Avista Corp.

1411 East Mission P.O. Box 3727 Spokane, Washington 99220-0500 Telephone 509-489-0500 Toll Free 800-727-9170

VIA OVERNIGHT MAIL

January 9, 2020

Diane Hanian Commission Secretary Idaho Public Utilities Commission 11331 W. Chinden Blvd Building 8, Suite 201-A Boise, ID 83714

RE: CASE NO. AVU-E-20-01 IN THE MATTER OF THE APPLICATION OF AVISTA CORPORATION FOR AN ACCOUNTING ORDER AUTHORIZING ACCOUNTING AND RATEMAKING TREATMENT OF COSTS ASSOCIATED WITH THE ENERGY IMBALANCE MARKET

Dear Ms. Hanian:

Enclosed for filing with the Commission is Avista's Application for an Accounting Order Authorizing Accounting and Ratemaking Treatment of Costs Associated with the Energy Imbalance Market (EIM). The filing consists of an original and seven copies of Avista's Application.

Please direct any questions regarding this filing to Liz Andrews at (509) 495-8601 or liz.andrews@avistacorp.com.

Sincerely,

/s/ Paul Kimball

Paul Kimball Manager of Compliance & Discovery

Enclosures

1	DAVID J. MEYER		RECEN	/ED
2 3	VICE PRESIDENT AND CHIEF COUNSEL FOR REGULATORY AND GOVERNMENTAL AFFA		2020 JAN 10	PM 3: 04
4 5	AVISTA CORPORATION P.O. BOX 3727		IDAHO PU	JBLIC
6	1411 EAST MISSION AVENUE		STILLINES CO.	MMISSIGN
7 8	SPOKANE, WASHINGTON 99220-3727 TELEPHONE: (509) 495-4316			
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12 13	BEFORE THE IDAHO PUBLIC U	TILITIES COMMISSIO	N	
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15 16	IN THE MATTER OF THE APPLICATION) CASE NO. AVI	U-E-20- <u>01</u>	
17 18	OF AVISTA CORPORATION FOR AN ACCOUNTING ORDER AUTHORIZING)		
19	ACCOUNTING AND RATEMAKING	j		
20 21	TREATMENT OF COSTS ASSOCIATED WITH THE ENERGY IMBALANCE MARKET)		
22	THE ENERGY INIDALIANCE MANGET	,		
23 24				
25	I. INTRODUC	CTION		
26	Avista Corporation, doing business as Avista		ista or Compan	w)
			•	
27	at 1411 East Mission Avenue, Spokane, Washingto	on, pursuant to Section 6	1-524 Idaho Co	ode
28	and Rule 52 of the Idaho Public Utilities Commis	ssion ("Commission Rule	s of Procedure	"),
29	hereby applies to the Commission for an order ar	uthorizing the accounting	g and ratemaki	ng
30	treatment detailed in this Application related to the	incremental costs the Co	ompany will inc	cur
31	associated with joining the California Independent	System Operator (CAISO) Western Ener	gy
32	Imbalance Market (EIM). In this filing, the Comp	any is requesting Commi	ission approval	to
33	defer, for later recovery in rates, these costs until se	uch time as they are inclu	ided in base rate	es.
34	These costs will primarily be related to developing the	he network model per CA	ISO requireme	nts
35	including EMS/SCADA integration, development	of a generation resource	bid strategy a	nd

population of the generation resource master file, conducting request for proposals and

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Application of Avista Corporation

Case No. AVU-E-20-

1	selecting new market related software applications, completion of modeling into the CAISO
2	test environment, project and change management and employee training.
3	Pursuant to Commission Rule of Procedure 201, the Company requests that this filing
4	be processed under the Commission's rules for Modified Procedure.
5	Communications in reference to this Application should be addressed to:
6 7 8 9 10 11 12 13 14 15	David J. Meyer, Esq. Vice President and Chief Counsel for Regulatory and Governmental Affairs Avista Corporation P.O. Box 3727 P.O. Box 3727 1411 E. Mission Avenue, MSC-7 Spokane, WA 99220-3727 Spokane, WA 99220-3727 Phone: (509) 495-4316 david.meyer@avistacorp.com Patrick D. Ehrbar Director of Regulatory Affairs Avista Corporation P.O. Box 3727 1411 E. Mission Avenue, MSC-27 Spokane, WA 99220-3727 Phone: (509) 495-8620 patrick.ehrbar@avistacorp.com
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17	II. BACKGROUND
18	Avista has actively monitored the operation and expansion of the Western EIM. The
19	Company regularly participates in regional meetings and dialogue associated with the EIM
20	including the potential expansion of the EIM to a day ahead market. Avista has been
21	continuously evaluating the operational benefits associated with EIM participation, and the
22	associated risks of not participating in the market. One of the largest operational benefits for
23	current EIM participants is the ability to balance and regulate load and renewable resources by
24	leveraging available market resources, instead of relying on only internal Avista resources to
25	provide regulation and flexible ramping.
26	Avista has also closely monitored the impacts to the bi-lateral trading market as more

entities join the EIM. The recent integration of Idaho Power and Powerex into the EIM has

had an impact on short term hourly market liquidity. In addition, the commitment of Seattle

City Light, NorthWestern Energy, and the recent notice of intent of the Bonneville Power

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Administration to join the market in the next few years, will continue to put a stress on near term hourly market liquidity. EIM participants are less likely to conduct bi-lateral transactions close to the operating hour, due to the need to pass EIM sufficiency and flexible ramping tests, and meet other market transaction closing times that occur well before the operating hour. This leads to significant risk and inefficiencies for non-market participants to reliably and responsibly meet load service obligations. With over 75 percent of the load in the western interconnection committed to joining the EIM by 2022, non-participating utilities will face growing market liquidity risk and will therefore need to hold more reserves to minimize exposure to in-hour fluctuations or extended non-planned generation outages. Holding additional reserves will lead to higher overall power supply costs since excess available resources can't be fully optimized or additional resources may need to be purchased.

In addition, Avista's renewable resource mix is changing as the price of renewable resources continue to decline, our customer's interest in purchasing cleaner energy increases, and the implementation of new carbon emission policies in the West. Recently, Avista signed two Power Purchase Agreements (PPA) for 20 MW of solar starting in December of 2018 (Adams-Neilson) and 145 MW of wind starting in late 2020 (Rattlesnake Flat), based on competitive pricing and customer interest. Avista expects to integrate additional renewable resources into its Balancing Authority Area (BAA) in the future associated with the development and adoption of state and local clean energy and carbon emission policies, and the increased interest of qualifying resources that meet the requirements under the Public Utility Regulatory Policies Act (PURPA). As additional variable resources are integrated into the Avista BAA, it becomes more efficient and cost-effective for Avista to rely on the EIM to help meet the in-hour variability, instead of holding back and dispatching Avista-owned resources to meet the flexible ramping requirements.

Based on the short term market liquidity risks associated with being a non-EIM participant, and Avista's changing resource portfolio, Avista decided it was time to join the Western EIM. Avista signed an EIM Implementation Agreement with the CAISO on April 25, 2019 with a planned go-live date of April 1, 2022. CAISO filed the implementation plan with FERC on December 11, 2019 and requested an effective date of April 1, 2020 to allow Avista to integrate into the market no later than April 1, 2022. A copy of the EIM ISO/Avista Implementation Agreement and the CAISO FERC filing letter are included as Attachment A and B, respectively.

