



**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION**

**APPLICATION FOR OSHPD SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)**

OFFICE USE ONLY	
APPLICATION #:	OSP – 0426

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Active Power Inc

Manufacturer's Technical Representative: Barry Marks, Regulatory Engineer

Mailing Address: 2128 W Braker, BK12, Austin Texas 78758

Telephone: On File Email: On File

Product Information

Product Name: CleanSource 750HD UPS

Product Type: Uninterruptible Power System **OSP-0426**

Product Model Number: CSHD750 (Active Power Part Number 8820654)
(List all unique product identification numbers and/or part numbers)

General Description: 750 kVA 3-wire, single input flywheel UPS. Seismic enhancements made to the test units and modifications required to address the anomalies observed during tests shall be incorporated into the production units.

Mounting Description: Rigid Base mount.

Applicant Information

Applicant Company Name: EASE

Contact Person: Jonathan Roberson, S.E.

Mailing Address: 5877 Pine Ave, Suite 210, Chino Hills, CA. 91709

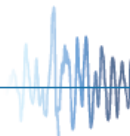
Telephone: (909) 606-7622 Email: j.roberson@easeco.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant:  Date: 9/24/19

Title: Principal Structural Engineer Company Name: EASE

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

Company Name: EASE

Name: Jonathan Roberson, S.E. California License Number: S4197

Mailing Address: 5877 Pine Ave, Suite 210, Chino Hills, CA. 91709

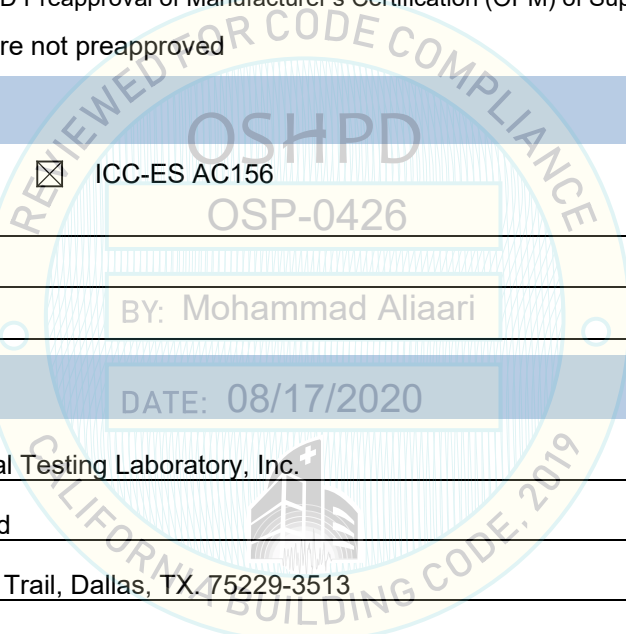
Telephone: (909) 606-7622 Email: j.roberson@easeco.com

Supports and Attachments Preapproval

- Supports and attachments are preapproved under OPM- _____
(Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)
- Supports and attachments are not preapproved

Certification Method

- Testing in accordance with: ICC-ES AC156
- Other (Please Specify): _____



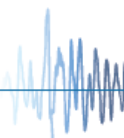
Testing Laboratory

Company Name: Environmental Testing Laboratory, Inc.

Contact Name: Brady Richard

Mailing Address: 11034 Indian Trail, Dallas, TX. 75229-3513

Telephone: (972) 247-9657 Email: brady@etldallas.com





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Seismic Parameters

Design in accordance with ASCE 7-10 Chapter 13: [X] Yes [] No

Design Basis of Equipment or Components (Fp/Wp) = 1.44 @ SDS = 2.00 / 1.17 @ SDS = 2.60

SDS (Design spectral response acceleration at short period, g) = 2.00 (z/h = 1); 2.60 (z/h = 0)

ap (In-structure equipment or component amplification factor) = 1

Rp (Equipment or component response modification factor) = 2.5

Omega_0 (System overstrength factor) = 2

Ip (Importance factor) = 1.5

z/h (Height factor ratio) = 1 (SDS = 2.00); 0 (SDS = 2.60)

Equipment or Component Natural Frequencies (Hz) = See Attachment 1

Overall dimensions and weight (or range thereof) = 132" W x 39" D x 80" H / 11,785 lb.

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15: [] Yes [X] No

Design Basis of Equipment or Components (V/W) =

SDS (Design spectral response acceleration at short period, g) =

SD1 (Design spectral response acceleration at 1 second period, g) =

R (Response modification coefficient) =

Omega_0 (System overstrength factor) = by: Mohammad Aliaari

Cd (Deflection amplification factor) =

Ip (Importance factor) = 1.5

Height to Center of Gravity above base =

Equipment or Component Natural Frequencies (Hz) =

Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2015: [] Yes [X] No

List of Attachments Supporting Special Seismic Certification

[X] Test Report(s) [] Drawings [] Calculations [] Manufacturer's Catalog

[X] Other(s) (Please Specify): Attachment 1

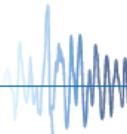
OSHPD Approval (For Office Use Only) - Approval Expires on December 31, 2025

Signature: M. Aliaari Date: August 17, 2020

Print Name: Mohammad Aliaari Title: SSE


Special Seismic Certification Valid Up to : SDS (g) = See Above z/h = See Above

Condition of Approval (if applicable):



ATTACHMENT 1: TEST SPECIMEN SUMMARY

ATTACHMENT PAGE | 1 OF 1

UUT-1 CleanSource 750HD 3W (3-wire)						
<i>Manufacturer:</i> Active Power						
<i>Identification:</i> Model No.: CSHD750 Serial No.: AP01464						
<i>Description:</i> Uninterruptible Power Supply (UPS) 750 kVA UPS 3-wire, single input w/o EXRC Cabinet. As a condition for seismic qualification all rivets connecting mounting base to cabinet structure were replaced with 0.25" diameter SAE J429 Grade 5 bolts and compatible hex nuts. These modifications were subsequently released as a standard manufactured product under Active Power Part Number 8820654.						
<i>Mounting:</i> Rigid Base (Floor) mounted using (20) – 5/8" dia GR 8 bolts						
Dimensions (in.)				Lowest Resonant Frequency (Hz.)		
Width	Depth	Height	Weight (lb.)	Side-Axis	Front-Axis	Vert-Axis
132	39	80	11,785	5.8	6.6	15.7
ICC-ES AC156 Shake Table Test Parameters						Code: 2016 CBC
S _{ds} (G)	z/h	I _p	A _{FLEX-H} (G)	A _{RIG-H} (G)	A _{FLEX-V} (G)	A _{RIG-V} (G)
2.0	1	1.5	3.20	2.40	1.74	0.70
2.6	0	1.5				
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.						

DATE: 08/17/2020

