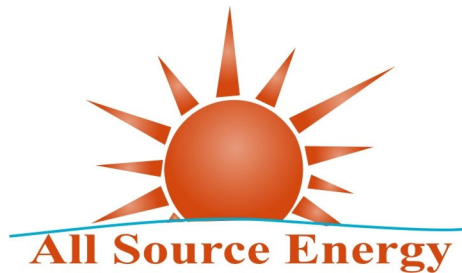


**Comments to the**  
**Staff Workshop on a Renewable Portfolio Standard**

**On**

**December 06, 2007**


**By**



**9220 Bonita Beach Rd., Suite 200-4**  
**Bonita Springs, FL 34135**

**Phone (239) 292-9385**

**Principal Author: William S. Toth, Jr.**

	<b>9220 Bonita Beach Rd., Suite 200-4 Bonita Springs, FL 34135</b>  <b>Phone (239) 292-9385</b>
---	---

We would like to thank the Florida Public Service Commission, the Commissioners and their staff for giving us the opportunity to provide input into this rule making.

## **Section 1 – General Discussion**

In this section we will be making some general comments and providing input of a general nature.


At the workshop there was considerable discussion on what the purpose of the Renewable Portfolio Standard (RPS) should be. We believe a four phased approach should be used for establishing the purpose of Florida’s RPS.

1. The Ultimate Goal (2050 and Beyond)
2. Long Term Goals (2020 through 2049, Political and Economic Environment)
3. Mid Term Goals (2010 through 2019, The Transition Phase)
4. Short Term Goals (2008 through 2009, The Start Up Phase)

The Ultimate Goal should be established first. The Long Term Goals should be established to create a political and economic environment that creates a self perpetuating industry that will accomplish the Ultimate Goal. Once the Long Term Goals have been established, Mid Term Goals should be established within the parameters of the Long Term Goals to transition the program out of its start up phase to meet the Long Term Goals. Once the Mid Term Transition Goals have been established, Short Term Start Up Goals should be established within the parameters of the Mid Term and Long term Goals to meet the Ultimate Goals.

We also believe it is important to distinguish between the creation of the RPS (“The Standard”) and the development and implementation of an RPS “Program” to ensure compliance with the standard. Both are critical components of what you are trying to accomplish, however, they are not the same thing. The development of a RPS by itself will be of little value without creating and implementing a RPS Program to implement compliance with the Standard. We believe that developing the Standard will be the easy part. The difficulty will be in developing the Program to implement the Standard. We also believe we are fortunate to be creating both at the same time at this time. We have numerous examples where we can pick what has worked and discard what has not. We have a blank sheet of paper and can create a system using the best aspects of many existing systems.

### **Section 1.1 – Ultimate Goal (2050 and Beyond)**

	<p><b>9220 Bonita Beach Rd., Suite 200-4 Bonita Springs, FL 34135</b></p> <p><b>Phone (239) 292-9385</b></p>
---	--

The primary purpose of the Ultimate Goals is to provide a “Vision” of what you want to accomplish in the end. What are the overall objectives of the RPS Program. Some suggested Ultimate Goals are:

1. Complete Energy Independence at the individual level.
2. Drive technology towards clean, renewable, sustainable energy and drive the cost of these technologies down.


The technology that has historically been available to produce electricity is the reason that our Electrical Production Systems are based on large energy production facilities and large transmission/grid systems. Technology drove the shift from oil lamps to electric lights and appliances supplied by massive power generating facilities over miles of wires. The paradigm has shifted as new technologies have been developed. We need to look forward, not backwards. Technologies are now available to allow clean, renewable, sustainable energy production at the individual level.

Using Regulations and Compliance Requirements to drive technology is not new. In the late 70s and early 80s the EPA passed various emission, effluent and solid waste standards that were so low the technology to measure them at the limits set by the standards did not even exist much less the technology to remove the pollutants down to the levels set in the Standards. Initially compliance was lax. It was cheaper to pay the fines than to invest in the technology to meet the standards. The fines were increased with time. Technologies were developed and implemented and the standards were eventually met.

