



**INVITATION TO BID  
ITB # 2018-28  
ISSUE DATE: May 15, 2018**

**Technology Services Server Room Upgrade**

**BID DUE DATE AND TIME  
June 7, 2018 (2:00 PM, PST)**

**SUBMITTAL LOCATION:**

**Clackamas County Procurement Division  
Attn: George Marlton, Director  
Public Services Building  
2051 Kaen Road  
Oregon City, OR 97045**

**[Procurement@clackamas.us](mailto:Procurement@clackamas.us)**

## **1.0 GENERAL**

### **1.01 SCHEDULE OF EVENTS:**

Invitation to Bid Issue Date.....	<b>May 15, 2018</b>
Protest of Specifications Deadline .....	<b>May 22, 2018</b>
Request for Clarification or Change Deadline .....	<b>May 31, 2018</b>
Bid Due Date and Time.....	<b>June 7, 2018</b>
Deadline for Protest of Award .....	7 calendar days after date on Notice of Award letter

This Schedule of Events is subject to change. Any changes will be made through the issuance of Written Addenda.

### **1.02 ISSUING OFFICE:**

The Procurement Division of Clackamas County ("County") is the issuing office and is the sole point of contact for this Invitation to Bid ("ITB"). All questions regarding this ITB should be directed to the Administrative Contact person identified below:

Name: Ryan Rice  
Title: Contract Analyst  
Telephone: (503) 742-5446  
Email: [rrice@clackamas.us](mailto:rrice@clackamas.us)

### **1.03 DEFINITIONS**

As used in this ITB, the terms set forth below are defined as follows:

1. "Addenda" means an addition to, deletion from, a material change in, or general interest explanation of the ITB.
2. "Exhibits" means those documents which are attached to and incorporated as part of the ITB.
3. "Bid" means an offer, binding on the Bidder and submitted in response to an Invitation to Bid.
4. "Bidder" means an entity that submits a Bid in response to an ITB.
5. "Bid Due Date and Time" means the date and time specified in the ITB as the deadline for submitting Bids.
6. "Invitation to Bid" or "ITB" means a Solicitation Document for the solicitation of competitive, Written, signed and sealed Bids in which Specifications, price, and delivery (or project completion) are the predominant award criteria.
7. "LCRBR" means the Clackamas County Local Contract Review Board Rules found at: <http://www.clackamas.us/code/documents/appendixc.pdf>
8. "Responsible" means an entity that demonstrates their ability to perform satisfactorily under a contract by meeting the applicable standards of responsibility outlined in LCRBR C-047-0500.
9. "Responsive" means a Bid that has substantially complied in all material respects with the criteria outlined in the ITB.
10. "Written or Writing" means letters, characters, and symbols inscribed on paper by hand, print, type, or other method of impression intended to represent or convey particular ideas or meanings.

## **2.0 INTRODUCTION AND BACKGROUND**

### **2.01 INTRODUCTION:**

The purpose of this bid is to contract with an APC Certified Reseller for the full supply and installation of all material and equipment needed for the server room upgrade. All equipment will be per APC/Schneider Electric CTO Report hereby attached and incorporated by reference.

Vendor Bid Price to be inclusive of all material, labor, and warranties to complete the full server room upgrade.

### **2.02 BACKGROUND:**

The Technology Services-1 Operations center ("TS1") is outdated and antiquated with failing UPS & HVAC equipment. It has been identified as a County / Technology Services ("TS") priority to remodel to a more efficient and flexible design allowing for long-term support and alterations to meet changing technology requirements. This, along with the probable relocation of the TS1 to another location on the Red Soils Campus due to the planned addition of a new County Courthouse, required a flexible, dynamic and "transportable" design be utilized. After reviewing the market options, standards, and availability, it was determined that APC had the best overall integrated designs that met all of the TS and Facilities Management requirements for this mission critical facility.

A team of TS and Facilities Management staff worked with engineers and integrators from APC for over a year, reviewing several operation center design options, to develop a design that meets all of the requirements for:

- Current TS and Facilities operational support requirements
- Ability to be relocated as needed
- Scalable growth capability
- Support by TS, Facilities and local vendors as required
- Fully integrated and compatible equipment
- Fully warrantied and maintenance supportable
- Efficient and flexible design
- Leader in the marketplace
- Available and supported by many certified vendors

This team worked with the APC engineers to develop the final design as specified by the equipment/installation specifications from APC / Schneider Electric specification report for the project.

Clackamas County sought brand specification approval per ORS 279B.215. On April 4, 2018, the County issued a Notification of Brand Name Specification specifically for this project. The notification was published for fourteen (14) days and received no protests. The Clackamas County Board of County Commissioners approved the brand specification at the Board of County Commissioners' Business Meeting held May 10, 2018.

## **3.0 SPECIFICATIONS / STATEMENT OF WORK**

### **3.01 REQUIRED SPECIFICATIONS:**

In order to qualify as a Responsive Bidder, the Bid needs to meet the required specifications per Exhibit A, attached and hereby incorporated by reference.

### **3.02 TERMS AND CONDITIONS:**

All installation services must be performed by a contractor licensed by the Oregon Construction Contractors Board. Installation services shall be performed in accordance with the Clackamas County General Conditions for Public Improvement Contracts dated November 1, 2017.

**Sample Contract:** Submission of a Bid in response to this ITB indicates Bidder's willingness to enter into a contract containing substantially the same terms (including insurance requirements) of the sample contract identified below. No action or response to the sample contract is required under this ITB. Any objections to the sample contract terms should be raised in accordance with 7.03 or 7.04 of this ITB, pertaining to requests for clarification or change or protest of the ITB specifications, and as otherwise provided for in this ITB. This ITB and all supplemental information in response to this ITB will be a binding part of the final contract.

The applicable Goods and Services Sample Contract and the General Conditions for this ITB can be found at <http://www.clackamas.us/bids/terms.html>.

#### **4.0 BIDDER QUALIFICATIONS**

##### **4.01 MINIMUM QUALIFICATIONS:**

In order to qualify as a Responsive Bidder, the Bidder needs to meet the minimum qualifications below: All vendors must be APC Reseller Certified for all phases / portions of the bid to include sales, configuration, installation and maintenance.

#### **5.0 REQUIRED SUBMITTALS**

##### **5.01 SUBMISSION OF BID AND QUANTITY:**

Submit one (1) **sealed** copy of the Bid by US Mail, delivery service, or hand delivery to the address below or via email to [procurement@clackamas.us](mailto:procurement@clackamas.us). If Bid is emailed, the subject line must read "Bid #2018-28 Technology Services Server Room Upgrade". The Bid, regardless of how it is submitted must contain all of the required information and must have signatures on the required forms. Bid envelopes must specifically identify the **ITB Number and Title**.

Submit Bids (including all required documents) by 2:00 PM PT to:

Clackamas County Procurement Division  
Attn: George Marlton, Director  
Public Services Building  
2051 Kaen Road  
Oregon City, OR 97045

Late Bids will not be accepted.

##### **5.02 REQUIRED SUBMITTALS:**

It is the Bidder's sole responsibility to submit information in fulfillment of the requirements of this ITB. If pertinent information or required submittals are not included within the Bid, it may cause the Bid to be rejected.

Bidders should submit the following information:

- Description of how the goods or services offered specifically meet the required specifications described in Exhibit A.
- Evidence of APC Certification documentation must be attached to Bid as described in Section 4.0, Bidder Qualifications.
- Exhibit B, Certifications, fully completed.
- Exhibit C, References, fully completed.
- Exhibit D, Bid Price Form, fully completed.

## **6.0 EVALUATION AND AWARD**

### **6.01 EVALUATION:**

Bids will be evaluated to determine the lowest Responsive Responsible Bidder based upon the ITB, Exhibits and Addenda. County may engage in any of the processes identified in the applicable LCRBR to determine the Contract award.

### **6.02 BEST AND FINAL OFFER:**

In accordance with LCRBR C-047-0261, the County may request best and final offers from those Bidders determined by County to be reasonably viable for contract award. However, County reserves the right to award a contract on the basis of initial bid received. Therefore, each bid should contain the Bidder's best terms from a price and technical standpoint. Following evaluation of the best and final offers, County may select for final contract negotiations/execution the offers that are most advantageous to County, considering cost and the evaluation criteria in this ITB.

