

**AMENDMENT NO. 2 TO AGREEMENT NO. 47573  
BETWEEN  
LOS ANGELES DEPARTMENT OF WATER AND POWER  
AND  
POWER COSTS, INC**

**THIS AMENDMENT NO. 2** to Agreement No. 47573 is made and entered into by and between the City of Los Angeles, acting by and through the Los Angeles Department of Water and Power, a municipal corporation (hereinafter referred to as LADWP) and Power Costs, Inc. (hereinafter referred to as "Consultant"), collectively the "Parties"; and

**WHEREAS**, the Parties have entered into Agreement No. 47573 (Agreement) wherein Consultant agreed to provide Meter Data Management System (MDMS) software, configuration, maintenance, support, and training services for the Energy Imbalance Market for the Agreement Total of \$1,606,985, effective November 18, 2019; and

**WHEREAS**, Change Order Nos. 1, 2, and 3 increased the Agreement Total by \$108,240 and Amendment No. 1 to the Agreement added two one-year extension options to the Agreement term for a maximum of five years and increased the not-to-exceed amount by \$407,875, to a new Agreement Total of \$2,123,100; and

**WHEREAS**, Change Order No. 4 increased the Agreement Total by \$24,600 and Change Order No. 5 increased the Agreement Total by \$24,600, for a total of \$49,200; and

**WHEREAS**, the Parties are amending the Agreement for the purpose of adding three years with two one-year extension options to the Agreement term, for a total term of up to ten years; updating the Statement of Work by adding software configuration and hosting storage, continuing hosting, maintenance, and support services; and increasing the Agreement Total by \$1,793,027, to a new not-to-exceed amount of \$3,965,327.

**NOW, THEREFORE, BE IT RESOLVED** that for good value and consideration including mutual exchange of promises, the Parties agree to amend Agreement No. 47573 as follows:

1. Subsection 13(a)(1) Extension Options as previously added with Amendment No. 1 and read as:

At LADWP'S sole option, the term of this Agreement may be extended for up to an additional two years, exercisable in one-year increments, or any portion thereof.

Subsection 13(a)(1) Extension Options is changed and now read as:

At LADWP'S sole option, the term of this Agreement may be extended for an additional two years, exercisable in one-year increments, or any portion thereof. Thereafter, the term of this

Agreement may be extended for up to an additional five years, exercisable in one three-year and two one-year increments, or any portion thereof.

2. Add the following new Subsection 12(i) Labor Rate Adjustments to Section 12, Fees, Invoices and Payment:

**i) Labor Rate Adjustments**

The Hourly Rate of only the Direct Labor rate table in Exhibit C, Fee Schedule, shall be firm for the first year following the effective date of Amendment No. 2. The Consultant may submit a written request to LADWP for only the Direct Labor rate adjustment per annum thereafter, at least 30 days before the anniversary of the effective date of this Agreement. If the request is not received 30 calendar days prior to the anniversary date, if approved, the request will be effective 30 calendar days after LADWP receives Consultant's written request. LADWP will review the rate adjustment request and may change it, upward or downward, by written mutual agreement between the Consultant and LADWP. Rate adjustments shall not exceed the change in the prior year's average Consumer Price Index calculated by using the "annual" averages column data for the United States (U.S.) Department of Labor, Bureau of Labor Statistics Chained Consumer Price Index for All Urban Consumers, U.S. city average (C-CPI-U).

3. Exhibit C – Fee Schedule and as amended with Amendment No. 1 is replaced in its entirety with the attached Exhibit C – Fee Schedule (Revision No. 1).
4. Add the following new item to the end of the table of Attachment C, Cloud Hosted Technical Best Practices, to Exhibit H – Statement of Work.

ID	Requirement Description
N/A	<p><b>Cloud Hosting Compute &amp; Storage Limits</b>            Contractor shall provide Hosting Service Storage (the "Hosting Services") for the cloud environments supporting MDMS system shall be subject to the compute and storage limit as defined in Attachment D.</p>

5. Add the attached new Attachment D, Hosted Service Storage and Compute Limit, to Exhibit H – Statement of Work.

Except as amended herein, all terms and conditions of Agreement No. 47573 shall remain in full force and effect. Notwithstanding the date of its final approval, this Amendment No. 2 shall be effective on November 17, 2024.

