

FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS
BUILDING ENERGY RATING SYSTEM STEERING COMMITTEE
OPTIONS WORKSHEET—MEETING III—APRIL 6, 2011

Committee members were requested to review the recommendations achieving a 75% or greater level of support from Meeting II and to propose a single “comprehensive programmatic recommendation” for enhancing the BERS program. The recommendations should address all of the key program issue areas and be comprehensive in their approach. BERS Steering Committee Member’s “comprehensive programmatic recommendations” were compiled and the Committee will rank them for acceptability (using the 4-point scale) at the April 6, 2011 meeting.

OPTIONS/RECOMMENDATIONS WITH \geq 75% LEVEL OF SUPPORT

Provide feedback on test results to assist applicants to understand where they need improvement. (12-0)

Keep the RESNET training as an integral part of the training. (12-0)

Technical support shall be received within 24 working hours of request for support. (12-0)

Determine whether there are COMNET options that can be used in Florida. (12-0)

Remove the requirement in law that ratings be done at cost. (12-0)

Clearly define a “Rating”. (12-0)

Define “Audit”. (12-0)

For commercial raters, define what recognized test & balance means. (12-0)

Identify state certification requirements for Auditor, either as an independent certification or as an equivalent for Class 2, or as identification a new class of rater for existing buildings. (11-1)

Establish a fine structure and related set of requirements for non-conformance to the rating rule. (11-1)

Review and determine whether to adjust the \$ rates for performing ratings. (10-2)

Evaluate the use of the university system to provide additional training and coursework toward certification and further building science as a specialty, throughout the State, particularly the northern part. (10-2)

More time should be spent on the practical training, to get more raters into Florida’s workforce faster. The on- the-job training and experience is what is needed. (9-3)

The business of providing BERS Ratings should fall (in part) under the Florida Department of Business & Professional Regulation CILB, the Construction Industry Licensing Board. (9-3)

Allow and approve additional rating providers. (9-3)

If additional providers are allowed it must be specified under what conditions other rating providers could be allowed under Florida’s BERS program. Statewide consistency should also be maintained. (9-3)

Allow and approve additional software options for use in Florida. (9-3)

OPTIONS/RECOMMENDATIONS WITH GREATER THAN 50% LEVEL OF SUPPORT

The following options did not achieve 75% or greater level of support, but achieved a greater than 50% level of support and are provided as information and possible use in developing comprehensive programmatic recommendations:

Evaluate whether to provide multiple training locations. (8-4)

Open the (rating and) teaching to Florida energy providers, and to any college or technical education school who wanted to participate. (8-4)

Consideration of adoption of additional RESNET standards, such as the standard for approving software for ratings and Pro. (8-4)

Allowing additional training providers to administer State of Florida exam. (8-4)

We need more public outreach. It is a waste of budget money to print out literature to send to people and hope that it gets in the right hands. Someone from DCA needs to be in charge of doing outreach programs. See about getting some grants to go across Florida and do homes shows educating the public. More Press Releases and if the program was open up to more raters other the FSEC I believe they would help get the word out much more then they do now. Strike requirement from law. (8-4)

Provide additional advanced diagnostics and building component training. (7-4)

Separation of administrator from provider. (7-5)

Test questions should correlate to field requirements and be vetted for efficacy and validity. (6-5)

Software (Energy Gauge) needs to be modified to allow for modification of the simulation options to allow for more experienced users to modify input options, especially with the base case. [Appendix G of ASHRAE 90.1] (6-5)

The commercial rating system should be aligned with national standards including Energy Star & LEED. (6-5)

MEMBERS' PROPOSED PROGRAMMATIC OPTIONS FOR CONSIDERATION APRIL 6

MIKE NAU (CONTRACTORS):

Overview

To really view this program for what will work here in Florida, we have to consider all the interactions between code compliance, DCA, ratings, FSEC, and their historic contribution and how all this was being funded. We must consider what will fund and where those funds will come from. If we write up a comprehensive program that conforms to those items we voted for (at 75% or above consensus) it would be fictitious. It was a wish list. We voted on many items without regard to their impact on funding, what their link (if any) to Code and whether they can even become a reality. When challenged to bring it all together into one comprehensive program that works I find myself moving back to systems that are currently in place and working with just adding minor tweaks for enhancement. When we insist on having registries, software, and training, that does everything we want, already in place outside the State I go back to Jeff's initial question in January "*Is there value to have a state program*"?. When raters start funding a national program for software training and registry, the internal funding will dry up and their credibility will rely on that new system/agency. If the software is split, it no longer coincides with Code and will not receive funding; we will buy outside approved efficiency software and in-state compliance software. Any added features will have to be requested at a national level and may or may not be carried out. I believe it's important to keep the program in the State and enhance what we have. It appears to me everything else costs more money that is not currently available. Not even the raters are experiencing the windfall profits to afford to fund these expansions.

Software

I think there is a distinct advantage to having one software package perform both code compliance and ratings. The difference between Code Compliance software and Rating software is the level of energy efficiency and the items being counted in the index/calculation.

I don't object to alternate software being offered but I think it should serve both purposes for Florida, compliance and efficiency ratings. This software must be compliant with the provisions of RESNET as well, since this is the standard by which ratings are performed nationally. While Florida has the option of requiring a tighter index for Energy Star it must still use RESNET standards as the basis. State oversight is necessary to serve both code as well as efficiency ratings. Allowing alternate compliance software places an unnecessary burden on the state while we are already anticipating severe budget cuts. Overall this theme of "where is money coming from" needs to be taken seriously. We must consider anywhere where there is an opportunity to consolidate funds. Software is one area where funding both for Code and rating software can be consolidated and state oversight will be necessary. The common cliché comes to mind "throw the baby out with the bathwater". We should petition FSEC to make the necessary improvements to the existing EG software.

Some questions came up regarding the possible use of COMNET as an alternate source for commercial ratings. I would encourage FSEC to look at COMNET gather a survey identifying its attributes and recommending making those changes to "EG Summit" to better align with COMNET. The alternative is the use of COMNET. Remembering that the minute the Florida code compliance software is split from efficiency software it will no longer be funded by the State.

State Oversight

As long as the software, as indicated above, is linked to both Code Compliance and efficiency ratings, it will be necessary to maintain state oversight. The minute this committee starts breaking out (separating) the efficiency programs from code, I believe we need to go back to the fundamental question Jeff asked in January: *"Is there value to have a state program"*? As many have indicated there are distinct advantages to having state oversight. It lends credibility to the ratings and keeps them in line with compliance reports. However, if it is decided by this steering committee that RESNET program can stand on its own without state specific requirements, than RESNET should be referenced in the rule as the oversight body and mandated rating program by which all raters in Florida must operate.

Practical Training

The existing training and program is geared toward the use of Energy Gauge programs. Something as simple as changing programs will require complete modification of the training. FSEC is a research institute with the Florida University system. The software changes that are requested are existing technologies that should/can be accomplished by FSEC. Several have commented that there is no funding to FSEC for maintaining the rater program. If we choose to expand the administrators to this program for training, testing, and rating management, where will that additional funding come from? This expansion will require funding to maintain a consistent program across all administrators? If there is a demand for additional providers in other areas than let FSEC administrate the program for training and facilitating the testing.

I support the idea Steve Baden presented elevating some of the rating organizations as "Rater Companies" they can act as mentors/ trainers under the administration of FSEC. When a rater is ready to take the exam, he/she can attend one of the testing sessions at the FSEC facility.

There were comments made regarding the transfer of Class 2 rater to and "Auditor" classification. I support this idea however; it should be a certification like Class 1. The advantage is to stay in alignment with RESNET, while still going through the tiered process FSEC established for training i.e. (Class 3: Energy Gauge software, Class 2: Physical inspection (audit) and then Class 1: Full measurement and inspection and Energy Gauge).

Another issue related to training was a prompting to increase practical training. I think once the "Rater Company" hierarchy (mentioned above) is established it will be necessary for serious raters to seek out the training and mentoring necessary from these companies. They will hold more authority under FSEC administration. They can gain from mentoring as well as providing full apprentice type programs.

Additional University Training

Concurrent with the work FSEC does, the rest of the university system should have minor programs addressing thermal building science and provide finishing students the opportunity to certify as raters on completion of their BS or AS degrees. This might be a Bldg Science program independent of an architecture program or an added feature. This would be an added feature to expanding the trade into a full rounded profession.

Rater vs. Auditor

There are fundamental differences in defining an auditor from a rater. A class 1 rater actually provides a finished rating. This includes air leakage measurements through the home, through the ductwork, to the exterior, along with calculations for the remaining equipment and bldg envelope. This information is entered into software for a final index or measurement of efficiency. I guess the key difference is actual measurement done on the envelope. The other classes of rater in Florida all

provide the same final measurement of efficiency, just using more default information requiring less field measurement.