III. EIM ESTIMATED COSTS AND BENEFITS

As part of Avista's market monitoring and evaluation efforts between 2015 and 2017, Avista hired two consultants to evaluate the costs and benefits of EIM participation. Avista recently updated these previous assessments based on current EIM operation and actual performance. Utilicast¹ was hired in the second half of 2018 to help Avista develop a full technology road map and conduct a metering assessment associated with EIM participation requirements. Utilicast also updated the market costs assessment that it had previously conducted for the Company in 2015. Based on the Utilicast assessments and preliminary planning done in the first quarter of 2019, Avista estimates it will cost between \$21.4 million and \$26.7 million (on a system basis) to fully prepare for market entry. These costs include metering upgrades, generation control modifications, communication infrastructure additions and improvements, the purchase and integration of up to eight market based software applications, the hiring of a System Integrator consultant, and internal Avista labor. The on-

¹ Utilicast is a provider of consulting services to the energy and utilities industry, providing expertise and experience in the areas of regional electricity market solutions, power systems operations, project implementation, analytics, energy services, customer care and related IT infrastructure.

going annual system costs to operate in the market are anticipated to be between \$3.5 million and \$4.0 million. Anticipated on-going costs include maintenance costs for software licenses and communication networks, the addition of approximately 12 new employees to facilitate market operations and settlements, including a new five person 24x7 hour EIM operating desk, and CAISO EIM membership fees. The Utilicast technology and meter assessments are included as Confidential Attachments C and D, respectively. Avista also created an EIM Program Charter in May 2019 to document updated cost estimates, project implementation processes and project governance. The EIM Charter is provided as Confidential Attachment E. The integration and on-going cost estimates will be further refined as Avista conducts extensive planning assessments and completes project milestones in 2020, including selecting software vendors, completing meter and control upgrade designs and finalizing the internal program structure and associated employee resource plan.

Avista contracted with Energy and Environmental Economics (E3)² in the fall of 2017 to perform an EIM benefit analysis. E3 was chosen since they had previously conducted multiple market benefit assessments for other EIM participants and had the best available system model. This allowed Avista to compare results to the other utilities. The E3 assessment estimated that Avista could see a range of system annual benefits from \$2 million to \$12 million by participating in the EIM. The E3 study is provided as Confidential Attachment F. There are four main study assumptions that drive the range of potential EIM benefits: the amount of flexible hydro Avista bids into the market, the amount of transmission that is made available for market transactions, the amount of renewable generation that is integrated into the Avista BAA, and the data source of the estimated benefits of other EIM participants, which

² Energy+Environmental Economics (or E3) is an energy consulting firm that helps utilities, regulators, policy makers, developers, and investors make strategic decisions as they implement new public policies, respond to technological advances, and address customers' shifting expectations.

was used for comparison purposes and a proxy for market price variations. E3 varied the
assumption of these critical drivers to create 24 different study scenarios. Avista analyzed the
24 different scenarios and anticipates EIM system annual benefits to be \$5.8 million, which is
an average of four of the 24 benefit scenarios (scenarios 6, 12, 18, 24). These four scenarios
assume: Avista maximizes hydro bids into the market, based on discussions with Portland
General Electric (PGE) and Idaho Power Company (IPC) about EIM benefits being directly
related to bidding flexible resources into the market; an increase in projected renewable
generation into the Avista resource mix, due to new emission policies; an average of low and
high transmission made available to the market; and an average of EIM benefits based on
modeled and actual data to represent price variations.

There is a high likelihood that Avista could see benefits move closer to the upper end of the study range (\$12 million system) based on the actual benefits that have been published for existing EIM participants. Recent market price volatility experienced in 2018 significantly increased the benefits of current EIM participants, compared to anticipated results from their E3 studies. Both IPC and PGE achieved EIM benefits in 2018 as calculated by the CAISO that were over five times their anticipated benefits as calculated by E3. Avista's resource mix and transmission connection to other EIM participants most closely matches IPC and PGE.

There are other operational benefits associated with EIM participation that were not quantified in the E3 study. Participation in the EIM will improve system visibility and reliability through improved modeling and new real-time monitoring. EIM participants also experience improved outage coordination, both internal and external. Because of load and generation diversity that exists across the larger EIM footprint, as compared to individual utilities, the total flexible ramping requirements are reduced by approximately 45% per the CAISO 2019 third quarter benefits report. The flexible ramping requirement reduction can be

shared	among	the	EIM	participants.	The	CAISO	also	calculates	reduced	renewable
curtailn	nents and	d asso	ociate	d greenhouse ga	as emi	ssion red	uction	as a result	of EIM pa	rticipation.
None o	f these a	dditio	onal b	enefits were giv	ven an	economi	c valı	ie in the E3	study, ho	wever after
entering	g the EIN	M, A	vista's	s customers wil	l see	some unq	uanti	fied financi	al benefit	from these
operation	ng efficie	encie	s.							

Avista performed an economic analysis to determine the system annual benefits required to breakeven over a ten year operating period based on EIM implementation costs of either \$21.4 million (expected system project costs) and \$26.7 million (expected system with contingency). In order to break even in 10 years, assuming integration costs of \$21.4 million, Avista will need to achieve system annual benefits of approximately \$5.0 million. Assuming integration costs of \$26.7 million, Avista will need to achieve annual system benefits of approximately \$6.0 million. As previously discussed, based on the E3 benefit analysis, Avista anticipates annual EIM benefits to be \$5.8 million (system). Therefore, Avista anticipates positive revenue from EIM participation in less than 10 years. If actual EIM system benefits are closer to the potential upper bound of \$12 million, as determined by E3 and experienced by other similar situated EIM participating utilities, then Avista customers would see positive revenue in a much shorter time period. This economic analysis prepared by Avista is provided in the confidential work papers included with this filing.

The current total estimate for EIM implementation system O&M expense over the entire project from 2019 to April 2022 is between \$3.2 million to \$4.0 million. The estimated annual project costs will be reassessed after the selection of the software vendor and other planning assessments are completed in early 2020. Current estimated planning costs for 2020 related to the initial Project Manager and Change Management labor, system integrator consultant, software requirements development, miscellaneous technology assistance, training

and potential accuracy testing analysis for generation and metering measurement devices, are expected to be between \$1.2 million and \$1.5 million, on a system basis.

IV. PROPOSED ACCOUNTING TREATMENT

In this filing, beginning January 1, 2020, the Company is requesting an order allowing the deferral of incremental O&M costs associated with the implementation of EIM until such time as they are included in base rates via a general rate case proceeding. As noted above, these costs will primarily be related to the network model development, including EMS/SCADA integration, development of generation resource bid strategy and population of the generation resource master file, completion of modeling into the CAISO test environment, project and change management and employee training.

To track these costs, the Company would defer the EIM-related monthly expenses based on actual EIM participation costs after it has incurred those costs (without a carrying charge), until that amount is fully imbedded in base rates.³ The EIM costs that the Company is proposing to defer include what will be accounted for in the following projects:

³ This is consistent with that approved for Idaho Power on January 31, 2017 in Case No. IPC-E-16-19, per Order No. 33706, allowing Idaho Power to defer their "initial costs of joining the EIM until such time as benefits begin to flow to customers. ... We decline to apply a carrying charge to the deferred amounts. We find that the ability to defer O&M costs for future recovery, compared to the normal ratemaking treatment, provides sufficient benefit to the Company." The Commission further stated: "We note that the deferral treatment applies to the O&M expenses of joining the EIM, and not to capital costs, which should be treated as any other capital expenditure."

		Operation and Mai	ntenance Accounting		
D	roject#	Project Name	Task # (FERC Account #)	Task Descriptiom	
	9806037	EIM - Transmission Ops O&M	566010	• KC 8 T	
	9806037	EIM - Transmission Ops O&M	566020	Other Expense-Labor Other - Training	
	9806040	EIM - Substation O&M	588010		
_	9806040	EIM - Substation O&M	588020	Misc Expense - Labor	
	9806036	EIM - Power Supply O&M	557000	Misc Expense - Training	
	9806036	EIM - Power Supply O&M	557020	Other Expense - Labor Training	
	9806038	EIM - FOWER Supply O&M	549010	Other Expense – Training	
	9806038	EIM - GPSS O&M	549020	Other Expense-Labor	
_	9806038		923010	Other - Training	
	9806039	EIM - Accounting IS/IT, Supply Chain	923010	Outside Services Employed	
_	9806039	EIM - Accounting IS/IT, Supply Chain EIM - Accounting IS/IT, Supply Chain	920101	Training - Required	
_	9806039	EIM - IT Network O&M CD.AA	920000	A&G Labor	
_	9906538	EIM - IT Network O&M CD.AA		Outside Services Employed	
220	9906538	EIM - IT Network O&M CD.AA	926101	Training - Required	
_	9805630		920000 549000	A&G Labor	
	9805630	EIM - Power Supply O&M		Misc. Power Supply - Labor	
_	9805630 9806054	EIM - Power Supply O&M	549001	Misc. Power Supply - Integrator	
	9806054	GPSS EIM CT & PT Testing	548000	Other Expense - Testing	
0	9800053	GPSS EIM CT & PT Testing	538000	Turbines & Equipment	

The Company requests to defer the total cost in Account 182.3 – Other Regulatory Assets. In a future general rate case, Avista would request recovery of the deferred balance and propose an amortization period at that time.

