



June 23, 2015

Via Electronic Mail: LTan@psc.state.fl.us

Ms. Lee Eng Tan
Office of the General Counsel
Florida Public Service Commission
Capital Circle Office Center
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Request for Comments on Development of Solar Technologies Dated April 23, 2015

Dear Ms. Tan,

The Solar Energy Industries Association ("SEIA") and Vote Solar (collectively "SEIA-VS") hereby submit the following comments in response to your memorandum dated April 23, 2015 requesting comments on enhancing development of solar technologies in Florida ("Request for Comments"). SEIA-VS appreciate the opportunity to provide input on these important issues being examined by the Florida Public Service Commission ("FPSC" or the "Commission") and to respond to the questions posed in the Request for Comments. SEIA-VS's comments are further supported by the undersigned endorsers (Attachment 1), and we also specifically voice our strong support of the comments submitted concurrently by the Interstate Renewable Energy Council (IREC) in response to the Request for Comments.

SEIA-VS's comments focus on holistic and responsible ways the FPSC and regulated utilities can advance both demand-side and supply-side solar programs, while ensuring those programs produce measurable benefits for all customers. To this end, we respectfully recommend that the FPSC and utilities work collaboratively with stakeholders to consider proposing the following programs and policies:

- 1) New interconnection procedures for solar resources that lower costs and reduce integration backlogs.
- Reasonable and effective demand-side incentives for residential, commercial, and lowincome customers.
- 3) Pilot programs for utilities to expand procurement and integration of distributed supply-side solar generation (DSG) for systems under 20 MW.
- 4) Shared solar programs designed to expand access to affordable solar for customers who cannot take advantage of onsite solar opportunities.
- 5) Defined procurement targets and processes for utility-scale development through competitive, market-based solicitations.

Each of these recommended programs provides its own benefit to ratepayers and the electric grid by minimizing upward pressure on retail rates and encouraging the widest participation across all classes of customers. These proposals are meant to provide the Commission and stakeholders with technical and cost data that will facilitate expansion of safe, affordable, and reliable solar energy in Florida going forward.

SEIA AND VOTE SOLAR

Established in 1974, the Solar Energy Industries Association (SEIA) is the national trade association of the U.S. solar energy industry. Through advocacy and education, SEIA and its member companies are building a strong solar industry to power America. As the voice of the solar industry, SEIA works to make solar a mainstream and significant energy source by expanding markets, removing market barriers, strengthening the industry and educating the public on the benefits of solar energy. SEIA represents the entire solar industry, encompassing all major solar technologies (photovoltaics, concentrating solar power and heating and cooling) and all points in the value chain, including financiers, project developers, component manufacturers and solar installers.¹

¹ The views expressed herein are the views of SEIA and not the views of any individual member company

Vote Solar is a 501(c)(3) non-profit, grassroots organization with the goal of bringing solar into the mainstream. Since 2002, Vote Solar has engaged at the state and local level through regulatory and legislative efforts to bring solar to scale, through implementation of key policies and regulations as well as removal of roadblocks to solar development and customer adoption. Vote Solar's primary focus includes net-metering, grid-integration of distributed solar generation, shared and community renewable energy programs, reducing permitting soft costs, and expanding access to free market financing programs. Vote Solar works closely with industry partners and other interested stakeholders such as IREC to engage on these issues in states across the country.

COMMENTS

A strong solar economy is borne out of policies that support solar in all of its shapes and sizes. SEIA-VS encourage the FPSC to maintain a balanced approach when considering ways to cost effectively integrate solar energy into Florida's energy mix as the Request for Comments seeks to accomplish by addressing both demand-side and supply-side solar policies and programs.

I. Demand-Side Solar: Policies and Programs to Encourage Adoption

In order to design and implement policies and programs that will encourage adoption of demand-side solar, it is essential to reflect on the previous pilot programs targeting this market segment in Florida. SEIA-VS believe that past programs were ineffective at testing and nurturing the market for customer adoption of solar photovoltaic (PV) and solar thermal for two primary reasons:

- 1) Program design failed to accurately account for real-time solar cost trends, making the program ineffective from both a cost and participation standpoint. Poor program design also inhibited the ability to harness market forces in understanding the scalability of these sectors and technologies.
- 2) Program design failed to capture, understand, and assess pilot program data and information in coordination with key stakeholders resulting in limited visibility into the benefits and market potential of demand-side solar.

We therefore recommend that the Commission draw upon its existing statutory authority and program rules to offer Florida's energy consumers with a suite of refined demand-side solar pilot programs. In doing so, a primary objective of these programs should be to deliver meaningful insight into the benefits and scalability of solar systems across the state. As discussed below, there are several aspects of program design that are critical for success and can overcome the challenges of past programs.

A. Benefits and opportunity of a well-designed solar thermal program

During the previous solar thermal pilot program, many of the utilities² failed to collect and provide the Commission with data related to energy to help inform market uptake and the benefits of solar thermal deployment. In addition, there was no meaningful and inclusive dialog to discuss refinement of program design and offerings. In our assessment, it is primarily due to a lack of data and meaningful exploration of alternative program design that the expiring solar thermal pilot programs have been deemed not cost effective. Rather than settling on this conclusion as inevitable, we urge the Commission to engage with stakeholders in seeking to improve these program opportunities through alternative designs that can encourage adoption, especially amongst low-income customers.

One of the primary benefits of a well-designed residential solar thermal program is that it offers the potential to positively impact Florida's winter peak demand. While codes and standards and further adoption of energy efficiency measures offer significant potential for helping to reduce Florida's summer peak demand,³ updates to the National Appliance Energy Conservation Act (NAECA) offer much less benefit in terms of

² OUC offered a Solar Thermal Rebate Program which collected thermal data based on kWh savings using a metering device. Duke also adopted changes by adding load control energy management devices within the program.

³ Witness Koch testimony FEECA (Tr. 198-199, lines 21–4). During the 2014 FEECA proceeding Witness Koch stated in his direct testimony "[I]n terms of the summer peak, the cumulative impact from Codes and Standards based on savings beginning in 2005 and extending through 2014 is estimated at approximately 1,700 MW. By 2024, the impact from Codes and Standards is projected to increase by an approximate additional 1,800 MW for a cumulative savings of 3,500 MW. Thus, the cumulative impact from Codes and Standards is expected to more than double for during the current goal-setting period (2015 to 2024) thereby reducing the growth in FPL's summer peak by almost 30%."

increasing the efficiency of water heating in existing construction,⁴ and thus, opportunity to reduce the state's winter peak demand. Through robust deployment of solar thermal, however, we believe there is significant opportunity to have a positive impact on Florida's sensitive coincident winter peak demand. In particular, solar thermal water heating coupled with load control devices offer the ability for the utilities to control peak loads in a more predictable fashion due, in part, to the large energy storage benefit associated with this technology. Solar water heating's unique storage qualities deliver the opportunity to increase stability, reliability and safety of the grid particularly during winter peak times.⁵

We call on the Commission to develop and adopt a new solar thermal pilot program that embraces a specific megawatt (MW) reduction goal of winter peak demand by 2020 and includes emphasis on load controlling devices and a low-income program component. In designing and implementing such a program, the Commission should specifically stipulate systematic and regular reporting of performance data, cost savings and benefits that accrue to ratepayers as a result of solar thermal deployment. We believe it would be reasonable to recover the costs of such a program through the energy conservation cost recovery (ECCR) clause, and to maintain the funding cap as applied in the previous solar thermal pilot program. We strongly encourage a step down program design structure for incentive levels in order to promote cost effective deployment and market transformation principles. To allow for increased participation in solar thermal, innovative financing, such as leasing or similar arrangements, should be made available as part of any incentive program. We are also in agreement with IREC's comments concerning Florida's solar thermal resource. We particularly support their

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⁴ Barriers that exist with new water heating tank replacements that increase costs, possible ventilation requirements and tank sizing are likely to impact costs and prohibit customers from taking advantage of heat pump water heaters leaving them with the option of a slightly more efficient element style water heater. New construction homes are likely best suited for these new water heating standards. Traditional water heaters will continue to contribute to Florida's winter peak load. Florida families will continue to demand heated water for short periods in the morning and when returning home in the evening from work, school or sporting activities consistent with Florida's winter peak load curve.

⁵ See Figure 1. Typical Florida Daily Electric Load Shapes (p22) http://www.psc.state.fl.us/publications/pdf/electricgas/FEECA2015.pdf

recommendations regarding technical specification for residential solar thermal water heating as well as the potential benefits for low-income customers.

B. Benefits and opportunity of well-designed residential and commercial customer-sited solar PV programs

In addition to consideration of a solar thermal pilot program, we recommend that the Commission also take up exploration of reminting programs designed to encourage residential and commercial solar PV development. As with a solar thermal pilot, it is essential to consider program design that is founded upon clear and well-defined objectives for deploying customer-sited solar PV. As discussed below, with deliberate and reasoned program design, Floridians would be offered a cost-effective opportunity for increased adoption of customer-sited solar PV systems.

One approach for doing so would be through a program that incorporates a thoughtful and structured step down of incentive levels in moving towards a specific MW deployment goal (referred to as MW block program design). The MW block approach has been successfully used in other states and is predicated upon the continued cost reduction of solar installation and designed upon a trajectory that will facilitate market scale and increased cost effectiveness. Although this approach is typically used for longer-term solar deployment programs whereby the industry is offered the certainty and scale to achieve robust and sustainable growth beyond the life of the program, incorporating this approach for a pilot program in Florida would provide a way for understanding market development, pressures and long-term opportunity. Unlike the previous pilot program based upon an inflexible and unsustainable incentive level that was not aligned with solar market and cost trends, employing the MW block approach would help to ensure greater cost-effectiveness, participation and benefit.