A typical audit provides a survey of all the equipment and the building envelope, then will evaluate based on efficient components. RESNET refers to an audit as: *“A home energy audit (or survey) evaluates an existing home to determine where and how energy is being lost, what systems are operating inefficiently and what cost-effective improvements can be implemented to enhance occupant comfort, make the home more durable and lower utility costs.”* where a RESNET rater uses diagnostic equipment to measure efficiency. The difference in ratings vs. audit in and outside Florida is raters provide a final measurement of energy efficiency along with a HERS index while an auditor makes recommendations based on a survey data or diagnostics.

Earlier discussions recommended converting the Florida Class 2 Rater to Auditor. That’s discussed under “Certification” below.

Certification

The certification for class 1, 2, and 3 in Florida differs slightly from RESNET. While the class 1 rating certification is very close, there are some questions. While two supervised ratings are completed through the training program the others require a rater in good standing to supervise. The definition of “Rater in Good standing” must be defined in the rule.

I think it may be acceptable to split the classes of rater to align more closely with RESNET. Class 3 is the one in question. FSEC could provide preliminary classes introducing Energy Gauge (or other software) and some of the geometry involved while working off drawings. This would be a prerequisite to class 2, which can become the 1st tier of RESNET Auditor classification. The final classification Rater would align precisely with class 1 training. There would be two certifications Rater and Auditor. While still maintaining the 3 tiered training approach FSEC has implemented.

Costs

The cost of registering a Florida rating should be periodically evaluated for its ability to cover all expenses generated through FSEC. As registered ratings continue to increase there should be a gradual reduction in cost per rating. If the evaluation shows an increase in cost, it needs to be evaluated for additional funding/ increase in price per rating.

Another item related to cost was a short section in rule 9B-60 where the rule addresses charges per rating under each of the three rating types. I don't fully understand the rule as it was written, but it does attempt to establish what the acceptable limits for charges are. It is not the business of the government to set charges for services rendered. Let the free market establish what an acceptable charge for services rendered are.

Alternate Providers CILB & Others

Under the current system FSEC is the provider of BERS Ratings, training, testing, and compliance software developer. A vote was taken to recommend the CILB licensing board be the provider of BERS ratings. The overall response was that this is a good idea. I also wouldn’t have any objections if the “provider” was under the jurisdiction of the licensing board, however where and how would they be funded. If the licensing board took over as provider of ratings, each registration fee would go to them.

Remembering this program is self-sustaining. There are several sources for funds: registration fees, Annual Rater Certification fees, Training fees, software fees and some form of State funding to develop the “Code Compliant” software (which is then used to develop the HERS index). While it sounds easy to split these sources of funds, currently there is a balance in overall funds. One source may be making money while another source may be losing.

There can be advantages to ratings falling under the licensing board. There may be an opportunity for raters to be granted access to opening HVAC panels, lighting fixture covers. However, all this is hypothetical, they still may be reluctant to allow raters access to items falling under the HVAC or electrical contractors license. Given current budget conditions I would keep the entire program under FSEC. Once this is split up, if there is a shortfall anywhere in the system, raters will pay for that shortfall.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Ranking</i> <i>04/06/11</i>				

Member’s Comments and Reservations (April 6, 2011):

BILL EBERLE (PUBLIC UTILITIES):

Comment on Process

Validity of issues/complaints has been addressed through committee voting and comments. Consensus on prioritization is presented by the vote summary compiled in the “Draft Recommendations” document from Mr. Blair. Focus on remediation/final disposition for the each.

Summary

BERS is not broken; BERS needs improvement and streamlining.

Proposal

Building on the premise that BERS needs improvement, let’s look at solutions to the most pressing issues/problems/areas of concern/complaints and write the solution(s) into the rule.

Included would be the Draft Recommendations” items, but most importantly:

Metrics: add metrics to the rule for areas that could provide an opportunity to integrate meaningful reporting. By having metrics in place, DCA can assess the success and operational status of the designated provider(s). Build it into Rule 9B-60.

Providers: If one provider is not meeting the criteria, DCA may change providers or add others.

Training/Certification: capacity, availability, scalability - broad scope wording that the provider is required to meet specific quantifiable goals.

Mentoring: provide language that clearly defines who is responsible for mentoring and a process map should be developed and presented (perhaps modeled on trades, but do we really need to jump in at the deep end?).

Rating Processing: simple metrics for throughput should be implemented and reported to DCA on a regular basis.

Technical Support: simple metrics for throughput should be implemented and reported to DCA on a regular basis.

Costs and Fees: audit for best practices.

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Member’s Comments and Reservations (April 6, 2011):

DAVID REED (PUBLIC UTILITIES):

The first portion of this recommendation is to review the fundamental purpose and policies of the “Florida Building Energy-Efficiency Rating Act”, Statute 553.990.

Section 553.991 Purpose – states “the purpose of this part is to provide for a statewide uniform system for rating the efficiency of buildings.”

Section 553.992 Adoption of rating system – “The department of Community Affairs shall adopt, update, and maintain a statewide uniform building energy rating system...”

Section 553.995 (4) “ratings may be conducted by any local government or private entity, provided that the appropriate persons have completed the necessary training and have been certified by the department.”

Whatever decisions and path the steering committee takes, my top recommendation is to try and meet the fundamental principles of these three sections.

I don’t believe that the systems in place meet these fundamental purposes and policies of this act. There are many **“ratings of building efficiencies”** that occur in Florida that do not follow these policies. The following is a list of those:

- First and foremost there are energy “ratings” performed on new residential buildings that don’t follow this policy. In order for new residential buildings to receive permits for construction, they must submit energy evaluations on the building. These evaluations are essentially “ratings”. They must achieve a score (E-ratio) on form 1100A after an evaluation performed by modeling the home. These evaluations (ratings) can be performed by anyone without any training. This goes directly against the intent of section 553.995 (4).
 - It has been my experience that a large percentage of these forms are wrong and many have been blatantly falsified.
 - I recommend that these ratings be performed only by trained and licensed individuals and a QA/QC protocol be implemented to remove those that perform incorrect evaluations.
 - Many new homes are not meeting the basic energy efficiency requirements of code and that goes directly against fundamental principles of Statute 553.990
- Currently, rule 9B-60 covers only “ratings” on residential buildings that have a HERS Index attached to them. All other “ratings” fall outside of this. There are many “ratings” performed in Florida that don’t follow the requirements of Statute 553.990 and rule 9B-60
 - The Energy Star program in this state is very strong. Many homes are certified to Energy Star standards using the prescriptive path (BOP) and do not need to follow

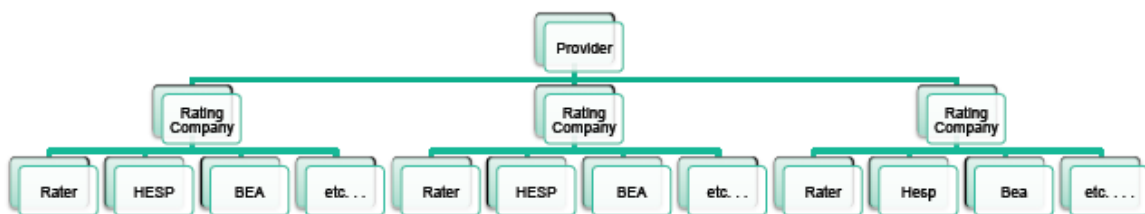
these rules. These homes achieve certification designed to signify a specific energy efficiency level and are promoted to the homeowner as being more efficient. These homes never went through a statewide uniform system for rating efficiency. Yet they claim to be 15% more efficient and are sold that way to homeowners. This is a direct contradiction to the statute.

- More and more “audits” are being performed in this state. Any worthwhile audit requires an assessment of the current energy consuming state of a building and then what the owner can do to increase it’s efficiency. In order to be of any value, audits must define what level of efficiency can be achieved with actions taken and what the ROI is for it. In essence, it’s a “rating”. I recommend we look into a feasible way of bringing audits into rule 9B-60 and ensuring they are done to some specific set of standards. I don’t recommend pigeon holing the industry to just one form of audit, but reasonable guidelines need to be met and folks must be trained to some level. Currently, anyone can claim to be an energy auditor and perform audits. Many are sales folks trying to push products and claiming false efficiency levels.

I recommend restructuring the Provider system in Florida and reorganizing FSEC’s primary responsibilities for the DCA.

- Look into following a new model like what Steve Baden presented (see figure below). Multiple providers should be allowed to operate in a free market, however, those providers should only perform review and processing of ratings, certifications and should NOT be allowed to perform the actual “rating”.
- FSEC should become the QA organization overseeing the providers and ensuring ratings and certifications are being performed properly and be the primary training facility for raters.
 - Providers should be able to provide training to raters, but final testing and certification must be done by FSEC
 - This will remove the major burdens from FSEC to provide all of the infrastructure for ratings and trainings and put them in a great position to oversee the quality of rating work performed in Florida.

This change should also be easily done without significant changes in costs and at a budget that will keep FSEC viable for a long time.