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1 V. CUSTOMER NOTIFICATION Notice to the public of the proposed revisions, pursuant to IDAPA 31.21.02.102, will 2 be given simultaneously with the filing of this Application by posting a notice to the 3 4 Company's Website. 5 WHEREFORE, Avista respectfully requests that the Commission issue an Order 6 7 approving the deferral of incremental O&M costs associated with the implementation of EIM incurred by Avista, effective on and after January 1, 2020, until such costs are included in a 8 future proceeding, with this application being processed under Modified Procedure. 9 DATED at Spokane, Washington, this 9 day of January, 2020. 10 11 12 AVISTA CORPORATION 13 BY14 15

Vice President and Chief Counsel for

Regulatory and Governmental Affairs

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VERIFICATION

STATE OF WASHINGTON		
)	
County of Spokane)	

David J. Meyer, being first duly sworn on oath, deposes and says: That he is the Vice President and Chief Counsel for Regulatory & Governmental Affairs for Avista Utilities and makes this verification for and on behalf of Avista Corporation, being thereto duly authorized;

That he has read the foregoing filing, knows the contents thereof, and believes the same to be true.

SIGNED AND SWORN to before me this $\frac{9}{2}$ day of January 2020, by David J. Meyer.



NOTARY PUBLIC in and for the State of Washington, residing at Spokane.

Commission Expires: 112321

ATTACHMENT A

Implementation Agreement

ENERGY IMBALANCE MARKET ISO/AVISTA IMPLEMENTATION AGREEMENT

This Implementation Agreement ("Agreement") is entered into as of April 25, 2019, by and between Avista Corporation, a Washington corporation ("Avista"), and the California Independent System Operator Corporation, a California nonprofit public benefit corporation ("ISO"). Avista and the ISO are sometimes referred to in the Agreement individually as a "Party" and, collectively, as the "Parties."

RECITALS

- A. WHEREAS, Avista has determined there is an opportunity to secure benefits for Avista's customers through improved dispatch and operation of Avista's generation fleet and through the efficient use and continued reliable operation of existing and future transmission facilities and desires to participate in the energy imbalance market operated by the ISO ("EIM");
- B. WHEREAS, the ISO has determined there are benefits to ISO market participants through greater access to energy imbalance resources in real-time and through the efficient use and reliable operation of the transmission facilities and markets operated by the ISO, and desires to expand operation of the EIM to include Avista;
- C. WHEREAS, Avista acknowledges that the rules and procedures governing the EIM are set forth in the provisions of the ISO tariff as filed with the Federal Energy Regulatory Commission ("FERC") and that participation in the EIM requires corresponding revisions to Avista's Open Access Transmission Tariff ("Avista Tariff") and the execution of associated service agreements; and
- D. WHEREAS, the Parties are entering into this Agreement to set forth the terms upon which the ISO will timely configure its systems to incorporate Avista into the EIM ("Project") on or before April 1, 2022 ("Implementation Date").

NOW THEREFORE, in consideration of the mutual covenants contained herein, and of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

AGREEMENT

Effective Date and Term.

- (a) This Agreement shall become effective upon the date the Agreement is accepted, approved or otherwise permitted to take effect by FERC, without condition or modification unsatisfactory to either Party ("Effective Date").
- (b) In the event FERC requires any modification to the Agreement or imposes any other condition upon its acceptance or approval of the Agreement, each Party shall

have ten (10) business days to notify the other Party that any such modification or condition is unacceptable to that Party. If no Party provides such notice, then the Agreement, as modified or conditioned by FERC, shall take effect as of the date determined under Section 1(a). If either Party provides such notice to the other Party, the Parties shall take any one or more of the following actions: (i) meet and confer and agree to accept any modifications or conditions imposed by such FERC order; (ii) jointly seek further administrative or legal remedies with respect to such FERC order, including a request for rehearing or clarification; or (iii) enter into negotiations with respect to accommodation of such FERC order, provided however, if the Parties have not agreed to such an accommodation within thirty (30) days after the date on which such FERC order becomes a final and non-appealable order, such order shall be deemed an adverse order and the Parties shall have no further rights and obligations under the Agreement.

- (c) The term of the Agreement ("Term") shall commence on the Effective Date and shall terminate upon the earliest to occur of (1) the date FERC permits all necessary revisions to the Avista Tariff to take effect and the service agreements under such tariff and the ISO tariff necessary for the commencement of Avista's participation in the EIM have taken effect; (2) termination in accordance with Section 2 of this Agreement; or (3) such other date as mutually agreed to by the Parties ("Termination Date").
- (d) This Agreement shall automatically terminate on the Termination Date and shall have no further force or effect, provided that the rights and obligations set forth in Sections 5 and 6 shall survive the termination of this Agreement and remain in full force and effect as provided therein.

Termination.

- (a) The Parties may mutually agree to terminate this Agreement in writing at any time. In addition, either Party may terminate this Agreement in its sole discretion after conclusion of the negotiation period in Section 2(b) or as provided in Section 2(d) or 2(e) as applicable.
- (b) If either the ISO or Avista seeks to unilaterally terminate this Agreement, it must first notify the other Party in writing of its intent to do so ("Notice of Intent to Terminate") and engage in thirty (30) days of good faith negotiations in an effort to resolve its concerns. If the Parties successfully resolve the concerns of the Party issuing the Notice of Intent to Terminate, the Party that issued such notice shall notify the other Party in writing of the withdrawal of such Notice ("Notice of Resolution").
- (c) At the time the Notice of Intent to Terminate is provided, or any time thereafter unless a Notice of Resolution is issued, Avista may provide written notice directing the ISO to suspend performance on any or all work on the Project for a specified period of time ("Notice to Suspend Work"). Upon receipt of a Notice to Suspend Work, the ISO shall: (1) discontinue work on the Project; (2) place no further orders with subcontractors related to the Project; (3) take commercially reasonable

actions to suspend all orders and subcontracts; (4) protect and maintain the work on the Project; and (5) otherwise mitigate Avista's costs and liabilities for the areas of work suspended. The ISO will not invoice Avista pursuant to Section 4(c) of this Agreement for any milestone payment following the issuance of a Notice to Suspend Work. To the extent a Notice of Resolution is issued pursuant to Section 2(b), the Notice to Suspend Work in effect at the time shall be deemed withdrawn and the ISO shall be entitled to invoice Avista for any milestone completed as specified in Section 4(c) of this Agreement and Avista shall pay such invoice pursuant to Section 4.

- (d) Any time after thirty (30) days from the date of the Notice of Intent to Terminate under Section 2(b), issued by either Party, and prior to the date of a Notice of Resolution, the ISO may terminate this Agreement by providing written notice to Avista that it is terminating this Agreement ("Termination Notice") effective immediately. The ISO may terminate this Agreement under the terms of this Section 2(d) at its sole discretion for any reason.
- (e) Any time after thirty (30) days from the date of the Notice of Intent to Terminate under Section 2(b), issued by either Party, and prior to the date of a Notice of Resolution, Avista may terminate this Agreement by providing written notice to the ISO that it is terminating this Agreement ("Termination Notice") effective immediately. Avista may terminate this Agreement under the terms of this Section 2(e) at its sole discretion for any reason.
- (f) In the event this Agreement is terminated by either or both of the Parties pursuant to its terms, this Agreement will become wholly void and of no further force and effect, without further action by either Party, and the liabilities and obligations of the Parties hereunder will terminate, and each Party shall be fully released and discharged from any liability or obligation under or resulting from this Agreement as of the date of the Termination Notice provided in Section 2(d) or 2(e), as applicable, notwithstanding the requirement for the ISO to submit the filing specified in Section 2(g). Notwithstanding the foregoing, the rights and obligations set forth in Sections 5 and 6 shall survive the termination of this Agreement and remain in full force and effect as specified in Sections 5 and 6, and any milestone payment obligation pursuant to Section 4(c) that arose prior to the Termination Notice in accordance with Section 2(d) or 2(e) shall survive until satisfied or resolved in accordance with Section 11.
- (g) The Parties acknowledge that the ISO is required to file a timely notice of termination with FERC. The Parties acknowledge and agree that the filing of the notice of termination by the ISO with FERC will be considered timely if the filing of the notice of termination is made after the preconditions for termination have been met, and the ISO files the notice of termination within ten (10) days after the Termination Notice has been provided by either the ISO in accordance with Section 2(d) or Avista in accordance with Section 2(e). This Agreement shall terminate upon acceptance by FERC of such a notice of termination.