In considering potential program design, we also strongly encourage the Commission to consider solar leasing options, which were excluded from the previous utility programs. Solar leasing is proven to help

overcome the upfront cost of going solar, and can be especially compelling for Florida's large population of retirees and others on fixed income as well as lower income customers. As has been demonstrated across the country, leasing arrangements provide an efficient and effective means by which to capture tax incentives, such as the federal income tax credit for those otherwise unable to take advantage of these tax benefits. We encourage the Commission to adopt program design that allows a wider variety of customers to participate, not simply those whom have large tax burden. Other program design options could include design a declining MW block structure to specifically benefit winter peaking utilities by offering a slightly higher incentive or incentive adder for solar PV systems that are installed facing west. This approach can potentially align solar generation with the needs of the grid, and help provide more generation in the later hours of the day. We also suggest consideration of how to appropriate reconcile and arrange for options REC sale or transfer.

We believe adopting this type program design for a future pilot could provide 125 MW-200MW of residential solar for costs between \$200-\$160/Kilowatt over 5 years while maintaining previously established funding caps. In comparison to the previous pilot, which yielded 20 MW through 2013⁸ at a cost of approximately \$1,600-1,800/Kilowatt,⁹ this new program design would allow a greater level of participation at much lower costs per MW deployed. We echo the Commission's disappointment regarding the costs of the previous FEECA utility programs.

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⁶ We echo Commissioner Graham's concern, which he voiced in the Internal Affairs meeting on March 3rd, that many customers, even with the rebate, may not have been able to take advantage of the previous solar PV pilot program – primarily due to the upfront costs. Additionally he read testimony from the Sierra Club seeking to minimize the rebate while seeking to install more solar PV, similar to the declining block structure. See: Transcript P6 Ln 3-22 http://flpsc.com/agendas/internalaffairs/iapdfs/IA-03-03-15.pdf

⁷ Opower: 9% of solar homes are doing something utilities love. Will others follow? http://log.opower.com/2014/12/solar-homes-utilities-love/

⁸ Internal Affairs Agenda Transcript P4 Ln 9-11 "About 20, a little over 20 megawatts of power was, of capacity was installed due to the solar pilot programs up until 2013" http://flpsc.com/agendas/internalaffairs/iapdfs/IA-03-03-15.pdf

⁹ Internal Affairs Agenda "Solar Program Costs – Incentives and Other Expenses" Dated Feb 27, 2015 Note: Gulf Power was used as proxy for TECO as solar PV numbers were not broken out separately.

With respect to grid impacts of increased solar PV penetration, the experience in Hawaiian Electric Companies (HECO) service territory is particularly relevant. Partnering with the National Renewable Energy Laboratory (NREL), HECO discovered that they were able to increase solar penetration levels on circuits beyond 120% and up to 250% of their daily minimum load without destabilizing the grid or jeopardizing safety. In addition, through real-time communication with smart inverters, the Hawaii PUC and HECO were able to save ratepayers tens' of millions of dollars, they requesting over the air updates to approximately 154 MW of inverters and establishing interim voltage ride-through settings resulting in increased stability to the grid. Florida's utilities have made significant investments in modernizing the grid to increase reliability and safety. Using HECO as proxy – 11% of their customers utilize rooftop solar – the Commission can gain comfort that new customer sited solar PV will not destabilize the grid when penetration in Florida is considerably less than 1%.

C. Low-Income Home Owners

As investors, banks and other lending institutions are becoming more familiar with solar, more creative solar financing options¹³ have emerged to provide long term financing to solar customers. The Commission should seek to further enable these entities to expand their offerings and explore increased options to serve to low income home-owners. ^{14, 15} The Commission should seek to provide a low income solar incentive pool that

¹⁰ NREL Inverter Load Rejection Over-Voltage Testing View Study Here: http://www.nrel.gov/docs/fy15osti/63510.pdf

¹¹ HPUC Docket No. 2014-0192 - Instituting a Proceeding to Investigate Distributed Energy Resource Policies P3 http://dms.puc.hawaii.gov/dms/OpenDocServlet?RT=&document_id=91+3+ICM4+LSDB15+PC_DocketReport59+26+A1001001A15B24A92304H5827418+A15B24B31518E871011+14+1960

¹² FPL also has developed, built and operates one of the nation's most modern grid networks and offers the highest reliability among Florida's investor-owned utilities, ranking in the top quartile nationally, with more than 99.98 percent reliability http://www.forhawaiisfuture.com/wp-content/uploads/NEE-HEI-Transaction-Release.pdf

¹³ OUC has partnered with Orlando Federal Credit Union (OFCU) to offer zero to low interest rate loans for solar PV and Solar Thermal see: http://www.ouc.com/environment-community/solar/solar-incentives, There are multiple members of SEIA that focus on long term solar loans between 7ys and 20yrs.

¹⁴ FPL's low income solar water heating pilot only offered options within new construction.

is designed to allow the private sector to respond and design financial products that can be used to increase affordability.¹⁶

We look forward to and would appreciate the opportunity to work with the Commission and other stakeholders in a dedicated, transparent program design process to help implement new pilot programs for residential, low income and commercial/industrial customers in order to better understand the overall cost effectiveness and benefits of customer sited solar.

D. Access to Cost and Production Data

We also encourage that any new demand-side pilot program involving an upfront or performance-based require utilities to collect and make public, data related to installation costs, system size and technology type in order that these programs serve their intent of informing and testing deployment of this technology in the market. Additionally, in order to enhance visibility into the cost effectiveness of solar thermal and solar PV programs, it is essential for customers to systematically provide annual production data. This could be achieved through a data acquisition system (DAS) similar to that used in the FPL solar for schools pilot program, and OUC's residential solar water heating program. Without providing relevant performance data from solar systems, the Commission and stakeholders must rely solely the minimal data provided within the customer

¹⁵ The Florida Solar Energy and Loan Fund is a 501(c)(3) Community Development Financial Institution (CDFI) as per the U.S. Treasury Department, and provides energy expertise and affordable financing to enable low-to moderate income homeowners and businesses to identify and make cost effective energy, wind hazard and water conservation upgrades to their homes and businesses ¹⁶ Incentives for low income home owners can be used as security interest for loans and leases, to buy down interest rates, eliminate debt-to-income, eliminate credit requirements.

¹⁷ The California Solar Initiative provided transparent installer and pricing data throughout the program encouraging competition and providing regulators and the public with valuable ongoing information https://www.californiasolarstatistics.ca.gov/

¹⁸ Note: The data available from the solar for schools pilot is in no way a replacement for having data from an actual residential rooftop. The data, in theory, could be overlaid on a residential load, however it does not take into consideration typical residential shading issues, residential circuit characteristics, thermal benefits of solar on the structure and the behavioral impact the customer experiences once making the investment in going solar.

owned renewable energy reports¹⁹ or confidential data procured through utility owned educational systems or R&D facilities. We do not feel the depth of these reports provide the Commission, the utilities or the overall body of ratepayers with sufficient data to clearly understand the benefits of customer-sited solar PV. Access and ability to analyze this data provides a value at least equivalent to the costs borne within a smartly designed declining MW block incentive program. In considering program design, we would also suggest that optionality for transfer of any Renewable Energy Credits (RECs) should be ensured.

E. Funding for Demand-Side Solar Programs

At minimum, we believe the Commission should focus funding on fewer and strongly designed programs and can do so within the confines of the previously adopted 10% funding cap within the Florida Energy Efficiency Conservation Act (FEECA) goals setting tied to ECCR. We also challenge the Commission to consider a more aggressive approach whereby increased investment in demand-side solar PV is justified based on an improving Florida economy. For instance, Florida Power and Light's (FPL) retail sales were up 1% and the average number of customers has increased by 66,000 over the prior quarter; FPL expects this growth to continue 1.3%-1.6% annually over the long-term. In addition, FPL maintains a healthy surplus depreciation reserve which can be use to support their expected 11.5% regulatory return on equity (ROE). Accordingly, FPL's statement that "modest changes in usage per customer are not likely to have a material effect on earnings," is well founded. As such, the Commission could seek to link investment in demand-side renewable energy to a percentage of retail sales over the 5-year period without any material affect to the general body of ratepayers.

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¹⁹ Customer owned renewable energy reporting data as required by statute:

http://www.psc.state.fl.us/utilities/electricgas/customerrenewable/index.aspx

²⁰ Nextera Investor Presentation highlighted continued improvement in Florida's economy. http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9MigyODAyfENoaWxkSUQ9LTF8VHlwZT0z&t=1

²¹ Nextera Investors Transcript http://phx.corporate-

ir.net/External.File?item=UGFyZW50SUQ9MjgyOTE2fENoaWxkSUQ9LTF8VHlwZT0z&t=1

II. Interconnection Procedures

We are supportive of IREC's comments to reform and improve interconnection procedures in the state. Interconnection is a cornerstone of efficient project development, thus, the Commission can and should take into consideration current interconnection procedures when exploring options to encourage cost-effective demand- and supply-side solar energy development. Inefficient interconnection procedures can add unnecessary time and significant expense to solar projects and undermine the economics of project development. By updating interconnection procedures using the methods recommended by IREC, the Commission will help to nurture market growth in a deliberate manner.

