PHILADELPHIA GAS WORKS
800 West Montgomery Avenue • Philadelphia, PA 19122

February 6, 2026

Ms. Gemela N. McClendon, Esquire
Executive Director
Philadelphia Gas Commission
One Parkway Building
1515 Arch Street, Ninth Floor
Philadelphia, PA 19102

RE: FY 2027 Capital Budget – Public Advocate Data Responses.

Dear Ms. McClendon:

Attached are PGW responses to the Public Advocate's data requests for PA-CB-40, 41, 43, and PA-CB-45 through PA-CB-58. Please note the response to PA-CB-44 was addressed verbally during the Informal Discovery session. Also provided is a revised response to PA-CB-20.

Sincerely,

William J. Gallagher
VP Budget and Strategic Development

Attachments
cc: Service List

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-40: Refer to 47-01-1-01.

a. Please provide the amount included in the budget for the specific components of this project.
b. Please identify the specific components required to implement this project.
c. Please provide the dollar amount included in the budget for this project that is related to the reserve funding for "unexpected hardware needs".
d. Identify the hardware included as "unexpected hardware needs". If there is no specific hardware related to "unexpected hardware needs", please explain how the additional cost associated with the reserve funding was determined.
e. Please explain how PGW determined how much expansion of the existing virtual desktop infrastructure was needed.

RESPONSE PROVIDED BY: Shane Mayo, Director IT Finance & Service Management

RESPONSE:

a. Dell Hyperconverged VXRail (Montgomery) $400,000
Dell Hyperconverged VXRail (NOC) $400,000
Budget Reserve $100,000

b. The components needed for this project are Dell VXRails that are hyperconverged, which include computing, network and storage equipment in one solution.

c. This project includes a $100,000 reserve.

d. The reserve is required for unexpected cost increases and unforeseen infrastructure expenses. The parent company for the VMWare software used by VXRails has a lengthy quoting process, making it difficult to get accurate quotes in a timely fashion. Our vendor representative provided an estimate based on historical and current market information at the time.

e. We currently have 410 VDI instances. Each hyperconverged environment can provide 40-50 VDI instances depending on the resources needed per instance. To expand PGW's current environment, we need to add at least an additional 100 instances to allow for the removal of the remote desktop farm currently in use.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST

FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-41: Refer to 47-01-1-03.

a. Please show how the $300,000 for IS Hardware was derived from the documents attached to the Capital Project Budget Justification.

b. It appears that annually, since FY 2025, PGW includes requests for expansion of Expansion SAN Storage. Please provide an analysis showing the actual spending on SAN Storage versus the budgeted amount for the FY 2025 and FY 2026 capital budgets.

RESPONSE PROVIDED BY: Shane Mayo, Director, IT Finance and Service Management

RESPONSE:

a. Please see attached budgetary quotes.

FY27 Additions - SAN Storage - Mont

FY27 Additions - SAN Storage - NOC.

b.

Fiscal Year	Project	Budget Amount	Actual Spending	Remaining Budget	To Be Purchased By
2025	47-01-03	$255,000	$0	$255,000	FY26 3rd Q
2026	47-01-03	$101,000	$0	$101,000	FY27 3rd Q

POMEROY TECHNOLOGIES, LLC

1050 Elijah Creek Road,
Hebron, KY 41048
Phone: 717-516-7105

PGW - 1090
Expansion Budgetary-
20661454-1

Number: **92117553**

Date: **10/20/2025**

Bill To:
Thaear Masad
PHILADELPHIA GAS WORKS Ref: 33042
800 W MONTGOMERY AVE
PHILADELPHIA, PA 19122
Phone: (215)235-1000
Email: thaear.masad@pgworks.com

Ship To:
Thaear Masad
PHILADELPHIA GAS WORKS
800 W MONTGOMERY AVE
PHILADELPHIA, PA 19122
Phone: (215)235-1000
Email: thaear.masad@pgworks.com

Item #	Mfr. Part	Description	Price	Qty.	Extended
	VSP E1090 Upgrade Appliance Product				
*1	A34V-600-850-UNI.P	Universal rail kit **Mfr:**	$ 124.48	1	**$ 124.48**
*2	043-100210-02-UL-S.P	POWER CORD IEC C14 TO IEC C13 250VAC 10A WORLDWIDE APPROVALS 0.7M **Mfr:**	$ 5.24	2	**$ 10.48**
*3	E1090DW-F1000-DBSE.P	2U SFF Drive Box (DBS. platinum) - 2 Port Connectivity **Mfr:**	$ 3,535.72	1	**$ 3,535.72**
*4	DW-F800-SCQ1F.P	VSP G SAS Cable 1.5m **Mfr:**	$ 102.33	2	**$ 204.66**
*5	EDW-F1000-DBSFB2.P	2U Drive Box Front Bezel **Mfr:**	$ 172.24	1	**$ 172.24**
*6	E1090-A-4X15RMGM.P	VSP E1090 Advanced 4 x 15TB SAS SSD Package **Mfr:**	$ 33,451.06	4	**$ 133,804.24**
*7	045-000392-01.P	SVC VSP E1090 Upgrade Installation - 9 x 5 (Local Business Hours) **Mfr:**	$ 791.27	1	**$ 791.27**
				Group Total	**$ 138,643.09**
	VSP E1090 Appliance Support				
*8	045-000384-01.P	SVC VSP E1090 - Standard Mo **Mfr:**	$ 1,189.31	11	**$ 13,082.41**
				Group Total	**$ 13,082.41**
	8 item(s)			**Sub-Total**	**$ 151,725.50**
				Freight	**$ 0.00**
				Tax @ 0%	**$ 0.00**
				Total	**$ 151,725.50**
					(*) Tax exempted Part(s)

