DCA09-DEC-269

BHAMANI, FORD & ASSOCIATES, INC.
CONSULTING ENGINEERS & PLANNERS
EB0004228

July 21, 2009

Florida Building Commission
c/o Paula Ford, Agency Clerk
Florida Department of Community Affairs
2555 Shumard Oak Drive
Tallahassee, FL 32399-2100

Re: Petition for a Declaratory Statement From the Florida Building Commission Regarding Voltage Drop for Feeders FBC 13-413.1 ABC 1.1

Thomas H. Ford RA
Bhamani, Ford, & Associates, Inc.
4900 SW 74th Ct.
Miami, FL 33155
Office: 305-663-1964
Fax: 305-667-5083
bfai@bellsouth.net

FILING AND ACKNOWLEDGEMENT
FILED, on this date, with the designated Agency Clerk, receipt of which is hereby acknowledged.

7/22/09
Miriam Snipes **Date**
Deputy Agency Clerk

I am a designer and am using the National Electrical Code and the Florida Building Code to design parking lot lighting for a large shopping center. There is a difference in the percent voltage drop allowed in feeders between the NEC article 215.2(A) FPN no. 2, page 98, NEC 2005 Handbook and the FBC 13-413.1 ABC 1.1

NEC	**FBC**
Feeders	**Feeders**
215.2 (A)	13-413.1 ABC 1.1
FPN No. 1	
Page 98 NEC 2005 Handbook	
FPN No. 2: Conductors for feeders as defined in Article 100, sized to prevent a voltage drop exceeding **3** percent at the farthest outlet of power, heating, and lighting loads, or combinations of such loads, and where the maximum total voltage drop on both feeders and branch circuits to the farthest outlet does not exceed **5** percent, will provide reasonable efficiency of operation.	Feeder conductors shall be sized for a maximum voltage drop of **2** percent at design load

Branch Circuits
See 210.10 (A)
FPN No. 4
Page 82 NEC 2005
Handbook

FPN No. 4: Conductors for branch circuits as defined in Article 100, sized to prevent a voltage drop exceeding 3 percent at the farthest outlet of power, heating, and lighting loads or combination of such loads, and where the maximum total voltage drop on both feeders and branch circuits to the farthest outlet does not exceed 5 percent, provide reasonably efficiency of operation.

Total: Branch Circuit and Feeder = 5% max

Branch Circuits
13-413.1 ABC 1.2

Branch circuit conductors shall be sized for a maximum voltage drop of 3 percent at design load.

Total: Branch Circuit and Feeder = 5% max

Is the voltage drop of 2 percent as stated in 13-413.1 ABC 1.1 intended as such or is it a scriverners error?

Why is the FBC so restrictive for the feeder conductor voltage drop at 2 percent and why is it not in agreement with the NEC?

Sincerely,
Bhamani, Ford, & Associates Inc.

Thomas H. Ford, R.A.
Florida R.A. License No. 8401

C.C.: Mo Madani, CBO, Technical Unit Manager
Building Code and Standards
Florida Department of Community Affairs
2555 Shumard Oak Blvd.
Tallahassee, FL 32399-2100

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MARINA LAKES. 4900 S.W. 74 COURT. MIAMI, FLORIDA. 33155. PHONE (305) 663-1964, FAX (305) 667-5083