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Member’s Comments and Reservations (April 6, 2011):

LARRY MAXWELL (ARCHITECTS):

Commercial Buildings Ratings:

The bulk of the discussions of the BERS Steering Committee has been focused on the residential building energy ratings and the requirements for potential raters. Little discussion of the commercial/institutional buildings portion of the building stock, and the requirements of the raters for those buildings has been covered. The Steering Committee needs to address the commercial/institutional building rating in greater detail also.

Presently in FS 255.252, new publicly owned buildings (state and local governmental offices, schools, etc) are being required to meet new energy efficiency and “sustainability” goals that will exceed the requirements of the Florida Energy or Building Codes. These new standards require the new building designs to meet the requirements for certification under such programs as USGBC LEED Certified level, or other such as Green Globes, etc. (Meet the requirements but not required to obtain an actual certification or any specific level of certification). However, as the statute is about energy efficiency but the wording to meet the above requirements speaks more to “Green Design Principles” rather than energy efficiency, there has arisen problems with how it should be carried out. Questions have been raised by design practitioners (architects and engineers) of new public buildings as to what they are actually to design to.

It would be appropriate to have a energy use modeling software(s) that are approved as acceptable that can show compliance that a new building’s design can meet some level of energy efficiency that is above the minimum energy efficiency code requirements. These higher standards can be based on such standards as the US EPA Energy Star for High Performance Buildings or the Architecture 2030 Challenge (incremental efficiency improvements in new buildings with the goal of new buildings designed in 2030 to be net zero). These analyses should also be allowed to be prepared and certified by design professionals (architects and engineers) that do not have to be required to be certified through the Building Energy Rating System program. It would be appropriate to require that post construction testing be provided by a certified Building Energy Rater or a Commissioning Agent that has been trained and certified to provide full building commissioning and energy testing and ratings for air leakage, duct leakage, etc. as is possible to be provided by a certified Building Energy Rater. Building energy raters that are certified to test and rate residential (single and duplex residences) should not necessarily be allowed to provide ratings for commercial buildings, except for perhaps small commercial (less than 10,000 sf.)

A category of raters for larger commercial buildings (greater than 10,000 sf) should be developed that requires architectural or engineering backgrounds (and most likely licensing in those disciplines) that also have certifications for the requirements of meeting certain levels and training and education above the nominal level required by their specific professional license.

As buildings continue to become more and more complex, and at the same time the energy use requirements become more stringent, especially if true efforts at achieving net-zero energy commercial continues to grow, this new level of building modeling, performance testing, and post construction testing and validation (and building commissioning) becomes standard, this new level of educational requirements and certifications will be appropriate and actually necessary.

Presently the new proposed IGCC (International Green Construction Code) has building modeling

and commissioning, and even post construction/post occupancy testing and certification as a requirement if the IGCC is approved and adopted. Florida needs to begin to pro-actively move in preparing for a professional(s) that are capable of providing these modeling, testing, and certifications.

The bulk of the discussions of the BERS Steering Committee seems to be focused on the residential side of the equation, with little discussion of the commercial/institutional buildings portion of the building stock that will be coming. The Steering Committee needs to also address the commercial/institutional building side also.

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Member’s Comments and Reservations (April 6, 2011):

ARLENE STEWART (RATERS):

9B-60.002. Definitions.

For the purpose of this chapter, the following words, unless the context does not permit such meaning, shall have the meanings indicated:

- (1) Confirmed rating -- energy rating performed on an actual building with data gathered from an on-site inspection of the physical building, not just data from plans or construction documents.
- (2) Department -- the Department of Community Affairs.
- (3) Exempt Building -- all buildings as defined by Sections 553.902(1)(a), (b), (c), and (d), F.S.
- (4) Improvement analysis -- written calculation of the cost-effectiveness of various options to improve the energy efficiency of a building, including an explicit report on the assumed financing rate and lives of the measures used in the calculation and consideration of interactions between energy-saving measures.
- (5) Mixed Occupancies -- buildings consisting of more than one type of occupancy.
- (6) New Residential Building -- new residential occupancy buildings, including new residential occupancy dwellings in mixed occupancy buildings, permitted for construction after July 1, 1994.
- (7) New Public Building -- a new building comfort-conditioned for occupancy that is owned or leased by the state, a state agency, or a governmental subdivision including, but not limited to, a city, county, or school district, permitted for construction after July 1, 1994.
- (8) Rating System -- a uniform scale of the relative energy use of buildings based on annual energy usage and costs with consideration of local climate conditions, construction practices and building use.
- (9) Rater -- a person trained and certified by the Department to apply the Rating System, or any portion thereof, to Florida buildings.
- (10) Contract for Sale -- an agreement in writing made by an owner of real property for the sale of that real property to a buyer.
- (11) Contract to Build -- an agreement in writing made by a builder with the owner or purchaser of real property for the construction of a building on that real property.
- (12) New Commercial Building -- new commercial occupancy buildings, including new commercial buildings in mixed occupancy buildings, permitted for construction after the effective date of this rule.

(13) Existing Commercial Building -- a completed commercial occupancy building, including existing commercial buildings in mixed occupancy buildings for which a certificate of occupancy, or equivalent approval for occupancy, has been issued.

(14) Existing Residential Building -- a completed residential occupancy building, including residential occupancy dwellings in mixed occupancy buildings for which a certificate of occupancy, or equivalent approval for occupancy, has been issued.

(15) Energy Audit -- a site inventory and descriptive record of features impacting the energy use in a building. This includes, but is not limited to: all building component descriptions (locations, areas, orientations, construction attributes and energy transfer characteristics); all energy using equipment and appliance descriptions (use, make, model, capacity, efficiency and fuel type); and all energy features.

(16) Performance Test -- site measurement of the energy performance of a building energy feature or an energy using device conducted in accordance with pre-defined testing and measurement protocols and analysis and computation methods. Such protocols and methods may be defined by national consensus standards like those of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) and the American Society for Test and Measurement (ASTM), or as modified or defined and adopted by the Department.

(17) Rating Class for Residential Buildings -- the category of an energy rating, based on the source of the input data which are used by the Florida Building Energy Rating System to compute the energy and cost estimates of the energy rating, and consisting of the following ~~three~~ Classes:

(a) ~~Class 1 Residential Rating (tested)~~ -- a confirmed energy rating, conducted in accordance with Rule 9B-60, F.A.C., using site energy audit and performance test data as the sources for the input data on which the rating is based.

(b) ~~Class 2 Residential Rating (inspection only)~~ -- a confirmed energy rating, conducted in accordance with Rule 9B-60, F.A.C., using site energy audit data as the source for the input data on which the rating is based.

~~(c) Class 3 Rating -- a projected energy rating, reserved for new buildings and clearly labeled as "projected rating based on plans" that is conducted in accordance with Rule 9B-60, F.A.C., using plans and construction documents as the sources for the input data on which the rating is based.~~

(c) Residential Audit Rating -- a confirmed energy rating with an improvement analysis, that is conducted in accordance with Rule 9B-60, F.A.C., using site energy audit data and/or performance test data as the source for the input data on which the rating is based. Such rating shall be clearly labeled as "improvement analysis based on site audit" or "improvement analysis based on site audit and performance test data."

(18) Registered Rating -- a Florida Building Energy Rating for a specifically located building that has been compiled by a certified Florida Rater of any Class, has been found to be complete and accurate, and has been recorded with the Program Administrator.

~~(19) Projected Rating -- A rating performed prior to the construction of a new building or prior to implementation of energy efficiency improvements to an existing building.~~

(19) Rating Class for Commercial Buildings -- the category of an energy rating, based on the source of the input data which are used by the Florida Building Energy Rating System to compute the energy and cost estimates of the energy rating, and consisting of the following:

(a) Commercial Rating -- An audit and computer-generated performance evaluation of a building conducted in accordance with Rule 9B-60.004 of this chapter and resulting in comparison energy costs to the minimum requirements for building type found in the Florida Energy Conservation Code, Chapter 5.

(b) Commercial Audit Rating -- a confirmed energy rating with an improvement analysis, that is conducted in accordance with Rule 9B-60, F.A.C., using site energy audit data and/or performance

test data as the source for the input data on which the rating is based. Such rating shall be clearly labeled as "improvement analysis based on site audit" or "improvement analysis based on site audit and performance test data."

~~(22) Program Administrator – means a public or private entity that is qualified to perform the training and support functions of the Florida Building Energy Rating System and that is authorized by the Department to perform such functions.~~

(22) Program Administrator – means a public or private entity that is qualified to execute perform administrative and technical perform the training and support functions of the Florida Building Energy Rating System and that is authorized by the Department to execute such functions.

(23) Residential Ratings Provider – means a public or private entity, accredited by RESNET that is also qualified to perform quality assurance-support functions for residential ratings of the Florida Building Energy Rating System and that is authorized by the Department or its Program Administrator to execute such functions.