This Amendment No. 2 may be executed in one or more counterparts, and by the parties in separate counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same. The parties further agree that signatures scanned into .pdf (or signatures in another electronic format designated by LADWP) and sent by e-mail shall be deemed original signatures.

This Amendment No. 2 consists of four (4) pages, Exhibit C – Fee Schedule (Revision No. 1), and Attachment D, Hosted Services Storage and Compute Limit, to Exhibit H – Statement of Work.

[Signature Page follows.]

SIGNATURE PAGE

**IN WITNESS WHEREOF**, the Parties hereto have caused this Amendment No. 2 to Agreement No. 47573 to be executed by their authorized representatives on the date written below.

DEPARTMENT OF WATER AND POWER  
OF THE CITY OF LOS ANGELES BY  
BOARD OF WATER AND POWER COMMISSIONERS

By signing below, the signatories of the Department of Water and Power attest that they have no personal, financial, beneficial, or familial interest in this contract.

Date: \_\_\_\_\_

By: \_\_\_\_\_

JANISSE QUIÑONES  
Chief Executive Officer and Chief Engineer

APPROVED AS TO FORM AND LEGALITY  
HYDEE FELDSTEIN SOTO, City Attorney

By

*Bethany A Burgess*  
BETHANY A. BURGESS  
Deputy City Attorney  
Date: September 12, 2024

And: \_\_\_\_\_

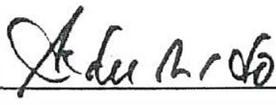
CHANTE L. MITCHELL  
Board Secretary

POWER COSTS, INC

Date: September 16, 2024

By: 

FRED N. LEE  
Chief Executive officer

And: 

SANDY B. HO  
Chief Financial Officer

**EXHIBIT C**  
**Fee Schedule**  
**(Revision No. 1)**

<b>Agreement No./ Title:</b>	47573 / EIM Meter Data Management System
<b>Firm Name:</b>	Power Costs Inc.
<b>Firm Address:</b>	301 David L. Boren Blvd., Suite 2000, Norman, OK 73072

<b>Item No.</b>	<b>Milestone Description</b>	<b>Amount Due by Delivery</b>	<b>Percentage of Total</b>
1	Notice to Proceed (NTP) issuance by LADWP, Standard Docs Delivered & Design Initiated and contractor will mobilize in 2 weeks	\$16,500	2.7%
2	Deliver Base Functional and Technical Design Documents	\$33,000	5.5%
3	Deliver EA OOTB w/ sample data on Hosted Server	\$33,000	5.5%
4	Functional PI Interface for OOTB	\$20,000	3.3%
5	LADWP Functional Design sign-off Phase 1	\$16,000	2.6%
6	LADWP Technical Design sign-off Phase 1	\$16,000	2.6%
7	Deliver PCI EA Interfaces. This task is now moved to Phase I	\$48,000	7.9%
8	Perform meter data validation using additional schedule and meter data sources. This task is now moved to Phase I	\$16,500	2.7%
9	Deliver FAT/SAT plans for Phase I	\$16,500	2.7%
10	FAT Successfully Complete for Phase I and LADWP sign-off & User Training (\$20,000)	\$99,000	16.40%
11	Deliver User Documents	16,500	2.70%
12	SAT Successfully Complete and LADWP sign-off for Phase I	\$66,000	10.90%
13	Conduct User Training	\$40,000	6.60%
14	LADWP Approval for Functional and Technical Design docs Phase II	\$12,000	2.00%
15	Successful Connectivity Testing	\$5,000	0.80%
16	Day-in-the-Life Testing Successfully Complete	\$5,000	0.80%
17	Market Simulation Testing Successfully Completed	\$10,000	1.70%
18	User Acceptance Testing Complete Phase I	\$10,000	1.70%