### **6.03 INTERGOVERNMENTAL COOPERATIVE PROCUREMENT STATEMENT:**

Pursuant to ORS 279A and LCRBR, other public agencies shall have the ability to purchase the awarded goods and services from the awarded contractor(s) under terms and conditions of the resultant contract. Any such purchases shall be between the contractor and the participating public agency and shall not impact the contractor's obligation to County. Any estimated purchase volumes listed herein do not include other public agencies and County makes no guarantee as to their participation. Any proposer, by written notification included with their proposal, may decline to extend the prices and terms of this solicitation to any and/or all other public agencies. County grants to any and all public serving governmental agencies, authorization to purchase equivalent services or products described herein at the same submitted unit bid price, but only with the consent of the contractor awarded the contract by the County.

### **6.04 INVESTIGATION OF REFERENCES:**

County reserves the right to investigate and to consider the references and the past performance of any Bidder with respect to such things as its performance or provision of similar goods or services, compliance with specifications and contractual obligations, and its lawful payment of suppliers, subcontractors, and workers. County further reserves the right to consider past performance, historical information and facts, whether gained from the Bid, interviews, references, County or any other source. County may postpone the award or execution of the Contract after the announcement of the notice of intent to award in order to complete its investigation.

## **7.0 INSTRUCTIONS TO BIDDERS**

### **7.01 APPLICABLE STATUTES AND RULES:**

This ITB is subject to the applicable provisions and requirements of the Oregon Revised Statutes, and the LCRBR.

### **7.02 MANUFACTURER'S NAMES AND APPROVED EQUIVALENT:**

"NO SUBSTITUTE" for any manufacturers' names, trade name, brand names, information and/or catalogue numbers listed in this specification will be allowed for this project. Bids which do not comply with these requirements are subject to rejection.

### **7.03 REQUEST FOR CLARIFICATION OR CHANGE:**

Requests for clarification or change of the ITB must be in Writing and received by the issuing office no later than the Request for Clarification or Change Deadline as specified in the Schedule of Events. Such requests for clarification or change must include the reason for the Bidder's

request. County Tech will consider all timely requests and, if acceptable to County, amend the ITB by issuing an Addendum. An Addendum will be posted at [www.clackamas.us/bids](http://www.clackamas.us/bids). Envelopes or e-mails containing requests should be clearly marked as a Request for Clarification or Change and include the ITB Number and Title.

7.04 **PROTESTS OF THE BID/SPECIFICATIONS:**

Protests must be in accordance with LCRBR C-047-0730. Protests of Specifications must be received in writing on or before 5:00 p.m. (Pacific Time), on the date indicated in the Schedule of Events, or within three (3) business days of issuance of any addendum, at the Procurement Services Division address listed in Section 1 of this ITB. Protests may not be faxed. Protests of the ITB specifications must include the reason for the protest and any proposed changes to the requirements.

7.05 **ADDENDA:**

If any part of this ITB is changed, an addendum will be provided to Proposers that have provided an address to the Procurement Division for this procurement. It shall be Proposers responsibility to regularly check the Bids and Contract Information page at <http://www.clackamas.us/bids/> for any published Addenda or response to clarifying questions.

7.06 **PREPARING AND SIGNATURE:**

All Required Submittals must be Written and signed by an authorized representative with authority to bind the Bidder. Signature certifies that the Bidder has read, fully understands, and agrees to be bound by the ITB and all Exhibits and Addenda to the ITB.

7.07 **PUBLIC RECORD:**

Upon completion of the ITB process, information in your Bid will become subject records under the Oregon Public Records Law. Only those items considered a “trade secret” under ORS 192.501(2), may be exempt from disclosure. If a Bid contains what the Bidder considers a “trade secret” the Bidder must mark each sheet of information as such. Only bona fide trade secrets may be exempt and only if public interest does not require disclosure.

7.08 **MODIFICATION:**

Prior to submittal, Bidders should initial modifications or erasures in ink by the person signing the Bid. After submittal but prior to the Bid Due Date and Time, Bids may be modified by submitting a Written notice indicating the modifications and a statement that the modification amends and supersedes the prior Bid. After the Bid Due Date and Time, Bidders may not modify their Bid.

7.09 **WITHDRAWALS:**

A Bidder may withdraw their Bid by submitting a Written notice to the issuing office identified in this ITB prior to the Bid Due Date and Time. The Written notice must be on the Bidder’s letterhead and signed by an authorized representative of the Bidder. The Bidder, or authorized representative of the Bidder, may also withdraw their Bid in person prior to the Bid Due Date and Time, upon presentation of appropriate identification and evidence of authority to withdraw the Bid satisfactory to County.

7.10 **LATE SUBMITTALS:**

Bids and Written notices of modification or withdrawal must be received no later than the Bid Due Date and Time. County may not accept or consider late Bids, modifications, or withdrawals except as permitted in LCRBR C-047-0330(6).

7.11 **BID OPENING:**

Bids will be opened immediately following the Bid Due Date and Time at the Submittal Location. Bidder may attend the Bid opening. Only the names of the Bidders submitting Bids and base bid price will be announced. No other information regarding the content of the Bids will be available.

- 7.12 **BIDS ARE OFFERS:**  
The Bid is the Bidder's offer to enter into a contract pursuant to the terms and conditions specified in the ITB, its Exhibits, and Addenda. The offer is binding on the Bidder for one hundred twenty (120) days. County's award of the Contract constitutes acceptance of the offer and binds the Bidder. The Bid must be a complete offer and fully Responsive to the ITB.
- 7.13 **CONTINGENT BIDS:**  
Bidder shall not make its Bid contingent upon County's acceptance of specifications or contract terms that conflict with or are in addition to those in the ITB, its Exhibits, or Addenda.
- 7.14 **RIGHT TO REJECT:**  
County may reject, in whole or in part, any Bid not in compliance with the ITB, Exhibits, or Addenda, if upon County's Written finding that it is in the public interest to do so. County may reject all Bids for good cause, if upon County's Written finding that it is in the public interest to do so. Notification of rejection of all Bids, along with the good cause justification and finding of public interest, will be sent to all who submitted a Bid.
- 7.15 **AWARDS:**  
County reserves the right to make award(s) by individual item, group of items, all or none, or any combination thereof. County reserves the right to delete any item from the award when deemed to be in the best interest of County.
- 7.16 **LEGAL SUFFICIENCY REVIEW:**  
Prior to execution of any Contract resulting from this ITB, the Contract may be reviewed for legal sufficiency by a qualified attorney for County pursuant to the applicable Oregon Revised Statutes and County Policy. Legal sufficiency review may result in changes to the terms and conditions specified in the ITB, Exhibits, and Addenda.
- 7.17 **BID RESULTS:**  
A notice of intent to award containing the Bid results will be issued to all Bidders. The Bid file will be available for Bidder's review during the protest period at the Procurement Division. Bidders must make an appointment with the issuing office to view the Bid file. After the protest period, the file will be available by making a Public Records Request to County through the Procurement Division.
- 7.18 **BID PREPARATION COST:**  
County is not liable for costs incurred by the Bidder during the ITB process.
- 7.19 **BID CANCELLATION:**  
If an ITB is cancelled prior to the Bid Due Date and Time, all Bids that may have already been received will be returned to the Bidders. If an ITB is cancelled after the Bid Due Date and Time or all Bids are rejected, the Bids received will be retained and become part of County's permanent Bid file.
- 7.20 **COLLUSION:**  
By responding, the Proposer states that the proposal is not made in connection with any competing Proposer submitting a separate response to the ITB, and is in all aspects fair and without collusion or fraud. Proposer also certifies that no officer, agent, elected official, or employee of County has a pecuniary interest in this Proposal.
- 7.21 **NONDISCRIMINATION:**  
The successful proposer agrees that, in performing the work called for by this ITB and in securing and supplying materials, contractor will not discriminate against any person on the basis of race, color, religious creed, political ideas, sex, age, marital status, sexual orientation, gender identity, veteran

status, physical or mental handicap, national origin or ancestry, or any other class protected by applicable law.

7.22 PROTEST OF CONTRACTOR SELECTION, CONTRACT AWARD:

An eligible Bidder who feels adversely affected or aggrieved may submit a protest within seven (7) calendar days after County issues a notice of intent to award a Contract. The protest must be clearly identified as a protest, identify the type and nature of the protest, and include the ITB number and title. The rules governing protests are at LCRBR C-047-0740.



