

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

CALCS PLUS

TESTIMONY OF KEN FONOROW

DOCKET NOS. 040029-EG, 040660-EG

AUGUST 12, 2005

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1. Please state your name, current position and address.

Kenneth D. Fonorow, President - Florida H.E.R.O., Inc.

15220 NW 5 Ave, Newberry, FL 32669

2. Please provide us your educational background and any special credentials or training that you have received relevant to your testimony in this case.

Nationally Certified HERS Rater Trainer

Nationally Certified HERS Rater

State of Florida Certified Class I, II and III Residential Rater

Masters Program for Building Science, Advanced Energy

Radon Resistant Residential Construction, National Environmental Health Association

CMP \_\_\_\_\_  
COM 3 18  
CTR orig 19  
ECR \_\_\_\_\_  
GCL 1 20  
OPC 21  
RCA \_\_\_\_\_  
SCR \_\_\_\_\_  
SGA \_\_\_\_\_  
SEC 1  
OTH \_\_\_\_\_

1           Creating Healthy and Efficient Green Building Environments, University of  
2           Florida

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4           Understanding Duct Leakage Test Methods, DOE

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6           Healthy House Builder Training, American Lung Association

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8           **3. Please provide us with your past and present professional association**

9           **memberships and positions you have held in those associations.**

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11           **NAHB** Research Center, Member - Whole House and Process Redesign Road

12           Mapping for the 21st Century Task Force

13           **North Central Florida Builders Association** - Member, past FHBA Associate

14           State Director, past member Board of Directors

15           **City of Gainesville** - Past Vice Chairman and member of the Gainesville Energy

16           Advisory

17           Committee

18           **RESNET** - Chair, Advanced Rater Certification Task Force, Member - National

19           Trainers,

20           Providers and Raters Committee, Building Specialist Certification Task Force,

21           Training and Education Committee and Sampling Standards Task Force, National

22           Conference Presenter.

1           **Santa Fe Community College** - Member, Building Construction Technology  
2           Advisory  
3           Committee, Continuing education instructor.

4  
5           **FGBC** - (Florida Green Building Coalition) - Member, Board of Directors,  
6           Building Committee, Certifying Agent

7           **EBBA** - (Energy Efficient Building Association) - Member, National Conference  
8           presenter.

9           **Habitat for Humanity International** - Member Green Team and Green Team  
10          Technical Advisory Committee.

11          **American Lung Association**, Florida Chapter - Consultant on Healthy Home  
12          Builders Guide

13          **NERA** - (National Energy Raters Association) - Past President, Member Board of  
14          Directors.

15          **Cross Creek Initiative** - Vice President, Past President and Co-founder

16          **ACI** - (Affordable Comfort Institute) - National conference presenter

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18          4. **Please provide us with a brief statement of your background and experience**  
19          **in the areas of building science, standards of building practice and programs**  
20          **involving residential energy efficiency and conservation and any awards**  
21          **you've received.**

22

1 I have been involved in building science and energy conservation for over 25  
2 years as energy analyst, consultant and problem solver. I am experienced in  
3 residential mechanical systems design and installation. My background includes  
4 pioneering work in the development of software for energy auditing, blower-door  
5 technology and "Green" construction codes.

6 Personal Awards include:

7 2005 - RESNET "Market Transformation Leadership Award."

8 2002-5 - EPA Energy Star Homes Program "Outstanding Achievement Award"

9 1999 - EPA Energy Star Homes Program "Ally of the Year"

10 State of Florida "Rater of the Year" - every year that this award was presented.

11 Awards received by projects that I have consulted on, performance tested and

12 certified include:

13 The Fechtel Company

14 2000-2003 SEBC Grand Aurora Energy Efficiency Award and

15 SEBC Grand Aurora Water-Wise Award

16 Tampa, Florida

17 The Dye Companies

18 2004 SEBC New Southern Home, Orlando

19 2003 SEBC New Southern Home, Reunion

20 Winter Park, Florida

21 All America Homes

22 2003 NAHB Energy Value Housing Award, Silver Award Winner

23 2002 SEBC Grand Aurora Award for Energy Efficiency

1       Gainesville, Florida

2   Atlantic Design & Construction

3       2001 EPA Energy Star Small Builder of the Year

4       Gainesville, Florida

5       HKW Enterprises, Inc.

6       2001 NAHB Energy Value Housing Award, Gold Award Winner

7       Builder Leadership Award, FSEC 1999, 2000 and 2001

8       Gainesville, Florida

9       Union Street Station, McGurn Investment Group

10      2001 NHBA Energy Value Housing Award, Silver Award Winner

11      Gainesville, Florida

12      Jennings Development Group, Inc.

13      First EPA Energy Star Affordable Apartment Complex in Nation

14      2000 SEBC Aurora Award for Energy Efficient Multi Housing

15      Gainesville, Florida

16      Bosshardt Realty

17      2000 EPA Energy Star Award for Special Recognition

18      Gainesville, Florida

19      Town of Tioga

20      2000 NAHB and Professional Builder Magazine's Gold Award for

21      "Best In American Living Smart Growth Community"

22      Newberry, Florida

23

1 Lakeland Habitat for Humanity  
2 2000 Walt Disney Foundation Grand Award for Environmental Stewardship  
3 Lakeland, Florida  
4 City of Gainesville's Cedar Grove II  
5 First affordable neo-traditional Energy Star Community in the U.S.  
6 2000 HUD Best Practices Award  
7 Gainesville, Florida  
8 Gainesville Regional Utilities  
9 1998 EPA Energy Star Utility of the Year  
10 Gainesville, Florida  
11 Melinda Koken Builders  
12 1997 First EPA Energy Star Renovated Home in Nation  
13 Gainesville, Florida  
14 Other clients include:  
15 First Off-Grid Home in U.S. to sell carbon credits on the International Carbon Bank  
16 & Exchange  
17 Bronson, Florida  
18 The Evans Group, Nationally Renowned Architectural/Design firm  
19 Orlando, Florida  
20 Top of the World, First Energy Star Retirement Community in Florida  
21 Ocala, Florida  
22

1 Custom 16,000 sq. ft. home powered by the largest privately owned PV system in  
2 U.S.

3 Macon, Georgia

4 Southface Energy Institute, Atlanta, Georgia

5 **5. Please describe Gainesville Regional Utilities (“GRU”) involvement with the**  
6 **federal Energy Star Homes® program.**

7 GRU joined this program in 1997 and helped sponsor a public seminar. They helped to  
8 publicize and promote this program through print media, TV ads and “bill stuffers” for  
9 several years.

106. **6. Does GRU provide any rating or other services to builders of residential**  
11 **units in its territory? Do you, if so, what services?**

12 After conducting an economic analysis of their costs to provide rating services, they  
13 determined that it would be more cost effective to allow the private sector to provide this  
14 service. In addition to the Federally required “Energy Audits”, they will assist in the  
15 development of load calculations and energy related code compliance forms. Their staff  
16 is available to answer consumer questions.

177. **7. Have you reviewed the attached table (appendix A) reflecting the penetration**  
18 **rate of Energy Star Homes® in the various areas of Florida and does it generally**  
19 **agree with your perception of the activities within GRU territory?**

20 Yes

218 **8. How many ratings have you done in the past five years? Past year?**

22 5 years - 1,250 homes

23 Past year - 250 homes

1 **9. What methods do you use to test for, and correct, duct leakage?**

2 After a visual inspection I perform a cfm25 test, both total and to out. If a significant  
3 deficiency is found, a pressure pan is used as a diagnostic tool to identify the portion(s) of  
4 the duct system that has significant duct leakage. In conjunction with the mechanical  
5 contractor, theatrical fog is introduced into the duct system to make the leaks visible to  
6 the technician, who can then repair the system.

7 **7110. Have you used the pressure pan methodology to test for duct leakage? If yes,**  
8 **explain when. If you don't currently use, explain why.**

9 Years ago, I used the pressure pan methodology to test for duct leakage. As the industry  
10 became aware of the shortcomings of this test methodology I eliminated it from my  
11 testing protocols. This methodology is simply not appropriate to use to determine the  
12 leakage rate of a duct system.

13 **11. Are you familiar with the FPL BuildSmart program? If yes, explain in what**  
14 **way you have become familiar and any experiences you have had with the program.**

15 I am only peripherally aware of this program as they do not provide electricity in the  
16 region I work in. I do know that their practice of providing this service for free has  
17 resulted in the virtual elimination of private Rating firms in their service territory.

18 **12. Does this conclude your testimony?**

19 Yes.