**EXHIBIT C  
Fee Schedule  
(Revision No. 1)**

19	Performance Testing Complete Phase I	\$10,000	1.70%
20	Parallel Operations Complete	\$10,000	1.70%
21	Go-Live Phase I	\$10,000	1.70%
22	Configure and test for irradiance and month end data	\$16,500	2.70%
23	Configure Business Reports	\$16,500	2.70%
24	Successful Completion of FAT Phase II	\$8,000	1.30%
25	Successful Completion of SAT Phase II	\$12,000	2.00%
26	User Acceptance Testing Complete Phase II	\$20,000	3.30%
27	Phase II deployed to Production, Performance Testing Complete & Final Documentation	\$22,000	3.60%
<b>Total</b>		<b>\$604,000</b>	<b>100.0%</b>

<b>Milestone Option</b>		
<b>Item No.</b>	<b>Description</b>	<b>Amount Due by Delivery</b>
28	Configure EA to support Meter Interrogation <b>Milestone Option (To be exercised in writing at the discretion of LADWP)</b>	\$66,000

<b>Standard Documents</b>	
<b>Item Description and Purpose</b>	<b>Amount Due Upon Delivery</b>
PCI User Guide, PCI Functional Specifications, PCI API Documentation, and PCI Hardware Document 2 weeks after contract signature	No Charge
As built documents no later than 2 weeks after delivery of code	No Charge
PCI Design Document (Functional & Technical) no later than 2 weeks after the completion of the design phase	No Charge
PCI SAT document 2 weeks before FAT, UAT and SAT	No Charge
PCI Release Notes with each new software release	No Charge
PCI User Guide, PCI Functional Specifications, PCI API Documentation, and PCI Hardware Document will be updated accordingly with the current software version.	No Charge

**EXHIBIT C  
Fee Schedule  
(Revision No. 1)**

<b>Other Direct Costs</b>		
<b>Item Description and Purpose</b>	<b>Billing Unit</b>	<b>Amount</b>
Perpetual License Fee	NET	\$353,572
Hosting Fee for Year 1	Annually	\$100,000
Hosting Fee for Year 2	Annually	\$100,000
Hosting Fee for Year 3	Annually	\$100,000
Hosting Fee for Year 4	Annually	\$100,000
Hosting Fee for Year 5	Annually	\$100,000
Hosting Fee for Year 6	Annually	\$105,000
Hosting Fee for Year 7	Annually	\$110,250
Hosting Fee for Year 8	Annually	\$115,763
Hosting Fee for Year 9	Annually	\$121,551
Hosting Fee for Year 10	Annually	\$127,628
Software Maintenance & Support for Year 1 (5x12)	Annually	\$ 70,714
Software Maintenance & Support for Year 2	Annually	\$ 72,128
Software Maintenance & Support for Year 3	Annually	\$ 73,571
Software Maintenance & Support for Year 3 (increase in annual support fee for 24/7 service; prorated monthly as appropriate)	Annually	\$ 18,393
Software Maintenance & Support for Year 4 (24/7 Service)	Annually	\$93,803
Software Maintenance & Support for Year 5 (24/7 Service)	Annually	\$95,679
Software Maintenance & Support for Year 6 (24/7 Service)	Annually	\$100,463
Software Maintenance & Support for Year 7 (24/7 Service)	Annually	\$105,486
Software Maintenance & Support for Year 8 (24/7 Service)	Annually	\$110,760
Software Maintenance & Support for Year 9 (24/7 Service)	Annually	\$116,298
Software Maintenance & Support for Year 10 (24/7 Service)	Annually	\$122,113