<p style="text-align: center;"><b>EXHIBIT A</b> <b>REQUIRED SPECIFICATIONS</b></p>
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**SCOPE OF WORK:**

The Statement of Work (“SOW”) includes full supply, delivery, configuration, and installation of all the equipment identified in the project *ISX0001436604-0022* as configured by APC. Scope further includes all needed floor braces to be supplied and installed by vendor. The awarded vendor will coordinate closely with assigned Technology Services and Facilities Management staff concerning product delivery and installation of equipment.

The bid code needed for certified APC vendors to reference when contacting APC/Schneider Electric is *ISX0001436604-0022*.

Awarded vendor to provide 1 year warranty and maintenance on all work and supplied product.

Owner to provide the following:

- Clackamas County Facilities Management to perform the required site prep, electrical input connections, and removal of existing HVAC.
- Clackamas County to supply power to UPS input electrical connections.

**ENGINEERS ESTIMATE:** \$250,000.00

**MINIMUM QUALIFICATIONS:**

All vendors must be APC Reseller Certified for all phases / portions of the bid to include sales, configuration, installation and maintenance.

**Prevailing Wage**

Prevailing Wage Rates requirements apply to this Project because the maximum compensation for all Owner-contracted Work is more than \$50,000. Contractor and all subcontractors shall comply with the provisions of ORS 279C.800 through 279C.870, relative to Prevailing Wage Rates. The Bureau of Labor and Industries (BOLI) wage rates and requirements set forth in the following BOLI booklet (and any listed amendments to that booklet), which are incorporated herein by reference, apply to the Work authorized under this Agreement:

PREVAILING WAGE RATES for Public Works Contracts in Oregon, January 1, 2018, and amended on April 1, 2018, which can be downloaded at the following web address:

[http://www.oregon.gov/boli/WHD/PWR/Pages/pwr\\_state.aspx](http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx)

The Work will take place in Clackamas County, Oregon.

**The Scope further includes the following Plans, Specifications and Drawings:**

Clackamas County Datacenter Specifications Drawing; Page 1

APC / Schneider Electric CTO Report –Solution Number: ISX0001436604-0022; Pages 1-13

**EXHIBIT B - CERTIFICATIONS**  
**ITB #2018-28**

By signature on this certification the undersigned certifies that they are authorized to act on behalf of the Bidder and that under penalty of perjury the undersigned will comply with the following:

**SECTION I. OREGON TAX LAWS**

The undersigned hereby certifies under penalty of perjury that the undersigned is authorized to act on behalf of Bidder and that Bidder is, to the best of the undersigned's knowledge, not in violation of any Oregon Tax Laws. For purposes of this certification, "Oregon Tax Laws" means a state tax imposed by ORS 320.005 to 320.150 and 403.200 to 403.250 and ORS chapters 118, 314, 316, 317, 318, 321 and 323 and the elderly rental assistance program under ORS 310.630 to 310.706 and local taxes administered by the Department of Revenue under ORS 305.620.

**SECTION II. AFFIRMATIVE ACTION**

The undersigned hereby certifies that they have not discriminated against Minority, Women or Emerging Small Business Enterprises in obtaining any required subcontracts, pursuant to ORS 279A110.

**SECTION III. COMPLIANCE WITH SOLICITATION**

The undersigned agrees and certifies that they:

1. Have read, fully understands and agrees to be bound by the Invitation to Bid and all Exhibits and Addenda to the Invitation to Bid;
2. Are an authorized representative of the Bidder, that the information provided is true and accurate, and that providing incorrect or incomplete information may be cause for rejection of the Bid or Contract termination;
3. Will use recyclable products, unless prohibited in this ITB, to the maximum extent economically feasible in the performance of a contract if awarded.
4. Will furnish the designated item(s) and/or service(s) in accordance with the Invitation to Bid and the Contract; and

☐ Resident Bidder, as defined in ORS 279A.120: Oregon Business Registry #: \_\_\_\_\_

☐ Non-Resident Bidder, Resident State: \_\_\_\_\_

Company Legal Business Name (No DBA/ABN): \_\_\_\_\_

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name (Type or Print): \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_

Title: \_\_\_\_\_ Email: \_\_\_\_\_

Address, City, State, Zip: \_\_\_\_\_

Oregon CCB# (if applicable): \_\_\_\_\_

Business Designation (check one):

☐ Corporation ☐ Partnership ☐ LLC ☐ Sole Proprietorship ☐ Non-Profit

☐ Minority Owned ☐ Women Owned ☐ Emerging Small Business

Oregon MWESB Certification Number: \_\_\_\_\_

Self-Identified Minority, Women or Emerging Small Business: ☐ Yes ☐ No

<b>EXHIBIT C REFERENCES</b>
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**REFERENCE 1**

Company: \_\_\_\_\_ Contact Name: \_\_\_\_\_

Address: \_\_\_\_\_ Phone Number: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ E-Mail: \_\_\_\_\_

Goods or Services Provided: \_\_\_\_\_

\_\_\_\_\_

**REFERENCE 2**

Company: \_\_\_\_\_ Contact Name: \_\_\_\_\_

Address: \_\_\_\_\_ Phone Number: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ E-Mail: \_\_\_\_\_

Goods or Services Provided: \_\_\_\_\_

\_\_\_\_\_

**REFERENCE 3**

Company: \_\_\_\_\_ Contact Name: \_\_\_\_\_

Address: \_\_\_\_\_ Phone Number: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ E-Mail: \_\_\_\_\_

Goods or Services Provided: \_\_\_\_\_

\_\_\_\_\_

<p align="center"><b>EXHIBIT D - BID PRICE</b> <b>FORM ITB #2018-28</b></p>
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Bid pricing response must be FOB Destination and include all taxes, tariffs, delivery, and installation costs.

ITB: #2018-28 Technology Services Server Room Upgrade

Date:

FOR THE LUMP SUM TOTAL: \$

**Evidence of APC Certification documentation must be attached to Bid.**

Company: \_\_\_\_\_

Address, City, State, Zip: \_\_\_\_\_

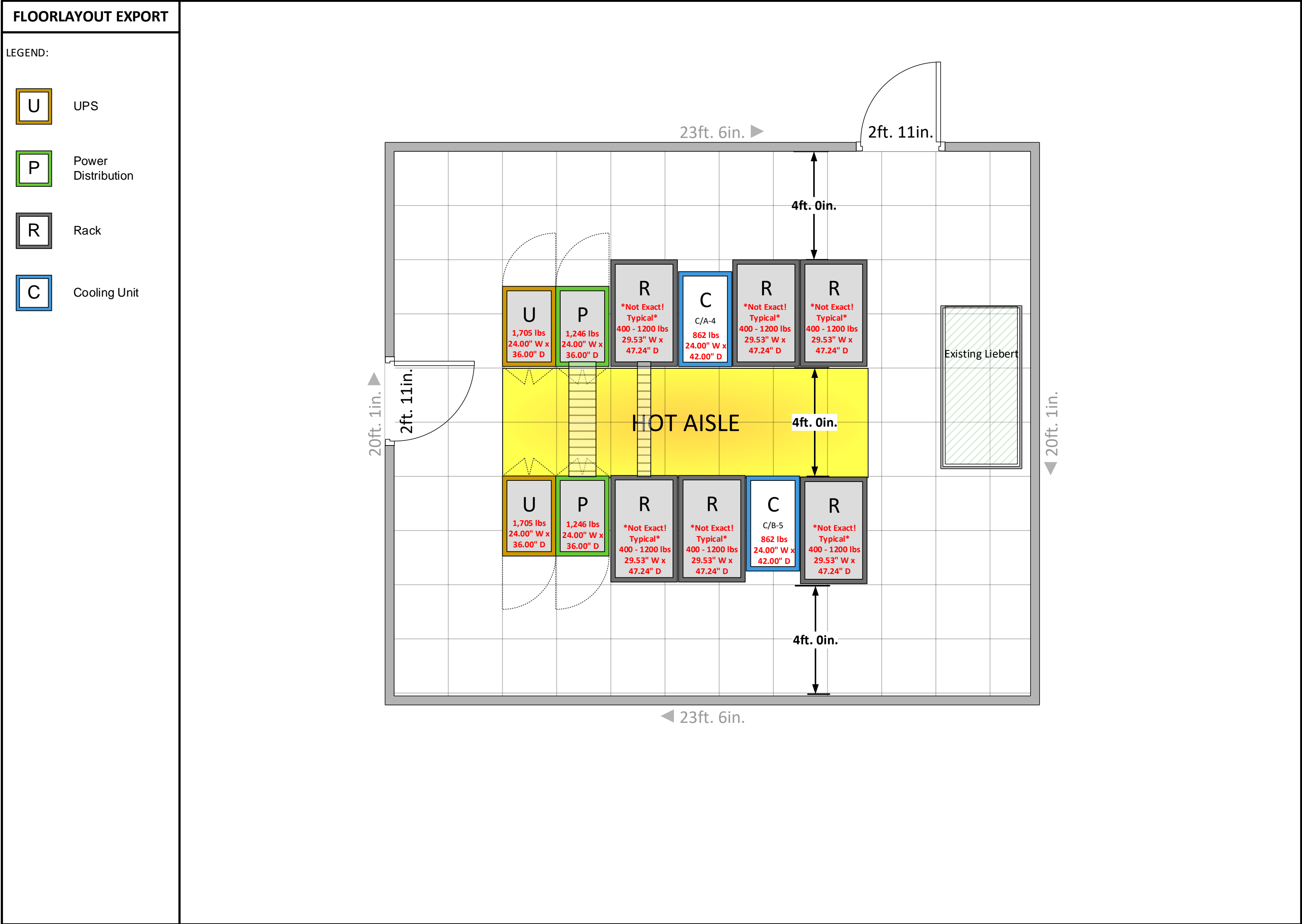
Contact Name: Telephone: \_\_\_\_\_

Contact Title: \_\_\_\_\_ Email: \_\_\_\_\_

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

(Authorized Signature)



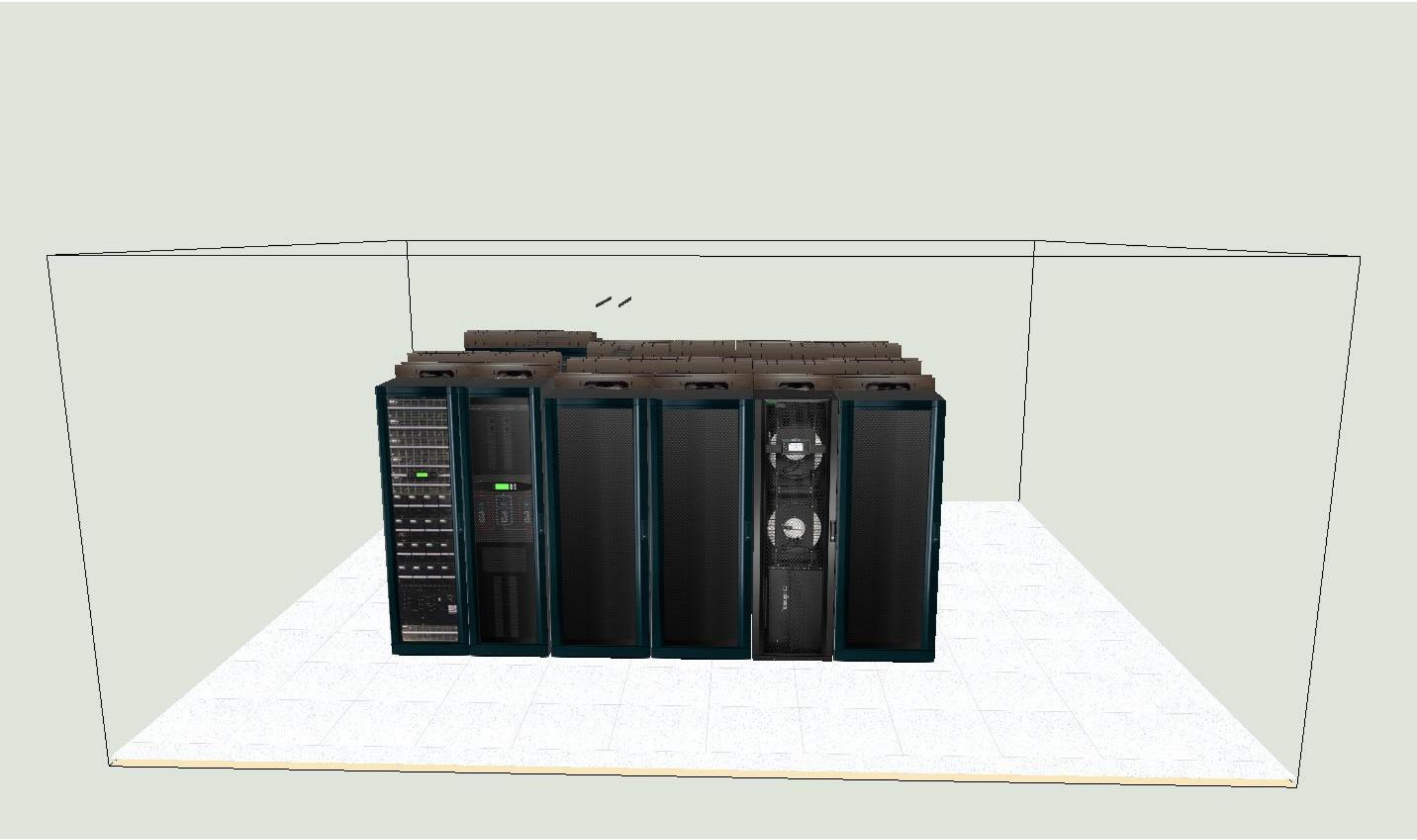


TOTAL IN-ROOM COOLING CAPACITY @ 90°F Hot Aisle: **54.46kW**  
(15.49 tons) @ N

PER UNIT COOLING CAPACITY  
Nominal: 30.5kw (8.67 tons) @ 90°F DB, 66.2°F WB)

TOTAL POWER CAPACITY DAY ONE: **20kW 2N**  
Runtime: 8 minutes @ 20kw (one UPS is online only) or  
23 minutes @ 10kW (two UPS's online in a normal  
condition)

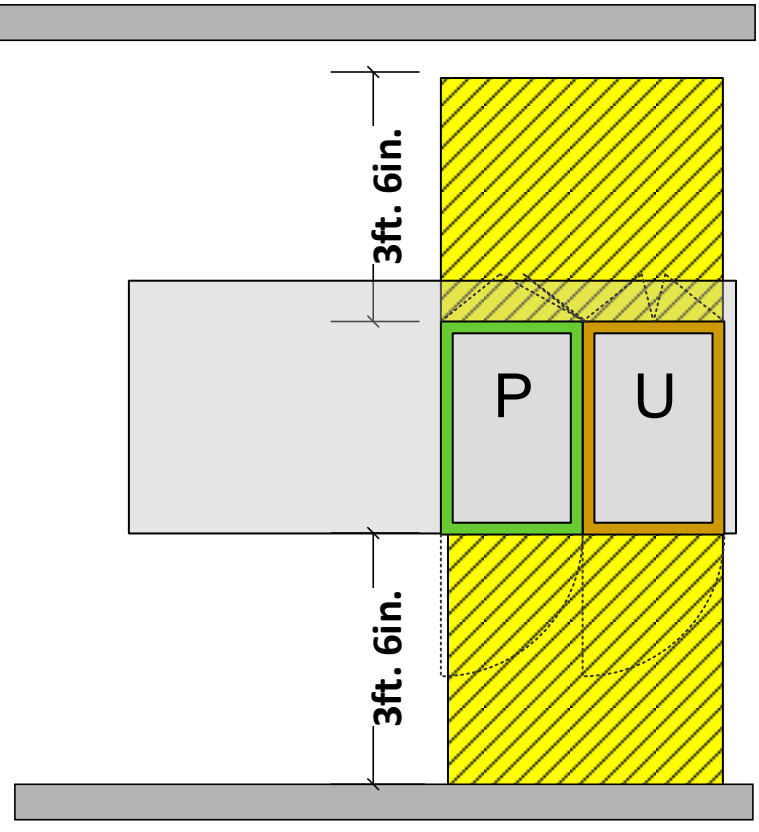
Room will be configured in an N+1 UPS topology  
supporting PDU's with flexible power distribution whips  
running overhead to each of the racks in an A/B  
configuration. APC field engineers will install factory  
terminated whips from the PDU's to each rack.