(24) Residential Training Provider – means a public or private entity that is accredited by RESNET, Building Performance Institute, the Banner Center for Construction or other entity the program administrator deems equivalent that is also qualified to performance training-support functions of the Florida Building Energy Rating System and that is authorized by the Department or its Program Administrator to execute such functions.

(25) Commercial Ratings Provider – means a public or private entity is qualified to perform quality assurance-support functions for commercial ratings of the Florida Building Energy Rating System and that is authorized by the Department or its Program Administrator to execute such functions.

(24) Commercial Training Provider – means a public or private entity that is accredited by RESNET that is also qualified to performance training-support functions of the Florida Building Energy Rating System and that is authorized by the Department or its Program Administrator to execute such functions.

Specific Authority 553.992 FS. Law Implemented 553.992, 553.995 FS. History--New 7-1-94, Amended 1-11-95, 12-27-98, 11-28-04, 7-27-10

9B-60.003. Department Activities.

(1) The Department or its administrator may interpret and clarify various aspects of the Florida Building Energy Rating System (BERS).

(2) Within three (3) years of the date of adoption of the rating system, and at least triennially thereafter in conjunction with the triennial review of Chapter 13 of the Florida Building Code, Building (the Code), the Department shall review the energy rating system program criteria and the calculation tools used in common by both the BERS and the Code that are adopted herein to determine the need for revision or modification. At a minimum, the Department shall update the rating system by adopting modifications to the current editions of the Code and the 2006 Mortgage Industry National Home Energy Rating Systems Standards, amended July 22, 2009, promulgated by the Residential Energy Services Network (RESNET) and the National Association of State Energy Officials (NASEO). Copies of the 2006 Mortgage Industry National Home Energy Rating Systems Standards, amended July 22, 2009, are available at the website [http://www.resnet.us/standards/mortgage/RESNET Mortgage Industry National HERS Standards.pdf](http://www.resnet.us/standards/mortgage/RESNET_Mortgage_Industry_National_HERS_Standards.pdf) or from the Florida Department of Community Affairs, Building Codes and Standards Office, 2555 Shumard Oak Boulevard, Tallahassee, Florida 32399-2100, (850) 487- 1824. The Department shall also adopt ASTM E 2797-11, Standard Practice for Building Energy Performance Assessment for a Building Involved in a Real Estate Transaction, BPI-101: Home Energy Auditing Standard and BPI-107: Standardized Qualification of Whole House Energy Savings Estimates as reference alternatives to RESNET Chapter 7.

(3) Any person may submit recommendations for proposed revisions or modifications to the rating system to the Department for consideration. Such proposed revisions and modifications shall be submitted in writing on Department of Community Affairs' Form #300-2008, the Change Request form, Building Energy Rating System, incorporated herein by reference, effective July 27, 2010. Copies of this form are available by writing to the Department of Community Affairs, Building Energy Rating System Program, 2555 Shumard Oak Boulevard, Tallahassee, Florida 32399-2100. Such proposals shall include the date of submittal, an identification of the submitter, identification of the section of the rating system to be revised, the new proposed language, a justification or reason for the change, and anticipated financial impacts of the change. The Department shall conduct a public hearing(s) in accordance with the requirements of Chapter 120, F.S. and Rule 9B-60.003(2)

(4) The Department or its Program Administrator shall develop, maintain and make available, at no cost to the prospective purchaser, Building Energy Rating System disclosure information brochure to be provided to the prospective purchaser.

Specific Authority 553.992, 553.998 FS. Law Implemented 553.992, 553.996 FS. History--New 7-1-94, Amended 12-27-98, 11-28-04, 7-27-10.

9B-60.004. Florida Building Energy Rating System, Adopted.

(1) Rules provided herein shall apply to new and existing residential buildings including single-family, multifamily, buildings of mixed occupancy, manufactured residential buildings; new and existing commercial buildings including buildings of mixed occupancy and manufactured commercial buildings; and to new and existing public buildings including state buildings, except those specifically exempted herein.

(2) For new homes, ~~the~~ home energy rating (HERS rating) for residential buildings shall be determined using only the Florida Residential Building Energy Rating System software EnergyGauge® USA, ResRate 2008, which produces the Florida Residential Building Energy Rating form, Form FRBER-2008, effective July 27, 2010, incorporated herein by reference. Certified BERS ratings shall be specific to one residence; sampling is not an acceptable procedure for ratings in Florida. ~~Air distribution system testing for Class 1 ratings shall be performed in accordance with Annex B and Annex C of BSR/ASHRAE Standard 152-04, "Method of Test for Determining the Design and Seasonal Efficiencies of Residential Thermal Distribution Systems." A Class 3 rating shall be clearly labeled as a "projected rating based on plans".~~

(3) For existing homes, the home energy rating (HERS rating) for residential buildings shall be determined using the Florida Residential Building Energy Rating System software EnergyGauge® USA, ResRate 2008, which produces the Florida Residential Building Energy Rating form, Form FRBER-2008, effective July 27, 2010, incorporated herein by reference.

For improvement analysis on an existing, individual, unique house only, the Department or its administrator shall also approve additional building energy use simulation software alternative(s) to EnergyGauge® USA, ResRate 2008, in accordance to BPI-107: Standardized Qualification of Whole House Energy Savings Estimates, as well as including cooling-dominated computational settings. The approved alternative building energy software simulation tool shall utilize actual energy bills and provide a set of standardized operating conditions to be used in the final calculation of standardized estimated savings. The rating shall produce an annualized usage prediction expressed in BTU/Sqft/DD. The Department or its administrator shall approve the form generated by the alternative software on a case by case basis to ensure that the intent of the data found on Form FRBER is included.

(34) Prior to contracting for construction of a new public building, an energy rating shall be conducted in accordance with subsection 9B-60.004(5), F.A.C. The public body proposing to contract for construction of such building shall consider the energy efficiency rating for that new

public building, notwithstanding the provisions of Section 255.254, F.S.

(4) The energy rating for public and commercial buildings shall be determined using only the Florida Commercial Building Energy Rating System software EnergyGauge® Summit ComRate 2008, which produces the Florida Commercial Building Energy Rating form, Form FCBER-2008, effective July 27, 2010, incorporated herein by reference. Public buildings owned or leased by state agencies and units of local government that are governed by Section 255.254, F.S., may utilize this rating system as one of the annual energy usage and cost by methods approved by those agencies.

(5) A copy of each of the above referenced rating systems has been filed with this rule with the Secretary of State. The rating systems are also available for reference and inspection at the Department of Community Affairs, Division of Housing and Community Development, 2555 Shumard Oak Boulevard, Tallahassee, Florida.

Specific Authority 553.992 FS. Law Implemented 553.994, 553.995(1) FS. History--New 7-1-94, Amended 10-3-94, 1-11-95, 12-27-98, 11-28-04, 7-27-10.

9B-60.005. Training and Certification Program.

(1) General Provisions.

(a) Beginning with the implementation date of this rule, no person may provide a rating in whole or in part (or any service otherwise named for the actions as described in 9B-60.002 in whole or in part) for buildings in Florida unless such a person has been certified as provided by this part. To perform a rating for any building as required by this rule, the person performing the rating must be certified by the Department of Community Affairs. For residential buildings, in accordance with Section 102.1.4.6 of the 2006 Mortgage Industry National Home Energy Rating Systems Standards, amended July 22, 2009, a Florida Certified Rater who has a financial or other interest resulting from the energy Rating results (including any recommended improvements resulting from the Rating) shall provide written disclosure of the nature of the financial or other interest to the owner of the property being rated utilizing Form FIDF-2008, Financial Interest Disclosure Form, incorporated herein by reference, effective July 27, 2010.

(b) Certification will be valid for one (1) year following the date of issuance. No rating activity shall be conducted after the expiration of the term of certification. A duplicate certificate may be obtained by written request to the Department.

(c) An application for annual certification renewal shall be submitted on a Certified Rater Renewal Form, Form 500B-2008, herein incorporated by reference, effective July 27, 2010, with a renewal fee of \$50. In addition to the annual renewal fee, a certified residential rater must, over a three year period, have completed twelve credit hours of continuing education in courses accepted by the Department for certification renewal. Acceptable courses shall, in general, be those dealing with energy use in buildings and building systems (including heating, ventilating and air conditioning), building design or construction, codes or plan review, financing or selling buildings, and courses on energy rating systems.

(2) The following qualifications, at a minimum, are required for certification as a rater:

(a) The individual shall submit an application on the Department of Community Affairs' Rater Certification Application Form, Form #500A-2008, herein incorporated by reference, effective July 27, 2010, and pay the appropriate application fee of \$150.00. The form is available by writing to the Department of Community Affairs, Energy Rating System Program, 2555 Shumard Oak Blvd, Tallahassee, Florida 32399-2100.

