State of California – Health and Human Services Agency

oshpd
Office of Statewide Health Planning and Development

Facilities Development Division www.oshpd.ca.gov/fdd
400 R Street. Suite 200, Sacramento, California 95811-6213 Phone (916) 440-8300 Fax (916) 654-2973

APPLICATION FOR PREAPPROVAL

SPECIAL SEISMIC CERTIFICATION OF EQUIPMENT AND COMPONENTS

For Office Use Only

APPLICATION NO.

OSP – 0091-10

Check whether application is: NEW [X] RENEWAL [ ]

1.0

Acuity Brands Controls	John "Red" Guthier
Manufacturer	*Manufacturer's Technical Representative*
905 Allen Avenue	Glendale, CA 91201
Mailing Address	
(800) 345-4448, Ex. 111	Red.Guthier@AcuityBrands.com
Telephone	*E-mail Address*

2.0

Lighting Control Panels	Electrical Sheet Metal Framed Control Panel
Product Name	*Product Type*

GR2400 Master Controller, GR2400-i Relay Panel, GR2400 Relay Panel, GR1400 Relay Panel, and X-Point Router.

Product model No (List all unique product identification numbers and/or serial numbers)

General Description: wall mounted Electrical Lighting Control Panels made by Acuity Brands Controls.

3.0

Acuity Brands Controls	John "Red" Guthier
Applicant Company Name	*Contact Person*
905 Allen Avenue	Glendale, CA 91201
Mailing Address	
(800) 345-4448, Ex. 111	Red.Guthier@AcuityBrands.com
Telephone	*E-mail Address*

I hereby agree to reimburse the Office of Statewide Health Planning and Development for the actual costs incurred by the department for review.

Signature of Applicant	6/25/10 *Date*
Compliance Manager *Title*	Lighting Control & Design *Company Name*

Registered Design Professional Preparing the Report

4.0

Rice Engineering, Inc.
Company Name

Bradley J. Kuehl — *Contact Name*
C 66394 — *California License Number*
105 School Creek Trail, Luxemburg, WI 54217 — *Mailing Address*
(920) 845-1042 — *Telephone*
BradKuehl@rice-inc.com — *E-mail Address*

California Licensed Structural Engineer Review and Acceptance of the Report

5.0

Arches Engineering LLC
Company Name

Ruth Miller — *Contact Name*
S4657 — *California License Number*
P.O. Box 3852, Grand Junction, CO 81502 — *Mailing Address*
(970) 255-6788 — *Telephone*
ruth@archesengineering.com — *E-mail Address*

Anchorage Pre-Approval

6.0

☒ *Anchorage pre-approval is **pending** under OPA-2578-10*
(Separate application for anchorage pre-approval is required)

☐ Anchorage is not Pre-approved

Certification Method

70. ☒ *Testing in accordance with:* ☒ *ICC-ES AC-156* ☐ *Other (Please Specify):*

☐ *Analysis*

☐ *Experience data*

☐ *Combination of Testing, Analysis, and/or Experience Data (Please Specify):*

Testing Laboratory (if applicable)

8.0

Environ Laboratories — *Company Name*
Kent L. Erickson — *Contact Name*
9725 Girard Avenue South, Minneapolis, MN 55431 — *Mailing Address*
(952) 888-7795 — *Telephone*
kle@environlab.com — E-mail:

Approval Parameters

9.0

Design in accordance with ASCE 7-05 Chapter 13: ☒ Yes ☐ No

Design Basis of Equipment or Components (F_p/W_p) = 1.7g

S_{DS} (Spectral response acceleration at short period) =2.27g

a_p (In-structure equipment or component amplification factor) =2.5

R_p (Equipment or component response modification factor) =6.0

I_p (Importance factor) = 1.5

z/h (Height factor ratio)=1.0

Equipment or Component fundamental period(s) = N/A

Building period limits (if any) = N/A

Overall dimensions and weight (or range thereof) = See Attachment # 1

Equipment or Components @ grade designed in accordance with ASCE 7-05 Chapter 15: ☐ Yes ☒ No