Since 2008, Florida has interconnected 74 MW of demand-side solar energy systems.²² While Commission decisions have led to growth in capacity, compared to many others states across the country,²³ Florida's frequency of interconnection requests is much lower. The level of interconnection request in these other state markets has placed large demands on utility teams, regulators, and the clean energy industry, leading to backlogs and the need for expensive and frequent stakeholder processes' to address and reform interconnection procedures without disrupting the market. In deliberating ways to encourage demand- and supply-side solar development, Florida can learn from the experiences of other state markets when considering how to address and effectuate interconnection rules that can have beneficial market impact and reduce costs. By updating Florida's interconnection rules ahead of possible request backlogs to conform with practices in states where adoption levels are higher and more frequent, the Commission can act in promoting demand- and supply-side renewable energy.

²² Consumer Renewable Energy Systems: 2014 See:

http://flpsc.com/utilities/electricgas/customerrenewable/2014/2014%20Net%20Metering%20Summary%20Spreadsheet/2014%20Net%20Metering%20Chart.pdf

²³ Hawaii's utility, HECO for example approved over 3,000 interconnection requests in the month of April 2015.

We would welcome the opportunity to work with the Commission and other stakeholders in a deliberate and inclusive fashion, and support IREC's suggestion to utilize IREC's *Model Interconnection Procedures* and other recent developments to orient the discussion.

III. Supply-Side Solar PV

SEIA-VS are encouraged by the Commission's desire to seek information about supply-side solar development in Florida. Florida is in a unique position to pursue deployment of supply-side solar in a cost-effective fashion that can avoid upward pressure on retail rates and save ratepayers money over time compared to other energy sources. And utility-scale solar is not only competitive with traditional generation, but over the long term it also serves as a fuel-free hedge over the long term against spikes in natural gas prices, or increased regulatory compliance costs for coal and nuclear plants.

A. Competitive Procurement of Large-Scale Solar

The FPSC must take care to look at current market evidence for energy costs and cast aside any outdated perceptions of solar as expensive compared to conventional generation, or as an expense forced on ratepayers by government-imposed targets. Solar growth across the United States is being driven by markets, not mandates. 90% of new solar development has occurred between 2010 and 2014, as plummeting costs have made solar price-competitive with traditional energy resources. As a result, 5 GW of new solar has been developed in the last 18 months outside of Renewable Portfolio Standards (RPS) procurements.²⁴

Across the country and in nearby non-RPS states in the Southeast, competitive markets for large-scale PV solar are delivering solar energy at prices below utilities' projected avoided costs, making solar the least-cost resource available in the market in some cases. Utility-scale power purchase agreements (PPAs) prices are

²⁴ http://www.greentechmedia.com/articles/read/5-Numbers-That-Will-Shape-the-Future-of-US-Solar-in-2015-and-2016

charting a consistent decline nationally, reaching lows of \$42/MWH in New Mexico, \$50 in Texas, ²⁵ \$65/MWH in Georgia, ²⁶ and non-public prices in other states like Arkansas low enough to avoid any new costs for ratepayers. Utilities are increasingly adopting solar as their default energy option²⁷ and frequently procuring large-scale solar cheaper than development of new natural gas facilities. ²⁸

The success of these market-based solar procurements should be brought to Florida, where it could profoundly transform the economics of solar energy in the state. As Florida utilities continue to announce plans to develop their own self-build or turnkey solar projects, the evidence from here in the Southeast over the last year demonstrates the enormous potential for price savings from competitive solicitation processes, without state incentives or RPS requirements. In 2014, Georgia Power Company ("Georgia Power") conducted a request for proposals (RFP) that resulted in over 500 MW of PPAs for large-scale solar at prices below 6.5 cents per kWh.²⁹ In the utility's own words, "Georgia Power has accomplished this substantial development by utilizing market based solicitations that have demonstrated that the market for solar is both robust and competitive, resulting in purchased power agreements ("PPA") that are at prices well below the Company's projected avoided cost."³⁰ The Georgia Public Service Commission confirmed in its own findings that this massive expansion of large-scale solar over PPA terms of 25 and 30 years would not lead to rate increases, but instead would save money for ratepayers while adding jobs to the state's economy.³¹

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²⁵ http://www.greentechmedia.com/articles/read/Cheapest-Solar-Ever-Austin-Energy-Buys-PV-From-SunEdison-at-5-Cents-Per-Ki ²⁶ See Georgia Power Company, *supra* at FN 27.

²⁷ Austin, Texas Passes a New Law Making Solar a 'Default' Generation Resource http://www.greentechmedia.com/articles/read/austin-energy-solar

²⁸ Xcel energy buys utility scale solar cheaper than natural gas: http://www.greentechmedia.com/articles/read/xcel-energy-buys-utility-scale-solar-for-less-than-natural-gas

²⁹ Georgia Power Company's Application for the Certification of the 2015 and 2016 Advanced Solar Initiative Prime Power Purchase Agreements and Request for Approval of the 2015 Advanced Solar Initiative Power Purchase Agreements, Georgia Public Service Commission Docket No. 38877, p. 19.

³⁰ *Id.* At p. 7.

³¹ Georgia Public Service Commission press release dated December 16, 2014. http://www.psc.state.ga.us/newsinfo/NewsReleases.aspx?Year=2014

SEIA-VS view utility-scale solar as a critical and immensely scalable component of Florida's energy mix going forward. We urge the Commission to encourage utilities to procure more supply-side solar through open competitive bidding processes specifically for systems sized between 20 MW and 74.99 MW. We believe that the FPSC could utilize its existing authority, acting within the ten-year site planning process or in reviewing a utility-proposed procurement program brought before the Commission, to encourage voluntary goals for large-scale solar procurement adding up to several GW statewide during the period 2016 through 2020.

B. Competitive Procurement of Distributed Supply-Side Solar Generation

In addition to encouraging market-based procurements for supply-side solar development between 20 MW and 74.99 MW, there is also a market opportunity to explore options for growing distributed supply-side solar generation (DSG) for systems under 20 MW. While several states offer long-term standard offer contracts with a specific avoided cost rate for DSG, Florida has relied on avoided cost rates that do not reflect the full benefits DSG facilities provide, especially when siting these facilities within areas of the grid that larger-scale solar projects cannot serve.

We urge the Commission to work with stakeholders in a transparent and inclusive manner to develop a 5-year supply side pilot program designed to target DSG systems under 20MW, with an annual MW cap for new expansion. The Commission should specifically seek to establish parameters around contract length and competitive bidding processes in order to ensure pilot program success by offering terms of 20 to 30 years or more, as the Georgia PSC has done. Systems sized below 20 MW are able to still take advantage of economies of scale, particularly when coupled with the fast-track interconnection screens mentioned by IREC. Larger project developers are sophisticated and prefer this process and are eager to invest in Florida's economy.

We also recommend the Commission encourage utilities to identify and target specific sites or locations within circuits where DSG would provide concrete benefit. By locating wholesale or supply side DSG in areas

where it is needed most, Florida ratepayers will see additional grid benefits including transmission and distribution savings, deferred system maintenance, and a cleaner more diverse energy portfolio. Solar generation projects have also been proven to increase the value of property on rural land, providing local governments with an expanded tax base and benefit to the surrounding community.³²

Utilities have often taken great credit for testing the market place for solar without sharing results with the Commission or other interested stakeholders. In designing a DSG pilot or directing competitive procurement for utility-scale solar, the Commission should require reporting and data sharing surrounding but not limited to performance, and costs and benefits of solar on the grid and in the marketplace. We welcome the opportunity to work with the Commission, stakeholders, and utilities to set a multi-GW statewide goal and procure supply-side solar with a process that brings the lowest cost for ratepayers with no upward pressure on rates.

IV. Meter Aggregation

We are supportive of IREC's comments on meter aggregation and believe the Commission should seek to adopt simple rule changes to Rule 25-6.102 of the Florida Administrative Code which precludes Aggregated Net-Metering (ANM) and other "conjunctive" billing arrangements for customers of investor-owned electric utilities.³³ While there are several aspects of ANM regulation that could quickly become overly complex, we recommend the Commission to adopt simple and clear rules for ANM arrangements. This is a barrier that 18

³² Excel states that NEP projects http://cleantechnica.com/2015/03/20/xcel-energy-purchasing-140-mw-solar-pv-planned-developments-roswell-new-mexico/

³³ Rule 25-6.102 states, "Conjunctive billing means totalizing metering, additive billing, plural meter billing, conjunctional metering, and all like or similar billing practices which seek to combine, for billing purposes, the separate consumptions and registered demands of two or more points of delivery serving a single customer...Conjunctive billing shall not be permitted."

states have sought to remove in some form or another to increase participation in the solar energy economy.³⁴ IREC has provided model language for meter aggregation within its Model Net Metering Rules.³⁵

We believe that the Commission through an open and transparent rule making proceeding, inclusive of comments and input from stakeholders, can make changes to Rule 25-6.102 of the Florida Administrative Code. Modification of this rule will provide energy stability to Florida's strong agricultural market. Similarly, through locational benefits of supply side solar, the utility grid and general body of ratepayers may benefit from solar development in rural areas where energy can be generated closer to the point of consumption. Without the adoption of these rule changes, the current system excludes certain agricultural customers from participating in the solar energy economy.