(b) Individuals applying for certification as raters ~~for new residential (Class 3), public and commercial buildings~~ shall attend a training program provided by the Department or its Program Administrator and shall demonstrate achievement of a level of knowledge and proficiency so as to successfully rate buildings by passing Department tests specific to the type of building rated for

certification. Individuals may also qualify for ~~Class 3~~ certification without attending the ~~Class 3~~ training program by passing a ~~Class 3~~ challenge test reflecting Florida-specific knowledge of energy codes and cooling climate building science.

Individuals applying for certification to perform testing for residential buildings shall demonstrate having the same stated requirements as ~~Class 2~~ raters, shall attend a ~~Class 4~~ HERS or BPI training program (or equivalent) provided approved by the Department or its Program Administrator and shall demonstrate achievement of a level of knowledge and proficiency so as to successfully perform residential performance tests by passing a Department test specific to ~~testing Class 4 certification.~~ Individuals may also qualify for ~~Class 4~~ testing certification without attending the ~~Class 4~~ training program by passing a ~~Class 4~~ testing challenge test. In addition, a ~~Class 4~~ testing rater candidate must complete five ~~Class 4~~ ratings under the supervision of a certified ~~Class 4~~ rater as well as pass the RESNET National Core Competency Test, referenced from Section 207.1.2 of the 2006 Mortgage Industry National Home Energy Rating Systems Standards, amended July 22, 2009, in order to obtain a ~~Class 4~~ certification.

The Department or its program administration shall also be permitted to accept BPI credentials as an alternative to HERS certification for individuals applying for certification for the alternative existing homes certification with improvement analysis. Such individuals must take and pass all Florida-specific tests (written and practicum) to demonstrate equivalent competency and are subject to the same continuing education and recertification requirements.

Individuals applying for certification as raters of ~~existing~~ commercial buildings, ~~in addition to the requirements stated above for new commercial buildings,~~ shall demonstrate certification as an energy auditor from a recognized commercial energy auditing program, such as the Certified Energy Auditor from the Association of Energy Engineers, or have at least one year of experience performing a minimum of fifteen commercial energy audits.

The Department or its administrator shall provide Florida-specific tests to approved training providers or approve tests developed by training providers to test Florida-specific requirements. The Department or its administrator shall charge a fee to the training provider to exceed the actual cost of developing the Florida-specific test or for reviewing the provider's proposal test for equivalency. The Department or its administrator shall determine the conditions under which training providers may give a challenge exam as well as revoke the training provider's authorization to administer a challenge exam for any impropriety. Training providers will report the results to the Department or its administrator upon successful passage by candidate or for renewal.

(c) The rates for providing building ratings shall be as follows: for Class 3 new residential building ratings, \$25.00 above those charges for providing Energy Code compliance calculations, or no more than the actual cost of conducting the rating, whichever is greater; for Class 2 residential building ratings, \$75.00 above those charges for providing the energy audit, or no more than the actual cost of conducting the rating, whichever is greater; for Class 1 residential building ratings, \$125.00 above those charges for providing the energy audit and performance tests, or no more than the actual cost of conducting the rating, whichever is greater; for new public and new commercial buildings which must comply with the Energy Code, \$50.00 above those charges for providing Energy Code compliance calculations, or no more than the actual cost of conducting the rating, whichever is greater; for those new public buildings which are exempt from Energy Code compliance, \$200.00 may be charged, or no more than the actual cost of conducting the rating whichever is greater; and for existing commercial buildings, \$100.00 above those charges for performing the energy audit, or no more than the actual cost of conducting the rating, whichever is greater.

(d) No certification shall be approved unless the applicant demonstrates to the Department that the following conditions are met: the applicant has not been found to be in violation of Part VIII, Chapter 553, F.S., or this rule chapter; the applicant has filed an accurate and complete application

with the application fee describing compliance with the relevant certification requirements; the applicant is capable of performing the activities for which he/she is seeking certification; the applicant has not shown a lack of ability or intention to comply with Part VIII, Chapter 553, F.S., or this rule chapter, or has not been unable or unwilling to conduct Energy Code compliance related activities forthrightly and honestly with his/her clients. Decertification shall be in accordance with procedures for revoking licenses of Chapter 120, F.S.

(e) Recertification is required within six months of the effective date of major revisions to the energy code provisions of the Florida Building Code, or at least every three years from the rater's last date of certification. For recertification, the applicant shall attend training on changes impacting the rating system provided by the Department of Community Affairs or its Program Administrator and demonstrate achievement of a level of knowledge and proficiency so as to successfully rate buildings by passing a Department test applicable to the buildings being rated. The fee for recertification shall be the annual certification renewal fee. In addition to the written test, ~~Class 1~~ residential raters shall be required to satisfactorily demonstrate performance testing skills necessary to perform a ~~Class 1~~ rating as part of the recertification as well as at the time of training and testing. These regulations in no way exempt any person from other state and local occupational licensure requirements. Any rater who fails to pass the recertification test in his or her rating classification shall be required to attend a refresher course approved by the Department of Community Affairs and retake the test. Until the rater can demonstrate his/her ability to perform ratings in his/her classification, registration of ratings by the rater shall be prohibited.

(3) Reporting Requirements. Certified raters shall submit all ratings to the Department in care of its Program Administrator via the website upload at:

http://dbase.fsec.ucf.edu/pls/engauge/rating_home.

(a) The Program Administrator shall maintain an electronic database that can be queried by the public to verify that a BERS Rating has been registered for a specific real property.

(b) Upon request and if authorized by the homeowner or his/her agent, the Program Administrator shall provide a registered BERS Rating report from the electronic database to a homeowner, or prospective home purchaser. The Program Administrator may charge a fee not to exceed the actual cost of providing such rating report.

(3) The following qualifications, at a minimum, are required for approval as a Provider:

(a) The individual or entity shall submit an application on the Department of Community Affairs' Provider Certification Application Form, Form #500D-2008 04, herein incorporated by reference, effective _____, and pay the appropriate application fee of \$300.00. The form is available by writing to the Department of Community Affairs, Energy Rating System Program, 2555 Shumard Oak Blvd, Tallahassee, Florida 32399-2100.

(b) The Department of Community Affairs shall approve Rating and/or Training Providers. Individuals or entities applying for approval as residential providers for residential buildings shall be accredited by RESNET or BPI as a ratings and/or training provider. Individuals or entities shall demonstrate achievement of a level of Florida-specific knowledge, proficiency and business practice so as to successfully perform quality assurance and/or training functions by passing a Department test specific to ratings, quality assurance and/training. Individuals or entities may also qualify for approval without attending Florida-specific provider program by passing a challenge test. In addition, a rating provider candidate must provide quality assurance on thirty ratings under the supervision of Program Administrator and shall be subject to biannual review thereafter by the Program Administrator. The Program Administrator shall review and approve classes given by training provider. In addition, the program administrator shall attend a training class given by the training provider at the program administrator's discretion.

(c) Individuals or entities that do not maintain approval by RESNET or BPI shall have their approval revoked by the Program Administrator.

(d) Rating providers shall submit approved ratings to the program administrator on behalf of their associated raters.

(4) The following qualifications, at a minimum, are required for the Program Administrator :

(a) The individual or entity shall submit an application on the Department of Community Affairs' Program Administrator Application Form, Form #500E-2008 04, herein incorporated by reference, effective _____, and pay the appropriate application fee of \$500.00. The form is available by writing to the Department of Community Affairs, Energy Rating System Program, 2555 Shumard Oak Blvd, Tallahassee, Florida 32399-2100. The Department of Community Affairs shall select a single administrator every three years in conjunction with the Florida Building Code and shall do so no later than 30 days after the implementation of a new code.

(b) The Program Administrator shall demonstrate achievement of a level of Florida-specific knowledge, proficiency and organization management as required to serve as the Department's designee. The Program Administrator shall develop, execute and maintain all administrative and technical aspects of this rule and shall have authority to issue non-binding administrative and technical interpretations. The Program Administrator shall submit an annual report of activities to the Department of Community Affairs.

(c) Where national standards exists (such as RESNET and BPI), there shall be separation between the Program Administrator and Rating Provider(s). Where national standards exist, the Program Administrator shall provide system oversight, including but not limited to maintenance of the state ratings database and rating system support documents and provisions, provide initial and triennial provider training on criteria, provide bi-annual quality assurance that approved Rating Providers are executing Florida provisions, review and approval of Training Provider curriculum, development and distribution of uniform testing criteria for raters and provide annual quality assurance that approved Training Providers are executing Florida provisions. The Program Administrator may charge a fee not to exceed the actual cost of providing such oversight services to providers, approved by the Department of Community Affairs and made available upon request. The Program Administrator shall also publish administrative certification processes and procedures and hold a yearly stakeholders meeting for the purpose of improving System execution. There shall be an administration fee of \$10 for each rating filed paid to the Program Administrator by the rating provider, who shall make yearly report to the Department of Community Affairs. There shall be an administration fee of \$25 for each training attendee paid by the Training Provider to the Program Administrator, who shall make yearly report to the Department of Community Affairs.