Quote Valid Until: 11/13/2025

Payment Details

Pay by: Company PO
Payment Term 30 days

Shipping and Delivery Details

Shipping via: BEST GND
Delivery Notes: Thaear Masad ; 215-235-1000 ; thaear.masad@pgworks.com

Terms and Conditions

Due to the unpredictable nature of tariffs, the quoted prices are subject to change. However, we will make every effort to honor the original pricing provided to you. This quotation has been prepared by Pomeroy based upon current product pricing and product availability as of the date of this quotation. The quotation provided hereon is subject to change if, after the issuance of this quotation, product pricing and/or product availability is affected as the direct result of a force majeure event or circumstance that is beyond Pomeroy's reasonable control.

For any questions regarding our returns policy please contact your Pomeroy sales associate or Click on the link below for a copy of our written policy.
Returns Policy

Prepared by: **Tim DeBross** Email: **Timothy.Debross@Pomeroy.com** Phone: **717-516-7105**

PURESTORAGE

Quote Date: 10.15.26
Client: PGW
Partner TBD

Product	Description	QTY	MSRP	Price	Total
	36TB Add				
DFM-DP-36TB-4x9.1TB	Pure Storage FlashArray DFM datapack 36TB-4x9.1TB	1	$ 223,200.00	$ 72,540.00	$ 72,540.00
DFM-DP-36TB, 1MO,PRM,FVR	DFM-DP-36TB 1 Month Evergreen Forever Subscription, 4 Hour Delivery, 24/7 Support	15	$ 890.00	$ 835.00	$ 12,525.00
PS-DP-FAISCAP-AD	FA Capacity Add	1	$ 10,500.00	$ -	$ -
				PROJECT TOTAL	**$85,065.00**

Product	Description	QTY	MSRP	Price	Total
	55TB Add				
DFM-DP-55TB-6x9.1TB	Pure Storage FlashArray DFM datapack 55TB-6x9.1TB	1	$ 334,800.00	$ 100,440.00	$ 100,440.00
DFM-DP-55TB, 1MO,PRM,FVR	DFM-DP-55TB 1 Month Evergreen Forever Subscription, 4 Hour Delivery, 24/7 Support	15	$ 1,335.00	$ 1,250.00	$ 18,750.00
PS-DP-FAISCAP-AD	FA Capacity Add	1	$ 10,500.00	$ -	$ -
				PROJECT TOTAL	**$119,190.00**

Adam Steitz
Account Executive, Pure Storage
asteitz@purestorage.com

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-43: Refer to 47-01-2-02.

a. Please show how the $2,350,000 for Replacement Network and Server Hardware was derived from the documents attached to the Capital Project Budget Justification.

RESPONSE PROVIDED BY: Shane Mayo, Director, IT Finance and Service Management

RESPONSE: Please see the attached quotes


FY27 Add & Replace - VXrails .msg


FY27 Replacements - 9K Cores for Mont.


FY27 Replacements-Switches.pdf


FY27 Replacements-UCS.pdf

O'Boyle, Mary Lynn

From: Rosemary Pron <rosemary.pron@ahead.com>
Sent: Wednesday, October 15, 2025 4:25 PM
To: Masad, Thaear A.
Subject: Re: budgetary quote

You got it, Thaear. We should be able to provide some great volume discounts when you're ready to make that purchase, but a safe budgetary number for 10 nodes is **$1,900,000**.

Let me know if you need anything else!

AHEAD

Rosemary Pron
Managing Director, AHEAD

484.787.7441 | www.ahead.com | rosemary.pron@ahead.com
For some Public Sector contracts, we will continue to operate as CDI

From: Masad, Thaear A. <Thaear.Masad@pgworks.com>
Sent: Wednesday, October 15, 2025 4:15 PM
To: Rosemary Pron <rosemary.pron@ahead.com>
Subject: RE: budgetary quote

Thanks for jumping on the call.
I spoke to will and the request we are looking for is to replace the 8 that are going EOL and an addition of 2 Vxrails (totaling 10).

Thank you

PGW
Thaear Masad
Manager, Server Engineers & Desktop Support | Information Services
Philadelphia Gas Works | 800 W. Montgomery Ave | Philadelphia, PA 19122
Phone: (215) 684-6711
Follow us on Facebook Twitter and YouTube

From: Rosemary Pron <rosemary.pron@ahead.com>
Sent: Wednesday, October 15, 2025 12:59 PM
To: Masad, Thaear A. <Thaear.Masad@pgworks.com>
Subject: Re: budgetary quote

External Email Notice. This Email originates from outside of PGW.

Hi!!

As I shared via text, I'm glad this is coming up since some nodes are coming up in 2026 that would require purchase by mid-2026 to be safe. I've listed those service tags below for your records. For budgetary needs, I went back to the order you just did with me to get a per node cost - if I add 10% (for price increases, etc.) on top of the normal price (price before Dell's additional discount at the end), the cost per node amounts to **~$190,000**. This price includes the required VMware licensing as well.

So - with that said, for your two asks, the budgetary number could be the same, but I wanted to make sure you're considering all 8 nodes that are expiring in 2024.

Essentially for both of your asks regarding 4 nodes, you could budget **$760,000**. If you wanted to budget for all 8, **$1,520,000**.

