# Task Order 2: Renewables Options Survey

# general

The Scope of Services conducted under this **Task Order 2** will be established by mutual agreement between Kentucky Municipal Energy Agency (“Client” or “KyMEA”) and nFront Consulting LLC (“Consultant” or “nFront Consulting”), collectively the Parties, and will be conducted under the provisions of the above referenced Professional Services Agreement (“Agreement”).

The intended purpose of this Task Order is for the Consultant to provide consulting services to the Client to assist with the Client’s decision-making process. Work Products provided under this Task Order are intended for use solely by the Client for the purposes stated herein. Capitalized terms not defined herein shall have the meanings ascribed to them in that Agreement.

# Scope of services

Pursuant to the KyMEA Board Resolution dated March 21, 2016 (the “Resolution”) relating to the potential for KyMEA or the KyMEA Members to engage in the development, construction, procurement, and/or execution of a power purchase agreement (“PPA”) associated with renewable resource alternatives (“Renewable Resources”), the Consultant will provide planning services to the Client associated with a survey of potential renewable resources that could be implemented by the KyMEA Members on or before May 2019 (the Options Survey).

The Resolution resolves that during the early portion of fiscal year 2016/2017, KyMEA will commence an effort to identify and evaluate alternatives for implementing Renewable Resources as early as May 2019. The goals of the Options Survey will be to (i) identify renewable resource options that can be practically implemented by KyMEA or the KyMEA Members as soon as 2019; (ii) develop generic, planning level estimates of the development and annual costs of such options and the practical implementation considerations related thereto; (iii) develop projections of avoided power supply costs and the net premium (or discount) incurred by the Members to implement Renewable Resources; (iv) describe the roles and responsibilities of KyMEA and the KyMEA Members in implementing the Renewable Resources identified; and (v) as an optional task, survey stakeholders within the communities of the KyMEA Members to gauge interest in Renewable Resources, including the willingness to bear potentially higher costs of Renewable Resources as compared to conventional power supply options.

The tasks that follow delineate the activities to be undertaken by the Consultant to accomplish the goals of the Options Survey.

**Task 1 – Renewables Market Characterization**

Consultant will characterize the current state of the renewables market in the context of deployment options for KyMEA and/or the KyMEA Members. While Renewable Resources can broadly include various solar options, wind, hydroelectric, biomass, and certain other emerging resource technologies, given construction timeline constraints and resource availability limitations, the focus of this scope will be limited to solar photovoltaic (“PV”), wind and known hydroelectric projects.

Preliminarily, the market characterization will focus on the following types of potential Renewable Resource options. For each of the following options, consideration will be given to both self-build and PPA options.

* A single Renewable Resource that is procured or owned and operated by KyMEA on behalf of all of the Members, with costs allocated to all Members through the All Requirements tariff;
* A single Renewable Resource that is procured or owned and operated by KyMEA on behalf of one or more of the Members, with costs allocated to (a) Members based on resource quantities subscribed to by each Member or (b) all Members through the All Requirements tariff;
* Multiple Renewable Resources installed in the Member service areas that are procured or owned and operated by KyMEA on behalf of certain Members, with costs allocated to Members based on resource quantities subscribed to by each Member; and

For each option, the Consultant will develop a summary of the pertinent market considerations, risks, advantages, disadvantages, and other details to characterize the options given the current strategic direction of KyMEA and Member interests. Financing requirements, approaches to cost recovery, economies of scale, and the terms of Member commitments will be addressed. Roles, responsibilities, and accountabilities of KyMEA as compared to the Members and Member communities will be outlined, and a review of a proposed participation model that avoids cross-subsidization of the cost of the Renewable Resources by other KyMEA Members will be discussed.

