an RFP website with up-to-date information regarding this RFP, including any amendments at <https://www.tid.org/about-tid/do-business-with-tid/rfp/renewable-energy-rfp/>.

For specific question concerning the RFP, please send an email to EnergyRFP@TID.ORG by February 19, 2021. Answers to questions received by the due date are expected to be posted on March 5, 2021 to the TID RFP website. To be included on a distribution list for information regarding this RFP please send an email to the above address with the subject 'Renewable Distribution'.