V. Community Solar

While Florida's residential, commercial, governmental, and utility solar opportunities are still wide open, the National Renewable Energy Laboratory has estimated between 72-78% of the roof space of residential homes is unsuitable for rooftop solar³⁶. While many of those customers want to participate in the solar economy, shade, roof characteristics, dwelling type (apartment home or condo), poor credit ratings, and other factors often prohibit them from doing so.

We echo IREC's comments on implementation of a shared renewables program and reiterate the importance of the four guiding principles when designing a true shared renewable program.

1. Shared renewable energy programs should expand renewable energy access to a broader group of energy consumers, including lower income customers and others who cannot install renewable energy on their own properties.

³⁴ These states include CO, DE, PA, CA, MD, VT, AZ, CT, OR, WV, MA, NY, UT, AR, MN, RI, WA, and ME. See the Freeing the Grid Report, 2014 edition, available at http://freeingthegrid.org/#download-ftg/.

³⁵ IREC Model Net Metering Rules, 2009, p. 6, available at: http://www.irecusa.org/publications/.

³⁶ Rooftop Photovoltaics Market Penetration Scenarios http://www.nrel.gov/docs/fy08osti/42306.pdf

- 2. Participants in a shared renewable energy program should receive tangible economic benefits on their utility bills, credited at a rate that ensures fair and meaningful benefits for participating customers who are unable to participate in Net Energy Metering.
- 3. Shared renewable energy programs should be flexible enough to account for energy consumers' preferences and their changing dwelling arrangements over time.
- 4. And finally, shared renewable energy programs should be additive to and supportive of existing renewable energy programs.

We encourage the FPSC to work with stakeholders and utilities to develop a community solar pilot program of at least 100 MW over a 5-year period, comprised of projects between 1MW and 5MW while following the IREC shared renewables guiding principles. Based on statements provided by FPL executives to their shareholders a program of this size would have no material effect on their regulatory ROE and thus have no material effect on the rates of the general body of ratepayers but would still contribute to diversifying Florida's fuel mix³⁷. This program operates similarly to a demand-side solar programs because tangible benefits to customers are experienced on-bill,

VI. Net Metering

We fully agree with and support the comments submitted by IREC concerning Florida's net energy metering (NEM) rules. As IREC notes, in 2014 Commission Staff recommended that Florida's electric utilities, subject to FEECA,³⁸ continue to utilize NEM and the provisions of Rule 25-6.065, F.A.C., as a method of encouraging demand-side renewable energy.³⁹ As one of the most effective policies that enables customers to meet their on-site energy demands with clean energy, we commend the Commission for their vote of confidence on this issue as exemplified by their vote in favor of recent Staff's recommendation.⁴⁰

³⁷ See ID 21

³⁸ Referring to http://www.psc.state.fl.us/publications/pdf/electricgas/FEECA2015.pdf

³⁹ See http://www.psc.state.fl.us/library/FILINGS/14/06299-14/06299-14.pdf Issue 10 page 73 CONCUSION

⁴⁰ on Issue 10 during the November 25, 2014 Agenda Conference

NEM is an intuitive and effective policy in helping customers reduce their onsite energy consumption. Accordingly, we concur with IREC that customers utilizing NEM are allowed access to non-discriminatory electricity rates that do not penalize their decision to install on-site distributed energy. Independent studies in states across the country continue to demonstrate that NEM provides a customer the ability to satisfy their onsite energy needs and fair compensation for energy exported to the grid.⁴¹

As the Commission looks to satisfy the directive of the Florida legislature in promoting demand-side renewable energy options, we believe that increased customer awareness and understanding of NEM options can significantly help to achieve this imperative. For instance, Florida's electric utilities could increase customer adoption of demand-side solar by actively making their customers aware of NEM as they do with other utility programs.

The Commission could increase the awareness in a customer's ability to adopt demand-side solar by requiring of the FEECA utilities to promote NEM to their customers using social media outlets and customer billing tools. The Commission can play an important role in ensuring the utilities promote this policy regularly. For example Florida Power & Light, (FPL), has used its social media outlets such as "Facebook Promoted Posts" (paid ads), Twitter and its customer billing system to promote the SolarNow Voluntary Solar Program.⁴² FPL consistently uses social media to engage customers to seek out participation in this program and other programs.

Commissioner Brise gave a thoughtful presentation at the Palm Beach Zoo on Florida's Solar Economy in April 2015 to a crowd of Floridians interested in solar energy and the expansion of the solar generation at the park through the FPL SolarNow Voluntary Solar Program. Commission Brise included foundational information on NEM and the greater societal benefits it creates by offsetting the need for additional power

⁴¹ Ref Note: 21

⁴² See: https://www.facebook.com/fplconnect & https://www.facebook.com/fplconnect/posts/10153497506999236:0

plants to be built if enough customers participate.⁴³ We welcome this type of community support and more interaction with the public from the Commission and are confident that the FEECA utilities could also prove effective in this regard. Utilities regularly market self-promoting programs, storm preparation, energy saver tips and sweepstakes through social media and should be using the same tools to promote customer participation and awareness of NEM.

NEM like other renewable energy programs are designed to protect the health, prosperity, and general welfare of the state and its citizens,⁴⁴ and utilities should communicate its existence and benefit to customers on a regular basis. FPL has, in the past, used social media to promote the demand side management program OnCall.⁴⁵ Both Duke Energy and FPL regularly update their Twitter⁴⁶ newsfeed to provide announcements on upcoming projects, energy saving tips and social and volunteering activities. This request may sound rudimentary, however, there is no recent evidence of FEECA Utilities actively promoting net metering⁴⁷ as a policy their customers can participate in. Therefore, we believe utility education and awareness of NEM would increase customer participation with very little to no additional investment of marketing resources since the FEECA utilities are already using this outlet to promote customer social engagement and outage notices.

VII. Conclusion

Despite having one of the best solar resources in the country, Florida has struggled to push its installed solar capacity beyond 1% of its generation mix. Florida ranks 15th among states for cumulative installed capacity, behind states such as Maryland, Massachusetts and Pennsylvania.⁴⁸ By maintaining the existing net

⁴³ Watch: Commissioner Brise presentation on Florida's Solar Energy Economy https://youtu.be/dJwAgqqtf20?t=27m50s

⁴⁴ § 366.81 Florida Statutes – Legislative findings and intent

⁴⁵ FPL On Call https://www.facebook.com/fplconnect/posts/10151413970589236:0

⁴⁶ Twitter Handle @DukeEnergy & Twitter Handle @insideFPL

⁴⁷ Duke Energy re-tweeted an official employee's post regarding a win-win settlement that ensured Duke Energy South Carolina customers would continue to have access to Net-Metering https://twitter.com/DukeEnergy/status/543458513457270784 FPL responded to a customer tech support issue in April 2015 https://twitter.com/insideFPL/status/592786688063250433

⁴⁸ U.S. Solar Market Insight Report: 2014 Year in Review, Solar Energy Industries Association.

metering program, implementing smart incentives through new pilot programs, and meter aggregation policies, Florida could increase participation by low-income, residential, small commercial and agricultural customers. By updating interconnection procedures, developing a shared renewable energy pilot and a supply side distributed solar generation pilot, Florida would further expand eligibility of participation in solar and gain purposeful insight into how solar positively impacts our fuel diversity and grid reliability. Ensuring all of these programs have a goal, including a clear goal and recovery option for utilities to develop and procure more utility scale solar will help the Commission and utilities achieve a goal of maintaining a diverse fuel mix in Florida while bolstering the local economy and protecting the state's air quality and natural resources. We hope that the Commission will continue this important discussion by holding transparent stakeholder workshops that effectively and inclusively address program designs and rule changes that can be implemented before the end of 2015. SEIA, Vote Solar and our u would appreciate the opportunity to further participate in an open dialogue with the Commission and other stakeholders.

Sincerely,

/s/ Sean Gallagher

Sean Gallagher Vice President State Affairs Solar Energy Industries Association 505 9th Street, NW Suite 800 Washington, DC 20004 (202) 682-0556

E-Mail: SGallagher@seia.org

/s/ Justin Hoysradt

Justin Hoysradt
Regional Manager - Florida
Vote Solar
313 Datura Street First Floor 101
West Palm Beach, FL 33401

Tel: 561-320-7786

E-Mail: justin@votesolar.org

Attachment 1

Undersigned Endorsers













SEIA-VS Comments: Attachment

The below petition of public support, signed by 529 Floridians, is hereby submitted as an attachment to SEIA-VS Comments on the Request for Comments on Development of Solar Technologies.

Dear Florida Public Service Commissioners,

Floridians deserve greater opportunity to tap into solar energy for meeting their energy needs.

As you consider ways to encourage development of rooftop solar, we urge you to maintain critical policy foundations, such as net metering. Please continue your commitment to full, fair credit for local solar power.

We also urge you to pursue programs that are proven to increase solar access and affordability. Shared solar and competitive solar procurement hold the potential to unleash market forces resulting in greater cost-effectiveness and participation.

We urge you to help make the Sunshine State a solar leader.