Implementation Scope and Schedule.

- (a) The Parties shall complete the Project as described in Exhibit A, subject to modification only as described in Section 4(e) below.
- (b) The Parties shall undertake the activities described in Exhibit A with the objective of completing the Project and implementing the EIM no later than the Implementation Date, including all milestones listed under Exhibit A for the Implementation Date, subject to modification only as described in Section 3(c) below.
- (c) Either Party may propose a change in Exhibit A or the Implementation Date to the other Party. If a Party proposes a change in Exhibit A or the Implementation Date, the Parties shall negotiate in good faith to attempt to reach agreement on the proposal and any necessary changes in Exhibit A and any other affected provision of this Agreement, provided that any change in Exhibit A, or any change to the Implementation Date, must be mutually agreed to by the Parties. The agreement of the Parties to a change in Exhibit A, or a change to the Implementation Date, shall be memorialized in a revision to Exhibit A, which will then be binding on the Parties and shall be posted on the internet web sites of the ISO and Avista, without the need for execution of an amendment to this Agreement. Changes that require revision of any provision of this Agreement other than Exhibit A shall be reflected in an executed amendment to this Agreement and filed with FERC for acceptance.
- (d) At least once per calendar month during the Term, the Parties' Designated Executives, or their designees, will meet telephonically or in person (at a mutually agreed to location) to discuss the status of the performance of the tasks necessary to achieve the milestones in Exhibit A and the continued appropriateness of Exhibit A to ensure that the Project can meet the Implementation Date. For purposes of this section, "Designated Executive" shall mean the individual identified in Section 8(g), or her or his designee or successor.

4. Implementation Charges, Invoicing and Milestone Payments.

- (a) As itemized in Section 4(c) below, Avista shall pay the ISO a fixed fee of \$300,000 for costs incurred by the ISO to implement the Project ("Implementation Fee"), subject to completion of the milestones specified in Section 4(c) and subject to adjustment only as described in Section 4(b).
- (b) The ISO will provide prompt written notice to Avista when the sum of its actual costs through the date of such notice and its projected costs to accomplish the balance of the Project exceed the Implementation Fee. The Implementation Fee shall be subject to adjustment only by mutual agreement of the Parties if the Parties agree to a change in Exhibit A, or a change to the Implementation Date, in accordance with Section 3(c) and the Parties agree that an adjustment to the Implementation Fee is warranted in light of such change.
- (c) Upon completion of the milestones identified in Exhibit A, the ISO shall invoice Avista for the Implementation Fee as follows:

- \$50,000 upon the Effective Date as further described in Section 1 of this Agreement and Exhibit A as Milestone 1;
- \$50,000 upon deployment into the ISO test environment of the full network model database that includes the topology of the Avista system as further described in Exhibit A as Milestone 2;
- iii. \$50,000 upon ISO promotion of market network model including Avista area to non-production system with Avista connection and data exchange data in advance of market simulation as further described in Exhibit A as Milestone 3;
- iv. \$50,000 upon commencement of EIM market simulation as further described in Exhibit A as Milestone 4;
- v. \$50,000 upon start of parallel operations as further described in Exhibit A as Milestone 5; and
- vi. \$50,000 upon the Implementation Date as further described in Exhibit A as Milestone 6.
- (d) Following the completion of each milestone identified in Section 4(c)(i) through (vi), the ISO will deliver to Avista an invoice which will show the amount due, together with reasonable documentation supporting the completion of the milestone being invoiced. Avista shall pay the invoice no later than forty-five (45) days after the date of receipt. Any milestone payment past due will accrue interest, per annum, calculated in accordance with the methodology specified for interest in the FERC regulations at 18 C.F.R. § 35.19a(a)(2)(iii) (the "FERC Methodology").
- (e) If a milestone has not been completed as described in Section 4(c)(i), (ii), (iii), (iv), or (v) and in Exhibit A, as Exhibit A may have been modified in accordance with Section 3(c), the Parties shall negotiate in good faith an agreed upon change to the Project Delivery Dates (as defined in Exhibit A) consistent with Section 3(c) such that the timing of milestone payments in Section 4(c) can be adjusted to correspond to the updated Exhibit A.
- (f) If Avista disputes any portion of any amount specified in an invoice delivered by the ISO in accordance with Section 4(c), Avista shall pay its total amount of the invoice when due, and identify the disputed amount and state that the disputed amount is being paid under protest. Any disputed amount shall be resolved pursuant to the provisions of Section 11. If it is determined pursuant to Section 11 that an overpayment or underpayment has been made by Avista or any amount on an invoice is incorrect, then (i) in the case of any overpayment, the ISO shall promptly return the amount of the overpayment (or credit the amount of the overpayment on the next invoice) to Avista; and (ii) in the case of an underpayment, Avista shall promptly pay the amount of the underpayment to the ISO. Any overpayment or underpayment shall include interest for the period from the date of overpayment, underpayment, or incorrect

allocation, until such amount has been paid or credited against a future invoice calculated in the manner prescribed for calculating interest in Section 4(d).

- (g) All costs necessary to implement the Project not provided for in this Agreement shall be borne separately by each Party, which in the case of the ISO will be recovered through rates as may be authorized by its regulatory authorities.
- (h) All milestone payments required to be made under the terms of this Agreement shall be made to the account or accounts designated by the Party which the milestone payment is owed, by wire transfer (in immediately available funds in the lawful currency of the United States).

Confidentiality.

- (a) All written or oral information received from the other Party in connection with this Agreement (but not this Agreement or any information in connection with this Agreement to the extent such Agreement and information is filed with FERC) necessary to complete the Project and marked or otherwise identified at the time of communication by such Party as containing information that Party considers commercially sensitive or confidential shall constitute "Confidential Information" subject to the terms and conditions herein.
- If Avista publicly releases Avista's Confidential Information in connection with a public process or a regulatory filing, or if the ISO publicly releases the ISO's Confidential Information in connection with a public process or a regulatory filing, then the information released shall no longer constitute Confidential Information; provided, however, that Confidential Information disclosed under seal (or in such other manner as to be treated confidentially) in connection with a regulatory filing shall retain its status as Confidential Information under this Agreement. In addition, Confidential Information does not include information that (i) is or becomes generally available to the public other than as a result of disclosure by either Party, its officers, directors, employees, agents, or representatives; (ii) is or becomes available to such Party on a non-confidential basis from other sources or their agents or representatives when such sources are not known by such Party to be prohibited from making the disclosure; (iii) is already known to such Party or has been independently acquired or developed by such Party without violating any of such Party's obligations under this Section 5; (iv) is the subject of a mutual written agreement between the Parties, including an agreement evidenced through an exchange of electronic or other communications, with regard to information for discussion at any stakeholder meetings or during the stakeholder process or with any regulatory authority; or (v) is the subject of a mutual written agreement between the Parties, including an agreement evidenced through an exchange of electronic or other communications, to allow for such disclosure and designation as non-confidential or public information on a case-by-case basis in accordance with Section 10 of this Agreement.
- (c) The Confidential Information will be kept confidential by each Party and each Party agrees to protect the Confidential Information using the same degree of

care, but no less than a reasonable degree of care, as a Party uses to protect its own confidential information of a like nature. Notwithstanding the preceding sentence, a Party may disclose the Confidential Information or portions thereof to those of such Party's officers, employees, partners, representatives, attorneys, contractors, advisors, or agents who need to know such information for the purpose of analyzing or performing an obligation related to the Project. Notwithstanding the foregoing, a Party is not authorized to disclose such Confidential Information to any officers, employees. partners, representatives, attorneys, contractors, advisors, or agents without (i) informing such officer, employee, partner, representative, attorney, contractor, advisor, or agent of the confidential nature of the Confidential Information and (ii) ensuring that such officer, employee, partner, representative, attorney, contractor, advisor, or agent is subject to confidentiality duties or obligations to the applicable Party that are no less restrictive than the terms and conditions of this Agreement. Each Party agrees to be responsible for any breach of this Section 5 by such Party or a Party's officers, employees, partners, representatives, attorneys, contractors, advisors or agents, subject to the limitations set forth in Section 6 below.