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

S_{DS} (Spectral response acceleration at short period) =

S_1 (Spectral response acceleration at 1 second period) =

R (Response modification coefficient)=1.0

Ω_0 (System overstrength factor) =1.0

C_d (Deflection amplification factor) =1.0

I_p (Importance factor) =1.5

Height to Center of Gravity above base =

Equipment or Component fundamental period(s) = Sec

Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2007: ☐ Yes ☒ No

10.0 *List of attachments supporting the special seismic certification of equipment or components:*

☒ *Test Report* ☐ *Drawings* ☒ *Manufacturer's Catalog*

☐ *Calculations* ☐ *Others (Please Specify:):*

11.0 *OSHPD Approval* *(For Office Use Only)*

Signature & Date 8/6/10	**December 31, 2016** *Approval Expiration Date*
Chris Tokas, SHFR *Name & Title*	S_{DS} (g) = **2.27** z/h = **1.0** *Special Seismic Certification Valid Up to*

Condition of Approval (if any):

3/5

ATTACHMENT #1

MODEL	DIMENSIONS	MAX WEIGHT	ENCLOSURE	MOUNTING	UUT#	OTHER MODEL IDENTIFIER	NOTES
GR2400 Master Controller							
GR2400MCDTCMODEXT	Height = 8.4 in. Width = 8.4 in. Depth = 4.6 in	7.5 lbs	TYPE 1	WALL	A1	GR2400ACCDTCMODDVSM	
GR2400DTCMODDV**SMNE1	Height = 8.3 in. Width = 13.3 in. Depth = 4 in	10 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**RESERVED FOR OPTIONAL PCB IDENTIFICATION
GR2400DTCMODDV**FMNE1	Height = 8.3 in. Width = 13.3 in. Depth = 4 in	10 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**RESERVED FOR OPTIONAL PCB IDENTIFICATION
GR2400-I Relay Panel							
GR2408IDIMDVNCSM	Height = 12.9 in. Width = 8.4 in. Depth = 3.2 in	9 lbs	TYPE 1	WALL	A2		
GR2408IDHDV**SM	Height = 12.9 in. Width = 8.4 in. Depth = 3.2 in	9 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR2408IDIMDV**FM	Height = 12.9 in. Width = 8.4 in. Depth = 3.2 in	9 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR2408IDHDV**FM	Height = 12.9 in. Width = 8.4 in. Depth = 3.2 in	9 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
							**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR2404IDIMDV**SM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	6.3 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR2404IDHDV**SM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	6.3 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR2404IDIMDV**FM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	6.3 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR2404IDHDV**FM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	6.3 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR2402IDIMDV**SM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	6.3 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR2402IDHDV**SM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	6.3 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR2402IDIMDV**FM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	6.3 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR2402IDHDV**FM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	6.3 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		
GR2400 Relay Panel							
GR2448/48DTCMODDVNCSM	Height = 37.5 in. Width = 20 in. Depth = 6 in	70 lbs	TYPE 1	WALL	A3		
GR2448/~~DTCMODDV**SM	Height = 37.5 in. Width = 20 in. Depth = 6 in	70 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED ~~DESIGNATION FOR QUANTITY OF RELAY MODULES USED
GR2448/~~SLAVEDV**SM	Height = 37.5 in. Width = 20 in. Depth = 6 in	70 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED ~~DESIGNATION FOR QUANTITY OF RELAY MODULES USED
GR2448/~~DTCMODDV**FM	Height = 37.5 in. Width = 20 in. Depth = 6 in	70 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED ~~DESIGNATION FOR QUANTITY OF RELAY MODULES USED
GR2448/~~SLAVEDV**FM	Height = 37.5 in. Width = 20 in. Depth = 6 in	70 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED ~~DESIGNATION FOR QUANTITY OF RELAY MODULES USED
GR2432/~~DTCMODDV**SM	Height = 25.5 in. Width = 20 in. Depth = 6 in	56 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED ~~DESIGNATION FOR QUANTITY OF RELAY MODULES USED
GR2432/~~SLAVEDV**SM	Height = 25.5 in. Width = 20 in. Depth = 6 in	56 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED ~~DESIGNATION FOR QUANTITY OF RELAY MODULES USED
GR2432/~~DTCMODDV**FM	Height = 25.5 in. Width = 20 in. Depth = 6 in	56 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED ~~DESIGNATION FOR QUANTITY OF RELAY MODULES USED