First Name	Last Name	State	City	Zip Code	County	I have a solar energy system	I work in the solar industry
Alexandra	Gordon	FL	Miami	33156	Miami-Dade	energy system	Solai illuusti y
Cheryl	McKinney	FL	Deerfield Beach	33130	Broward		
Sandie	Betz	FL	Sarasota	34238	Sarasota		
Barbara	Condon	FL	Cutler Bay	33157	Miami-Dade		
Woody	Mason	FL	Bonita Springs	34133	Lee		
	Mace	FL	Tavernier	33070	Monroe	1	
Gary	Rochester		Jacksonville				
Chris	Rochester	FL	Jacksonville	32216 33442-	Duval	1	
Tammy	Lettieri	FL	Deerfield	6050			
Allan	Peterson	FL	Gulf Breeze	32563	Santa Rosa		
Vincent	Domeraski	FL	Fort McCoy	32134	Marion		
				33613-			
ERIC	JARMAN	FL	TAMPA	1618			
BARB	KOSINSKI	FL	VENICE	34285	Sarasota		1
Tino	Garcia	FL	Stuart	34497			1
Earl L.	Kerr	FL	Clearwater	33759	Pinellas	1	
Eva	Walko	FL	Vero Beach	32967	Indian River		
Bill	Harper	FL	Lutz	33548	Hillsborough		
Tim	Gaffney	FL	Key West	33040	Monroe	1	
Carlos	Gomez-Moreno	FL	Hollywood	33019	Broward		
amanda	osborne	FL	jacksonville	32258	Duval		
Linda	Fowler	FL	TAMPA	33613	Hillsborough		
john	gorman	FL	tampa	33503	Hillsborough		
Mary Theresa	Cotter	FL	Miami	33155	Miami-Dade		
Charles	Omana	FL	Delray Beach	33483	Palm Beach		
Carisse	LeJeune	FL	Boynton Beach	33435	Palm Beach		
miranda	castro	FL	Gainesville	32607	Alachua	1	
Raina	Russo	FL	Delray Beach	33446	Palm Beach	1	1
Brian	Tobin	FL	Tequesta	33469	Palm Beach		
Jody	Smith	FL	Key West	33040	Monroe		
Larry	Van Gelder	FL	St Petersburg	33702	Pinellas	1	
Barbara	Canning	FL	Lakeland	33803	Polk		
Bonnie	Mc Cune	FL	Miami	33143	Miami-Dade		
Chuck	Hamblen	FL	Jacksonville	32216	Duval		
Virginia	Davis	FL	Palatka	32177	Putnam	1	1
Scott	Fershleiser	FL	New Port Richey	34652	Pasco		
			,	34228-			
Regina	Gurland	FL	LONGBOAT KEY	1405			
Joshua	Pritt	FL	Indialantic	32903	Brevard		
Alissa	Schafer	FL	Fort Lauderdale	33316	Broward		1

Melissa	McDonald	FL	Land O Lakes	34639	Pasco		1
Don	Wilner	FL	Pembroke Pines	33029	Broward		
				32907-			
Susan	Linden	FL	Palm Bay	7842			
Yann	Brandt	FL	Lauderdale By The Se	33308	Broward	1	1
David	Leithauser	FL	DeLand	32724	Volusia	1	1
Pam	Arthur	FL	Stuart	34997	Martin		
Edward		FL	Pinellas Park	33782	Pinellas		
Victoria	Ryan Calleja	FL	Miami	33146	Miami-Dade		1
Christopher	Lanitis	FL	Pinellas Park	33782	Pinellas		1
Michael		FL		33919			
	Donovan		Fort Myers		Lee	4	1
Michael	Collins	FL	Gainesville	32605	Alachua	1	1
Terrence	Hiduke	FL	Fort Myers	33908	Lee	_	
Keith	Maust	FL	Lakeland	33813	Polk	1	1
Jan	Jennings	FL	Ocoee	34761	Orange		
Kirk	Maust	FL	Sarasota	34243- 7202		1	1
Roger	Barna	FL	Bonita Springs	34135	Lee	_	
Justin	Hoysradt	FL	West Palm Beach	33401	Palm Beach		1
Daniel	Camacho	FL	Plantation	33313	Broward		1
Steven	Large	FL	Pembroke Pines	33025	Broward	1	1
Alan	Dorfman	FL	Delray Beach	33446	Palm Beach		1
Susan	Yorke	FL	Indiantown	34956	Martin	1	
Brad	Fitzgerald	FL	Sarasota	34240	Sarasota	<u> </u>	
Nick	Patel	FL	Spring Hill	34606	Hernando		1
Susan	England	FL	Palm beach gardens	33418	Palm Beach		1
Richard	Anderson	FL	Palm Bay	32905	Brevard		
Donna	D'Arco	FL	Sarasota	34236	Sarasota	1	
Andrew	Lund	FL	Miami	33186			
	Gulden	FL	Bradenton	34209		1	1
Dale					Manatee	1	1
LILLIE	BRITTON	FL	PALMETTO	34221	Manatee		1
Bob	Prindle	FL	Bradenton	34207	Manatee		1
Andra	Heide	FL	Pace	32571	Santa Rosa		
Jacques	Holzmann	FL	Miami	33156	Miami-Dade		1
Don	Phelps	FL	Tallahassee	32303	Leon		
Gail	Hineline	FL	Orlando	32819	Orange		
Bradley	Tayloe	FL	Venice	34285	Sarasota		
Robert	Rorebeck	OR	Cascade locks	97014	Multnomah		1
Ken	Eberly	FL	Ocala	34481	Marion	1	
GLORIA	BELL	FL	TAMARAC	33321	Broward		
Lynn	Nilssen	FL	Sarasota	34242	Sarasota	1	

Geraldine	Vaccaro	FL	West Palm Beach	33409	Palm Beach		
steven	ferry	FL	clearwater	33763	Pinellas	1	
Sandra	Ripberger	FL	Bradenton	34209	Manatee		
Patricia	Vergona	FL	Boca raton	33487	Palm Beach		1
Mark	Barrett	FL	Silver Springs	34488	Marion		
Kia	Hendrix	FL	Gainesville	32605	Alachua		
Louis	Martone	FL	Davenport	33837	Polk		
Dustin	Thaler	FL	Miami	33132	Miami-Dade		1
Anna	Adams	FL	Wilton Manors	33305	Broward		
Ann	Jacobson	FL	Naples	34112	Collier		
ANNE	CURRAN	FL	Sarasota	34231	Sarasota		
Diana	Springfield	FL	Saint Augustine	32084	Saint Johns		
Kelly	McIntyre	FL	Bradenton	34208	Manatee		1
Sandra	Jolly	FL	Port Saint Lucie	34952	Saint Lucie	1	
Lisa	Spagnoli	FL	SARASOTA	34235	Sarasota		1
William	Lippy	FL	Lakeland	33803	Polk	1	1
Elizabeth	Ackerly	FL	Ocean Ridge	33435	Palm Beach	1	
Thomas	Fleming	FL	Tampa	33629	Hillsborough		
Bryan	Hammond	FL	Tampa	33634	Hillsborough		1
Marilyn	Lewis	FL	Crawfordville	32327	Wakulla		
Susanne	Reiter	FL	North palm beach	33408	Palm Beach		
Jennifer	Scott	FL	Fort Myers	33908	Lee		
Chris	Aloise	FL	Palm Harbor	34683	Pinellas		
Jennifer	ONeal	FL	Fort Myers	33912	Lee	1	
Brian	Wilson	FL	Coral Gables	33134	Miami-Dade		
Robert	Bullard	FL	Ponce Inlet	32127	Volusia	1	1
Robin	Hurt	FL	Longwood	32750	Seminole	1	1
John	Spinnler	FL	Cape Coral	33991	Lee	1	1
Agnes	Mattson	FL	North Palm Beach	33408	Palm Beach		
Lisa	Michael	FL	Jacksonville	32217	Duval		
Gina	Papabeis	FL	Gulfport	33707	Pinellas		
Heng	Phu	FL	Trinity	34655	Pasco	1	1
Pedro	Figueroa	FL	Orlando	32835	Orange	1	
Kevin	Bickers	FL	Atlantic Beach	32233	Duval	1	
Sheila	Gulden	FL	Sarasota	34243	Manatee	1	1
donna	markham	FL	sarasota	34237	Sarasota		1
Raymond	Figueroa	FL	Orlando	32803	Orange		
Dominick	Porretto	FL	Pompano Bch.	33064	Broward	1	1
George	Thomas	FL	Youngstown	32466	Bay		
Josie	Garcia	FL	Sarsota	34237	Sarasota		
RANDALL	LEE	FL	venice	34285	Sarasota	1	1