UPS REQUIREMENTS & SPECIFICATIONS
<b>SY20K40F Symmetra 20kW N+1 UPS Scalable to 40kW N+1</b> <b>-POWER-</b> **UPS is native 208V in/out and will use a 480:208 step-down transformer on the primary side of the adjacent PDU.** Voltage Input: 480 Volt, Three Phase, 60 Hz (3W + G + GEC) Voltage Output: 208V, Three Phase, 60Hz (111A Nominal) Runtime @ 40kW: 5 minutes Input Current (Nominal Per Phase): <b>54A @ 480V</b> Maximum Input Current: <b>67A @ 480V</b> Recommended Overcurrent Protection: <b>80A @ 480V (3 Pole)</b> Clockwise Phase Rotation (L1, L2, L3)
<b>-INPUT WIRES-</b> 4 AWG Copper Max Cable Size: 250 kcmil Refer to NEC Articles 310-15, 310-16 and 315 for further information Cable lugs are NOT provided <b>**Power distribution from the UPS to the racks will be provided and installed by APC**</b>

COOLING REQUIREMENTS & SPECIFICATIONS
<b>ACRD601 In-Row Cooling Unit</b> <b>-POWER-</b> Voltage 480 Volt, Three Phase, 60 Hz Min Current Ampacity (MCA): <b>24A</b> Max Overcurrent Protection (MOP): <b>40A</b> Compressor LRA: 28.1A @ 480V (powered by VFD) Compressor RLA: 16.6A @ 480V Power: 14.6 kW <b>-PIPING-</b> See pages 28 and 29 for pipe sizing <b>**Reference ASHRAE equivalent piping lengths on pg. 29 of the manual for proper pipe sizing.**</b>  Refrigerant: <b>R410A</b> Condensate: 1/2"NPT or BSPT <b>**Max 11.5ft Vert Rise, 60ft Total Equivalent Feet**</b>  Limit refrigerant piping to 200 equivalent feet. Trap Vertical discharge line every 20 ft, Horizontal lines pitch ¼" per 10ft <b>**Reference ACRD601 Installation manual for complete specifications.**</b>

CONDENSERS
<b>QSC55319 Air Cooled Condenser</b> Ambient Temp: 95F Sound Pressure @ 10ft and 100% fan speed: 67.8 dbA Weight: 1,102 lbs Dimensions: 79.41" L x 48.92" W x 54.15" H Min Clearance: 42" on all sides for proper air flow Voltage: 480V, 3 Phase , 60 Hz – FLA: 2.9 / MCA: 4A / MOP 7A

SERVICE CLEARANCES
<div>Minimum 36" clearance front and rear is recommended for service. 48" is recommended for roll-out</div> <div>National Electric Code Minimum Clearance is 42" based upon 480V supply to the UPS.</div> <div></div>

HIGH LEVEL EQUIPMENT REVIEW
QTY (6) AR3350 Cabinets (750mm wide x 1200mm deep) QTY (12) AP8865 8.6kW 3Phase 208V rack PDU QTY (12) Temp/Humid Sensors QTY (2) APC Symmetra PX40 UPS QTY (2) APC ACRD601 In-Row Cooling Units



## CTO Report

Solution Name : Clackamas County TS1 PX20-40 2N 480V RD601 6 Racks

Solution Number : ISX0001436604-0022

Status : Received

Opportunity # : OP-151016-4167455

BOM Type : ISX Advanced

Solution Owner Notes : null

\* \*If a report extends to more than one page, there is a possibility of a SKU getting displayed more than once. This is to enhance user readability.

## Details

Design Name: Clackamas County TS1 PX20-40 2N 480V RD601 6 Racks

Type: ISXD

SKU Type	Quantity	Item	Description
FG	6	AR3350	NetShelter SX 42U 750mm Wide x 1200mm Deep Enclosure with Sides Black
Purchased SKU	12	AR8442	Vertical Cable Organizer, 8 Cable Rings, Zero U
Purchased SKU	6	AR7706	Mounting Rail Brush Strips, NetShelter SX, 750mm Wide (AR3x5x)
PTO	1	AR8164ABLK	Cable Ladder 6" (15cm) Wide w/Ladder Attachment Kit (AR8166ABLK)
PTO	1	AR8165ABLK	Cable Ladder 12" (30cm) Wide w/Ladder Attachment Kit (AR8166ABLK)
Purchased SKU	2	AR8560	Cable Trough, Open Bottom, 600mm
Purchased SKU	4	AR8561	Cable Trough, 600mm
Purchased SKU	6	AR8571	Cable Trough, 750mm
Purchased SKU	4	AR8162ABLK	Data Cable Partition, NetShelter, 600mm Wide
Purchased SKU	4	AR8163ABLK	Data Cable Partition, NetShelter, 600mm Wide, pass-through
Purchased SKU	6	AR8172BLK	Data Cable Partition, NetShelter, 750mm Wide
Purchased SKU	6	AR8173BLK	Data Cable Partition, NetShelter, 750mm Wide, pass-through
Purchased SKU	2	ACAC10010	InRow Bridge Partition, Data Cable 600 MM
PTO	1	SY20K40F	Symmetra PX 20kW Scalable to 40kW N+1, 208V
PTO	1	SYBT4	Battery Module for Symmetra PX, Smart-UPS VT or Galaxy 3500
ATO	1	PSX-PDU120V	120 V TYPE PDU
APC Part	1	ELECTRICAL SYSTEM 120V	-ELECTRICAL SYSTEM 120V
APC Part	1	0G-PD40G6FK1-M	- -TYPE B PDU INCL. 480V STEP DOWN TRANSFORMER & MBP
APC Part	1	DISTRIBUTION BREAKERS 120V	-TYPE & AMP OF DISTRIBUTION CKT BRKS
APC Part	1	0M-2603	- -ASSY THREE POLE TESTED 80A CKT BREAKER
APC Part	63	0M-0218	- -S/A BLANK PNL 1P CKTBRK NAM PSX-PDU
APC Part	6	0M-5366	- -S/A TESTED BRKR 3P 30A PNL
APC Part	1	DISTRIBUTION CORDSETS 120V	-OVERHEAD DISTRIBUTION CORDSETS
APC Part	2	0M-815482-005	- -ASSY WHIP 5WIRE 10AWG L21-30 5FT
APC Part	1	0M-815482-007	- -ASSY WHIP 5WIRE 10AWG L21-30 7FT
APC Part	1	0M-815482-011	- -ASSY WHIP 5WIRE 10AWG L21-30 11FT
APC Part	1	0M-815482-015	- -ASSY WHIP 5WIRE 10AWG L21-30 15FT
APC Part	1	0M-815482-019	- -ASSY WHIP 5WIRE 10AWG L21-30 19FT
APC Part	1	INSTRUMENTATION 120V	-INSTRUMENTATION OPTIONS