GR2432/~~SLAVEDV**FM	Height = 25.5 in. Width = 20 in. Depth = 6 in	56 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED ~~DESIGNATION FOR QUANTITY OF RELAY MODULES USED
GR1400 Relay Panel							
GR1416/16SLAVEDVNCSM	Height = 18 in. Width = 12 in. Depth = 6 in	29.5 lbs	TYPE 1	WALL	A4		
GR1416/16DTCMODDV**SM	Height = 18 in. Width = 12 in. Depth = 6 in	29.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1416/08SLAVEDV**SM	Height = 18 in. Width = 12 in. Depth = 6 in	29.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1416/08DTCMODDV**SM	Height = 18 in. Width = 12 in. Depth = 6 in	29.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1416/16SLAVEDV**FM	Height = 18 in. Width = 12 in. Depth = 6 in	29.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1416/16DTCMODDV**FM	Height = 18 in. Width = 12 in. Depth = 6 in	29.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1416/08SLAVEDV**FM	Height = 18 in. Width = 12 in. Depth = 6 in	29.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1416/08DTCMODDV**FM	Height = 18 in. Width = 12 in. Depth = 6 in	29.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		
GR1400-LT Relay Panel							
GR1416LT/16SLAVEDVNCSM	Height = 17.1 in. Width = 10.6 in. Depth = 3.1 in	15.5 lbs	TYPE 1	WALL	A5		
GR1416LT/16DTCMODDV**SM	Height = 17.1 in. Width = 10.6 in. Depth = 3.1 in	15.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1416LT/08SLAVEDV**SM	Height = 17.1 in. Width = 10.6 in. Depth = 3.1 in	15.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1416LT/08DTCMODDV**SM	Height = 17.1 in. Width = 10.6 in. Depth = 3.1 in	15.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1416LT/16SLAVEDV**FM	Height = 17.1 in. Width = 10.6 in. Depth = 3.1 in	15.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1416LT/16DTCMODDV**FM	Height = 17.1 in. Width = 10.6 in. Depth = 3.1 in	15.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1416LT/08SLAVEDV**FM	Height = 17.1 in. Width = 10.6 in. Depth = 3.1 in	15.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1416LT/08DTCMODDV**FM	Height = 17.1 in. Width = 10.6 in. Depth = 3.1 in	15.5 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		
GR1408LT/08SLAVEDV**SM	Height = 13.4 in. Width = 8.4 in. Depth = 3.1 in	12.2 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1408LT/08DTCMODDV**SM	Height = 13.4 in. Width = 8.4 in. Depth = 3.1 in	12.2 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1408LT/04SLAVEDV**SM	Height = 13.4 in. Width = 8.4 in. Depth = 3.1 in	12.2 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1408LT/04DTCMODDV**SM	Height = 13.4 in. Width = 8.4 in. Depth = 3.1 in	12.2 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1408LT/08SLAVEDV**FM	Height = 13.4 in. Width = 8.4 in. Depth = 3.1 in	12.2 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1408LT/08DTCMODDV**FM	Height = 13.4 in. Width = 8.4 in. Depth = 3.1 in	12.2 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1408LT/04SLAVEDV**FM	Height = 13.4 in. Width = 8.4 in. Depth = 3.1 in	12.2 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1408LT/04DTCMODDV**FM	Height = 13.4 in. Width = 8.4 in. Depth = 3.1 in	12.2 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		
GR1404LT/04SLAVEDV**SM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	9.1 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1404LT/04DTCMODDV**SM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	9.1 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1404LT/02SLAVEDV**SM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	9.1 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1404LT/02DTCMODDV**SM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	9.1 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1404LT/04SLAVEDV**FM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	9.1 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1404LT/04DTCMODDV**FM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	9.1 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1404LT/02SLAVEDV**FM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	9.1 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		**DESIGNATION FOR TYPE OF RELAY MODULES USED
GR1404LT/02DTCMODDV**FM	Height = 8.4 in. Width = 8.4 in. Depth = 3.1 in	9.1 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		