**Section 1.2 – Long Term Goals (2020 through 2049)**

The primary purpose of the Long Term Goals is to create a political and economic environment that will allow market forces to accomplish the Ultimate Goal with little or no governmental oversight. Some suggested Goals are:

1. Enhanced National Security.
2. Enhanced Personal Security.
3. Enhanced Disaster Relief Capabilities.
4. The creation of a robust, self sustaining, self financing, Renewable Energy Credit (REC) Exchange on an Interstate and International level.
5. The injection of true market forces into the Energy Sector in Florida and the reduction, to the extent practical, of the Utility Monopolies that currently exist in the state.
6. The elimination of Interstate and International Non-Tariff Trade Barriers.

	<p><b>9220 Bonita Beach Rd., Suite 200-4 Bonita Springs, FL 34135</b></p> <p><b>Phone (239) 292-9385</b></p>
---	--

7. The creation of a political and economic environment that promotes a robust, self sustaining, expanding Renewable Energy Industry that no longer needs governmental incentives.
8. The creation of a Renewable Energy Industry that maximizes the use of technologies that maximize the effects of the most desirable attributes of the most desirable technologies.
9. Maximize the reduction of transmission losses and reduce the need for building new transmission/grid systems.
10. Reduce the need to build large energy production facilities of a Non-Distributed nature that require the building of and maintenance of large transmission/grid systems.

**Section 1.3 – Mid Term Goals (2013 through 2019)**

The primary purposes of the Mid Term Goals should be: 1) The transitioning of the RPS Program out of the start up phase towards being an independent, self funding program with minimal government oversight; 2) Continue to provide effective incentives while at the same time continuing to drive down technology costs, and; 3) Continuing the process of meeting Florida’s Long Term Goals. Some suggested Goals are:

1. Continued evaluation and modification of RECs to meet Long Term Goals.
2. Continued evaluation and modification of “Carve Outs” to meet Long Term Goals.
3. Harmonization of Florida RECs with other State, Regional, National and International REC systems to facilitate a larger trading block.
4. Harmonization of the Florida REC Exchange with other State, Regional, National and International REC Trading systems to facilitate a larger trading block.
5. Develop an oversight program to regulate the Florida REC Exchange.
6. Begin privatizing the Florida REC Exchange and begin the shift to making it self funding.

**Section 1.4 – Short Term Goals (2008 through 2012)**

The primary purpose of the Short Term Goals should be the development and implementation of an RPS Program that begins the process of meeting Florida’s Long Term Goals. Some suggested Goals are:

1. Small, On-Site, Clean Systems - Develop a RPS that provides the maximum incentives for the installation of many small (25 kW and under), Distributed Generation (On-site), clean (Solar and wind) systems. Another alternative could be to provide the maximum incentives for systems that



9220 Bonita Beach Rd., Suite 200-4  
Bonita Springs, FL 34135

Phone (239) 292-9385

do not produce more than 110% of the owner's power usage without placing a limit based on the system size. These incentives should be very attractive to maximize the installation of these types of systems to achieve long term goals and maximize private sector participation. This is not meant to imply that larger systems or systems with some undesirable attributes should not receive an incentive. The point is to provide the most incentives to those technologies with the most positive attributes and are the most in line with achieving the long term goals.

2. Bio-Waste Reduction - Develop a RPS that provides the maximum incentives for the installation of many small, Distributed and Semi-Distributed Generation (On-site and local), Bio-Waste reduction systems. Since I am not as familiar with this industry and technologies, I have not provided any suggestions as to the maximum size of the systems. Again, these incentives should be very attractive to maximize the installation of these types of systems to achieve long term goals and maximize private sector participation.
3. Recycling - Develop a RPS that provides the maximum incentives for recycling where recycling would be a cleaner or more cost effective solution and at the same time would also conserve finite nonrenewable resources. Since recycling is not really a RPS issue, this may have to be done by not providing incentives to technologies that use recyclable materials as fuel sources and produce undesirable waste water effluents, solid wastes and air emissions.
4. Carve Outs - In order to ensure that Long Term Goals are met and in order to focus incentives on technologies with the most desirable attributes, "Carve Outs" should be established for the various technologies. These Goals should be set based on a percentage of total energy production.
5. Incentive Program - Create an incentive program based on the Goals that drive the development and installation of the various technologies with the most desirable attributes. While grabbing the "low hanging fruit" may seem like a good idea now, if it is not in line with the long term goals it will be counter productive in the long run as it will siphon off the limited resources available for achieving the long term goals. The amount of the incentive should also be based on both the Goals and "Normalizing" the cost of the energy production by that technology. The "Normalization" value should be set so that there is still a slight gap between the baseline value of the cost of energy production and the cost of energy production for the technology receiving the incentive. This "Normalization Gap" will provide the incentive to drive the cost of that technology down and also take advantage of the intrinsic value associated with the particular technology. The size of this "Normalization Gap" must also take into account the Mid Term and Long Term Goals of the overall program. The