(d) The Program Administrator shall collect fines for the following infractions:
Conducting ratings (whole or partial) without a certification: \$500 for each infraction
Conducting ratings (whole or partial) without a current certification: \$100 for each infraction
Failure to pass quality assurance inspections: \$10 for the first infraction, \$100 for the second infraction, \$1000 and suspension of certification for the third infraction (per QA set)
Failure to disclose a conflict of interest: \$50 for the first infraction, \$100 for the second infraction, \$1000 and suspension of certification pending investigation by Program Administrator for the third infraction

(3) Reporting Requirements. Certified raters shall submit all ratings to the Department in care of its Program Administrator via the website upload at:
http://dbase.fsec.ucf.edu/pls/engauge/rating_home the Florida Solar Energy Center, 1679 Clearlake Road, Cocoa, FL 32920 in electronic format, either via electronic mail (e-mail) or on 3 1/2

" diskette. Approved Ratings Providers shall be permitted to submit ratings to the state database on behalf of their Class 1 raters.

(a) The Program Administrator Florida Solar Energy Center shall maintain an electronic database that can be queried by the public to verify that a BERS Rating has been registered for a specific real property.

(b) Upon request and if authorized by the homeowner or his/her agent, the Program Administrator shall Florida Solar Energy Center may provide a registered BERS Rating report from the electronic database to a homeowner, or prospective home purchaser for a fee. The Program Administrator may charge a fee not to exceed the actual cost of providing such rating report.

(4) A written report shall be provided to the purchaser of real property or that individual who requested the rating. Such report shall include the Florida Building Energy Rating report and the following:

(a) A completed copy of the Florida Building Energy Rating, Form FRBER-2008 or Form FCBER-2008;

(b) The certified rater's signature, typed or printed name and certification number;

(c) The date that the rating was completed;

(d) The statement: "This notice is provided to you by an individual certified by the Florida Department of Community Affairs to perform a building energy rating evaluation. Any questions, comments, or complaints regarding the person or agency performing this service may be directed to the Florida Department of Community Affairs, Building Energy Rating System Program, 2555 Shumard Oak Boulevard, Tallahassee, Florida 32399-2100, (850) 487-1824, or the Program Administrator. The Department or the Program Administrator may request the owner's permission in the future to conduct a quality assurance review of this rating;" and

(e) If it is a residential rating, the disclosure form printed from the EnergyGauge® USA ResRate 2008.

Specific Authority 553.992 FS. Law Implemented 553.995(4) FS. History-- New 7-1-94, Amended 10-3-94, 1-11-95, 12-27-98, 11-28-04, 7-27-10.

9B-60.007. Florida Building Energy Rating System, Existing Public Buildings.

(1) The provisions of this rule are adopted to implement the Florida Building Energy Efficiency Rating Act of 1993, Part VIII, Chapter 553, Florida Statutes, by providing a state-wide uniform energy rating system for rating existing buildings proposed for acquisition for public use through lease or purchase and for existing public buildings undergoing renovation. The term existing public building, as used herein, shall have the same meaning as new public buildings in rule 9B-60.002, except construction of such buildings shall have been permitted before this rule shall have taken effect.

(2) Prior to contracting for renovation or acquisition of an existing public building, an energy rating shall be conducted in accordance with the criteria in rule 9B-60.007(3). The public body proposing to contract for renovation or acquisition of such building shall consider the energy efficiency rating for that existing public building when comparing contract options, notwithstanding the provisions of Section 255.254, F.S. As used herein, building means any structure that encloses a space used for sheltering any occupancy and separated from other buildings by a fire wall, and renovation means a building undergoing alteration where the cost of the alteration exceeds 30 percent of the assessed value of the structure.

(3) The energy rating for existing public buildings shall be determined using the Florida Commercial Building Energy Rating System software, EnergyGauge® Summit ComRate-2008 in accordance with rule 9B-60.004. Public buildings owned or leased by state agencies and units of local

government governed by Section 255.254, F.S., may utilize this rating system as one of the annual energy usage and cost methods approved by those agencies.

(4) The cost of providing building ratings for existing public buildings shall be no more than \$100.00 above those charges for the energy audit plus the Energy Code compliance calculations or the actual cost, whichever is less.

Specific Authority 553.992 FS. Law Implemented 553.991, 553.993, 553.994, 553.995, 553.997, 553.998 FS. History--New 7-21-94, Amended 12-27-98, 7-27-10.

9B-60.008 RESNET Standards, Adopted.

The 2006 Mortgage Industry National Home Energy Rating Systems Standards, amended July 22, 2009, promulgated by the Residential Energy Services Network (RESNET) and the National Association of State Energy Officials (NASEO) are adopted for residential buildings and incorporated by reference as the rule of this Department except as otherwise specified in this rule chapter.

Specific Authority 553.992 FS. Law Implemented 553.995(1)(c) FS. History--New 12-27-98, Amended 11-28-04, 7-27-10.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Ranking 04/06/11</i>				

Member’s Comments and Reservations (April 6, 2011):

DENNIS STROER (RATERS):

At the Jan 19th meeting we had 18 options / recommendations that received a 75% support level. The recommendation “*The business of providing BERS Ratings should fall (in part) under the Florida Department of Business & Professional Regulation CILB, the Construction Industry Licensing Board. (9-3)*” is one I feel would include some of the other options / recommendations so this will be the focal point of my “homework project”.

At this time Class 1BERS (HERS) Raters are only governed by the Department of Community Affairs, the provider (FSEC), and RESNET. The continuing education credits a rater receives today come from the RESNET Training Committee through their provider. However, this education does not include OSHA, Business Practices, lien laws, etc. which are all required by the CILB. It was always the intent of the DCA that BERS Ratings should be provided by a business that practice in that field. Today, companies offering third party BERS (HERS) ratings must be able to provide a portfolio services to be successful. Those companies who have been successful in the business of providing third party BERS/HERS ratings are also well ingrained in the Building Science field. In Florida most successful business have a plan that not only includes third party HERS ratings but also provides other third party services such as Energy Calculations for the permitting process, HVAC load calculations, HERS ratings for Energy Star and other green programs, building performance diagnostics, etc. And to do that successfully the business must have a portfolio of skill sets and hire employees.

It should also be noted that a business that provides third party BERS (HERS) ratings contract with builders. The BERS/HERS rater that works for that business must go on jobsites to perform

his/her work. The company in the business of providing third party BERS ratings must have a good understanding of Florida Building Code. For this reason companies in the business of providing third party services such as BERS/HERS ratings, Energy Calculations for the permitting process, HVAC load calculations, and other related services to the construction industry should have a designation under the Florida Department of Business & Professional Regulation CILB, the Construction Industry Licensing Board. For lack of a better name I will mostly refer to the business as a “BERS Contractor” but I am sure my peers can come up with a better classification. So if it was decided to create a classification under the CILB for a business that supplied third party BERS (HERS) ratings as part of its business plan what would that business look like? And what would be the benefits?

“BERS Contractor”

Any way you look at it, those of us who have been successful in the business of supplying third party BERS ratings are in fact Contractors. We just aren’t regulated very well in Florida (other than by the DCA, Rule 9B60, and our provider). A BERS Contractor would be licensed to provide BERS (HERS) ratings, energy calculations, HVAC load calculations, and other third party services pertaining to the skill sets mentioned below. The BERS contractor would have to abide by the same rules as any other contractor working in the building industry in the State of Florida. The contractor would have to acquire a determined amount Continuing Educational Units every two years and carry required insurances.

Continuing Education

This may seem problematic but maybe not. As a model, I would look at the CEU requirements of the HVAC contractor. Every two years the HVAC contractor must accumulate 14 CEUs. Nine of those CEUs come from a “general category” and five are mandatory. Needless to say, the educational credits HERS raters must acquire through their RESNET providers would cover the nine “general category” requirements. It is the five mandatory items that BERS (HERS) contractors would be required to get under the CILB. The mandatory CEU’s a “BERS Contractor does not presently receive are Advanced Building Code, Business Practice, Laws and Rules, Worker’s Compensation, and Workplace safety. The lack of required education in those five categories can fail the “BERS Contractor” business and more importantly put the general public at risk (consider a BERS/HERS rater working around combustion appliances).

Insurance

To be listed as a RESNET certified HERS Raters we must carry a required amount of errors and omissions insurance, but that’s all. As a certified BERS contractor under the CILB, we would be required to carry additional insurance such as general liability and workman’s compensation. As a “BERS Contractor” my employees go on job sites, use ladders, test ductwork, run equipment, etc. Our company carries general liability and workman’s comp but there isn’t anybody governing us to make sure we do.

Also, I might mention that it is almost impossible for a BERS/HERS rater to get liability insurance when their business plan is based only on ratings. The insurance industry does not know how to classify a business that goes on construction sites and performs ratings. Putting a “BERS Contractor” classification under the CILB would help solve that issue.