JBPG704	12/15/2026
HBPG704	12/15/2026
BXD4343	12/15/2026
BXD5343	12/15/2026
BXD6343	12/15/2026
BXD7343	12/15/2026
3HVYPR3	12/15/2026
4HVYPR3	12/15/2026

AHEAD

Rosemary Pron
Managing Director, AHEAD

484.787.7441 | www.ahead.com | rosemary.pron@ahead.com
For some Public Sector contracts, we will continue to operate as CDI

From: Masad, Thaear A. <Thaear.Masad@pgworks.com>
Sent: Wednesday, October 15, 2025 11:02 AM
To: Rosemary Pron <rosemary.pron@ahead.com>
Subject: budgetary quote

Rosemary-
That time of year again and we are planning for our future.

Can you send me 2 separate budgetary quotes. 1 for expanding on our existing Vxrail environment with 4 more nodes. The 2nd quote for replacing our original 4 nodes with 4 new nodes. As usual this is a rush, can you please send something over as soon as you can.

Thank you.

Thaear Masad
Manager, Server Engineers & Desktop Support | Information Services
Philadelphia Gas Works | 800 W. Montgomery Ave | Philadelphia, PA 19122
Phone: (215) 684-6711
Follow us on Facebook Twitter and YouTube

Price Estimate

cisco

Rick Scatchard
Cisco Systems, Inc.
NO ADDRESS LINE1,0
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UNITED STATES
Ph no:+1 856-642-7092

UNITED STATES

Price Estimate for planning and information purposes only and is not a binding offer from Cisco.

Date : 20-Oct-2025

Estimate ID: AU164224597PR
Deal ID : NA

All Prices Shown in USD

Part Number	Description	Service Duration (Months)	Estimated Lead Time (Days)	Unit List Price	Pricing Term	Qty	Unit Net Price	Disc(%)	Extended Net Price
N9K-C9508	Nexus 9508 Chassis with 8 linecard slots	---	28	26,289.13		2	13,144.57	50.00	26,289.14
CON-L14HR-N9508	CX LEVEL 1 24X7X4 Nexus 9508 Chassis with 8 linecard slots	60	N/A	157,062.05		2	141,355.85	10.00	282,711.70
NXOS-MSLL-10.5.2F SA	Nexus 9500, 9300 NX-OS Software 10.5.2 (64bit) Merch Silicon	---	21	0.00		2	0.00	50.00	0.00
N9K-C9500-ACK	Nexus 9500 Accessory Kit	---	28	0.00		2	0.00	50.00	0.00
MODE-NXOS	Mode selection between ACI and NXOS	---	21	0.00		2	0.00	50.00	0.00
N9K-C9508-FAN2	Nexus 9508 Fan Tray (Generation 2)	---	28	6,171.11		6	3,085.56	50.00	18,513.36
N9K-PUV-3000W-B	Nexus 9500 3000W Universal PS, Port-side Intake	---	28	6,788.22		12	3,394.11	50.00	40,729.32
CAB-HV-25A-SG-US1	NORTH AMERICA, Saf-D-Grid/Saf-D-Grid 400VDC 20A	---	28	0.00		12	0.00	50.00	0.00
DCN-OTHER	Select if this product will NOT be used for AI Applications	---	3	0.00		2	0.00	50.00	0.00
N9K-SC-A	System Controller for Nexus 9500	---	28	0.00		4	0.00	50.00	0.00
N9K-C9508-FM-R2	Fabric Module for 400G in N9508R with buffer support	---	28	32,398.34		12	16,199.17	50.00	194,390.04
N9K-C9500-RMK	Nexus 9500 Rack Mount Kit	---	14	0.00		2	0.00	50.00	0.00
N9K-C9500-LC-CV	Nexus 9500 Linecard slot cover	---	14	0.00		8	0.00	50.00	0.00
N9K-C9500-P-CV	Nexus 9500 Power Supply slot cover	---	14	0.00		4	0.00	50.00	0.00
NXOS-SLP-INFO-9K	Info PID for Smart Licensing using Policy for N9K	---	21	0.00		2	0.00	50.00	0.00
N9K-SUP-B+	Supervisor B+ for Nexus 9500	---	28	24,684.45		2	12,342.23	50.00	24,684.46
N9K-SUP-B+	Supervisor B+ for Nexus 9500	---	28	24,684.45		2	12,342.23	50.00	24,684.46
C1A1TN9500M816-5Y	DCN Advantage Term N9500 M8/M16, 5Y	---	3	119,014.80		2	65,458.20	45.00	130,916.40
Initial Term - 60.00 Months | Auto Renewal Term - 12 Months | Billing Model - Prepaid Term									
SVS-L1N9KA-M816-5Y SA	Cisco Support Enhanced for DCN Advantage N9500 M8/M16, 5Y	---	3	0.00		2	0.00	45.00	0.00
Initial Term - 60.00 Months | Auto Renewal Term - 12 Months | Billing Model - Prepaid Term									
DCN-ADOPT-BAS	Nexus(DCN) - Virtual adopt session http://cs.co/requestCSS	---	3	0.00		2	0.00	45.00	0.00
Initial Term - 60.00 Months | Auto Renewal Term - 12 Months | Billing Model - Prepaid Term									
SW-OTHER	Select if this product will NOT be used for AI Applications	---	3	0.00		2	0.00	45.00	0.00
Initial Term - 60.00 Months | Auto Renewal Term - 12 Months | Billing Model - Prepaid Term									
N9K-X96136YC-R	Nexus 9500 R-Series Linecard, 16x10G + 32x10/25G + 4x100G	---	28	44,925.69		2	22,462.85	50.00	44,925.70
N9K-X96136YC-R	Nexus 9500 R-Series Linecard, 16x10G + 32x10/25G + 4x100G	---	28	44,925.69		2	22,462.85	50.00	44,925.70
N9K-X96136YC-R	Nexus 9500 R-Series Linecard, 16x10G + 32x10/25G + 4x100G	---	28	44,925.69		2	22,462.85	50.00	44,925.70
N9K-X96136YC-R	Nexus 9500 R-Series Linecard, 16x10G + 32x10/25G + 4x100G	---	28	44,925.69		2	22,462.85	50.00	44,925.70