**9220 Bonita Beach Rd., Suite 200-4  
Bonita Springs, FL 34135**

**Phone (239) 292-9385**

more desirable the technology is the smaller the “Normalization Gap” should be. Once again, the value of the incentive should be separate and independent from the REC value.

6. Compliance Program - Develop a highly controlled and regulated “Compliance Program” for tracking “Dollars” paid for incentives for compliance with the 1% cap. This program should accommodate trading and long term agreements between Regulated Utilities for compliance purposes. This should be separate and independent from the REC Program.
7. Alternate Compliance Payments - Establish an Alternate Compliance Payment Program. A great deal of discussion and concern was expressed over the issue that there will not being enough Technology RECs or “Incentive Payments” available to meet RPS compliance requirements, especially in the beginning. Money spent for the development of systems for the Compliance Program, the REC Exchange, advertising and education, and other necessary infrastructure should be permitted as contributing towards the 1% cap. This would eliminate this concern while at the same time providing “Seed Money” for establishing the necessary infrastructure for the RPS Program. As the various programs are implemented and begin to become “Self Sustaining,” and as the availability of other types of Technology RECs or Incentive Payments become more available, the Alternate Compliance Payments can be phased out.
8. Renewable Energy Credits (RECs) - Renewable Energy Credits (RECs) should be developed with a long term market driven goals in mind. RECs should be developed to eliminate Interstate and International Non-Tariff Trade Barriers. To accomplish this, the RECs should have the flexibility to be converted from one type of REC into another. For example, the various attributes of the RECs should be able to be separated or combined and the size of the REC (kWh/mWh) should be variable so they can be separated or aggregated for maximum flexibility. The RECs must be developed to facilitate long term and mid term goals and also be adaptable as state, interstate and international market forces develop.
9. Private Sector REC Trading Exchange - Develop a Private Sector REC Trading Exchange that can be harmonized with other State, Regional, National or International REC Exchanges. There are many models to use as a template. One example is the Stock Exchange where the brokers are paid a percentage of the value of the trade and the Exchange is overseen by the Securities and Exchange Commission (SEC). Another example is the International Standards Organization (ISO) where “Registrars” are paid a fee by their clients to confirm compliance with various International Standards and are “Accredited” by the ISO to perform this function. A



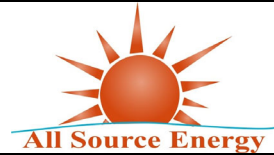
9220 Bonita Beach Rd., Suite 200-4  
Bonita Springs, FL 34135

Phone (239) 292-9385

third example is the Environmental Protection Agency's (EPA's) National Environmental Laboratory Accreditation Program (NELAP) where the EPA "Accredits" laboratories to conduct testing for clients for EPA compliance purposes and audits them on a periodic basis to confirm the laboratories compliance with testing standards. A fourth example is the Occupational Health and Safety Administration's (OSHA's) Nationally Recognized Testing Laboratory (NRTL) Program which functions very much like the EPA's NRTL Program. There are also numerous State and Voluntary REC markets that already exist. As with the development of the RECs, the REC Exchange should be developed with a long term market driven goal in mind. As with the RECs, the REC Exchange must be developed to facilitate deregulation in the future as long term and mid term goals are met and as state, interstate and international market forces develop.