To qualify for a BERS Contractor Licenses

Again, I would have to refer to what is required for other trades under the CILB such as the requirements to become a HVAC contractor. The applicant must have five years working in the

field under a licensed HVAC contractor or two years plus formal education. The time in the field under a licensed contractor is true mentorship on the skill sets required to successfully operate a company within the boundaries of a set of standards. To be successful in business a “BERS Contractor” must know much more than just how to produce a BERS rating. The BERS contractor must have a portfolio of skill sets based on building science; how the building works as a system.

The successful BERS Contractor must have, at minimum, a working knowledge of the following skill sets:

The building code with emphasis on the Energy Code Building materials and their proper application ACCA Manuals J, S, and D Heating & cooling system ratings and outputs Forced air duct systems Exhaust systems Psychrometrics relating to the properties of air Combustion safety (very high priority when a BERS rater is working around combustion appliances)

No doubt some of my peers would say I might have missed a few. However, it is plain to see that it is impossible to have a working knowledge of those skill sets by attending 5 days in a class room/lab, 1 field day doing two ratings with a group, and 3 ratings under a Class 1 energy rater (it’s absurd). At best this person who completes and passes the present Class 1 Rater certification program is at best a “BERS Technician” (which would be a great designation). In the HVAC field the contractors employ technicians that are or can be certified in their particular tasks such as North American Technician Excellence (NATE) certified technicians.

Synergies

I know of several successful “BERS Contractors” (again, for a lack of a better term) in Florida who offers third party services using the skill sets above. We all mostly consider ourselves in the Building Science field. Two things we all have in common; we offer third party BERS/HERS ratings as part of our business plan and we hire employees. By putting “BERS Contractors” under the CILB it would make those companies more legitimate in the construction industry and give a work place for the those people who have decided become a Class 1 Energy Rater under the present certification system. Some of the other issues below would be taken care of by default.

Keep the RESNET training as an integral part of the training. (12-0)

If the “BERS Contractor” falls under the CILB, RESNET would still be the main provider of CEUs in the general category. RESNET would still be responsible to provide oversight relating to the practice of performing a rating as it does now; an expense the CILB would not have to bear. However, RESNET does not teach Advanced Building Code, Business Practice, Laws and Rules, Worker’s Compensation, and Workplace safety which are all mandatory classes that Florida contractors must take once every two years. This is where the CILB would provide oversight and standards for compliance.

Technical support shall be received within 24 working hours of request for support. (12-0)

Sorry, no comment. My experience with technical support has been outstanding. But maybe it is because we have learned the software very well; providing energy calculations for the permitting process has been our core business since 1991. (Has anybody tried to get technical support from Auto Desk?)

However, putting the business under the CILB would require in house mentoring under a licensed contractor.

Determine whether there are COMNET options that can be used in Florida. (12-0)

It looks like Comnet will more or less certify programs that accurately and easily perform ASHRAE

90.1 calculations. OK, here is a surprise, EnergyGauge Summit is the only program out there today that comes close to “accurately and easily”. There are several DOE2 programs out there that perform 90.1 calculations accurately and some of the best are free. But none of them are as easy to operate as Summit. I give Summit the same difficulty factor as I give my Manual J load calculation software (RHVAC by Elite Software). But then again, RHVAC is too complicated for those who can’t run USA.

Remove the requirement in law that ratings be done at cost. (12-0)

I agree because it causes confusion.

Clearly define a “Rating”. (12-0)

This should be done under a CILB, “BERS Contractor”, TAC committee

Define “Audit”. (12-0)

This should be done under a CILB, “BERS Contractor”, TAC committee

For commercial raters, define what recognized test & balance means. (12-0)

A recognized Test and Balance contractor is a contractor certified by a recognized organization such as National Environmental Balancing Bureau, www.nebb.org or Associated Air Balance Council, www.aabc.com. They are not specifically trained in the BERS/HERS industry. Their skill sets involve testing and balancing of mechanical systems to a set of engineered documents and standards. Their skill sets do not involve the evaluation of the building as a system in itself, with many sub systems, and not all of them are mechanically driven.

Identify state certification requirements for Auditor, either as an independent certification or as an equivalent for Class2, or as identification a new class of rater for existing buildings. (11-1)

As the owner of a company that offers services based on the skill sets above I believe those designations are important and worth leaving in place. Our core business is supplying energy calculations and HVAC load calculations for the permitting process. Those people who perform that work are, at minimum, a Class 3 energy rater. Having these classifications gives employees goals to achieve and self esteem in the industry they work in. It also helps to keep the “BERS Contractor” business healthy.

Establish a fine structure and related set of requirements for non-conformance to the rating rule.

(11-1) Under the CILB there is already a tool in place to handle non conformance. Also, a BERS TAC committee would be created to make recommendations on how best to handle non-conformance.

Review and determine whether to adjust the \$ rates for performing ratings. (10-2)

Should not the free market dictate the cost of ratings? I believe competition will keep ratings at fair market value.

Evaluate the use of the university system to provide additional training and coursework toward certification and further building science as a specialty, throughout the State, particularly the northern part. (10-2)

From what I can see many universities are starting to include some kind of building science courses in their curriculum. So I am not sure for the reasoning behind this one, I must have voted against it. If it relates to becoming a Class 1 energy rater then I can understand the issue. However, there is no rule that says preparation and training to become a BERS rater has to come from the university. It is

true that testing to become a BERS/HERS rater must be done at the FSEC testing site at this time. However, nobody says an applicant must train there. The applicant can receive his/her training anywhere.

More time should be spent on the practical training, to get more raters into Florida's workforce faster. The on-the-job training and experience is what is needed. (9-3)

I feel that this is a misconception and a huge mistake. We do not need to flood the State with inexperienced BERS raters without a business plan. We must first consider what a business would look like when the business plan is providing third party services to the construction industry that includes BERS ratings. How should that business model be licensed, and what type of insurance should they carry. (An inexperienced BERS rater can be very dangerous around combustion appliances.)

On the job training should come from the company a BERS technician is working for. This is the place for mentoring on the skill sets mentioned above. This is how it works in the trades today.

Allow and approve additional rating providers. (9-3)

I am totally against this one because of the confusion factor and the low cost we are paying for BERS/HERS registration today. However, if this is what the majority wants then I say go for it. It won't break the system but the cost of doing business will go up! The current provider is very inexpensive.

If additional providers are allowed it must be specified under what conditions other rating providers could be allowed under Florida's BERS program. Statewide consistency should also be maintained.

(9-3)

How the different software packages relate to our climate is probably the most important question. The State will need a software compliance testing tool and provider standards to accredit a provider. The provider must prove to be very familiar with our climate zone and the demands it requires on our buildings.

Allow and approve additional software options for use in Florida. (9-3)

See above

Allow for stand-alone software with online upgrades instead of annual licenses. (9-3)

I can agree with this one, other software companies do the same. However, the user must pay for each upgrade. Energy code software changes with each code "glitch" change. AutoCAD cost me \$500.00 a year to stay updated.

I feel that people who are complaining about the software do not have the proper skill sets to be classified as a "BERS Contractor". Our company uses the software daily because energy calculations (using USA) and HVAC load calculations (using RHVAC by Elite Software) have been the bread and butter part of our business since 1991. We have four people who operate the USA software.

RHVAC is a Manual J load calculation program and it is ACCA certified. RHVAC is much more complicated to operate than EnergyGauge USA. USA will provide an ACCA Manual J HVAC load calculation in the background but it is only a whole building calculation and is useless as a design tool. Providing room-by-room ACCA Manual J calculations to the building industry is a service a typical "BERS Contractor" would provide.

Most people complaining about the USA software cannot or do not know how to perform an ACCA Manual J room-by-room calculation because it is a complicated procedure and the certified software reflects that. To be proficient in using the software the practitioner must have a good understanding of Manual J; just as person operating a full blown accounting software package must know accounting.

I worry that those who complain about USA software really don't understand the science behind the program. Input guesses are made into the software because some inputs pertain to the skill sets mentioned above. Inexperienced BERS rater have no understanding of those skill sets so input mistakes are made. When the software package receives bogus inputs it reacts, so does the Manual J software we use or any other software package that mostly performs scientific calculations and crunches numbers. EnergyGauge USA is a great rating software package that does an outstanding job. I truly believe that for a "BERS contractor business to be successful the business must be proficient in multiple software packages as they relate to the skill sets mentioned above.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Ranking 04/06/11</i>				

Member's Comments and Reservations (April 6, 2011):

VINCE BRIONES (ENGINEERS):

Based on the comments of the BERS survey, and the recommendations of the BERS Steering Committee, consideration should be given to changing the program from an operation that is managed by a single entity to one that has options for allowing multiple providers. This change would need to include who is authorized to provide training, technical support and software tools. Accreditation and oversight of the program should remain the responsibility of a single agency of the State. If changes are made to the operation of the program, the opportunity should be used to clarify and improve definitions and classifications within BERS and remove some of the confusion with the current program.