Valid through
FOB Point None
Note:

Product Total	508,993.58
Service Total :	282,711.70
Subscription Total	130,916.40
Total Price:	922,621.68

Signed: ______________________

Rick Scatchard

"This Price Estimate does not constitute an offer by CISCO to sell products, but is instead an invitation to issue a purchase order to CISCO until the valid date specified in this price estimate. Such a purchase order will be subject to Cisco's standard procedures, terms and conditions for the acceptance of purchase orders. This order may be subject to indirect tax (VAT, GST, sales tax or other indirect taxes), duty and freight charges even if not noted on this estimate."

Price Estimate

Rick Scatchard
Cisco Systems, Inc.
NO ADDRESS LINE1,0
0,0-0
UNITED STATES
Ph no:+1 856-642-7092

UNITED STATES

Price Estimate for planning and information purposes only and is not a binding offer from Cisco.

Date : 14-Oct-2025

Estimate ID: XW164184629GF
Deal ID : NA

All Prices Shown in USD

Part Number	Description	Service Duration (Months)	Estimated Lead Time (Days)	Unit List Price	Pricing Term	Qty	Unit Net Price	Disc(%)	Extended Net Price
C9300-48UN-E	Catalyst 9300 48-port of 5Gbps Network Essentials	---	20	15,900.34		3	6,042.13	62.00	18,126.39
CON-L1NCD-C93004UN	CX LEVEL 1 8X7NCDCatalyst 9300 48port of 5Gbps Network E	60	N/A	8,120.00		3	8,120.00	0.00	24,360.00
C9300-DNA-E-48 SA	C9300 DNA Essentials, 48-Port Term Licenses	---	14	0.00		3	0.00	62.00	0.00
CON-L1SWT-C93E48	CX LEVEL 1 SW SUB C9300 DNA Essentials	60	N/A	330.00		3	330.00	0.00	990.00
C9300-DNA-E-48-5Y	C9300 DNA Essentials, 48-Port, 5 Year Term License	60	N/A	2,211.99		3	1,106.00	50.00	3,318.00
C9300-NW-E-48 SA	C9300 Network Essentials, 48-port license	---	14	0.00		3	0.00	62.00	0.00
SC9300UK9-1712	Cisco Catalyst 9300 XE 17.12 UNIVERSAL	---	14	0.00		3	0.00	62.00	0.00
PWR-C1-715WAC-P	715W AC 80+ platinum Config 1 Power Supply	---	20	0.00		3	0.00	62.00	0.00
PWR-C1-715WAC-P/2	715W AC 80+ platinum Config 1 SecondaryPower Supply	---	20	1,528.88		3	580.97	62.00	1,742.91
CAB-TA-NA	North America AC Type A Power Cable	---	28	0.00		6	0.00	62.00	0.00
NO-POWER-CORD	ECO friendly green option, no power cable will be shipped	---	20	0.00		3	0.00	62.00	0.00
SSD-240G	Cisco pluggable USB3.0 SSD storage	---	20	1,834.66		3	697.17	62.00	2,091.51
STACK-T1-50CM	50CM Type 1 Stacking Cable	---	20	122.31		3	46.48	62.00	139.44
CAB-SPWR-30CM	Catalyst Stack Power Cable 30 CM	---	20	116.20		3	44.16	62.00	132.48
NM-BLANK-T1	Cisco Catalyst Type 1 Network Module Blank	---	20	0.00		3	0.00	62.00	0.00
C9K-ACC-RBFT	RUBBER FEET FOR TABLE TOP SETUP 9200 and 93xx	---	20	0.00		3	0.00	62.00	0.00
C9K-ACC-SCR-4	12-24 and 10-32 SCREWS FOR RACK INSTALLATION, QTY 4	---	20	0.00		3	0.00	62.00	0.00
CAB-GUIDE-1RU	1RU CABLE MANAGEMENT GUIDES 9200 and 9300	---	20	0.00		3	0.00	62.00	0.00
NETWORK-PNP-LIC SA	Network Plug-n-Play Connect for zero-touch device deployment	---	3	0.00		3	0.00	62.00	0.00

Valid through
FOB Point None
Note:

Product Total	22,232.73
Service Total :	25,350.00
Subscription Total	3,318.00
Total Price:	**50,900.73**

Signed: _____

Rick Scatchard

Price Estimate

Rick Scatchard
Cisco Systems, Inc.
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0,0-0
UNITED STATES
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Cisco Systems, Inc.
301 Lindenwood Drive, Suite 210,
MALVERN,PENNSYLVANIA-
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Ph no:+1 408 894 6808

Price Estimate for planning and information purposes only and is not a binding offer from Cisco.