- (d) In the event that a Party is required by a court of competent jurisdiction or regulatory authority (by law, rule, regulation, order, deposition, interrogatory, request for documents, data request issuedas part of a regulatory process, subpoena, civil investigative demand or similar request or process) to disclose any of the Confidential Information, such Party shall (to the extent legally permitted) provide the other Party with prompt written notice of such requirement so that the other Party may seek a protective order or other appropriate remedy and/or waive compliance with the terms of this Section 5. In the event that such protective order or other remedy is not obtained, the disclosing Party hereby waives compliance with the provisions hereof with respect to such Confidential Information. In such event, the Party compelled to disclose shall (i) furnish only that portion of the Confidential Information which, in accordance with the advice of its own counsel (which may include internal counsel), is legally required to be furnished, and (ii) exercise reasonable efforts to obtain assurances that confidential treatment will be accorded the Confidential Information so furnished.
- (e) Notwithstanding the foregoing, the Parties acknowledge that they are required by law or regulation to report certain information that could embody Confidential Information from time to time, and may do so from time to time without providing prior notice to the other Party. Such reports may include models, filings, and reports of costs, general rate case filings, cost adjustment mechanisms, FERC-required reporting, investigations, annual state reports that include resources and loads, integrated resource planning reports, reports to entities such as FERC, the North American Electric Reliability Council ("NERC"), Western Electricity Coordinating Council ("WECC"). or similar or successor organizations, or similar or successor forms, filings, or reports, the specific names of which may vary by jurisdiction, along with supporting documentation. Additionally, in regulatory proceedings or investigations in all state and federal jurisdictions in which they may do business, the Parties will from time to time be required to produce Confidential Information, and may do so without prior notice using its business judgment in compliance with all of the foregoing and including the appropriate level of confidentiality for such disclosures in the normal course of business.

- (f) Each Party is entitled to seek equitable relief, by injunction or otherwise, to enforce its rights under this Section 5 to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision, subject to the limitations set forth in Section 6 below.
- (g) Unless otherwise prevented by law, upon written request by a Party, the other Party shall promptly return to the requesting Party or destroy all Confidential Information it received, including all copies of its analyses, compilations, studies or other documents prepared by or for it, that contain the Confidential Information in a manner that would allow its extraction or that would allow the identification of the requesting Party as the source of the Confidential Information or inputs to the analysis. Notwithstanding the foregoing, neither Party shall be required to destroy or alter any computer archival and backup tapes or archival and backup files (collectively, "Computer Tapes"), provided that any Confidential Information of the other Party retained by a Party shall be kept confidential in accordance with the terms of this Agreement.
- (h) Nothing in this Agreement shall be deemed to restrict either Party from engaging with third parties with respect to any matter and for any reason, specifically including the EIM, provided Confidential Information is treated in accordance with this Section 5.
- (i) This Section 5, Confidentiality, applies for two years (24 months) after the Termination Date or the date of any expiration or termination of this Agreement.

Limitation of Liability; Indemnity.

- (a) The Parties acknowledge and agree that, except as otherwise specified in Section 4(f) of this Agreement, neither Party shall be liable to the other Party for any claim, loss, cost, liability, damage or expense, including any direct damage or any special, indirect, exemplary, punitive, incidental or consequential loss or damage (including any loss of revenue, income, profits or investment opportunities or claims of third party customers), arising out of or directly or indirectly related to such other Party's decision to enter into this Agreement, such other Party's performance under this Agreement, or any other decision by such Party with respect to the Project.
- (b) Each Party shall indemnify, defend and hold harmless each of the other Party and its officers, directors, employees, agents, contractors and sub-contractors, from and against all third-party claims, judgments, losses, liabilities, costs, expenses (including reasonable attorneys' fees) and damages for personal injury, death or property damage, to the extent caused by the negligence, willful misconduct, or breach of this Agreement of the indemnifying Party, its officers, directors, agents, employees, contractors or sub-contractors related to this Agreement; provided, that this indemnification shall be only to the extent such personal injury, death or property damage is not attributable to the negligence or willful misconduct related to this Agreement or breach of this Agreement of the Party seeking indemnification, its officers, directors, agents, employees, contractors or sub-contractors. The indemnified Party

shall give the other Party prompt notice of any such claim. The indemnifying Party, in consultation with the indemnified Party, shall have the right to choose competent counsel, control the conduct of any litigation or other proceeding, and settle any claim, provided that any such settlement shall not impose costs upon the indemnified Party. The indemnified Party shall provide all documents and assistance reasonably requested by the indemnifying Party.

(c) The rights and obligations under this Section 6 shall survive the Termination Date and any expiration or termination of this Agreement.

7. Representation and Warranties.

- (a) Representations and Warranties of Avista. Avista represents and warrants to the ISO as of the Effective Date as follows:
- (1) It is duly formed, validly existing and in good standing under the laws of the jurisdiction of its formation.
- (2) It has all requisite corporate power necessary to own its assets and carry on its business as now being conducted or as proposed to be conducted under this Agreement.
- (3) It has all necessary corporate power and authority to execute and deliver this Agreement and to perform its obligations under this Agreement, and the execution and delivery of this Agreement and the performance by it of this Agreement have been duly authorized by all necessary corporate action on its part.
- (4) The execution and delivery of this Agreement and the performance by it of this Agreement do not: (i) violate its organizational documents; (ii) violate any governmental requirements applicable to it; or (iii) result in a breach of or constitute a default of any material agreement to which it is a party.
- (5) This Agreement has been duly and validly executed and delivered by it and constitutes its legal, valid and binding obligation enforceable against it in accordance with its terms, except as the same may be limited by bankruptcy, insolvency or other similar laws affecting creditors' rights generally and by principles of equity regardless of whether such principles are considered in a proceeding at law or in equity.
- (6) All material governmental authorizations in connection with the due execution and delivery of this Agreement, have been duly obtained or made prior to the date hereof and are in full force and effect.
- (b) Representations and Warranties of the ISO. ISO represents and warrants to Avista as of the Effective Date as follows:
- (1) It is duly formed, validly existing and in good standing under the laws of the jurisdiction of its formation.

- (2) It has all requisite corporate power necessary to own its assets and carry on its business as now being conducted or as proposed to be conducted under this Agreement.
- (3) It has all necessary corporate power and authority to execute and deliver this Agreement and to perform its obligations under this Agreement, and the execution and delivery of this Agreement and the performance by it of this Agreement have been duly authorized by all necessary corporate action on its part.
- (4) The execution and delivery of this Agreement and the performance by it of this Agreement do not: (i) violate its organizational documents; (ii) violate any governmental requirements applicable to it; or (iii) result in a breach of or constitute a default of any material agreement to which it is a party.
- (5) This Agreement has been duly and validly executed and delivered by it and constitutes its legal, valid and binding obligation enforceable against it in accordance with its terms, except as the same may be limited by bankruptcy, insolvency, regulatory authority, or other similar laws affecting creditors' rights generally and by principles of equity regardless of whether such principles are considered in a proceeding at law or in equity.
- (6) All material governmental authorizations in connection with the due execution and delivery of, and performance by it of its obligations under this Agreement, have been duly obtained or made prior to the date hereof and are in full force and effect.