**EXHIBIT C  
Fee Schedule  
(Revision No. 1)**

Travel & Expense, in accordance with Exhibit D, Allowable Travel Expense (Not-to-Exceed Amount)	NET	\$67,000
<b>Other Direct Costs (Commenced Only with LADWP's Written Approval)</b>		
<b>Item Description and Purpose</b>	<b>Billing Unit</b>	<b>Amount</b>
<b>Implementation of Maintenance, Hosting &amp; Support Services for Load Serving Entities (LSE) the addition of two LSE's</b>	One Time	\$107,715
LSE Software Maintenance Support & Hosted Fee Year 6	Annually	\$30,000
LSE Software Maintenance Support & Hosted Fee Year 7	Annually	\$30,000
LSE Software Maintenance Support & Hosted Fee Year 8	Annually	\$30,000
LSE Software Maintenance Support & Hosted Fee Year 9	Annually	\$30,000
LSE Software Maintenance Support & Hosted Fee Year 10	Annually	\$30,000
System Access Fee 40k/LSE Year 6	Annually	\$80,000
System Access Fee 40k/LSE Year 7	Annually	\$80,000
System Access Fee 40k/LSE Year 8	Annually	\$80,000
System Access Fee 40k/LSE Year 9	Annually	\$80,000
System Access Fee 40k/LSE Year 10	Annually	\$80,000
<b>Total</b>		<b>\$3,137,887</b>
<b>Complimentary Professional Services</b>		
PCI will provide a complimentary professional services package of 125 hours. Consulting Services, System Enhancements, and Training.	No Charge	

<b>Change Orders</b>	
<b>Change Order Description</b>	<b>Not to Exceed Amount</b>
Change Order No. 1	\$77,900
Change Order No. 2	\$22,140
Change Order No. 3	\$8,200

**EXHIBIT C  
Fee Schedule  
(Revision No. 1)**

Change Order No. 4	\$24,600
Change Order No. 5	\$24,600
<b>Total</b>	<b>\$157,440</b>

<b>Agreement Total</b>	<b>\$3,965,327</b>
------------------------	--------------------

Notes:

1. PCI to invoice the perpetual license fees for PCI EA after successful delivery of PCI's EA system out of the box with limited data on PCI hosted servers.
2. PCI will invoice the initial hosted fee for PCI EA after successful delivery of PCI's EA system out of the box with limited data on PCI hosted servers. A monthly prorated fee will be payable if the hosted period is less than a full year. The hosting servers will hold data for past three years, any subsequent data will be held at LADWP.
3. The annual support fee is payable upon successful SAT completion for the PCI EA system. A monthly prorated fee will be payable if the support period is the less than a full year.
4. The PCI software suite will be sized to handle the LADWP BA portfolio of more than 70 resources with approximately 10 GW capacity and will accommodate normal growth (i.e. – additions to the generation portfolio other than via acquisitions). The numbers for the LA portfolio are estimates and if the portfolio is larger at go-live there shall be no impact on price and PCI will accommodate normal growth based on the Go-live BA portfolio.
5. The Agreement is firm fixed price. All necessary interfaces to meet requirements shall be included in fixed fee.
6. PCI will deliver the requirements at the agreed upon fixed fee.
7. LADWP portfolio will have approximately:
  - 70-100 resources
  - 30-40 tie lines, tie lines may have base and dynamic ETSRs
  - 3-4 load zones\*\*

The numbers for the LA portfolio are estimates and if the portfolio would require additional hardware in excess of the limits set forth in Attachment D, Hosted Service Storage and Compute Limit, additional fees for hosting will be required.

<b>DIRECT LABOR</b>	
<b>Labor Classification</b>	<b>Hourly Rate</b>
Project Manager / Technical Lead / Developer / Tester / Architect	\$235

<b>Rates for incremental environment usage for Attachment D, Hosted Service Storage and Compute Limit from Exhibit H</b>	
<b>Usage Type</b>	<b>Rates</b>
RDS Base Storage	\$0.4603 per GB per availability zone per month
File Share Storage	\$0.834 per GB per availability zone per month
RDS Compute (db.m5.large single AZ)	\$225.16 per 2 vCPUs & 8 GB RAM per availability zone per month
Fees for Application Compute (r5.xlarge)	\$595.11 per 4 vCPUs & 32 GB RAM per month
Fees for Application Compute (t3.2xlarge)	\$653.04 per 8 vCPUs & 32 GB RAM per month
Fees for Application Compute (t3.xlarge)	\$337.03 per 4 vCPUs & 16 GB RAM per month
Fees for Application Compute (t3.large)	\$167.17 per 2 vCPUs & 8 GB RAM per month