10. Cost Recovery - The Regulated Utilities should be permitted to recover the costs associated with RPS compliance. There are some that would say that this is the Rate Payers "Subsidizing" those that invest in Renewable Energy. I would argue that the Rate Payers are "Leveraging" their limited resources to take advantage of Private Sector money. If a Regulated Utility builds the Renewable Energy facilities, the Rate Payers will be paying for the entire cost of the project, including any interest paid on loans or bonds and the profit made by the Utility, and will not have the advantage of leveraging the Private Sector Capital that is being used to fund the project. By making a small investment for the development of more desirable technologies, they receive a larger benefit because they are leveraging their costs with private sector dollars to get more energy production per dollar spent for that technology. In addition, all of the ratepayers have the same opportunity to take advantage of the incentives. If they choose not to, that is their choice. The ideal situation would be to have a waiting list of ratepayers wanting to take advantage of the various incentives.
11. Non-Compliance - If Alternative Compliance Payments are available, the penalties for Non-Compliance with the RPS should be several times the cost of compliance and should be punitive. If the Regulated Utilities have the ability to comply and don't or commit fraud in reporting, penalties should be of such a magnitude that it is very much more cost effective to comply. In addition, Non-Compliance penalties should not be permitted to be passed on to the rate payers.
12. Caps - In order to limit risks to ratepayers, total program costs, including direct incentives and administration costs, should be capped so that they would not exceed some reasonable level. A level not to exceed 1% of total gross electric revenues was suggested by several speakers and seems reasonable.





9220 Bonita Beach Rd., Suite 200-4  
Bonita Springs, FL 34135

Phone (239) 292-9385

13. Advertising – In order for the RPS program to work, people have to know it exists. Advertising will be a critical aspect for success, especially in the early stages of the RPS program. Advertising dollars associated with the RPS program should be controlled by the FPSC to ensure that advertising is directed at meeting RPS program goals.
14. Energy Efficiency – Energy Efficiency is an important aspect for an overall Energy Conservation Strategy and should be included in the RPS as “Technologies” on their own with their own Goals, Carve Outs and RECs. They should not be used to lower, or as a substitute for “Renewable Energy Production” Goals. It was mentioned at the workshop that Transmission Line Efficiency measures should not be included in the RPS. If Energy Efficiency is included in the RPS, Transmission Line Efficiency measures should be considered as a “Technology” with its own Goals, Carve Outs, and RECs. End user Energy Efficiency measures should be treated in the same way.

## **Section 2 – Specific Agenda Comments**


This section addresses the specific Agenda “Topics for Discussion”

**Section 1.a. of the Agenda** requests input regarding methods to encourage Specific Renewables specifically regarding multipliers versus set asides or tiered goals.

Initially the technology goals should be set as a percentage of total energy production. The goal initially is to drive the installation of technologies with the most desirable attributes. Each technology should have its own percentage goal.

The amount of the incentive available for a system for a particular technology should also be based on an energy production “Cost Normalization Factor.” The purpose of the “Cost Normalization Factor” is to lower the cost of the energy production for that technology enough so that the intrinsic value of the technology will overcome the “Normalization Gap.” At the same time, the “Normalization Gap” should be large enough to drive down the cost of the technology. An example of a baseline might be to create incentives that will provide for a payback of the system in one quarter of the projected life span of the particular system. For example, if a particular system has a projected useful life span of 20 years, the payback time for the system should be 5 years or less. This initially may seem like a short pay back time but after you factor in the cost of the interest paid on the loan for the purchase of the system the payback time will extend out to 10 or 15 years or more when refinanced at intervals to make it cash flow neutral and depending on other factors such as the interest rate of the loan and energy




 <p><b>All Source Energy</b></p>	<p><b>9220 Bonita Beach Rd., Suite 200-4 Bonita Springs, FL 34135</b></p> <p><b>Phone (239) 292-9385</b></p>
---	--

inflation rates. A good way to establish the projected useful life span for a system would be to use the manufacturers guarantee for the product. Technologies with more desirable attributes and fewer negative attributes may have shorter pay back times while technologies with fewer positive attributes and more negative attributes will have longer pay back times or no incentives at all.

If we use the 1% of total gross electric revenues as the cap for the total expenditure for incentives, using a multiplier or a divisor will not work. If we use the example presented in the Workshop where Solar PV had a multiplier of 5 and assume that a Utility spends all of its money on Solar PV, the Utility will only spend 0.2% of its total gross electric revenue for the development and implementation of renewable technologies and will still be in compliance with the RPS. In our opinion, this would be counter productive to the goal of increasing renewable energy production in Florida by reducing the dollars available for accomplishing this goal. Using a “Cost Normalization Factor” and Goals based on attributes to establish the amount of the incentive that will be paid for a particular system as described above is a better model for achieving the programs overall Goals.