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Ranking 04/06/11</i>				

Member's Comments and Reservations (April 6, 2011):

PAKI TAYLOR (ENGINEERS):

Recommend a minimum of five (5) primary training providers in the State of Florida: **Northwest, Northeast, Central, Southern** and **Southwest** areas of the state. The training providers connect to the university and community college system.

Recommend multiple rating providers: a minimum requirement of one rating provider per regional area (five minimum rating providers in total – the maximum number is unlimited).

Separate the BERS system regulation/compliance from the **administrative/training/rating functions**.

The State of Florida Business and Professional Regulation would oversee the BERS system regulation and compliance.

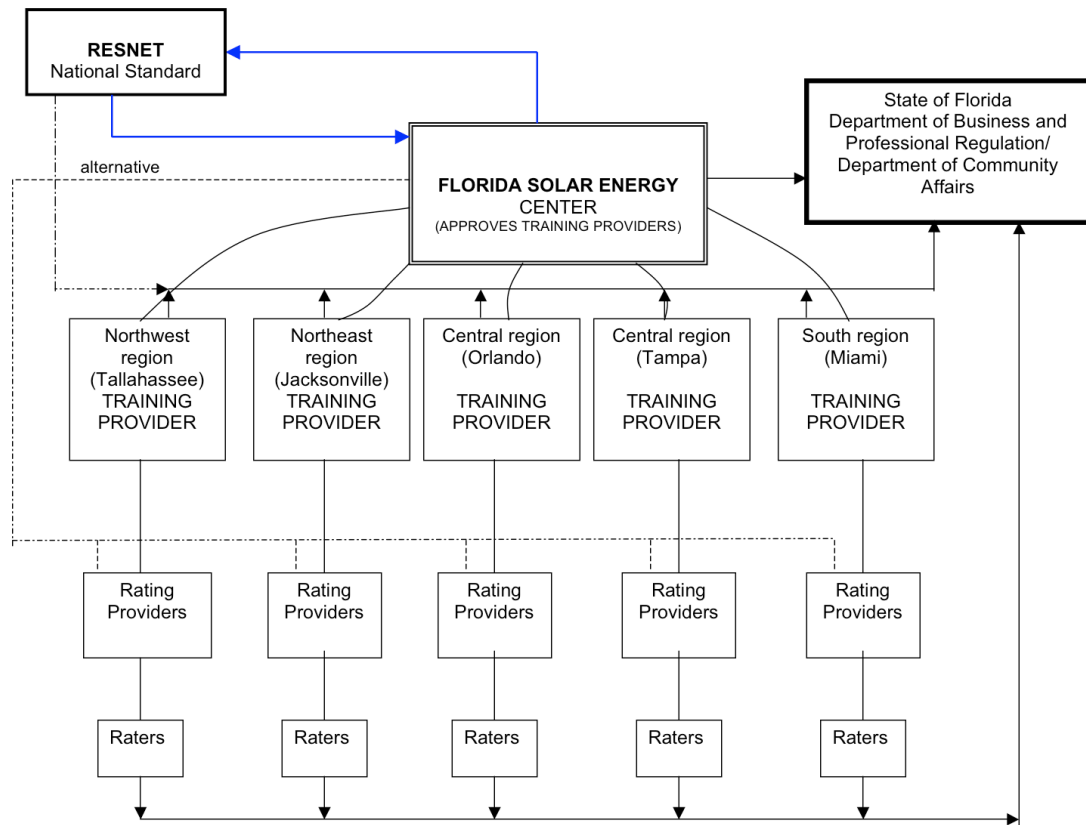
Incorporate the appropriate BERS system language into the FL. Statutes and the Florida Administrative code.

The BERS system should be unified and consistent and in alignment with the RESNET standard.

The Florida Solar Energy Center would oversee the training of training providers and rating providers and administer and/or approve their programs for consistency and uniformity. FSEC would report to the State (Department of Community Affairs) and list the approved training/rating providers online.

Alternatively, FSEC would approve only training providers. The training providers would oversee the rating providers.

The (portions of the) examinations should be computerized and available at Prometric (or equivalent) testing centers throughout the State.



	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Ranking 04/06/11</i>				

Member’s Comments and Reservations (April 6, 2011):

MEMBERS’ WRITTEN COMMENTS:

Arlene Stewart:

Can we please take a look at E2797-11* (proposed standard currently under review by an ASTM technical committee) “*Standard Practice for Building Energy Performance Assessment for a Building Involved in a Real Estate Transaction*” as a potential for the gathering of information for the commercial BERS program? Since we don’t currently have a standard referenced?

<http://www.astm.org/Standards/E2797.htm>

*Note from the document (E2797-11) submitted by Arlene:

“This document is not an ASTM standard; it is under consideration within an ASTM technical committee but has not received all approvals required to become an ASTM standard. You agree not to reproduce or circulate or quote, in whole or in part, this document outside of ASTM Committee/Society activities, or submit it to any other organization or standards bodies (whether national, international, or other) except with the approval of the Chairman of the Committee having jurisdiction and the written authorization of the President of the Society. If you do not agree with these conditions please immediately destroy all copies of the document. Copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428. All Rights Reserved.”

PUBLIC WRITTEN COMMENTS:

Vince DiFrancesco (Everblue Training Institute):

Florida rater trainers Proposal: There are a number of things that are proprietary to FSEC that need to be made available to trainers so we can effectively offer rater training and/or testing in Florida.

1. Course descriptions, learning objectives, and criteria required to develop curriculum and training.
2. Field training/testing facilities and specialized equipment specifications and requirements.
3. Software training requirements and licensing
4. Test formats and the ability to administer written exams and field exams in conjunction with a training event the way FSEC does. This is required to be able to independently meet prerequisites for each level of training.
5. Requirements for educational ratings and supervised ratings and the ability to administer in conjunction with a training event the way FSEC does. This is required since they are being applied to both RESNET and Florida Rater requirements.

We would like to combine training and testing events throughout the State so students can have one stop training and testing over a given period of time that is not broken up. We believe this would reduce the financial and logistical hardships associated with making several trips to FSEC over time. We have a significant amount of experience doing this nationwide with both BPI and HERS training, and we would like to bring this to Florida as well.

Jason Helvenston (Simply Sustain):

Transition to a Free Market

I. DBPR – Governor’s Goal

- A. Begin working with DBPR to establish a transition to DBPR
- B. Transfer the Rater License to DBPR

II. Revise and Clarify Existing Rule /Law

A. National RESNET/HERS Providers

- i. Allow additional National RESNET/HERS Providers into State
- ii. Current law only specifies for State Certified BERS Ratings, not National HERS Ratings.
- iii. Nothing needs to change but clarification of a National HERS Rating versus a Florida BERS Rating.
- iv. Maintain Florida BERS Rating system and training.
- v. Utilization of open market service provider allows for superior competition and an ability to choose who you build your relationships with.

B. Energy Rating/Auditing Software

- i. Allow additional Software for National HERS Ratings into State
- ii. Keep existing approved software for State BERS Ratings and Energy Code Calculations.
- iii. Utilization of open market software allows for superior competition and market driven solutions. Non-competitive software will only create an inferior product.
- iv. Why are over 90% of the Nations HERS ratings registered by software other than the State of

Florida required software? The rest of the Nation can choose and they choose others.

v. Integrated software can be usable for scheduling, accounting, report writing, and other crucial business functions. These capabilities are currently available to the rest of the U.S. but NOT Florida.

C. Establish BERS Purpose

i. Mission and Goals

1. What has BERS accomplished?
2. What has HERS accomplished?
3. What does BERS want to accomplish?
4. Why have BERS, especially if NO enforcement?
5. Without funding, does BERS hinder progress?

ii. Measurements of Success (Florida compared to U.S.)

1. # of Ratings registered in the State of Florida
2. # of Energy Efficient Mortgages or EIMs registered
3. # of Energy Star labels
4. % of passing rate for RESNET exam
5. Florida percentile of success for RESNET exam.
6. How many national Ratings are registered with Energy Gauge versus other Rating software's?

D. Internal Regulation Systems

i. Conflicts of interest

1. Stop the Regulator from being one of the biggest Competitors.
2. Stop the Regulator from receiving free leads via the State Office.

ii. Price Fixing

1. Stop determining market price.
2. Stop collusion between market to market and regulator to market.

E. Standard of Ethics and Procedures

- i. Establish or follow existing standards for ethics and procedures.
- ii. Non-compliance actions should be stated and enforced.

F. Enforcement of Law

i. Enforceable

1. Make laws, rules, etc. that are enforceable.
2. Reasonable and effectively enforce.

ii. Non-Enforceable

1. Do not make laws, rules, etc. that are not enforceable.
2. Do not tie the hands of the honest and ethical (raters, businesses) with unfair/unenforceable laws.