SKU Type	Quantity	Item	Description
FG	1	AR8108BLK	- -1U Airflow Management Blanking Panel Kit (Qty 2) Black
APC Part	1	OPTIONS & ACCESSORIES 120V	-OPTIONS AND ACCESSORIES
APC Part	1	0G-PSX-B-UM-EN	- -USER MANL ASSY PSX B
APC Part	1	RACK COLOR	-RACK COLOR
APC Part	1	0M-1292	- -KIT PSX-PDU BLACK EXTERIOR
PTO	1	SY20K40F	Symmetra PX 20kW Scalable to 40kW N+1, 208V
PTO	1	SYBT4	Battery Module for Symmetra PX, Smart-UPS VT or Galaxy 3500
ATO	1	PSX-PDU120V	120 V TYPE PDU
APC Part	1	ELECTRICAL SYSTEM 120V	-ELECTRICAL SYSTEM 120V
APC Part	1	0G-PD40G6FK1-M	- -TYPE B PDU INCL. 480V STEP DOWN TRANSFORMER & MBP
APC Part	1	DISTRIBUTION BREAKERS 120V	-TYPE & AMP OF DISTRIBUTION CKT BRKS
APC Part	1	0M-2603	- -ASSY THREE POLE TESTED 80A CKT BREAKER
APC Part	63	0M-0218	- -S/A BLANK PNL 1P CKTBRK NAM PSX-PDU
APC Part	6	0M-5366	- -S/A TESTED BRKR 3P 30A PNL
APC Part	1	DISTRIBUTION CORDSETS 120V	-OVERHEAD DISTRIBUTION CORDSETS
APC Part	2	0M-815482-005	- -ASSY WHIP 5WIRE 10AWG L21-30 5FT
APC Part	1	0M-815482-007	- -ASSY WHIP 5WIRE 10AWG L21-30 7FT
APC Part	1	0M-815482-011	- -ASSY WHIP 5WIRE 10AWG L21-30 11FT
APC Part	1	0M-815482-013	- -ASSY WHIP 5WIRE 10AWG L21-30 13FT
APC Part	1	0M-815482-019	- -ASSY WHIP 5WIRE 10AWG L21-30 19FT
APC Part	1	INSTRUMENTATION 120V	-INSTRUMENTATION OPTIONS
FG	1	AR8108BLK	- -1U Airflow Management Blanking Panel Kit (Qty 2) Black
APC Part	1	OPTIONS & ACCESSORIES 120V	-OPTIONS AND ACCESSORIES
APC Part	1	0G-PSX-B-UM-EN	- -USER MANL ASSY PSX B
APC Part	1	RACK COLOR	-RACK COLOR
APC Part	1	0M-1292	- -KIT PSX-PDU BLACK EXTERIOR
FG	2	ACRD601	InRow RD, 600mm Air Cooled, 460-480V, 60Hz
FG	2	AP9326	APC Leak Sensor Extension Cable - 20 ft (6.1 m)
Purchased SKU	2	ACCD75235	Condenser 1x1 Build to Order, 38kW, 95F, 460V/3, 60Hz (qsce55319)
Purchased SKU	2	ACAC75014	Flooded Receiver, 20L, 219mm diameter, 640mm length, ASME with heater
FG	10	AP9335T	APC Temperature Sensor
FG	2	AP9335TH	APC Temperature & Humidity Sensor
Purchased SKU	1	AP9224110	APC 24 Port 10/100 Ethernet Switch
Purchased SKU	1	AR8429	Horizontal Cable Organizer 1U w/brush strip
FG	1	3827GY-5	APC CATEGORY 5 UTP 568B PATCH CABLE, GREY, RJ45M/RJ45M
FG	11	3827GY-10	APC CATEGORY 5 UTP 568B PATCH CABLE, GREY, RJ45M/RJ45M
FG	5	3827GY-15	APC CATEGORY 5 UTP 568B PATCH CABLE, GREY, RJ45M/RJ45M
FG	3	3827GY-20	APC CATEGORY 5 UTP 568B PATCH CABLE, GREY, RJ45M/RJ45M
FG	1	3827GY-25	APC CATEGORY 5 UTP 568B PATCH CABLE, GREY, RJ45M/RJ45M
	4	47136WH	APC CAT 5 INLINE COUPLER, RJ45 FEMALE TO FEMALE, STRAIGHT THROUGH, WHITE
SRV	1	WSITECOORD	Site Coordination Service
SRV	2	WUPGSTRUP7-UG-01	Scheduling Upgrade to 7X24 for Existing Startup Service for up to 40 kVA UPS or Battery Frame
SRV	2	WSTRUP7X24-AX-41	Start-Up Service 7X24
SRV	2	WASSEMUPS5X8-PX-21	Scheduled 5X8 Assembly Service for Symmetra PX 40 kW UPS and/or PDU
SRV	2	WASSEM5X8-AX-41	Scheduled Air Assembly Service 5X8 for InRow RP DX units
SRV	1	WASSEM5X8-3R-PX-10	5X8 Scheduled Assembly of 1-3 Additional Racks
SRV	1	WASSEM5X8-5R-PX-20	5X8 Scheduled Assembly Service for 1-5 Racks
SRV	4	WUPGASSEM7-UG-01	Scheduling Upgrade to 7X24 for Existing Assembly Service for up to 40 kVA UPS

SKU Type	Quantity	Item	Description
SRV	4	WUPGASSEM7-UG-01	or Battery Frame
SRV	2	WUPGASSEM7-AX-00	Scheduling Upgrade to 7X24 for (1) Existing Cooling Assembly Service
SRV	2	WUPG8HR7X24-UG-01	1 Year 8HR 7X24 Response Upgrade to Factory Warranty or Existing Service Contract for up to 40 kVA
SRV	2	WUPG8HR7X24-AX-00	1 Year 8HR 7X24 Response Upgrade to Existing Service Contract for (1) Cooling Product
ATO	1	WNSC01	Data Center Management Software Configuration Suite
SRV	1	WNSC0101	-Data Center Expert Software Configuration
SRV	1	WNSC010102	- -Data Center Expert Basic Administration
SRV	1	WNSC010103	- -Data Center Expert Advanced Administration
SRV	6	WNSC010104	- -Data Center Expert Alarm Threshold Configuration
SRV	3	WNSC010105	- -Data Center Expert Alarm Action Configuration
SRV	3	WNSC010106	- -Data Center Expert Alarm Profile Configuration
SRV	3	WNSC010108	- -Data Center Expert Network Management Configuration
SRV	16	WNSC010111	- -Data Center Device Identification
SRV	1	WNSC011	-Data Center Management Software Configuration Option
SRV	1	WNSC010101	- -Data Center Management Software Configuration Base Service
SRV	2	WNSC0105	- -StruxureWare Follow On Preparation Service
SRV	1	WNSC0104	-Data Center Post Configuration Review
SRV	1	WNSC010401	- -Data Center Expert Post Configuration Review
	1	WMS1YROVM-DIGI	StruxureWare Data Center Expert 1 Year VM Software Support Maintenance Contract
FG	1	SWDCEVMACT-DIGI	StruxureWare Data Center Expert Virtual Machine Activation Key

## Additional parts & Accessories

SKU Type	Quantity	Item	Description
Purchased SKU	6	AR7701	NetShelter SX Bolt-Down Kit
Purchased SKU	2	AR8567	Trough End Cap
Purchased SKU	7	AP8704S-NAX590	Power Cord Kit (6 ea), Locking, C13 to C14, 1.2m (4ft), North America, Blue
Purchased SKU	7	AP8702S-NAX590	Power Cord Kit (6 ea), Locking, C13 to C14, 0.6m (2ft), North America, Blue
Purchased SKU	7	AP8706S-NAX340	Power Cord Kit (6 ea), Locking, C13 to C14, 1.8m, North America, Red
Purchased SKU	1	AR8136BLK200	1U 19" Black Modular Toolless Airflow Management Blanking Panel - Qty 200
Purchased SKU	7	AP8702S-NAX340	Power Cord Kit (6 ea), Locking, C13 to C14, 0.6m, North America, Red
Purchased SKU	7	AP8706S-NAX590	Power Cord Kit (6 ea), Locking, C13 to C14, 1.8M (6ft), North America, Blue
FG	6	AP8865REDX667	Rack PDU 2G, Metered, ZeroU, 8.6kW, 208V, (36) C13 & (6) C19 & (2) 5-20, Red Silk
FG	6	AP8865BLUX667	Rack PDU 2G, Metered, ZeroU, 8.6kW, 208V, (36) C13 & (6) C19 & (2) 5-20, Blue Silk
Purchased SKU	7	AP8704S-NAX340	Power Cord Kit (6 ea), Locking, C13 to C14, 1.2m, North America, Red
Purchased SKU	2	ACDC2501	Roof Height Adapter, SX42U to VX42U, 600mm
Purchased SKU	6	ACDC2503	Roof Height Adapter, SX42U to VX42U, 750mm

## Custom Parts

SKU Type	Quantity	SKU ID	Description
Custom	1	QWINSTALL-QMGI55637-00	PRODUCT PROFESSIONAL SERVICES OTHER 3RD PARTY MECHANICAL INSTALLATION
Custom	1	QWPRJ-QMGI58024-00	PRODUCT PROFESSIONAL SERVICES OTHER 3RD PARTY SITE MANAGEMENT SERVICES FOR ISX0001171101-0011



SKU Type	Quantity	SKU ID	Description
Custom	1	QWINSTALL-QMGI56034-00	PRODUCT PROFESSIONAL SERVICES OTHER 3RD PARTY MECHANICAL INSTALLATION
Custom	2	QFLOORSTAND-QSCE40616-00	PRODUCT SYMMETRA PX SYPX 40KW 31 INCH FLOORSTAND FOR TWO MATED ISX 24 INCH CABINETS
Custom	1	QWINSTALL-QBED58098-00	PRODUCT PROFESSIONAL SERVICES OTHER THIRD PARTY PS ANCHORING

NOTES:

\*= Unreleased part number or the part number is being phased out. Please see the Part Number Status report for details of all the SKUs in this solution. Each Design in Solution is Approved Independently.