MODEL	DIMENSIONS	MAX WEIGHT	ENCLOSURE	MOUNTING	UUT#	OTHER MODEL IDENTIFIER	NOTES
X-Point Router							
GRRXLDD	Height = 12.75 in. Width = 8.25 in. Depth = 3.1 in	9 lbs	TYPE 1	WALL	A6		
GRRXL********	Height = 12.75 in. Width = 8.25 in. Depth = 3.1 in	9 lbs	TYPE 1	WALL	SIMILAR TO ABOVE	GR2400XP**********DVSM GR2400XP**********DVFM	*DESIGNATION FOR TYPE OF DRIVER CARD (UP TO QTY 8)
GRRXS*****	Height = 8.25 in. Width = 8.25 in. Depth = 3.1 in	6.4 lbs	TYPE 1	WALL	SIMILAR TO ABOVE		*DESIGNATION FOR TYPE OF DRIVER CARD (UP TO QTY 4)
X-Point Relay Module							
XP-1	Height = 2.37 in. Width = 2 in. Depth = 2.6 in	0.25 lbs	TYPE 1 Polymeric material	ON JUNCTION BOX, EQUIPMENT ENCLOSURE, OR LIGHT FIXTURE	A7		
XP-2	Height = 2.37 in. Width = 2 in. Depth = 2.6 in	0.25 lbs	TYPE 1 Polymeric material	ON JUNCTION BOX, EQUIPMENT ENCLOSURE, OR LIGHT FIXTURE	SIMILAR TO ABOVE		
XP-D	Height = 2.37 in. Width = 2 in. Depth = 2.6 in	0.25 lbs	TYPE 1 Polymeric material	ON JUNCTION BOX, EQUIPMENT ENCLOSURE, OR LIGHT FIXTURE	SIMILAR TO ABOVE		
XP-D 347	Height = 2.37 in. Width = 2 in. Depth = 2.6 in	0.25 lbs	TYPE 1 Polymeric material	ON JUNCTION BOX, EQUIPMENT ENCLOSURE, OR LIGHT FIXTURE	SIMILAR TO ABOVE		
XP-H	Height = 2.37 in. Width = 2 in. Depth = 2.6 in	0.25 lbs	TYPE 1 Polymeric material	ON JUNCTION BOX, EQUIPMENT ENCLOSURE, OR LIGHT FIXTURE	SIMILAR TO ABOVE		
XP-DN	Height = 2.37 in. Width = 2 in. Depth = 2.6 in	0.25 lbs	TYPE 1 Polymeric material	ON JUNCTION BOX, EQUIPMENT ENCLOSURE, OR LIGHT FIXTURE	SIMILAR TO ABOVE		
XP-1 QK	Height = 2.37 in. Width = 2 in. Depth = 2.6 in	0.25 lbs	TYPE 1 Polymeric material	ON JUNCTION BOX, EQUIPMENT ENCLOSURE, OR LIGHT FIXTURE	SIMILAR TO ABOVE		
XP-2 QK	Height = 2.37 in. Width = 2 in. Depth = 2.6 in	0.25 lbs	TYPE 1 Polymeric material	ON JUNCTION BOX, EQUIPMENT ENCLOSURE, OR LIGHT FIXTURE	SIMILAR TO ABOVE		
XP-D QK	Height = 2.37 in. Width = 2 in. Depth = 2.6 in	0.25 lbs	TYPE 1 Polymeric material	ON JUNCTION BOX, EQUIPMENT ENCLOSURE, OR LIGHT FIXTURE	SIMILAR TO ABOVE		
XP-D 347 QK	Height = 2.37 in. Width = 2 in. Depth = 2.6 in	0.25 lbs	TYPE 1 Polymeric material	ON JUNCTION BOX, EQUIPMENT ENCLOSURE, OR LIGHT FIXTURE	SIMILAR TO ABOVE		
XP-H QK	Height = 2.37 in. Width = 2 in. Depth = 2.6 in	0.25 lbs	TYPE 1 Polymeric material	ON JUNCTION BOX, EQUIPMENT ENCLOSURE, OR LIGHT FIXTURE	SIMILAR TO ABOVE		
XP-DN QK	Height = 2.37 in. Width = 2 in. Depth = 2.6 in	0.25 lbs	TYPE 1 Polymeric material	ON JUNCTION BOX, EQUIPMENT ENCLOSURE, OR LIGHT FIXTURE	SIMILAR TO ABOVE		