



Avista Corp.

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July 12, 2018

Washington Utilities and Transportation Commission
1300 S. Evergreen Park Drive S. W.
P.O. Box 47250
Olympia, Washington 98504-7250

Attention: Mr. Mark Johnson, Executive Director & Secretary

RE: Avista Corporation Affiliated Interest Filing (Spirae, LLC) pursuant to RCW 80.16.020.

Dear Mr. Johnson,

Pursuant to RCW 80.16.020 and WAC 480-100-245, please find enclosed for filing an original and three copies of the "Work Authorization No. 2" authorized under the Professional Services Agreement (filed on May 9, 2017), between Avista Corp. ("Avista") and Spirae, LLC ("Spirae"). As discussed in Docket No. UE-161056, Avista both made an investment in Spirae in 2016 through its affiliate, Avista Capital, thus making Spirae an affiliate, as well as entered into a Professional Services Agreement related to the Company's Turner Energy Storage Project.¹

In this filing, Avista is filing an updated addendum to the existing Professional Services Agreement between Avista and Spirae related to the Micro-Transactive grid project through the Clean Energy Fund 2 (CEF II) grant from the State of Washington Department of Commerce (COM). A previous filing on May 9, 2017 included the original Professional Services Agreement as Confidential Attachment A (R-41040) as well as Work Authorization No. 1. This filing includes Work Authorization No. 2, included as Confidential Attachment A, under the previously filed Professional Services Agreement. Work Authorization No.1 included work related to the scoping process for the CEF II project, resulting in a 30% design. The attached Work Authorization No. 2 represents the remainder of the work required under the original Professional Services Agreement.

¹ The Turner Energy Storage Project is a 1 megawatt vanadium flow battery owned by Avista. The energy storage system is installed on the campus of Schweitzer engineering Laboratories ("SEL") in Pullman, WA.

The CEF II grant has the objective of improving system reliability and efficiency by deploying and controlling assets for utilization of renewable energy and electric distribution systems. Avista has worked with public and private industry to develop a proposal for the CEF II grant which included a Micro-Transactive Grid Project. There are six partners including McKinstry, Schweitzer Engineering Labs (SEL), Spirae, Itron, Pacific Northwest National Labs (PNNL), and WSU Facilities Research.

This project will deploy solar and storage distributed energy resources that are integrated into a building management system located on Washington State University's Spokane Campus. This project will leverage a number of technologies, including Supervisory Control and Data Acquisition (SCADA), Distribution Management Systems, Spirae Optimizer, Microgrid Controller and Meter Riva System, in order to optimize solar and storage distributed energy resources in an effort to achieve a "Shared Energy Economy". The learnings from this collaborative project, we believe, will then be able to be spread across our distribution system.

Spirae's portion of the project is related to the software, hardware, and services to connect distributed energy resources to Avista's distribution system to maximize customer benefits while ensuring effective operation of the utility distribution system. Spirae will be responsible for the deployment of a distributed energy resource (DER) optimizer to develop dispatch schedules for specific DER assets in this Micro-Transactive Grid. In addition, Spirae will assist in the integration requirements between their Wave product and SEL microgrid controller, as well as the DER assets.

Terms of Work Authorization No. 2

The primary terms of Work Authorization No. 2, which has been included as Confidential Attachment A, are as follows:

- a) Spirae will build upon the work performed under Work Authorization No.1 (included in the May 9, 2017 filing) by performing detailed design, delivery of software, testing and support.
- b) Avista will pay Spirae for the software, hardware and engineering services not to exceed \$702,729.

The Work Authorization is in the Public Interest

For the reasons explained above, Avista believes this Professional Services Agreement is in the public interest. Spirae will deploy its "Wave" application to two batteries, solar infrastructure and building management systems. It will also be deployed in Avista's Micro-Transactive Grid to automatically dispatch the DER assets in order to optimize its economic and operational values. In addition, Spirae will assist in the integration requirements between their Wave product and SEL microgrid controller. Spirae's Wave product will be responsible for optimizing the DER assets to meet specific business use cases while SEL microgrid controller will be responsible for operational objects like reliability and energy efficiencies. Avista will leverage PNNL to validate the optimization schemes in the Wave product. The Wave product, combined with the PNNL validation processes, will provide insight into the valuation resulting from the shared energy economy project.

Avista respectfully requests that the Commission complete its review of this agreement and promptly notify the Company if it believes that the agreement is inconsistent with public interest.

In accordance with WAC 480-07-160, Avista Corporation requests confidential treatment of the Professional Services Agreement provided in Attachment A. This attachment is marked "Confidential."

Please direct any question regarding this filing to Jennifer Smith at (509) 495-2098.

Sincerely,

A handwritten signature in black ink, appearing to read 'Patrick D. Ehrbar', with a long horizontal flourish extending to the right.

Patrick D. Ehrbar
Director of Regulatory Affairs