Date : 20-Oct-2025

Estimate ID: SU164264898IL
Deal ID : NA

All Prices Shown in USD

Part Number	Description	Service Duration (Months)	Estimated Lead Time (Days)	Unit List Price	Pricing Term	Qty	Unit Net Price	Disc(%)	Extended Net Price
UCSX-M8-MLB	UCSX M8 Modular Server and Chassis MLB	---	N/A	0.00		1	0.00	0.00	0.00
UCSX-210C-M8-U	UCS 210c M8 Compute Node w/o CPU, Memory, Storage, Mezz	---	56	7,871.53		8	7,871.53	0.00	62,972.24
CON-SNTP-UCSX21CU	SNTC-24X7X4 UCS 210c M8 Compute Node w o CPU, Memory	36	N/A	3,582.00		8	3,582.00	0.00	28,656.00
IMM-MANAGED	Deployment mode for UCS FI connected Servers in IMM mode	---	21	0.00		8	0.00	0.00	0.00
UCSX-MLV5D200GV2D	Cisco VIC 15230 2x 100G mLOM X-Series w/Secure Boot	---	42	2,026.38		8	2,026.38	0.00	16,211.04
UCSX-M2-480G-D	480GB M.2 SATA SSD	---	21	866.34		16	866.34	0.00	13,861.44
UCSX-TPM-002D-D	TPM 2.0 TCG FIPS140-2 CC+ Cert M7 Intel MSW2022 Compliant	---	35	54.04		8	54.04	0.00	432.32
UCSX-C-SW-LATEST-D	Platform SW (Recommended) latest release XSeries ComputeNode	---	21	0.00		8	0.00	0.00	0.00
UCS-DDR5-BLK	UCS DDR5 DIMM Blanks	---	21	0.00		128	0.00	0.00	0.00
UCSX-M8A-FMEZZBLK	Front Mezzanine Blank M8 X series servers	---	21	0.00		8	0.00	0.00	0.00
UCSX-M8I-HS-F	UCSX Intel M8 Compute Node Front CPU Heat Sink	---	21	0.00		8	0.00	0.00	0.00
UCSX-M8I-HS-R	UCSX Intel M8 Compute Node Rear CPU Heat Sink	---	21	0.00		8	0.00	0.00	0.00
UCSX-M2I-HWRD-FPS	UCSX Front panel w/M.2 RAID controller Included for SATA drv	---	42	0.00		8	0.00	0.00	0.00
UCSX-MRX64G2RE5	64GB DDR5-6400 RDIMM 2Rx4 (16Gb)	---	21	4,761.48		128	4,761.48	0.00	609,469.44
UCSX-CPU-I6740P	Intel I6740P 2.1GHz/270W 48C/288MB DDR5 6400MT/s	---	21	18,386.14		16	18,386.14	0.00	294,178.24
DC-MGT-SAAS	Cisco Intersight SaaS	---	N/A	0.00		1	0.00	0.00	0.00
Initial Term - 36.00 Months | Auto Renewal Term - 0 Months | Billing Model - Prepaid Term | Requested Start Date - 05-Dec-2025 | Requested End Date - 04-Dec-2028									
DC-MGT-IS-SAAS-AD SA	Infrastructure Services SaaS/CVA - Advantage	---	3	55.00	1	8	55.00	0.00	15,840.00
SVS-DCM-SUPT-BAS	Cisco Support Standard for DCM	---	3	0.00	1	1	0.00	0.00	0.00
DC-MGT-UCSC-1S SA	UCS Central Per Server - 1 Server License	---	3	0.00	1	8	0.00	0.00	0.00
DC-MGT-ADOPT-BAS	Intersight - Virtual adopt session http://cs.co/requestCSS	---	3	0.0000	1	1	0.0000	0.00	0.00
UCSX-9508-D=	UCS 9508 Chassis	---	21	8,821.02		1	8,821.02	0.00	8,821.02
CON-SNTP-UCSXD958	SNTC-24X7X4 UCS 9508 Chassis	36	N/A	1,536.00		1	1,536.00	0.00	1,536.00
UCSX-9508-CAK-D	UCS 9508 Chassis Accessory Kit	---	21	0.00		1	0.00	0.00	0.00
UCSX-9508-RBLK-D	UCS 9508 Chassis Active Cooling Module (FEM slot)	---	42	0.00		2	0.00	0.00	0.00
UCSX-9508-ACPEM-D	UCS 9508 Chassis Rear AC Power Expansion Module	---	49	0.00		2	0.00	0.00	0.00
UCSX-9508-KEYAC-D	UCS 9508 AC PSU Keying Bracket	---	21	0.00		1	0.00	0.00	0.00
UCSX-9508-FSBK-D	UCS 9508 Chassis Front Node Slot Blank	---	35	0.00		8	0.00	0.00	0.00

Valid through
FOB Point None
Note:

Product Total	517,944.11
Service Total :	27,172.80
Subscription Total	8,712.00
Total Price:	**553,828.91**

Signed: _____

Rick Scatchard

Price Estimate

Rick Scatchard
Cisco Systems, Inc.
NO ADDRESS LINE1,0
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Price Estimate for planning and information purposes only and is not a binding offer from Cisco.