Oliver	Baumgart	FL	Bradenton	34207	Manatee	1	1
neil	ming	FL	tampa	33617	Hillsborough		
Gail	Greenblatt	FL	Ponte Vedra	32081	Saint Johns		
Connie	Hutton	FL	Jupiter	33478	Palm Beach		
Frank	Bodine	FL	Thonotosassa	33592	Hillsborough		
Charles	Warren	FL	Bartow	33830	Polk		
Michael	Dickey	FL	Port Saint Lucie	34952- 3309			
karen	smith	FL	Aripeka	34679	Pasco		
Thomas	Cooper	FL	Miami	33158	Miami-Dade	1	
Roland	Tagle	FL	pembroke Pines	33028	Broward	1	
Pat	Claerhout	FL	Palm Harbor	34683	Pinellas		
Katherine	Nicol	FL	Cape Canaveral	32920	Brevard		
Rebecca	Stahlnecker	FL	Mount Dora	32757	Lake		1
Lynore	Reiseck	FL	Fort Lauderdale	33301	Broward		
S	Logan	FL	Miami	33131- 4937			
Paul	Sering	FL	Port Charlotte	33948	Charlotte		
Ramesh	Krishnaiyer	FL	Coral Springs	33071	Broward	1	
Paul	Nicholson	FL	Neptu ne Beach	32266	Duval	1	1
Martie	Burkett	FL	Pierson	32180	Volusia	1	
tim	grey	FL	naples	34109	Collier		
Joe	Perugini	FL	Tarpon Springs	34689	Pinellas		
judy	browne	FL	deerfield beach	33442	Broward		
				33437-			
Ira	Goldman	FL	Boynton Beach	3998			
Corina	Fitch	FL	Miami	33127	Miami-Dade		
sandra	cannon	FL	wesley chapel	33544	Pasco		1
Latha	Krishnaiyer	FL	Coral Springs	33071	Broward		
Robert	Porter	FL	Longboat Key	34228	Sarasota		
Neil	Cammardella	FL	St. Pete	33712	Pinellas		
R	Schjolden	FL	Myakka City	34251	Manatee		
Tins	Santillo	FL	Keystone Heights	32656	Clay		
Brokos	Nelson	FL	Gainesville	32608	Alachua		
Jeffery	Wolf	FL	St. Petersburg	33701	Pinellas	1	
Jo Ellen	Bate	FL	Fort Lauderdale	33311- 5569			
M	Gregory	FL	Boca Raton	33433	Palm Beach		
Donald	Shaw	FL	St. Petersburg	33703- 3418			
Judith	Martinez	FL	St Augustine	32084	Saint Johns		
amy	davis	FL	panama city beach	32413	Bay		
stephanie	holzmann	FL	miami	33156	Miami-Dade		

Wayne	Adams	FL	Seminole	33776	Pinellas	1	1
Frank	Kobor	FL	Cape Coral	33914	Lee		1
Andrew	Kapalko	FL	Port Orange	32128	Volusia		
Colin	Walsh	CA	Emeryville	94608	Alameda	1	1
Emily	Lapham	FL	Orlando	32803	Orange		
Pamela	ONeal	FL	Fort Myers	33919	Lee		
Karin	Figueroa	FL	Orlando	32835	Orange	1	
nelson	kraucak	FL	belleview	34421	Marion		
Stephen	Bongini	FL	Miami Beach	33140	Miami-Dade		
Mark	Thornbloom	FL	Cocoa	32926	Brevard	1	1
Joyce	Clark	FL	Ft Myers	33919	Lee		
Wm. R.	Young	FL	Winter Park	32789	Orange		
William	Keller	FL	Port Charlotte	33948	Charlotte	1	
Jim	Yongue	FL	Orlando	32837	Orange		
Brett	Robert	FL	Coral Springs	33071	Broward		
Daniel	Amer	FL	Miami	33130	Miami-Dade		
Warren	Schmitt	FL	Sorrento	32776	Lake		
steve	specht	FL	kissimmee	34747	Osceola	1	
Jackie	Duvall	FL	Gulf Breeze	32563	Santa Rosa		
James	Williams	FL	Gainesville	32605	Alachua		
April	Bates	FL	St. Petersburg	33705	Pinellas		
John	Somerville	FL	West Palm Beach	33405	Palm Beach		
Richard	Marks	FL	Boynton Beach	33472	Palm Beach		
John	Favuzza	FL	Palm Bay	32907	Brevard		
R David	Wicker	FL	jacksonville	32256	Duval		
Thomas	Rohe	FL	Montverde	34756	Lake		
Boris	Rosenstein	FL	West Plam Beach	33401	Palm Beach		1
Ronald	Bishop	FL	High Springs	32643	Alachua	1	1
Keith	Christian	FL	Mount Dora	32757	Lake		
				33710-			
Caroline	Miller	FL	St Petersburg	7634			
Joyce	Salomon	FL	Coral springs	33071	Broward		
Steven	cook	FL	FORT LAUDERDALE	33315	Broward	1	
James	Cummings	FL	Merritt Island	32952	Brevard	1	
bob	pavese	FL	n palm beach	33408	Palm Beach	1	
Katie	Ullmann	FL	Miami	33180	Miami-Dade		1
LISA	LYNCH	FL	SAINT JOHNS	32259	Saint Johns	1	
linda	paleias	FL	ft lauderdale	33308- 2564			
William	Claiborn	FL	Venice	34285	Sarasota	1	
Samuel	Kendall	FL	ALTAMONTE SPRINGS	32701	Seminole		

Carol	Barbour	FL	Ponte Vedra	32082	Saint Johns		
Suzanne	Saunders	FL	St. Petersburg	33702	Pinellas		
Ellen	Strall	FL	Matlacha	33993	Lee		
Camilla	Spicer	FL	Port Charlotte	33952	Charlotte		
Leoncio	Garcia	FL	Wellington	33414	Palm Beach		
Andrew	East	FL	Ponte Vedra Beach	32082	Saint Johns	1	1
Julie	Oster	FL	Tallahassee	32309	Leon		
Nan	Gold	FL	Sarasota	34231	Sarasota		
Tom	Opiela	FL	St Augustine	32084	Saint Johns		
Sean	OHara	FL	Jacksonville	32246	Duval		1
Anthony	DeCarlo	FL	Kissimmee	34741	Osceola		
				33704-			
Lenn	Neff	FL	St. Petersburg	2011			
Jay	Taylor	FL	Earleton	32631	Alachua		1
Diane	Harris	FL	Vero Beach	32968	Indian River		
Dennis	Donegan	FL	Tamarac	33321	Broward		
Lynne	Walker	FL	Melbourne	32934	Brevard		
Richard	Grove	FL	New Smyrna Beach	32861	Orange		
Melissa	Judge	FL	Tampa	33607	Hillsborough		
Palmer	Hinds	FL	tampa	33592	Hillsborough		
R	MCHAM	FL	NORTH PALM BEACH	33408	Palm Beach		
JOHN	DIMINO	FL	VERO BEACH	32966	Indian River		
Frank	Kline	FL	Titusville	32796	Brevard	1	1
Jason	Wolf	FL	Key West	33041	Monroe	1	
juan	Mato	FL	CLEARWATER	33759	Pinellas		1
Lindsey	Kohlenburg	FL	Port Charlotte	33952	Charlotte		
Diana	Rawlings-Bever	FL	Fort Myers	33901	Lee		
gary	wisniewski	FL	port orange	32129	Volusia		
Tiffany	Troxler	FL	Miami	33133	Miami-Dade		
Statia & Karen	McNeese	FL	Niceville	32578	Okaloosa	1	
Paul	Hargrave	FL	Gainesville	32605	Alachua		
Brad	Arthur	FL	LAND O LAKES	34639	Pasco		
Tom	Howard	FL	Spring Hill	34606	Hernando		
Patricia	McDonald	FL	Winter Park	32792	Orange	1	
lila	ryan	FL	wpb	33401	Palm Beach		
John	Alger	FL	Jacksonville	32254	Duval	1	1
Catherine	McNamara	FL	Orlando	32828	Orange		
Michael J	Euteneuer Sr	FL	Boynton Beach	33436	Palm Beach	1	1
Dale	Truscot	FL	Orlando	32806	Orange	1	
Richard	Romley	FL	Bradenton	34212	Manatee		
Kathleen	Summa	FL	St Augustine	32086	Saint Johns		

David	Lapham	FL	Orlando	32806	Orange		
Bruno	Sara	FL	Fort lauderdale	33317	Broward		
Paul	Groh	FL	Gulf Breeze	32563	Santa Rosa		
Liliana	Laverde	FL	Miami	33133	Miami-Dade		
Douglas	Young	FL	Tamarac	33321	Broward		
Nancy	Frainetti	FL	St. Petersburg	33701	Pinellas	1	1
Ray	Gecas	FL	St. Pete Beach	33706	Pinellas		1
Laura K	Chilkott	FL	Port Orange	32127	Volusia	1	
Paul	Michel	FL	Miami	33165	Miami-Dade	1	
Connie	Cueto	FL	Lithia	33547	Hillsborough		
Marjorie	Weber	FL	Miami Shores	33138	Miami-Dade		
Will	Miller	FL	Belle air Bluffs	33770	Pinellas	1	
Stephen	Wallace	FL	venice	34285	Sarasota	1	
Dave	Bookman	FL	Viera	32955	Brevard		
Nancy	Natilson	FL	Tampa	33603	Hillsborough		
Robert	O'Brien	FL	Delray Beach	33483	Palm Beach		
Rick	Marcena	FL	Oakland park	33334	Broward		
Mary and			·	32952			
Thomas	Cummings	FL	Merritt Island	5934		1	
pam	ford	FL	land o lakes	34639	Pasco		
Douglas	Horner	FL	Orlando	32812	Orange		
Jim	Black	FL	Tampa	33603	Hillsborough		
Valerie	Robbin	FL	Coral Gables	33134- 5618			
John	Novar	FL	PINECREST	33156	Miami-Dade		1
Barbara	Hughes	FL	Sanford	32771	Seminole		
Marcia	Hoodwin	FL	Sarasota	34238	Sarasota		
John	Dervin	FL	Apopka	32712	Orange		
Sheila	Connelly	FL	Cutler Bay	33157	Miami-Dade		
Mary Ann	Holtz	FL	SAINT PETERSBURG	33713	Pinellas		
Mehmet	Kurgun	FL	Palm city	34990	Martin		
John	Elzie	FL	Tallahassee	32303	Leon		
Sam	Green	FL	Eustis	32726	Lake	1	
Richard	Rowland	FL	Deltona	32738	Volusia		
Rhana	Bazzini	FL	Sarasota	34231	Sarasota		
Jan	Novotny	FL	Jacksonville Beach	32250	Duval		
Helen	Bernstein	FL	Casselberry	32707	Seminole	1	
Jaime	Racine	FL	Sarasota	34238	Sarasota		
Cynthia	Davies	FL	Babson Park	33827	Polk		
Ronnie	Bolling	FL	Ormond Beach	32176	Volusia		
Helena	a	FL	St. Augustine	32080	Saint Johns		
Doug	Helliesen	FL	Key West	33040	Monroe		