**EXHIBIT C  
Fee Schedule  
(Revision No. 1)**

Fees for Compute Processes for GenTrader Grid Servers (C5 Class)	\$953.26 per 4 CPU cores per month
Fees for Compute Processes for GenTrader Grid Servers (T2 Class)	\$319.91 per 4 CPU cores per month
Fees for QlikView Compute (r5.large)	\$308.06 per 2 vCPUs & 16 GB RAM per month
Fees for QlikView Compute (r5.xlarge)	\$595.11 per 4 vCPUs & 32 GB RAM per month
Fees for QlikView Compute (r5.2xlarge)	\$1169.20 per 8 vCPUs & 64 GB RAM per month
Fees for QlikView Compute (r5.4xlarge)	\$2317.38 per 16 vCPUs & 128 GB RAM per month
Fees for QlikView Compute (r5.8xlarge)	\$3981.73 per 32 vCPUs & 256 GB RAM per month
Thinfinity Remote Desktop	\$120 per user license per year

Notes:

1. All services subject to the Hourly Rates and fees charged for incremental environment usage in accordance with the above table and Attachment D to Exhibit H will be subject to issuance of a Change Order or Amendment adding additional funds to the Agreement Total.

**END OF FEE SCHEDULE**

## EXHIBIT H STATEMENT OF WORK

### Attachment D Hosted Service Storage and Compute Limit

1. Base Storage Threshold. The Hosting Services shall include the allocation of database storage described herein (the "**Base Storage Threshold**"). PCI shall notify an authorized Client Representative in writing when the Client has reached eighty-five percent (85%) of the Client's then-current Base Storage Threshold. Within five (5) business days of receiving PCI's notice, Client Representative may request in writing that PCI increase the Base Storage Threshold. If PCI does not receive Client's written request to increase the Base Storage Threshold within five (5) business days of its receipt of the notice, to support the continuity of Client's Hosted Services operations, when the storage reaches 100% of the Base Storage Threshold, PCI may overwrite existing storage. If Client Representative requests that PCI increase the Base Storage Threshold the additional storage will be added by PCI and Client will be charged for the incremental storage at the rates described herein. Storage is incremented in 500 GB units and billed annually beginning in the year in which the increment is added.
  
2. File Share Storage. The Hosting Services shall include the allocation of File Share Storage described herein (the "**File Share Storage**"). PCI shall notify an authorized Client Representative in writing when Client has reached ninety percent (90%) of Client's then-current File Share Storage setting. Within five (5) business days of receiving PCI's notice, Client Representative may request in writing that PCI increase the File Share Storage. If PCI does not receive Client's written request to increase the File Share Storage threshold within five (5) business days of its receipt of the notice, to support the continuity of Client's Hosted Services operations, when the storage reaches 100% of the File Share Storage threshold, PCI may overwrite existing storage. If Client Representative requests that PCI increase the File Share Storage threshold the additional storage will be added and Client will be charged for the incremental storage at the rates described herein. Storage is incremented in 500 GB units and billed annually beginning in the year in which the increment is added.
  
3. Application Compute. The Hosting Services shall include the allocation of Application Compute Servers described herein (the "**Application Compute**"). Application compute servers are used to run clients' workflows using PCI products in PCI GSMS & PCI Kube Platforms. The vCPUs and RAM allocated are used by all implemented workflows. The client can request additional Application Compute by submitting a request through the issue tracking system. PCI shall complete the request and bill the Client at the listed rate. The minimum increment size is 2vCPUs with 8 GB of RAM. The default duration is yearly.
  
4. Grid Compute. The Hosting Services shall include the allocation of Grid Compute described below:
  - PCI GSMS (LADWP-MT)