Initially, the price for a REC for a particular technology will not be relevant. Currently there is no market for RECs in Florida. To the best of our knowledge, there is no way to create a REC in Florida that can be sold on the voluntary REC market or anywhere else unless you are a Utility sized producer. A market for the buying and selling of RECs for small energy producers must be created. This is a major issue that has to be dealt with to achieve the Long Term Goals. One model that can be used to accomplish this is the Mutual Fund market. Many small investors pool their money to purchase a diversified stock portfolio that they could not otherwise do as an individual. Once a REC market is established, it can be harmonized with other REC markets.

To provide stability to the REC market and encourage Private Sector investments, RECs must have a long term value. This does not preclude the buying and selling of RECs on a shorter time scale. A good model for this is Treasury Bills (T Bills). When you purchase a T Bill, there is an interest rate associated with it. If you hold the T Bill to the end of that T Bill’s “Term” you will receive whatever amount the T Bill was valued at when you bought it, no matter what happens to interest rates before the end of the term. If interest rates go up before the end of the term, the value of your T Bill goes down if you choose to sell it before the end of the term. If interest rates go down before the end of the term, the value of your T Bill goes up if you choose to sell it before the end of the term. In this example, the interest rate is analogous to the value of the REC. T Bills can be purchased for a term as short as 30 days and for as long as 30 years. The Interest Rate (Value of the REC)

	<p><b>9220 Bonita Beach Rd., Suite 200-4 Bonita Springs, FL 34135</b></p> <p><b>Phone (239) 292-9385</b></p>
---	--

for the T Bill (REC) is whatever it is at that time for a T Bill with that term as dictated by market forces at that time. You can choose to sell the T Bill or hold the T Bill to the end of its term as you choose.

**Section 1.b. of the Agenda** requests input regarding how multipliers or tiered goals should be set.


The goals should be set based on Ultimate Goals and the attributes of the technologies, **NOT** on short term monetary issues and Special Interests. The technologies that receive the most incentives should have the most positive attributes and the least negative attributes. Positive and negative attributes should take into account Ultimate and Long Term Goals and **MUST NOT** focus solely on the monetary relationship between the Utilities, ratepayers and system owners. The RPS and RPS Program must have a much more comprehensive focus than the Tunnel Vision View of the relationship between the Utilities, ratepayers and system owners. In addition, the current cost of the energy production of the technology **MUST NOT** be a consideration since one of the main purposes of the RPS and the incentives is to drive down the costs of the energy production for technologies with the most desirable attributes.

Setting the Ultimate and Long Term Goals early in the process is critical to the process of developing the RPS and the RPS Program to implement the RPS. Without setting the Ultimate and Long Term Goals first you will not have a target to guide all other decisions. In addition to setting the Ultimate and Long Term Goals you must also ascertain your Baseline. The Baseline is where you are now. The process you must go through is very much like going on a trip. If you don't know where you are and you don't know where you are going, you may never get there.

While we understand that shorter term energy needs are very important and need to be addressed, however, we believe they should not be addressed in the RPS. We are only talking about 1% of Total Gross Electric Revenues. The RPS should address long term, future needs. The technologies and the paradigm have changed, as they always do. In addition to determining the Ultimate Goals and the Baseline, you must answer the question of whether you want the RPS and RPS Program to be "Reactive" or "Proactive." To a great extent, the answer to this question will drive the direction of the RPS and the RPS Program. We believe the RPS and RPS Program should be Proactive.

Some examples of attributes are:

**Positive Attributes**

	<p><b>9220 Bonita Beach Rd., Suite 200-4 Bonita Springs, FL 34135</b></p> <p><b>Phone (239) 292-9385</b></p>
---	--

1. On-Site/Distributed Generation primarily for the purpose of offsetting the building, industrial complex, or farm's own use. The smaller the distribution area the better.
2. The treatment of Biomass for the purpose of recycling the Biomass that creates byproducts that can be used for the production of energy.
3. Low, Life Cycle waste production.