General Provisions.

- (a) This Agreement, including Exhibit A to this Agreement, constitutes the entire agreement between the Parties, and supersedes any prior written or oral agreements or understandings between the Parties, relating to the subject matter of this Agreement; provided, that nothing in this Agreement shall limit, repeal, or in any manner modify the existing legal rights, privileges, and duties of each of the Parties as provided by any other agreement between the Parties, or by any statute or any other law or applicable court or regulatory decision by which such Party is bound.
- (b) This Agreement may not be amended except in writing hereafter signed by both of the Parties; provided, however, the Parties may mutually agree to changes in Exhibit A in accordance with Section 4(e).
- (c) Any waiver by a Party to this Agreement of any provision or condition of this Agreement must be in writing signed by the Party to be bound by such waiver, shall be effective only to the extent specifically set forth in such writing and shall not limit or affect any rights with respect to any other or future circumstance.
- (d) This Agreement is for the sole and exclusive benefit of the Parties and shall not create a contractual relationship with, or cause of action in favor of, any third party.

- (e) Neither Party shall have the right to voluntarily assign its interest in this Agreement, including its rights, duties, and obligations hereunder, without the prior written consent of the other Party, which consent may be withheld by the other Party in its sole and absolute discretion. Any assignment made in violation of the terms of this Section 8(e) shall be null and void and shall have no force and effect.
- (f) In the event that any provision of this Agreement is determined to be invalid or unenforceable for any reason, in whole or part, the remaining provisions of this Agreement shall be unaffected thereby and shall remain in full force and effect to the fullest extent permitted by law, and such invalid or unenforceable provision shall be replaced by the Parties with a provision that is valid and enforceable and that comes closest to expressing the Parties' intention with respect to such invalid or unenforceable provision.
- (g) Whenever this Agreement requires or provides that (i) a notice be given by a Party to the other Party or (ii) a Party's action requires the approval or consent of the other Party, such notice, consent or approval shall be given in writing and shall be given by personal delivery, by recognized overnight courier service, email or by certified mail (return receipt requested), postage prepaid, to the recipient thereof at the address given for such Party as set forth below, or to such other address as may be designated by notice given by any Party to the other Party in accordance with the provisions of this Section 8(g):

If to Avista:

Avista Corporation PO Box 3727 Spokane, WA 99220

Attention: Jason Thackston, Senior Vice President, Energy Resources

E-mail: jason.thackston@avistacorp.com

If to the ISO:

California Independent System Operator Corporation 250 Outcropping Way Folsom, CA 95630

Attention: Petar Ristanovic, Vice President, Technology

E-mail: PRistanovic@caiso.com

Each notice, consent or approval shall be conclusively deemed to have been given (i) on the day of the actual delivery thereof, if given by personal delivery, email sent by 5:00 p.m. Pacific Time, or overnight delivery, or (ii) date of delivery shown on the receipt, if given by certified mail (return receipt requested). It is the responsibility of each Party to provide, in accordance with this Section, notice to the other Party of any necessary change in the contact or address information herein.

- (h) This Agreement may be executed in one or more counterparts (including by facsimile or a scanned image), each of which when so executed shall be deemed to be an original, and all of which shall together constitute one and the same instrument.
- (i) Nothing contained in this Agreement shall be construed as creating a corporation, company, partnership, association, joint venture or other entity with the other Party, nor shall anything contained in this Agreement be construed as creating or requiring any fiduciary relationship between the Parties. No Party shall be responsible hereunder for the acts or omissions of the other Party.
- (j) The decision to execute an EIM service agreement and participate in the EIM remains within the sole discretion of Avista and the decision whether to continue to offer EIM services (subject to Sections 1(c) and 2) remains within the sole discretion of the ISO.
- (k) Nothing in this Agreement shall preclude a Party from exercising any rights or taking any action (or having its affiliates take any action) with respect to any other project.
- Unless otherwise expressly provided, for purposes of this Agreement, the (1) following rules of interpretation shall apply: (i) any reference in this Agreement to gender includes all genders, and the meaning of defined terms applies to both the singular and the plural of those terms; (ii) the insertion of headings are for convenience of reference only and do not affect, and will not be utilized in construing or interpreting, this Agreement; (iii) all references in this Agreement to any "Section" are to the corresponding Section of this Agreement unless otherwise specified; (iv) words such as "herein," "hereinafter," "hereof," and "hereunder" refer to this Agreement (including Exhibit A to this Agreement) as a whole and not merely to a subdivision in which such words appear, unless the context otherwise requires; (v) the word "including" or any variation thereof means "including, without limitation" and does not limit any general statement that it follows to the specific or similar items or matters immediately following it; and (vi) the Parties have participated jointly in the negotiation and drafting of this Agreement and, in the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as jointly drafted by the Parties and no presumption or burden of proof favoring or disfavoring any Party will exist or arise by virtue of the authorship of any provision of this Agreement.
- (m) The above-stated recitals are incorporated into and made a part of this Agreement by this reference to the same extent as if these recitals were set forth in full at this point.
- 9. <u>Venue</u>. Venue for any action hereunder shall be FERC, where subject to its jurisdiction, or otherwise any state or federal court with jurisdiction within the State of California.
- 10. <u>Communication.</u> The Parties shall develop a communication protocol for the dissemination of material information associated with the Project, which shall be

approved by Avista and the ISO. Pursuant to the communication protocol, the individual identified in Section 8(g), or their designee or successor, shall provide reasonable advance notice to the other Party of planned press releases, public statements, and meetings with the public or governmental authorities in which material information concerning the Project or Avista's involvement will be shared. The Parties shall mutually consult with each other as provided in the communication protocol prior to making such public statements or disclosures; provided that nothing herein shall prevent, limit, or delay either Party from making any disclosure required by applicable law or regulation, subject to the provisions of Section 5 hereof. In the event either Party engages in material unplanned communications about the Project that otherwise should have been subject to this Section and the communication protocol, such Party shall provide notice to the other Party as promptly as possible of the nature and content of such communication.

- 11. <u>Dispute Resolution</u>. Unless otherwise provided herein, each of the provisions of this Agreement shall be enforceable independently of any other provision of this Agreement and independent of any other claim or cause of action. In the event of any dispute arising under this Agreement, the Parties shall, to the extent practicable, first attempt to resolve the matter through direct good faith negotiation between the Parties, including a full opportunity for escalation to executive management within the Parties' respective organizations. If the Parties are unable to resolve the issue within thirty (30) days after such escalation of the dispute, then for matters subject to FERC jurisdiction either Party shall have the right to file a complaint under Section 206 of the Federal Power Act. For all other matters, then:
- (a) To the fullest extent permitted by law, each of the Parties hereto waives any right it may have to a trial by jury in respect of litigation within the federal or state courts located within California as specified herein in Section 9, directly or indirectly arising out of, under or in connection with this Agreement. Each Party further waives any right to consolidate, or to request the consolidation of, any action in which a jury trial has been waived with any other action in which a jury trial cannot be or has not been waived.
- (b) If a waiver of jury trial is deemed by any court of competent jurisdiction within the State of California as specified herein in Section 9 to not be enforceable for any reason, then to the fullest extent permitted by law, each of the Parties hereto agrees to attempt to settle amicably through non-binding arbitration. Notwithstanding the foregoing, either Party may seek provisional legal remedies if, in such Party's judgment, such action is necessary to avoid irreparable damage or preserve the status quo.
- 12. <u>Third Party Agreements</u>. The Parties may engage in discussions with third parties, either jointly or unilaterally, to facilitate the Project. Each Party may adopt or modify tariffs or enter into or modify binding agreements between such Party and third parties to implement the approved terms and conditions of the Project or EIM as necessary and appropriate.