## **EXHIBIT H STATEMENT OF WORK**

- Production Environment
  - "GSMS & GT" RDS Base Storage Threshold 1,000 GB
  - RDS Compute (Multiple Availability Zone): 4 vCPUs & 16 GB of RAM
  - File Share Storage 2,000 GB
  - QlikView Server with 32 GB of RAM
  - Application Compute (Application Servers):
    - Task Servers: 2 servers, with 4 vCPUs & 16 GB of RAM each
    - User Servers: 2 servers, with 2 vCPUs & 8 GB of RAM each
  - GenTrader Compute (Grid Servers) Maximum Number of CPUs 24 of T2 (burstable)
- Dev Environment
  - "GSMS & GT" RDS Base Storage Threshold 1,000 GB
  - RDS Compute (Single Availability Zone): 2 vCPUs & 8 GB of RAM
  - File Share Storage 500 GB
  - QlikView Server with 32 GB of RAM
  - Application Compute (Application Servers):
    - Task/User Servers: 2 servers, with 4 vCPUs & 16 GB of RAM each
  - GenTrader Compute (Grid Servers) Maximum Number of CPUs 4 of T2 (burstable)
- Test Environment
  - "GSMS & GT" RDS Base Storage Threshold 1,000 GB
  - RDS Compute (Single Availability Zone): 2 vCPUs & 8 GB of RAM
  - File Share Storage 1,000 GB
  - QlikView Server with 32 GB of RAM
  - Application Compute (Application Servers):
    - Task Servers: 2 servers, with 4 vCPUs & 16 GB of RAM each
    - User Servers: 2 servers, with 2 vCPUs & 8 GB of RAM each
  - GenTrader Compute (Grid Servers) Maximum Number of CPUs 8 of T2 (burstable)
- PCI GSMS (LADWP-TO)
  - Production Environment
    - "GSMS" RDS Base Storage Threshold 500 GB
    - RDS Compute (Multiple Availability Zone): 2 vCPUs & 8 GB of RAM
    - File Share Storage 500 GB
    - Application Compute (Application Servers):
      - Task Servers: 2 servers, with 4 vCPUs & 16 GB of RAM each
      - User Servers: 2 servers, with 2 vCPUs & 8 GB of RAM each
  - Dev Environment
    - "GSMS" RDS Base Storage Threshold 500 GB
    - RDS Compute (Single Availability Zone): 2 vCPUs & 8 GB of RAM
    - File Share Storage 500 GB
    - Application Compute (Application Servers):

## EXHIBIT H STATEMENT OF WORK

- Task/User Servers: 2 servers, with 2 vCPUs & 8 GB of RAM each
- Test Environment
  - "GSMS" RDS Base Storage Threshold 500 GB
  - RDS Compute (Single Availability Zone): 2 vCPUs & 8 GB of RAM
  - File Share Storage 500 GB
  - Application Compute (Application Servers):
    - Task Servers: 2 servers, with 2 vCPUs & 8 GB of RAM each
    - User Servers: 2 servers, with 2 vCPUs & 8 GB of RAM each
- PCI GSMS (LADWP-ET)
  - Production Environment
    - "GSMS" RDS Base Storage Threshold 500 GB
    - RDS Compute (Multiple Availability Zone): 2 vCPUs & 8 GB of RAM
    - File Share Storage 500 GB
    - Application Compute (Application Servers):
      - Task/User Servers: 2 servers, with 4 vCPUs & 16 GB of RAM each
  - Dev Environment
    - "GSMS" RDS Base Storage Threshold 500 GB
    - RDS Compute (Single Availability Zone): 2 vCPUs & 8 GB of RAM
    - File Share Storage 500 GB
    - Application Compute (Application Servers):
      - Task/User Servers: 2 servers, with 2 vCPUs & 8 GB of RAM each
  - Test Environment
    - "GSMS" RDS Base Storage Threshold 500 GB
    - RDS Compute (Single Availability Zone): 2 vCPUs & 8 GB of RAM
    - File Share Storage 500 GB
    - Application Compute (Application Servers):
      - Task/User Servers: 2 servers, with 4 vCPUs & 16 GB of RAM each
- Data Transfer Fees: The base pricing includes data transfer fees to support normal workflows. The data transfers should not exceed \$100 per month for each of the 3 eco- systems (LADWP-MT, LADWP-TO, LADWP-ET). Any excess will be billed at cost.
- Client will have PCI GSMS: Production, Dev, and Test environments.
- QlikView: Existing QlikView licenses will be in use and no new ones will be purchased

Rates for incremental environment usage are listed in Exhibit C, Fee Schedule.

### End of Attachment D

## END OF STATEMENT OF WORK