Date : 20-Oct-2025

Estimate ID: SU164264898IL
Deal ID : NA

All Prices Shown in USD

Part Number	Description	Service Duration (Months)	Estimated Lead Time (Days)	Unit List Price	Pricing Term	Qty	Unit Net Price	Disc(%)	Extended Net Price
UCSX-PSU-2800AC-D	UCS 9508 Chassis 2800V AC Dual Voltage PSU Titanium	---	49	1,164.64		6	1,164.64	0.00	6,987.84
CAB-C19-CBN	Cabinet Jumper Power Cord, 250 VAC 16A, C20-C19 Connectors	---	21	0.00		6	0.00	0.00	0.00
UCSX-I-9108-25G-D	UCS 9108-25G IFM for 9508 Chassis	---	21	9,085.88		2	9,085.88	0.00	18,171.76
UCSX-C-DEBUGCBL-D	UCSX Compute Node Debug Cable	---	21	59.76		1	59.76	0.00	59.76
UCSX-CHASSIS-SW-D	Platform SW (Recommended) latest release for X9500 Chassis	---	21	0.00		1	0.00	0.00	0.00
SFP-25G-AOC3M=	25GBASE Active Optical SFP28 Cable, 3M	---	17	590.38		8	590.38	0.00	4,723.04

Valid through
FOB Point None
Note:

Product Total	517,944.11
Service Total :	27,172.80
Subscription Total	8,712.00
Total Price:	553,828.91

Signed: _____

Rick Scatchard

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-45: **Refer to the response to KB-HE-3. PGW states that the alternative solutions it evaluated were upgrading LNG trucking facilities; the spot purchase of pipeline gas; and increasing pipeline capacity. Did PGW evaluate a modular design that allow scalability in terms of volumes to be processed? Regardless of your response, please explain why PGW made the decision.**

RESPONSE PROVIDED BY: Daniel J. Cassidy, P.E., Vice President Technical Operations
Erik Wickley-Olsen. P.E., Principal Engineer

RESPONSE:

Yes, a modular system was evaluated. PGW found that for the same capacity as the proposed liquefier, operating and maintenance costs for a modular system would be significantly higher. In addition, a modular system requires a larger footprint than a single plant of equivalent capacity.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-46: **Refer to the response to KB-HE-6. PGW states "the plant has required extensive maintenance and overhauls of major plant components over the years." Wouldn't the overhaul of major plant components result in extending the plant's service life?**

a. If not, please explain why that is the case and provide data or other evidence to support your response.

b. If yes, how long is expected from service life extension expected? Provide data or other evidence to support your response.

RESPONSE PROVIDED BY: Daniel J. Cassidy, P.E., Vice President Technical Operations
Erik Wickley-Olsen. P.E., Principal Engineer

RESPONSE:

a. Overhaul of major plant components would not extend the service life of the plant. The overhaul of major components would only extend the life of those plant components that are replaced. Also, note that the cold box cannot be overhauled without full disassembly and replacement of the internal heat exchangers.
b. See above response.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-47: **Refer to the response to KB-HE-6.**

a. Please provide the outage time for each of the events that resulted in loss of production.

b. Given that the cost of some of the repairs and maintenance events were budgeted, is it PGW's position that each of the events were "unexpected shutdown"? If not, please identify the events that were budgeted and planned.

RESPONSE PROVIDED BY: Daniel J. Cassidy, P.E., Vice President Technical Operations
Erik Wickley-Olsen. P.E., Principal Engineer

RESPONSE:

a. There are no detailed records for many of the outages listed. In general, the TSA pretreatment vessel overhauls likely resulted in the longest loss of production periods. The 2023 work resulted in a one-month loss of production.
b. Most of these larger maintenance events were planned in response to plant performance issues or recommended maintenance schedules provided by the manufacturer.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-48: Refer to the response to KB-HE-6. What would be the avoided costs that would result from a failure of the liquefier?

RESPONSE PROVIDED BY: Daniel J. Cassidy, P.E., Vice President Technical Operations
Erik Wickley-Olsen. P.E., Principal Engineer

RESPONSE:

The ability to produce LNG with an on-site liquefier allows PGW to avoid significant operating costs each year. Also, please refer to the response to KB-HE-7.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-49: **Refer to the response to KB-HE-8. PGW states "the thermal cycling experienced by these systems was/has been significantly less than the PGW system." However, in the response to PA-CB-4, PGW states "Based upon CH-IV experience with similar facilities CH-IV assumed that these liquefiers experience thermal cycling events approximately three times per year." Isn't it true that the statement that the Richmond Expander Plant's thermal cycling is 5 times that of similar plants is also an assumption?**

RESPONSE PROVIDED BY: Daniel J. Cassidy, P.E., Vice President Technical Operations
Erik Wickley-Olsen. P.E., Principal Engineer

RESPONSE:

The consultant (CH-IV) assumed thermal cycling events based on the standard annual operation of a peak-shaving LNG plant. That is, the consultant assumed that (i) plant start-up for liquefaction would take place in the spring to replenish LNG storage; (ii) the plant is then restarted in the fall to top-off the tanks; and (iii) one additional start-up is allowed for in the summer. Please note that LNG peak shaving plants run as stated above, operate for several months uninterrupted. In contrast, PGW's LNG plant needs to start-up and shut-down frequently due to tail-gas limitations (based upon demand in the PGW Distribution system).

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-50: **Refer to the response to KB-HE-8. Please provide any evidence that shows that the size of liquefier is relevant to the service life liquefier.**

RESPONSE PROVIDED BY: Daniel J. Cassidy, P.E., Vice President Technical Operations
Erik Wickley-Olsen. P.E., Principal Engineer

RESPONSE:

The size of the liquefier is not known to affect service life.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-51: Refer to the response to KB-HE-15. Please provide the calculation of the 6.9% escalation rate and provide the source documents.