33. Compliance. Each Party shall comply with all federal, state, local or municipal governmental authority; any governmental, quasi-governmental, regulatory or administrative agency, commission, body or other authority exercising or entitled to exercise any administrative, executive, judicial, legislative, policy, regulatory or taxing authority or power, including FERC, NERC, WECC; or any court or governmental tribunal; in each case, having jurisdiction over either Party in connection with the execution, delivery and performance of its obligations under this Agreement. This Agreement is not intended to modify, change or otherwise amend the Parties' current functional responsibilities associated with compliance with WECC and NERC Reliability Standards; provided, however, the Parties may enter into separate mutually agreed to arrangements to clarify roles and responsibilities associated with compliance with WECC and NERC Reliability Standards in respect of this Agreement.

IN WITNESS WHEREOF, each of the Parties has caused its duly authorized officer to execute this Implementation Agreement as of the date first above written.

AVISTA CORPORATION

By:

Name: Jason Thackston

Title: Senior Vice President, Energy Resources

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

By

Name: Petar Ristanovic

Title: Vice President, Technology

EXHIBIT A: PROJECT SCOPE AND SCHEDULE

The Project consists of the activities and delivery dates identified in this Exhibit A, implemented in accordance with the Agreement. The Parties have included a schedule for the Implementation Date to coordinate their efforts required for completion of the Project on a milestone track.

The Parties understand that input received from stakeholders during the course of implementing the Project, conditions imposed or questions raised in the regulatory approval process, and the activities of the Parties in implementing the Project may cause the Parties to determine that changes in the Project are necessary or desirable. Accordingly, this Exhibit A may be modified in accordance with Section 3(c) of the Agreement.

Each Party is responsible for performing a variety of tasks necessary to achieve the milestones on the scheduled dates specified in the table below ("Project Delivery Dates") and shall plan accordingly. The Parties shall communicate and coordinate as provided in the Agreement to support the planning and execution to complete the Project.

Project Scope and Milestones	Project Delivery Dates supporting April, 2022
Detailed Project Management Plan – The Parties will develop and initiate a final project management plan that describes specific project tasks each Party must perform, delivery dates, project team members, meeting requirements, and a process for approving changes to support completion of the Project. This phase will include a detailed IT system review to assist Avista in development of a detailed metering plan, bid-to-bill system, and coordination with Avista EMS. Work will be initiated on the Avista staff training program using the foundational and detailed system computer-based training module, as well as on the resource data templates needed during Milestone 2.	May 2019- Decermber 2019
Milestone 1 – This milestone is completed when the Agreement has been made effective in accordance with Section 1 of the Agreement.	April 2020
Full Network Model Expansion – Full Network Model expansion for Avista and EMS/SCADA, including, proof of concept of export/import of EMS data; complete model into the ISO test environment; complete validation for all SCADA points from	November 2020

Avista; testing of the new market model; and validation of the Outage and State Estimator applications.	
Milestone 2 - This milestone is completed upon modeling Avista into the ISO Full Network Model through the EMS which will be deployed into a non-production test environment using the ISO's network and resource modeling process.	July 2021
System Implementation and Connectivity Testing – System requirements and software design, the execution of necessary software vendor contracts, development of Market network model including Avista, allow Avista to connect to a non-production test system.	August 2021
 Milestone 3 - ISO to promote market network model including Avista area to non-production system, and allow Avista to connect and exchange data in advance of Market Simulation. 	September 2021
Construction, Testing and Training in Preparation for Market Simulation - This task includes IT infrastructure upgrades, security testing, training, Day-in-life simulation, and functional testing.	September 2021
Milestone 4a – Start of Joint Integration Testing with ISO, Interface testing with minimum data requirements and functional integration testing. ISO will make the test environment available for Avista connectivity testing prior to the delivery date assuming Avista has provided all requisite data and non-production system availability does not conflict with ISO production system Spring Release schedule.	September 2021
Milestone 4b –Begin 'Day in the Life' scenario testing	November 2021
Milestone 4c – Begin Structured Market simulation (Milestone 4 payment due at this point)	December 2021
Activate Parallel Operations – During January 2022, the ISO will activate a parallel operation environment to practice production grade systems integration as well as market processes and operating procedures in anticipation of the impending Avista	January 2022

activation as an EIM Entity and to confirm compliance with the EIM readiness criteria set forth in the ISO tariff.	
Milestone 5 – Start of parallel operations	February 2022
System Deployment and Go Live – Implementing the Project and going live will include resource registration, operating procedures and updates, execution of service agreements, completion of the Avista tariff process, applicable board approvals, the filing and acceptance of service agreements and tariff changes with FERC, and completion and filing of a readiness criteria certification in accordance with the ISO tariff.	March 2022
Milestone 6 – This milestone is complete upon the first production Avista energy imbalance market trade date.	April 1, 2022

ATTACHMENT B

CAISO FERC Filing Letter



California Independent System Operator Corporation

December 11, 2019

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

> California Independent System Operator Corporation Filing of CAISO Rate Schedule No. 6037

> > Docket No. ER20- -000

Dear Secretary Bose:

The California Independent System Operator Corporation ("CAISO") submits for filing and acceptance an agreement ("Implementation Agreement") dated April 25, 2019, between the CAISO and Avista Corporation ("Avista").1 The Implementation Agreement sets forth the terms under which the CAISO will extend its existing real-time energy market systems to provide imbalance energy service to Avista, pursuant to the CAISO's Energy Imbalance Market ("EIM") tariff.² Under the Implementation Agreement, Avista will compensate the CAISO for its share of the costs of system changes, software costs, and other configuration activities. The CAISO requests that the Commission accept the Implementation Agreement effective April 1, 2020, so that the extension of the real-time energy market to include Avista may proceed towards implementation no later than April 1, 2022.3

I. Background

The EIM provides other balancing authority areas the opportunity to participate in the real-time market for imbalance energy that the CAISO operates in its own balancing authority area. PacifiCorp's balancing authority areas (PacifiCorp East and PacifiCorp West) were the first two to join the EIM. The EIM market rules went into effect on October 24, 2014, for the first trading day

The CAISO submits the Implementation Agreement pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d.

The EIM tariff provisions are set forth primarily in Section 29 of the CAISO Tariff.

See Implementation Agreement, Section 1; see also CAISO Tariff, Section 29.2(b).

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November 1, 2014.4

The EIM has continued to develop and attract the interest of a diverse array of participants throughout the Western Interconnection. NV Energy joined on December 1, 2015, Puget Sound Energy Inc. and Arizona Public Service Company began participation on October 1, 2016, Portland General Electric Company followed on October 1, 2017, and the Idaho Power Company joined concurrently with Powerex Corp. on April 4, 2018. The Balancing Authority of Northern California ("BANC") commenced phase 1 EIM participation in April 2019. Also, the Salt River Agricultural Improvement and Power District and the City of Seattle, by and through its City Light Department ("Seattle City Light") intend to commence EIM participation in April 2020. NorthWestern Energy, the City of Los Angeles Department of Water and Power, Public Service Company of New Mexico, and the Turlock Irrigation District intend to commence EIM participation in April 2021, concurrent with BANC phase 2. Other entities, including the Bonneville Power Administration, Tucson Electric Power, and Tacoma Power, will commence EIM participation along with Avista in the spring of 2022.5

II. The Implementation Agreement

The Implementation Agreement details the contractual terms, including the scope of work and the agreed-upon fee, under which the CAISO will take the steps necessary to incorporate Avista into the EIM consistent with the identified key milestones and associated payment provisions.⁶ The Implementation Agreement is modeled after implementation agreements previously accepted by the Commission and, therefore, adopts provisions substantially similar to those which have been filed with and accepted by the Commission.⁷

Under the Implementation Agreement, the CAISO and Avista must complete a variety of project tasks necessary for implementation by April 1, 2022.

See Cal. Indep. Sys. Operator Corp., 149 FERC ¶ 61,005 (2014).

⁵ EIM participation materials are at https://www.westerneim.com/Pages/About/default.aspx.

See Implementation Agreement, Sections 3-4 and Exhibit A.