Bruce	Athey	FL	Pass a Grille	33706	Pinellas		
Alejandro	Sanchez	FL	Cooper City	33330	Broward		
Gary	Monahan	FL	Delray BeaCH	33445	Palm Beach		
Alek	Williams	FL	Orlando	32839	Orange		
	Hesse & Doug						
Susanne	Dyer	FL	Alachua	32615	Alachua	1	
Marilyn	Barber	FL	Rediington Beach	33708	Pinellas		
Karen	Wolman	FL	Orlando	32819	Orange		
Paul	Carbonell	FL	Winter Haven	33881	Polk		
MARSHA	GAINES	FL	CAPE CORAL	33993	Lee		
Drew	Martin	FL	Lake Worth	33460	Palm Beach	1	
Kenneth	Phipps	FL	Lakeland	33804	Polk		
Mark	Napoli	FL	Palm Bay	32907	Brevard	1	
stephanie	montalvo	FL	hollywood	33020	Broward	1	
Carmen	Ramsey	FL	Sarasota	34233	Sarasota		
Linda	Halderman	FL	Sarasota	34231	Sarasota		
Donald	Raper	FL	Marathon	33050	Monroe		1
Guillermo	Villalona	FL	Sarasota	34236	Sarasota		
Kurt	Johnsen	FL	Gainesville	32601	Alachua	1	1
				32608-			
Sarah	Harrison	FL	Gainesville	7131			
Felicity	Hohenshelt	FL	Jacksonville	32246	Duval		
Elliot	Warren	MA	Wellesley	2482	Norfolk		
Robert	Dobbelaar	FL	New Smyrna Beach	32169	Volusia		
Winford	Nettles	FL	Jacksonville	32236	Duval	1	
Morley	Schloss	FL	Loxahatchee Groves	33470	Palm Beach	1	
Pablo	Sabio	FL	Fort Lauderdale	33304	Broward		
Dan	Mccormic	FL	Lake Panasoffkee	33538- 3326		1	
Joris	Hines	FL	Merritt Island	32952	Brevard	1	
Karyn	Burrell	FL	Vero Beach	32968	Indian River		
Theresa	McCormick	FL	the villages e	32162- 2607			
Debbie	Combs	FL	Ft Myers	33905	Lee		
Francis	Winzig Jr	FL	Orlando	32803	Orange		
Karen	Johnson	FL	St johns	32259	Saint Johns		
				32771-			
Curtis	Hughes	FL	Sanford	8390			
Horst	Stapelfeldt	FL	Cape Coral	33904	Lee		
Roland	Gigandet	FL	Orlando	32812	Orange	1	
k	blackett	FL	fleming island	32003	Clay		
Christopher	Sego	FL	Ocoee	34761	Orange		
Tricia	Zimmerman	FL	Ocala	34482	Marion		

Robert	DeMasi	FL	Gainesville	32605	Alachua	1	
Rafael	Frias	FL	Lake Worth	33463	Palm Beach		
Ed	Gardner	FL	Gainesville	32607- 3368			
Gary	Rainey	FL	Port St Lucie	34987	Saint Lucie		
Ellouise	Pritchett	FL	Avon Park	33825	Highlands		
	nelson	FL	pompano beach	33064	Broward		1
troy Scott	Egglefield	FL	Nokomis	34275	Sarasota	1	1
Katie		FL		33966	Lee	1	1
Robert	Downey Robson Jr	FL	Fort Myers WEST PALM BEACH		Palm Beach	1	
				33406		1	
Andrew	Crowder	FL	Boca Raton	33487	Palm Beach		
Lew	Welge	FL	Gainesville	32607	Alachua	1	
joe	kirwin	FL	Fort Lauderdale	33312	Broward	1	
Mike	Murphy	FL	Crestview	32536	Okaloosa	1	
М	M	FL	L	33064	Broward		
Vincent	Russo	FL	Hernando	34442	Citrus	1	
Dominick	Porretto	FL	Pompano Beach	33064	Broward	1	1
Darlene	Wolf	FL	Naples	34102	Collier		
Samuel	Cochrane	FL	Indialantic	32903	Brevard	1	1
Cindy	Pennington	FL	Melbourne Beach	32951	Brevard		
Jonathan	Dean	FL	Morriston	32668	Levy	1	
Donna	Billing	FL	Delray Beach	33444	Palm Beach		
Edward	White	FL	Brandon	33511	Hillsborough		
Kathy	Lange	FL	Sanibel	33957	Lee		
John	McCabe	FL	The Villages	32163	Sumter	1	
Donald	Leddin	FL	Melbourne	32934	Brevard	1	
Marcos	Comtois	FL	Cape Coral	33909	Lee	1	
Earnest	Gallion	FL	Crystal River	34429	Citrus	1	
Michaelain	Kanzer	FL	Miami	33133	Miami-Dade		
Margaret	LaValle	FL	Crawfordville	32327	Wakulla		
Robert	Jr	FL	MELROSE	32666	Putnam		
Susan	Chamish	FL	Lake Worth	33467	Palm Beach	1	
John	Hendershot	FL	Tampa	33614	Hillsborough		
Paul	Goode	FL	Vero Beach	32963	Indian River		
Rich	Holsinger	FL	St petersb	33703	Pinellas		
Aimee	Bernstein	FL	Boynton Beach	33437	Palm Beach		
Steve	Clark	FL	Estero	33928	Lee		
Gary	Johnson	FL	Fernandina Beach	32034	Nassau	1	
John	Benish	FL	Port Saint Lucie	34983	Saint Lucie		
charles	monroe	FL	orlando	32822	Orange	1	
Lauren	Lagasi	FL	Seerfield	33441	Broward	<u> </u>	
Michael	Seaton	FL	Wesley Chapel	33545	Pasco		

Karen	Chasez	FL	DeBary	32713- 9711		1	
Elaine	Codias	FL	Coral Gables	33134	Miami-Dade		
Cindy	Bennett	FL	Sebring	33870	Highlands	1	
Denise	Bishop	FL	High Springs	32643	Alachua	1	
Sherri	Wanda	FL	Orlando	32833	Orange		
Frederic	Walsh	FL	Palmetto	34221	Manatee		
Carol	Winzig	FL	Orlando	32803	Orange		
Martha	Milne	FL	Fort Myers	33901	Lee		
Laurence	Rosenberg	FL	Cape Coral	33904	Lee		
Michael	Nicely	FL	New Smyrna Beach	32169	Volusia	1	
Margaret	Dunlap	FL	Melbourne	32935	Brevard	1	
Ada	Loli	FL	Palm Beach Gardens	33410	Palm Beach		
Elaine Catherine	WESTON	FL	Deerfield Beach	33442	Broward		
Kathy	Kirkland	FL	Bonifay	32425	Holmes	1	
· ·					Holmes		
Janine	Gedmin	FL	Bonifay	32425 34655-	noinies	1	
Duke	Gore	FL	Trinity	4572			
Brian	Miller	FL	North Port	34288	Sarasota	1	
Daniel	Uddin	FL	Davie	33325	Broward		
Steve	Brandes	FL	Wellington	33414	Palm Beach		
Terry	Muntges	FL	Clearwater	33761	Pinellas	1	
Cinda	Hitchcock	FL	Tampa	33604	Hillsborough		
Jolene	Marshall	FL	Myakka City	34251	Manatee		
Jim	Marble	FL	Palmetto	34221	Manatee		
Willie	Mabins	FL	Milton	32570	Santa Rosa		
Roberta	auciella	FL	Hollywood	33021	Broward		
Richard	Gilland	FL	Cocoa	32927	Brevard		
Jim	Oster	FL	lantana	33462	Palm Beach		
mike	ayers	FL	melbourne beach	32951	Brevard		
William	Davis	FL	Jacksonville Beach	32250	Duval	1	
Hanna	Ambrus	FL	Coconut Creek	33073	Broward		
Jerry	Tyner	FL	Callahan	32011	Nassau		
Cheryl	Gross	FL	Sarasota	34232	Sarasota		
Suzanne	Campbell	FL	Key West	33040	Monroe	1	
mike	moe	FL	lighthouse point	33064	Broward	1	
Rebecca	Edmondson	FL	Pensacola	32504	Escambia		
Adelard	Levesque	FL	Jupiter	33477	Palm Beach		
Hal	Herrington	FL	Indian Rocks Beach	33785	Pinellas	1	
Joe	Forest	FL	Lakeland	33812	Polk	1	1
Joshua	Correa	FL	Largo	33773	Pinellas		
Thomas	Paige	FL	Bradenton	34207	Manatee		