RESPONSE PROVIDED BY: Daniel J. Cassidy, P.E., Vice President Technical Operations
Erik Wickley-Olsen. P.E., Probcipal Engineer

RESPONSE:

The escalation is an effective rate for FY29, which is roughly calculated by [adding] the PGW Finance Department's assumed escalation rates for FY27 (2.3%), FY28 (2.2%), and FY29 (2.2%). Most of the spending will occur in FY29.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-52: Refer to KB-ID-1.

a. Please explain in, layman's term, what happens in the expander. Is this phase the opposite of the compression?

b. When reference is made to the size liquefier, is it the cold box that is usually being referred to or the entire plant facility?

c. When the service life of the LNG production plant is being referred to, is it the entire facility depicted on the flow chart or certain components?

d. Why would it not be reasonable to replace those specific components that may be facing issues with reliability or capacity.

RESPONSE PROVIDED BY: Daniel J. Cassidy, P.E., Vice President Technical Operations
Erik Wickley-Olsen. P.E., Principal Engineer

RESPONSE:

a. The expander is part of the compander (compressor/expander). The compander consists of separate compression and expansion turbines mechanically joined together such that they both operate together. The expander turbine receives the energy from the decompressed gas and powers the compressor turbine.
b. The size of the liquefier refers to the size of the whole plant, i.e. all of the components (including the cold box) that are required to produce LNG.
c. The service life of the LNG plant refers to the entire facility depicted on the flow chart, with the cold box the most "at risk" of failure.
d. It would not be reasonable to invest in a cold box only with an insufficient guarantee of overall plant performance. Please refer to the response to PA-CB-3.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-53: Refer to PA-CB-6.

a. Why would pursue the new LNG plant before finalizing the 3P? Isn't there a risk of expenditures being made which might ultimately not be the preference of a 3P partner?

b. Please explain how PGW know the appropriate size of the plant without knowing the requirements of a 3P partner.

c. Is there a current potential 3P partner stated in implied in the response to PA-CB-7?

RESPONSE PROVIDED BY: Daniel J. Cassidy, P.E., Vice President Technical Operations
Erik Wickley-Olsen. P.E., Principal Engineer

RESPONSE:

a. There are two competing considerations to address (i) the risk of existing plant failure which increases every year (operational risk); and (ii) the risk that the public/private partnership (3P) negotiations might not be successfully completed (economic risk). PGW believes that LNG plant failure places gas customers at greatest risk — as we need an operational plant to meet design winter conditions (as we are experiencing at present). Therefore, PGW believes that it is prudent to continue with engineering work on the LNG replacement project so that the proposed 10 MMSCFD Plant can be be constructed and operational as soon as possible. [The Company is also pursuing 3P negotiations as successful negotiations may yield significant savings for gas customers.]

b. PGW knows what is required for a design winter. PGW does not know what a third party needs to make the partnership acceptable to them.

c. Yes. PGW is currently in an RFP process to secure a 3P partner.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-54: **Refer to the response to PA-CB-14 (d). Please clarify the response. Is the 10,000 MSCFD for PGW alone or PGW and a 3P partner?**

RESPONSE PROVIDED BY: Daniel J. Cassidy, P.E., Vice President Technical Operations
Erik Wickley-Olsen. P.E., Principal Engineer

RESPONSE:

10,000 MSCFD is the capacity of the liquefier that PGW requires solely to meet its annual LNG production needs.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-55: Refer to the response to PA-CB-34. Please explain whether PGW has explored using the training facilities of other gas utilities in the region rather than investing in Leak City?

RESPONSE PROVIDED BY: Shawn Murray – Director, Resource Management and Technology

RESPONSE: PGW has explored using the training facilities of other gas utilities in the region for leak training, and there are several reasons for the decision to build our own:

- PGW conducts initial and refresher leak training annually for all Field Operations totaling approximately 800 employees each year. Transporting this volume of employees to another utility's training center would create significant scheduling and operational challenges, including travel time, transportation costs, and potential overtime expenses.
- External facilities are primarily designed to serve their own workforce. Coordinating access when those utilities are not using their facilities would be difficult and could lead to delays in PGW's training schedule, which is critical for maintaining compliance and operational readiness.
- PGW operates in a highly urban environment, and our leak training focuses on scenarios unique to dense city infrastructure, including narrow streets, complex underground utilities, and high pedestrian traffic. Many regional facilities are designed for suburban or rural conditions, which do not adequately replicate the challenges faced in Philadelphia.

Having our own facility will allow PGW to tailor training scenarios to our specific operational requirements and regulatory standards. It also ensures flexibility to incorporate new technologies, procedures, and safety protocols without relying on another utility's schedule or facility limitations. Some additional considerations for not using other training facilities are:

- Liability and insurance concerns when using another utility's property.

- Security and confidentiality of PGW-specific procedures and emergency response protocols.
- Potential union and contractual implications related to offsite training.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-56: Refer to the response to PA-CB-34. For an urban setting like Philadelphia, would investing in Leak City be an expensive endeavor? Please explain what efforts PGW would make to minimize costs.