For each option, the Consultant will develop generic, planning level capital, operating and financing cost assumptions and/or estimated power purchase agreement pricing. Consultant will rely on externally available sources of information to develop such estimates, including analyses conducted by the EIA and other government and industry organizations, databases to which the Consultant subscribes, research on regionally representative projects, and other sources that may be provided by the Client. For purposes of developing estimated pricing for PPA options, the Consultant will evaluate reasonable cost recovery and profit of a PPA offeror, including benefits associated with investment tax credits (if applicable). As practical, costs for renewable resource integration will be computed.

Projected costs for the Renewable Resources will be contrasted with projected power supply and/or market prices representative of the power supply portfolio under development for KyMEA, and the value of costs that are projected to be avoided by KyMEA and the Members from the installation of the Renewable Resources will be projected. Avoided power supply costs could include: marginal energy costs, generating or market capacity costs, transmission costs, distribution costs (as applicable), system losses and planning reserves, and environmental and regulatory compliance.

The Consultant will develop a high-level 10-year financial comparison of the Renewable Resource options. Costs of the Renewable Resources will be compared to avoided power supply costs to compute the net present value premium (or discount) that participants would expect to pay (receive) relative to reliance on conventional resources or the market to serve the load that would be served by each option.

At the conclusion of the Task, the Consultant will prepare a PowerPoint presentation of its findings and will present these findings to the Client at a meeting of the Board of Directors of the KyMEA All Requirements Project.

**Task 2 (Optional) – Member Community Engagement**

At the Client’s option, the Consultant will an agreed upon number of meetings with representatives, community leaders, and interested parties from the KyMEA Member organizations to determine the interest and willingness of the Member communities to participate in the Renewable Resource options. Depending upon Client’s objectives, the results from Task 1 may be shared with those interviewed in order to solicit feedback regarding the results and findings.

Consultant will develop a guiding set of questions for the interviews in partnership with Client, with some allowance for open discussion and reaction to the Task 1 results. Depending on the Client’s objectives and the targeted participants for the interviews, the interviews may be conducted individually or as a group workshop and could be conducted telephonically or in person. A concise summary of the interviews would be provided to Client, with a synopsis of any common themes from the interviews.

Alternatively, or in addition, an on-line survey of electric customers could be developed and implemented to ascertain customer interest in a particular renewables option.

# ADDITIONAL SERVICES

At the written request of the Client, and to the extent not provided for in this Task Order, the Consultant will perform additional work consistent with the provisions outlined in the Professional Services Agreement. Changes or modifications to the Scope of Services included in this Task Order will be authorized by mutual agreement between the Parties including those affirmed by email correspondence between authorized representatives of the Parties.

# Schedule for Completion

The Parties will mutually agree upon the Schedule for Completion of each activity included in this Task Order.

# Compensation

**Fee for Services**

Services under this Task Order are to be provided on a time and materials basis. Compensation for services performed will be billed based on actual time worked at an hourly rate of $245 per hour for executive consultants of nFront Consulting. Time of other nFront Consulting personnel shall be charged at the Consultant’s standard billing rates in effect at the time the services are rendered.

Fees for services provided and expenses under this Task Order for the services described as Task 1 in the Scope of Services will not exceed an estimated budget of $25,000, unless and until such time as written authorization to increase funding is received from the Client.

Fees for services provided and expenses under this Task Order for the optional services described as Task 2 in the Scope of Services will be determined by mutual agreement of the Parties. The budget for the optional Task 2 services will depend on the to-be-determined objectives of the Client with respect to quantity and the number and location of interviews conducted of the Member community representatives and leaders, and/or decisions regarding the on-line survey.

**Out of Pocket Expense**

Client shall reimburse Consultant for all out-of-pocket expenses incurred by the Consultant during the prosecution of this Task Order in an amount equal to the actual cost thereof.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement by their duly authorized representatives as of the day and year indicated above.

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| **Kentucky Municipal Energy Agency**  By:  Name:  Its:  Date: | **nFront Consulting LLC**  By:  Name:  Its: Project Manager  Date:  By:  Name:  Its: Manager, nFront Consulting LLC  Date: |