Tim	Odell	FL	Orange Park	32073	Clay	1	
Jim	Moore	FL	Homestead	33030	Miami-Dade		
James	Moore	FL	Homestead	33030	Miami-Dade		
DJ	Rambler	FL	Homestead	33030	Miami-Dade		
Terry	Thorkildson	FL	Gainesville	32601	Alachua		
Helen	Colby	FL	Miami	33156	Miami-Dade		
Hilary	Mentkow	FL	Tampa	33624	Hillsborough	1	
William	Mentkow	FL	Tampa	33624	Hillsborough	1	
Andrew	Bissessar	FL	AVON PARK	33825- 8758	_		
CARLOS	Diaz	FL	Boca Raton	33428	Palm Beach	1	
PATRICIA &							
James	VOIGT	FL	SPRING HILL	34608	Hernando		
Suzy	Siegmann	FL	Temple Terrace	33617- 4133			
cassandra	wooden	FL	punta gorda	33980	Charlotte		
Ralph	Snearly	FL	Haines City	33844	Polk		
Phil	В	FL	Parrish	34219	Manatee		
Barbara	Schwartz	FL	Ocala	34470- 4938			
Drew	Melville	FL	Cora Springs	33065	Broward		
Michael	Burns	FL	Sarasota	34242	Sarasota		
Terrance	Hood	FL	Jupiter	33478	Palm Beach		
Lawrence	Ashbrook	FL	Jacksonville	32218	Duval		
Alecia	Folsom	FL	Lakeland	33810	Polk		
herm	gorenflo	FL	ruskin	33570	Hillsborough		
Russell	Kania	FL	Sunny Isles Beach	33160- 4747			
Judy	Madure	FL	Lakewood Ranch	34202	Manatee		
Bill	McClelland	FL	Altoona	32702	Lake		
Chris	Bromfield	FL	boca raton	33431	Palm Beach	1	
milan	minarik	FL	Clearwater	33756	Pinellas		
Peg	Quattro	FL	Miami	33133	Miami-Dade		1
Eric	Fish	FL	Miami Beach	33141	Miami-Dade		
the	Resident	FL	st. cloud	34771	Osceola		
john	callahan	FL	west palm beach	33415	Palm Beach	1	
Patricia	Ponder	FL	St. Augustine	32084	Saint Johns		
Marilyn	Coronado	FL	Miami	33162	Miami-Dade		
Deb	Di Turi-Dini	FL	New Smyrna Beach	32169	Volusia		
Kyle	Loshure	FL	St Augustine	32080	Saint Johns	1	1
Scott	Leslie	FL	Vero Beach	32967	Indian River		
Peter	Burkard	FL	Sarasota	34243	Manatee	1	
Vickie	Fournier	FL	Miami	33129	Miami-Dade		

Russell	Corns	TN	Etowah	37311	Bradley		
Carl	Krave	FL	Dunedin	34698	Pinellas		
Gail	Crady	FL	Saint Petersburg	33709- 3818		1	
Kenneth	Serota	FL	Land O Lakes	34639	Pasco	1	
V	I	FL	oviedo	32765- 7918	rusco	1	
david	hollister	FL	st pete beach	33706	Pinellas	1	
Marilyn	Mazur	FL	West Palm Beach	33401	Palm Beach		
Tom	Worthmann	FL	Bell	32619	Gilchrist	1	
andrea	frank	FL	sarasota	34231	Sarasota		
ROCIO	Nunez del prado	FL	North Miami Beach	33162	Miami-Dade		
Stephen	Perz	FL	Gainesville	32605	Alachua		
brett	haskins	FL	st. petersburg	33707	Pinellas		
Abraham	Pedraza	FL	Orlando	32829	Orange		1
Tom	Wilson	FL	Miami	33133	Miami-Dade		
Jerry	Tyner	FL	Callahan	32011	Nassau		
keith	ford	FL	clearwater	33755	Pinellas	1	
jack	honor	NY	waterford	12188	Saratoga		1
karina	fentie	FL	coral springs	33076	Broward		
Thomas	Skoloda	FL	Bradenton	34209	Manatee	1	
Tim	Durst	FL	Gulf Breeze	32563	Santa Rosa		
Antonio	Ortiz	FL	Odessa	33556	Hillsborough		
robert	lalime	FL	punta gorda	33983	Charlotte		
Patrick	PatrickBrown	FL	Orlando	32806	Orange		
carlos	nieves	FL	kissimmee	34759	Polk		
Gerald	Larson	FL	Port charlotte	33948	Charlotte	1	
James	Sorrells	FL	Groveland	34736	Lake		
david	flythe	FL	Deerfield Beach	33441	Broward		
Mary Margaret	Jenior	FL	Altamonte Springs	32701	Seminole		
Christine	Winterstein	FL	Sun City Center	33573	Hillsborough	1	
Dom	Bruzzese	FL	Ormond Beach	32174	Volusia		
Joseph	Weaver	FL	Seffner	33584	Hillsborough	1	
Rick	Benninghove	FL	Lakewood Ranch	34202	Manatee		
richard	moyroud	FL	LAKE WORTH	33449	Palm Beach	1	
Patience	Rockey	FL	Boca Grande	33921	Lee		
Peter	Germroth	FL	Seffner	33584	Hillsborough		
Elizabeth	Letsch	FL	Tampa	33605	Hillsborough	1	
		1 -		33003	Anne		
Mary	Arthurs	MD	Edgewater	21037	Arundel		
Frances	Dunham	FL	Gulf Breeze	32563	Santa Rosa		
Steven	Carter	FL	Boca Raton	33434	Palm Beach		

Jim	Doyle	FL	High Springs	32643	Alachua	1	
kaye	burnns	FL	ft.lauderdale	33317	Broward	1	
Henry	Cusnir	FL	Davie	33317	Broward	1	
Dale	Aprill	FL	Hollywood	33024	Broward	1	
Corbett	Kroehler	FL	Orlando	32839	Orange	1	
Sandra	Sklar	FL	Wellington	33414	Palm Beach		
Tami	Redi	FL	Hollywood	33020	Broward	1	
						4	1
Gary	Pridgen	FL	Jacksonville St. Data rahvura	32210	Duval Pinellas	1	1
Doug	Daneliak	FL	St. Petersburg	33711			1
wermer	Milhal	FL	titusville	32780	Brevard		1
Jeffrey	Saitta	FL	Tampa	33618	Hillsborough	1	1
Alan	Hurst	FL	Boca Raton	33433	Palm Beach	1	1
Tommy	Ault	FL	OVIEDO	32765	Seminole	1	
Michael	Le	FL	Melbourne	32940	Brevard		
Andy	Maguire	FL	Bradenton	34205	Manatee	1	1
wayne	wallace	FL	largo	33777	Pinellas	1	1
Jennifer	Del Negro	FL	Lakeland	33813	Polk		
John	Deem	FL	Pensacola	32504	Escambia		
troy	millar	FL	tampa	33625	Hillsborough	1	1
David	Beckerman	FL	Parkland	33067	Broward		
lawaaa	C. vera maior era	-	Labaland	33812-			
James	Cummings	FL	Lakeland	4027	0		
eli	schoen	FL	orlando	32825	Orange		1
Justin	Hoysradt	FL	West Palm Beach	33401	Palm Beach		1
kelly	kliebe	FL	sarasota	34234	Sarasota		
William	Hennel	FL	Bradenton	34210	Manatee	1	1
Conway	Bolt	FL	Grant	32949	Brevard	1	
william	palladino	FL	apollo beach	33572	Hillsborough	1	
Nick	Branica	FL	Sarasota	34242	Sarasota		
Wilton	Hart	FL	Lantana	33462	Palm Beach		
David	Moulton	FL	Vero Beachff	32963	Indian River		1
George	Riley	FL	Vero Beach	32963	Indian River	1	
Kelly	Coffin	FL	Bradenton	34208	Manatee		1
Donnie	Young	FL	Vero Beach	32967	Indian River		
Karen	Julch	FL	Ellenton	34222	Manatee		
Mark	Maher	FL	Boca Raton	33486	Palm Beach	1	1
Remo	Eyal	FL	Apopka	32703	Orange	1	1
Loren	Zucconi	FL	Oviedo	32765	Seminole	1	1
Enrico	Metzler	FL	Miami	33184	Miami-Dade		
Shana	Maguire	FL	Bradenton	34205	Manatee		1
Shana	Maguire	FL	Bradenton	34205	Manatee	1	1
megan	Johnson	FL	bradenton	34221	Manatee		

Cory	Taylor	FL	Orlando	32901	Brevard		
terrill	symons	FL	ellenton	34222	Manatee	1	
Ingrid	Kassner	FL	Venice	34293	Sarasota		
Aaron	Benson	FL	Vero Beach	32960	Indian River		
Angelo	Fonseca	FL	Miami	33175	Miami-Dade		
Denise	Dgani	FL	Boynton beach	33473	Palm Beach		
Caryn	McCleskey	FL	Palm Coast	32164	Flagler		
Yvonne	Brendel	FL	Loxahatchee	33470	Palm Beach	1	
E	Ullman	FL	Boca Raton	33433	Palm Beach		
Kati	Weiss	FL	Cape Coral	33904	Lee	1	1
Mason	Hulle	FL	Lauderdale By The Sea	33308	Broward		1
Vince	McLeod	FL	Gainesville	32611	Alachua	1	
Robert	Hall	FL	Loxahatchee	33470- 3801			
Luke	Kahlich	FL	Wilton Manors	33305	Broward		
Ada	Loli	FL	Palm Beach Gardens	33410	Palm Beach		
Nate	Moulton	FL	Vero Beach	32963	Indian River		
michael	meskimen	FL	fort myers	33912	Lee		
Toni	Crabtree	FL	Miramar	33023	Broward		
					TOTALS	151	85