Rack & Rack Accessories

Equipment Stage Legend  
NEW= Item will be delivered by Schneider Electric  
EXISTING= Item is already at installation site  
PLANNED= Item may be included in a future expansion (NOT INCLUDED IN ORDER)

Name: R/A-3/Z1  
Part Number: AR3350  
Model: Low density server rack - Deep Rack 42U Wide  
Stage: NEW  
Design Load: 3.0 kW

Part Number	Position	U Position	Stage
AP8865	LEFT_REAR	0	NEW
AP8865	RIGHT_REAR	0	NEW
AR8442	LEFT_REAR	0	NEW
AR8442	LEFT_REAR	0	NEW
AR7706	LEFT_REAR	0	NEW
AP9335T	FRONT	0	NEW
AP9335TH	FRONT	0	NEW

Rack & Rack Accessories

Name: R/A-5/Z1  
Part Number: AR3350  
Model: Low density server rack - Deep Rack 42U Wide  
Stage: NEW  
Design Load: 3.0 kW

Part Number	Position	U Position	Stage
AP8865	LEFT_REAR	0	NEW
AP8865	RIGHT_REAR	0	NEW
AR8442	LEFT_REAR	0	NEW
AR8442	LEFT_REAR	0	NEW
AR7706	LEFT_REAR	0	NEW
AP9335TH	FRONT	0	NEW
AP9335T	FRONT	0	NEW

Rack & Rack Accessories

Name: R/A-6/Z1  
Part Number: AR3350  
Model: Low density server rack - Deep Rack 42U Wide  
Stage: NEW  
Design Load: 3.0 kW

Part Number	Position	U Position	Stage
AP8865	LEFT_REAR	0	NEW
AP8865	RIGHT_REAR	0	NEW

Part Number	Position	U Position	Stage
AR8442	LEFT_REAR	0	NEW
AR7706	LEFT_REAR	0	NEW
AR8442	LEFT_REAR	0	NEW
AP9335TH	FRONT	0	NEW
AP9335T	FRONT	0	NEW

### Rack & Rack Accessories

Name:

R/B-3/Z1

Part Number:

AR3350

Model:

Low density server rack - Deep Rack 42U Wide

Stage:

NEW

Design Load:

3.0 kW

Part Number	Position	U Position	Stage
AP8865	LEFT_REAR	0	NEW
AP8865	RIGHT_REAR	0	NEW
AR7706	LEFT_REAR	0	NEW
AR8442	LEFT_REAR	0	NEW
AR8442	LEFT_REAR	0	NEW
AP9224110	FRONT	40	NEW
AP94VMACT	FRONT	41	NEW
AP9335TH	FRONT	0	NEW
AP9335T	FRONT	0	NEW

### Rack & Rack Accessories

Name:

R/B-4/Z1

Part Number:

AR3350

Model:

Low density server rack - Deep Rack 42U Wide

Stage:

NEW

Design Load:

3.0 kW

Part Number	Position	U Position	Stage
AP8865	LEFT_REAR	0	NEW
AP8865	RIGHT_REAR	0	NEW
AR8442	LEFT_REAR	0	NEW
AR7706	LEFT_REAR	0	NEW
AR8442	LEFT_REAR	0	NEW
AP9335TH	FRONT	0	NEW
AP9335T	FRONT	0	NEW

### Rack & Rack Accessories

Name:

R/B-6/Z1

Part Number:

AR3350

Model:

Low density server rack - Deep Rack 42U Wide

Stage:

NEW

Design Load: 3.0 kW

Part Number	Position	U Position	Stage
AP8865	LEFT_REAR	0	NEW
AP8865	RIGHT_REAR	0	NEW
AR8442	LEFT_REAR	0	NEW
AR8442	LEFT_REAR	0	NEW
AR7706	LEFT_REAR	0	NEW
AP9335TH	FRONT	0	NEW
AP9335T	FRONT	0	NEW

PDU Configurations

Logical Name: P/A-2/Z1-A  
Name: PDU A Feed  
Feed: A\_FEED  
Description: Symmetra PX 40 (10 to 40 kW / kVA)  
Stage: NEW  
Input Voltage: 480V

Qty	Part Number	Description
1	PSX-PDU120V	120 V TYPE PDU
1	ELECTRICAL SYSTEM 120V	ELECTRICAL SYSTEM 120V
1	0G-PD40G6FK1-M	TYPE B PDU INCL. 480V STEP DOWN TRANSFORMER & MBP
1	DISTRIBUTION BREAKERS 120V	TYPE & AMP OF DISTRIBUTION CKT BRKS
1	0M-2603	ASSY THREE POLE TESTED 80A CKT BREAKER
63	0M-0218	S/A BLANK PNL 1P CKTBRK NAM PSX-PDU
6	0M-5366	S/A TESTED BRKR 3P 30A PNL
1	DISTRIBUTION CORDSETS 120V	OVERHEAD DISTRIBUTION CORDSETS
2	0M-815482-005	ASSY WHIP 5WIRE 10AWG L21-30 5FT
1	0M-815482-007	ASSY WHIP 5WIRE 10AWG L21-30 7FT
1	0M-815482-011	ASSY WHIP 5WIRE 10AWG L21-30 11FT
1	0M-815482-013	ASSY WHIP 5WIRE 10AWG L21-30 13FT
1	0M-815482-019	ASSY WHIP 5WIRE 10AWG L21-30 19FT
1	INSTRUMENTATION 120V	INSTRUMENTATION OPTIONS
1	AR8108BLK	1U Airflow Management Blanking Panel Kit (Qty 2) Black
1	OPTIONS & ACCESSORIES 120V	OPTIONS AND ACCESSORIES
1	0G-PSX-B-UM-EN	USER MANL ASSY PSX B
1	RACK COLOR	RACK COLOR
1	0M-1292	KIT PSX-PDU BLACK EXTERIOR

CB-Position	Breaker	Whip	Connected To	Type	Name	Stage
1-3-5	0M-5366	0M-815482-005	R/A-3/Z1	DR42Wide rack	Low density server rack - Deep Rack 42U Wide	NEW
2-4-6	0M-5366	0M-815482-005	R/A-5/Z1	DR42Wide rack	Low density server rack - Deep Rack 42U Wide	NEW
7-9-11	0M-5366	0M-815482-007	R/A-6/Z1	DR42Wide rack	Low density server rack - Deep Rack 42U Wide	NEW
8-10-12	0M-5366	0M-815482-011	R/B-3/Z1	DR42Wide rack	Low density server rack - Deep Rack 42U Wide	NEW
13-15-17	0M-5366	0M-815482-013	R/B-4/Z1	DR42Wide rack	Low density server rack - Deep Rack 42U Wide	NEW
14-16-18	0M-5366	0M-815482-019	R/B-6/Z1	DR42Wide rack	Low density server rack - Deep Rack 42U Wide	NEW
19-21-23	0M-2603	na		Extra	Extra	NEW

Battery Details

Requested Runtime	Drawers	External Cabinets	Actual Runtime
6min	3	0	8min

PDU Configurations

Logical Name: P/B-2/Z1-B  
 Name: PDU B Feed  
 Feed: B\_FEED  
 Description: Symmetra PX 40 (10 to 40 kW / kVA)  
 Stage: NEW  
 Input Voltage: 480V