RESPONSE PROVIDED BY: Shawn Murray – Director, Resource Management and Technology

RESPONSE: Leak City will be built at the North Operations Center as part of the current training facilities. The construction of Leak City will be completed by PGW employees which will allow PGW to complete this project with minimal impact to the Capital Budget. While the name "Leak City" suggests a large-scale development, the actual footprint will be modest. The footprint of Leak City will be confined to the "Track and Field" area in Lot 2C. This area has been highlighted in response to KB-ID-4 where the entire NOC site plan (KB-ID-4 NOC Lease Exhibit A-1 Site Plan.pdf) has been provided.

The design will focus on simulating structures commonly encountered in Philadelphia but as much smaller examples (ex. sheds designed to simulate houses). This approach ensures realistic, urban-specific training scenarios without requiring extensive land or infrastructure investment. By leveraging internal resources, utilizing existing space, and maintaining a compact design, PGW will significantly reduce costs while still delivering a highly effective and practical training environment.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-57: Refer to the response to PA-CB-34. Please identify all expenses associated with Leak City other than the $41,000 shown in the budget.

RESPONSE PROVIDED BY: Shawn Murray - Director, Resource Management and Technology

RESPONSE: All other expenses associated with the construction of Leak City will be Operating expenses. PGW will need to procure asphalt and concrete to create the simulated roadway and footway. PGW will also need to procure utility boxes to simulate the types of structures PGW employees will encounter in the field. The additional Operating expenses will be detailed in the FY27 Operating Budget.

To clarify, the entire external area we plan to build out will be referred to as "Leak City." Within this space, we will install piping designed to simulate various tasks—such as installing repair sleeves, clamps, and service connections—using pressurized air. The piping will be configured to connect to a standard tow-behind compressor (what our Distribution crews use for pneumatic tools). This setup will allow us to replicate an inches-water-column system without releasing natural gas into the atmosphere. This area is also currently used for excavation and backfilling training where employees can learn how to use both pneumatic and manual tools. Additionally, PGW conducts mechanized excavation and backfilling training for employees qualified to operate mechanized excavation equipment.

This project will be supported through the Operating budget, as we will utilize our own crews and existing piping inventory. It's important to note that the pressurized piping will not be used in the leak investigation training area. For leak investigation scenarios, we will employ a specialized natural gas detector that connects to a tablet via Bluetooth. This system can be remotely controlled to display simulated readings, creating realistic training conditions without any actual gas present.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST
FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-58: Refer to the response to PA-CB-34. Has PGW identified inadequacies in its current training practices for detecting leaks, minimizing accidents, injuries, and property damage, etc.? If so, please explain.

RESPONSE PROVIDED BY: Shawn Murray – Director, Resource Management and Technology

RESPONSE: PGW has not identified any inadequacies in its current training practices. PGW previously conducted leak investigation training at the Passyunk Training Facility within Leak Alley. Leak Alley simulated a single block with simulated houses and utility structures. Although PGW has not identified any training inadequacies, Leak City will improve PGW's ability to train employees for less common, but equally as important, scenarios. We also recognize that training employees in environments that closely replicate real-world conditions, while maintaining a controlled and safe setting, provides significant benefits. This approach enhances employee confidence and preparedness, ensuring they are knowledgeable of our policies and procedures while also more comfortable and effective when encountering actual field situations.

Currently, we train leak investigation in two ways:

1. **Field Simulation:** We take students outside the NOC gates into the surrounding city streets and conduct leak investigation exercises using our training gas detection instruments. Occasionally, customers observe these sessions, and we explain that the activity is part of training.

2. **On-the-Job Training (OJT):** Employees perform leak investigations on actual calls under the direct supervision of a qualified supervisor, who oversees the entire process.

Leak City will allow us to move these exercises behind PGW gates, eliminating customer interactions and enabling us to create multiple controlled scenarios that closely mimic real-world conditions while maintaining a completely safe environment.

RESPONSE TO THE PUBLIC ADVOCATE'S DATA REQUEST

FISCAL YEAR 2027 CAPITAL BUDGET

PA-CB-20:

(Supplemental)

Reference Commissioner Urbania's statement at the August 13, 2024, Gas Commission Meeting ("I share the Advocate's concern that if the spending authority is granted, there will be no study vetting the necessity of the project in the context of declining load, which could result in wasting $2 million of ratepayer funds.").

a. **How was declining load (specifically, retail load) factored into PGW's decision to propose replacement of the Richmond LNG liquefier?**

b. **How was declining load (specifically, retail load) factored into the sizing of PGW's proposed LNG liquefier?**

c. **How does the ability to interrupt large industrial customers to continue to serve other rate classes factor into PGW's proposal?**

d. **Provide any workpapers or other studies discussing, describing or modeling the impact of declining load on PGW's gas liquefaction needs.**

RESPONSE PROVIDED BY: Daniel J. Cassidy, P.E., Vice President Technical Operations

RESPONSE:

a. Retail load, defined as customers that are Interruptible Transportation (Rate IT), is not factored in LNG design winter assumptions as all planning is based on Firm customer load only. PGW plans for a design winter and makes its portfolio decisions accordingly. Being the supplier of last resort, PGW must plan for the use of vaporized natural gas (VNG) from stored LNG for extreme weather events and as a critical asset that is needed for various system failure scenarios in the gas supply and distribution system.

b. Rate IT customer load was not factored into the sizing of the LNG Liquefier.

c. PGW's LNG is not used for Rate IT customers, so interrupting industrial customers does not affect PGW's LNG usage.

d. There are no studies or workpapers available. PGW's Gas Planning and Gas Management teams meet periodically to review Design Day and Design Winter

LNG needs. Refer to response "a" above for what PGW must consider when determining these needs.