Negative Attributes

1. Off-Site/Non-Distributed Energy Production requiring transmission over the grid system with the sole purpose of the retail sale of the energy.
2. The production of Hazardous Waste that must be disposed of as a Hazardous Waste.
3. The production of Hazardous Waste that must be further treated before the waste can be disposed of as a Non-Hazardous Waste in Municipal Landfills.
4. The production of wastes that must be disposed of in Municipal Landfills.
5. High, Life Cycle waste production.
6. Air Emissions known to cause adverse health effects.
7. Air Emissions known to be Greenhouse Gases.
8. The use of recyclable Feed Materials as fuel.

The above attributes are not meant to be a complete list. I am sure there are others more familiar with the various technologies that can add to this list.

**Section 2. of the Agenda** requests input regarding Methods to Encourage Compliance.

We believe the following components are essential to achieving the Ultimate Goals. This also assumes that the Ultimate Goals and Long Term Goals as proposed in these comments are adopted.

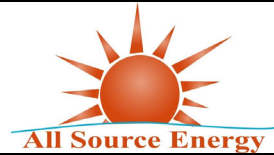
1. Establish Ultimate and Long Term Goals First.
2. Determine your current Baseline for the various technologies.
3. Determine if the RPS and RPS Program will be Reactive or Proactive.
4. Determine the Positive and Negative attributes for each technology based on **ALL** factors, not just the Utility, ratepayer and system owner relationship.
5. The establishment of Technology Goals based on percentage of total energy production for each specific technology.



**9220 Bonita Beach Rd., Suite 200-4  
Bonita Springs, FL 34135**

**Phone (239) 292-9385**

6. Establishment of “Cost Normalization Factors” that determine the amount of incentives that will be provided for systems of a particular technology. These incentive payments are what will be tracked for the purposes of compliance with the 1% cap.
7. Establish a Compliance Exchange for determining compliance with the 1% cap and the trading of Compliance Dollars between Regulated Utilities. For example, One Utility has a rural area and wants to provide incentives for Bio-reduction, Cogeneration facilities because it is needed in that area based on Ultimate Goals. In order for the Utility to do this it must exceed its allotment of funds for that technology for several years at the expense of the other technologies. A second Utility is in an area where various solar options are more desirable and available and they will exceed their allotment of funds for solar on an ongoing basis at the expense of other technologies because the availability to fund the other technology options simply does not exist in their service area. The two Utilities should be able to enter into long term agreements and/or trade Compliance Dollars through the Compliance Exchange for compliance purposes to meet their RPS requirements. This is an area where establishing a Baseline and Long Term and Ultimate Goals is critical to guide the development of a realistic and equitable RPS and RPS Program to meet Florida’s needs.
8. Cary Overs, Grace Periods, and Variances should be granted under some circumstances. Again, establishing a Baselines and Goals is critical here. The example given above about regional priorities and availability of various technologies to fund in a Regulated Utility’s service region is a good example. If a Regulated Utility is making a “Good Faith Effort” to comply with the RPS through its incentives and the Compliance Exchange, but various regional priorities, availability to fund other technologies, availability of Compliance Dollars from other Florida sources, and short term financial issues (The 1% Cap) prevent the Regulated Utility from meeting the RPS overall short term percentage goals, Cary Overs, Grace Periods and Variances should be granted.
9. Alternate Compliance Payments will be essential to the development and implementation of the RPS Program, especially in the beginning. There was much discussion at the workshop that there will not be enough “Technology RECs” to comply with the RPS, especially in the beginning. We believe this is true and is a “Blessing in Disguise.” As stated earlier, creating the RPS (The Standard) is the easy part. Creating the “RPS Program” to implement the RPS Standard will be the difficult part. Again, we are basing this on the 1% annual cap. Based on testimony at the workshop and the number of “Renewable Energy” projects currently underway in Florida, we believe there will not be enough “Technology



9220 Bonita Beach Rd., Suite 200-4  
Bonita Springs, FL 34135

Phone (239) 292-9385


RECs” or technology based projects to fund to comply with any standard that is proposed based on 1 % of Gross Energy Revenues. There will be more money available than Technologies to fund. Alternative Compliance Payments should be established for the development and implementation of the various functions that will be required to implement the RPS and RPS Program. At the Net Metering/Interconnection Workshops and Hearing, there was much discussion on who will be responsible for the cost of “Metering” for various purposes and the cost of updating computer programs to accommodate an RPS Program. These and other cost concerns are real and justifiable. This is where Alternate Compliance Payments come into play. The funds obtained from Alternate Compliance Payments should be used to develop, implement and maintain the RPS Program, especially in the first few years.