See Cal. Indep. Sys. Operator Corp., 143 FERC ¶ 61,298 (2013); Cal. Indep. Sys. Operator Corp., 147 FERC ¶ 61,200 (2014), Cal. Indep. Sys. Operator Corp., 151 FERC ¶ 61,158 (2015), Cal. Indep. Sys. Operator Corp., 152 FERC ¶ 61,090 (2015), Cal. Indep. Sys. Operator Corp., 154 FERC ¶ 61,020 (2016); Cal. Indep. Sys. Operator Corp., 155 FERC ¶ 61,311 (2016); Commission Letter Order, Docket No. ER17-868-000 (Mar. 14, 2017); Commission Letter Order, Docket No. ER17-1300-000 (May 18, 2017); Commission Letter Order, Docket No. ER17-2120-000 (Sept. 7, 2017); Cal. Indep. Sys. Operator Corp., 160 FERC ¶ 61,058 (2017); Commission Letter Order, Docket No. ER17-2559-000 (Nov. 16, 2017); Commission Letter Order, Docket No. ER19-1080-000 (Apr. 5, 2019); Commission Letter Order, Docket No. ER20-95-000 (Dec. 4, 2019).

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The parties chose this date to provide sufficient time for completion of all expected activities based on the size, complexity, and compatibility of Avista, including filing a certification of readiness with the Commission. The specific tasks may be modified by mutual agreement of the parties.⁸

The Implementation Agreement specifies that Avista will pay a fixed implementation fee of \$300,000, subject to completion of six specific milestones for recovery of the portion of the costs attributable to the CAISO's effort to configure its real-time market systems and incorporate Avista into the EIM.⁹ The methodology that the CAISO used to determine the implementation fee for Avista is the same methodology that the CAISO used to determine all of the previously accepted implementation fees for the other EIM participants described above.

The implementation fee is based on the CAISO's estimate of the costs it will incur to configure its real-time energy market to function as the EIM available to all balancing authority areas in the Western Electricity Coordinating Council ("WECC"). The components of that estimate are described in the Declaration of April D. Gordon, the CAISO's Director of Financial Planning and Procurement, which is included with this filing as Attachment B, and are summarized below.

Implementation Costs (in thousands of dollars)				
Licenses	12,150			
Energy management system upgrades	1,000			
Data storage	2,000			
Hardware upgrades	500			
Production software modifications	1,000			
Network configuration and mapping	500			
Integration	500			
Testing	1,500			
System performance tuning	250			
Training and operations readiness	150			
Project management	100			
Total	\$19,650			

Using this estimate, the CAISO derived a rate that allocates the \$19.65 million to potential entrants into the EIM according to their proportionate share of the total WECC load (excluding the CAISO's load), using updated data reported

⁸ Implementation Agreement, Section 3.

⁹ Id., Section 4.

The total estimated cost is a projection assuming the total work effort remains stable. Implementations either completed or underway are not considered in this estimate.

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to WECC. The CAISO then applied this fee to Avista's share of the updated WECC load (exclusive of the CAISO) to account for the Avista implementation fee.

The \$300,000 implementation fee is just and reasonable because it allocates a portion of the overall cost to Avista in an amount proportionate to Avista's share of the benefits that will ensue from the EIM, as measured by usage. In addition, as explained in Ms. Gordon's declaration, the CAISO confirmed the reasonableness of the resulting allocation by comparing it with an estimate of the costs the CAISO projects it will incur to configure its real-time energy market to function as the EIM that serves both the CAISO and Avista. This comparison confirmed that the fee reasonably represents those costs, even though certain costs may not be triggered by the Avista implementation but may instead be incurred by the CAISO to incorporate other entrants. In future implementations, the CAISO will confirm that the rate is reasonable by conducting a similar comparison of the total implementation costs with the individual entity costs.

The Implementation Agreement also provides for adjustment of the fixed implementation fee by mutual agreement of the parties in the event that the CAISO's actual or expected costs exceed the estimate that forms the basis of the implementation fee. 11 This provision allows for appropriate consideration of the allocation of costs associated with incorporation of Avista into the EIM. At the same time, the requirement for Avista to agree to any increase in the implementation fee ensures that Avista's share of those costs remains reasonable. The Implementation Agreement therefore reflects a reasonable balance of the parties' interest in preserving a level of cost certainty for Avista, while appropriately allocating the costs of implementing the EIM.

The Implementation Agreement represents a binding commitment of the parties. As such, it provides a workable framework for the parties to resolve any differences and to make course corrections along the way. On the other hand, the Implementation Agreement recognizes that the parties are entering into the agreement on a voluntary basis and circumstances may arise that interfere with the incorporation of Avista into the EIM through the planned process. Accordingly, the Implementation Agreement allows either party to terminate the agreement for any or no reason, provided it has first entered into good-faith discussions for 30 days in an effort to resolve any differences.¹² This and other

Implementation Agreement, Section 4. See also Commission Letter Order, Docket No. ER14-1350-000 (Apr. 8, 2014) (accepting amendment to EIM implementation agreement between the CAISO and PacifiCorp, to increase the PacifiCorp implementation fee to cover additional scope identified in the stakeholder process). PacifiCorp's request for additional scope is the only instance thus far where an amendment of the implementation fee has been necessary.

¹² Implementation Agreement, Section 2.

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related provisions mean that the parties must work closely together to achieve the goal of implementing Avista into the EIM in a timely manner.

The Implementation Agreement also includes general provisions that round out the parties' commitments. These general provisions address confidentiality (Section 5), limitations of liability (Section 6), representations and warranties (Section 7), general provisions such as those regarding notices, amendments, *etc.* (Section 8), venue (Section 9), communication (Section 10), and dispute resolution (Section 11).

III. Next Steps

Following the Commission's acceptance of the Implementation Agreement, the CAISO will incorporate Avista into the EIM. Avista's implementation will be subject to the CAISO tariff readiness requirements and the filing of a certificate of readiness with the Commission. ¹³ The CAISO will also take into consideration lessons learned from the prior implementations, as the readiness criteria represent the baseline for measuring the readiness of each new EIM entity's processes and systems for EIM participation.

Avista will continue to engage with its customers prior to participation in the EIM. The CAISO expects that Avista will make any necessary modifications to its open access transmission tariff in advance of the implementation date. The CAISO recognizes that this effort will involve Avista working with interested parties to facilitate implementation of the EIM, and the CAISO will engage in that effort as Avista considers it appropriate.

IV. Effective Date

The CAISO requests that the Implementation Agreement be made effective on April 1, 2020.

V. Request for Waivers

The CAISO submits that the filing substantially complies with the requirements of section 35.13 of the Commission's rules applicable to filings of this type. The CAISO respectfully requests waiver of any such requirement to the extent this filing does not satisfy that requirement. In particular, the CAISO requests waiver of the requirement to submit Period 1 and Period 2 schedules, because the implementation fee is a one-time fee that is not based on historical data in Period 1 schedules or on the projections in Period 2 schedules. In any event, good cause exists to waive filing requirements that are not material to the

See CAISO Tariff, Section 29.2(b).

^{14 18} C.F.R. § 35.13.

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Commission's consideration of the Implementation Agreement.

VI. Service

The CAISO has served copies of this filing upon all scheduling coordinators, Avista, the California Public Utilities Commission, and the California Energy Commission. In addition, the CAISO has posted the filing on the CAISO website.

VII. Contents of Filing

The following attachments, in addition to this transmittal letter, support the instant filing:

Attachment A Implementation Agreement; and

Attachment B Declaration of April D. Gordon, Director of

Financial Planning and Procurement

VIII. Correspondence

Pursuant to Rule 203(b)(3) of the Commission's Rules of Practice and Procedure, ¹⁵ the CAISO requests that all correspondence, pleadings, and other communications concerning this filing be served upon the following:

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California Independent System
Operator Corporation
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E-mail: janders@caiso.com

^{15 18} C.F.R. § 385.203(b)(3).

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IX. Conclusion

The CAISO respectfully requests that the Commission accept this filing and permit the Implementation Agreement, CAISO Rate Schedule No. 6037, to be effective April 1, 2020, as requested. If there are any questions concerning this filing, please contact the undersigned.

Respectfully submitted,

By: /s/ John C. Anders

Roger E. Collanton General Counsel Burton A. Gross Deputy General Counsel John C. Anders Assistant General Counsel California Independent System Operator Corporation Tel: (916) 608-7287

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