Qty	Part Number	Description
1	PSX-PDU120V	120 V TYPE PDU
1	ELECTRICAL SYSTEM 120V	ELECTRICAL SYSTEM 120V
1	0G-PD40G6FK1-M	TYPE B PDU INCL. 480V STEP DOWN TRANSFORMER & MBP
1	DISTRIBUTION BREAKERS 120V	TYPE & AMP OF DISTRIBUTION CKT BRKS
1	0M-2603	ASSY THREE POLE TESTED 80A CKT BREAKER
63	0M-0218	S/A BLANK PNL 1P CKTBRK NAM PSX-PDU
6	0M-5366	S/A TESTED BRKR 3P 30A PNL
1	DISTRIBUTION CORDSETS 120V	OVERHEAD DISTRIBUTION CORDSETS
2	0M-815482-005	ASSY WHIP 5WIRE 10AWG L21-30 5FT
1	0M-815482-007	ASSY WHIP 5WIRE 10AWG L21-30 7FT
1	0M-815482-011	ASSY WHIP 5WIRE 10AWG L21-30 11FT
1	0M-815482-015	ASSY WHIP 5WIRE 10AWG L21-30 15FT
1	0M-815482-019	ASSY WHIP 5WIRE 10AWG L21-30 19FT
1	INSTRUMENTATION 120V	INSTRUMENTATION OPTIONS
1	AR8108BLK	1U Airflow Management Blanking Panel Kit (Qty 2) Black
1	OPTIONS & ACCESSORIES 120V	OPTIONS AND ACCESSORIES
1	0G-PSX-B-UM-EN	USER MANL ASSY PSX B
1	RACK COLOR	RACK COLOR
1	0M-1292	KIT PSX-PDU BLACK EXTERIOR

CB-Position	Breaker	Whip	Connected To	Type	Name	Stage
1-3-5	0M-5366	0M-815482-011	R/A-3/Z1	DR42Wide rack	Low density server rack - Deep Rack 42U Wide	NEW
2-4-6	0M-5366	0M-815482-015	R/A-5/Z1	DR42Wide rack	Low density server rack - Deep Rack 42U Wide	NEW
7-9-11	0M-5366	0M-815482-019	R/A-6/Z1	DR42Wide rack	Low density server rack - Deep Rack 42U Wide	NEW
8-10-12	0M-5366	0M-815482-005	R/B-3/Z1	DR42Wide rack	Low density server rack - Deep Rack 42U Wide	NEW
13-15-17	0M-5366	0M-815482-005	R/B-4/Z1	DR42Wide rack	Low density server rack - Deep Rack 42U Wide	NEW
14-16-18	0M-5366	0M-815482-007	R/B-6/Z1	DR42Wide rack	Low density server rack - Deep Rack 42U Wide	NEW
19-21-23	0M-2603	na		Extra	Extra	NEW

Battery Details

Requested Runtime	Drawers	External Cabinets	Actual Runtime
6min	3	0	8min

Data Cables

Logical Name: R/B-3/Z1

Name: Switch 1

U Position: 40

Description: APC 24 Port 10/100 Ethernet Switch

Stage: NEW

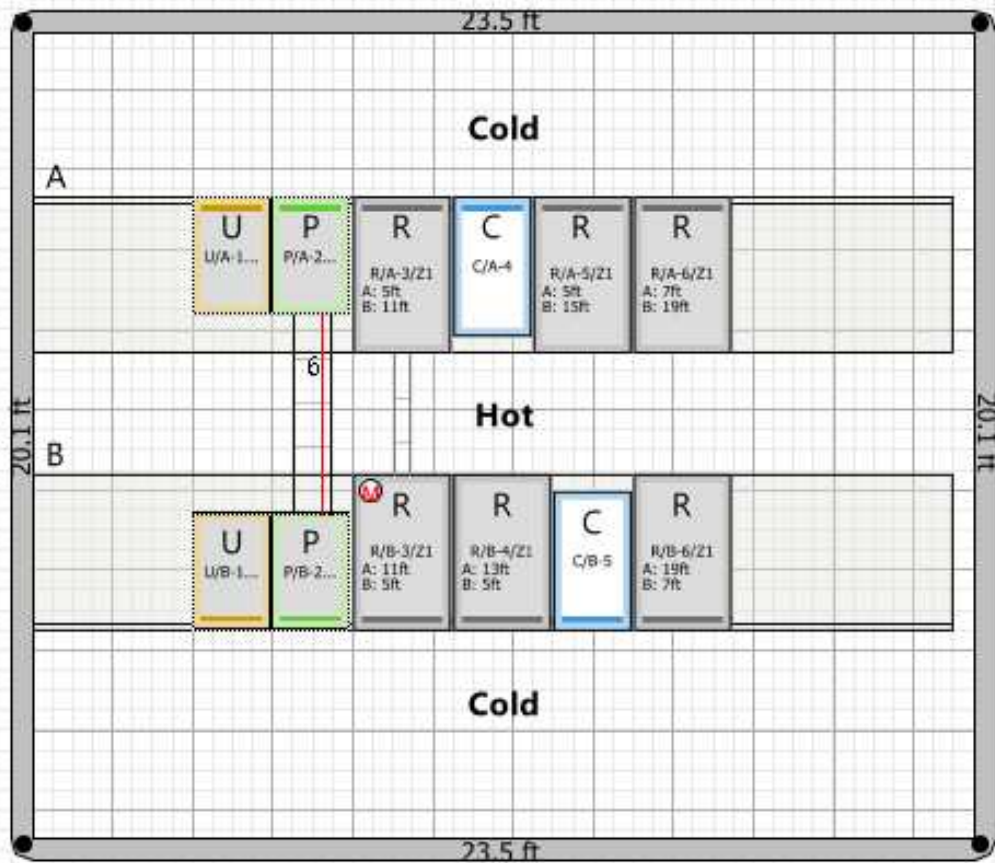
Qty	Part Number	Description
9	3827GY-10	APC CAT 5 UTP 568B PATCH CABLE, GREY, RJ45 MALE TO RJ45 MALE, 14 PAIR, 24 AWG, STRANDED, PVC, 10 FT
4	3827GY-15	APC CAT 5 UTP 568B PATCH CABLE, GREY, RJ45 MALE TO RJ45 MALE, 4 PAIR, 24 AWG, STRANDED, PVC, 15 FT
3	3827GY-20	APC CATEGORY 5 UTP 568B PATCH CABLE, GREY, RJ45M/RJ45M
1	3827GY-25	APC CAT 5 UTP 568B PATCH CABLE, GREY, RJ45 MALE TO RJ45 MALE, 4 PAIR, 24 AWG, STRANDED, PVC, 25 FT

Port	Connected From	Location	Stage	Data Cables	Connected To	Location	Stage	# Extenders
1	AP94VMACT	R/B-3/Z1	NEW	3827GY-10	AP9224110	R/B-3/Z1	NEW	0
2	AP9224110	R/B-3/Z1	NEW	3827GY-15	AP8865	R/A-5/Z1	NEW	0
3	AP9224110	R/B-3/Z1	NEW	3827GY-20	AP8865	R/A-6/Z1	NEW	0
4	AP9224110	R/B-3/Z1	NEW	3827GY-15	AP8865	R/A-5/Z1	NEW	0
5	AP9224110	R/B-3/Z1	NEW	3827GY-20	AP8865	R/A-6/Z1	NEW	0
6	AP9224110	R/B-3/Z1	NEW	3827GY-15	UPS	U/B-1/Z1-B	NEW	0
7	AP9224110	R/B-3/Z1	NEW	3827GY-15	ACRD601	C/B-5	NEW	0
8	AP9224110	R/B-3/Z1	NEW	3827GY-10	AP8865	R/B-4/Z1	NEW	0
9	AP9224110	R/B-3/Z1	NEW	3827GY-10	AP8865	R/B-4/Z1	NEW	0
10	AP9224110	R/B-3/Z1	NEW	3827GY-10	AP8865	R/B-6/Z1	NEW	0
11	AP9224110	R/B-3/Z1	NEW	3827GY-10	AP8865	R/B-6/Z1	NEW	0
12	AP9224110	R/B-3/Z1	NEW	3827GY-10	AP8865	R/B-3/Z1	NEW	0
13	AP9224110	R/B-3/Z1	NEW	3827GY-20	ACRD601	C/A-4	NEW	0
14	AP9224110	R/B-3/Z1	NEW	3827GY-10	AP8865	R/B-3/Z1	NEW	0
15	AP9224110	R/B-3/Z1	NEW	3827GY-10	AP8865	R/A-3/Z1	NEW	0
16	AP9224110	R/B-3/Z1	NEW	3827GY-10	AP8865	R/A-3/Z1	NEW	0
17	AP9224110	R/B-3/Z1	NEW	3827GY-25	UPS	U/A-1/Z1-A	NEW	0

Cooling Distribution Report

Room Properties:	***	
Entering Water Temperature	7.2	Celsius
Chilled Water delta T	5.6	Celsius





# Rack SVG