10. Various payments for incentives and Alternate Compliance Payments should be passed through to Rate Payers. Once again I want to stress that this investment by the ratepayers **IS NOT** a subsidy. It is an investment of limited resources to leverage Private Sector funds to ensure the procurement of the maximum kilowatt hours of the most desirable technologies at the least cost to the ratepayers. The desirable attributes of the various technologies will provide many “Social and Monetary” benefits that will be enjoyed by all ratepayers and taxpayers alike. Costs for willful noncompliance or fraud should not be passed through to the ratepayers.
11. As stated earlier, incentive mechanisms should be driven by the Goals. Once the Goals have been established the amount of the incentive for a particular system of a particular technology should also be based on Cost Normalization Factors.

**Section 3.a. of the Agenda** requests input on mechanisms to evaluate, verify, measure and track RECs.

RECs should be established on a technology specific basis so they can be combined and split for maximum flexibility.

There should be various sized (kWh/mWh) RECs that can be combined and split for maximum flexibility. The size of the smallest REC should facilitate the small investor, specifically the average home owner. This will allow for the aggregation of RECs of varying amounts. The combination of flexibility regarding technology specific and size will facilitate trading on numerous markets and will help maximize smaller Private Sector investments.

	<p><b>9220 Bonita Beach Rd., Suite 200-4 Bonita Springs, FL 34135</b></p> <p><b>Phone (239) 292-9385</b></p>
---	--

There should also be various time frames associated with RECs. Initially, a REC should have a long term time horizons (Minimum of 10 Years) to encourage Private Sector investments and provide stability to the market in the beginning. However, the ability to sell a 10 year REC after 3 years should be an option. The value of a 10 year REC after 3 years will depend on market forces at the time the REC is sold. In the future, shorter time horizons for RECs may be established to allow for flexibility in trading (The T Bill example) if the market dictates.


There is metering technology (Smart Meters) that currently exists that can accommodate the function of verifying and measuring the production of energy for REC and Compliance purposes. Inverters used with solar systems are computerized and have the ability to measure numerous parameters. The cost of the metering should be considered in the incentives provided for various technologies.

We do not believe that the tracking of RECs will be difficult once we establish what a REC is. Smart Meters, Inverter type technologies and computers have the ability to do this quite easily. The cost of installing the equipment and developing new computer programs or modifying existing computer tracking programs and systems is an area where Alternate Compliance Payments should be spent in the beginning of the program.

The more computerized and automated the measuring and tracking system is the easier verification will be. Some compliance Auditing or Oversight will need to be performed. The amount and type of oversight will depend on how automated the system is. The more human interaction there is in the measuring and tracking system the more oversight will be required. Automating the system will probably have a higher up front cost but the ongoing oversight and maintenance costs will be reduced.

All qualified Renewable Energy Production should be counted including Self Service generation. It should be measured and tracked the same way as the rest of the program. This is an area where computerization and automation of the system will be very beneficial. If the energy production is not metered and tracked as part of the program, it should not be eligible for incentives provided by the RPS Program.

As stated earlier, we believe that Energy Efficiency should be included as a category of its own with its own goals which are separate from any production goals set by the RPS. Measuring Energy Efficiency will not be as straight forward as measuring Energy Production. Measuring a kWh that is produced is much

	<p><b>9220 Bonita Beach Rd., Suite 200-4 Bonita Springs, FL 34135</b></p> <p><b>Phone (239) 292-9385</b></p>
---	--

easier than measuring a kWh that is not produced or saved. Engineering estimates will have to be used for this.

The role of the FPSC in ensuring compliance should be one of regulatory oversight. One model is where the FPSC “Accredits” private contractors to perform various functions like the REC Exchange and Oversight functions of the program. As stated earlier there are many models that already exist for this. To reiterate, there is the ISO model, the NELAP model, the SEC model, existing State programs, etc. The model or models used will depend on the Goals and final structure of the RPS and RPS Program.

Once again we would like to thank the Florida Public Service Commission, the Commissioners and their staff for giving us the opportunity to provide input into this rule making.

If we can be of any further assistance, please do not hesitate to contact us.

Respectfully Submitted,

All Source Energy