

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2
3 **DIRECT TESTIMONY**

4 **OF**

5 **DANIEL J. PELLOWITZ**

6 **ON BEHALF OF**

7 **THE SOLID WASTE AUTHORITY OF PALM BEACH COUNTY**

8 **IN RE:**

9 **MODIFICATION TO DETERMINATION OF NEED**

110018-70

10
11 **Q. Would you please state your name, occupation and business address?**

12 A. My name is Daniel J. Pellowitz. I'm the Assistant to the Executive Director of the Solid
13 Waste Authority of Palm Beach County, with offices at 7501 North Jog Road, West Palm
14 Beach, Florida 33412 (the "Authority").

15
16 **Q. Briefly, what is your educational background and experience?**

17 A. I hold a BS degree in Quantitative Business Analysis from Penn State University. I also
18 hold an MBA from Florida Atlantic University. I have over 20 years of financial,
19 analytical, strategic planning and managerial experience including over 19 years with the
20 Authority, one of the largest and most successful integrated solid waste management
21 systems in the nation.

22
23 I am responsible for assisting the Authority's Executive Director in administration and
management matters; acting on his behalf in his absence; providing guidance in the
development and implementation of Authority projects; coordinating interdepartmental
activities; leading, developing and presenting financial and strategic analyses of solid

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1 waste management and recycling alternatives; and reviewing and commenting on issues
2 which may affect Authority functions. I have developed and/or updated numerous
3 models, plans and studies including the Integrated Solid Waste Management Plan. I have
4 performed dozens of financial feasibility studies covering all aspects of the Authority's
5 Integrated Solid Waste Management System including collection, transportation,
6 recycling, composting, landfilling, waste-to-energy and overall system financing. My
7 responsibilities include the monitoring, analysis, modification and updating as and when
8 appropriate of the Authority's programs for dealing with MSW processing and disposal
9 and planning for the changing MSW needs of the Authority in this dynamic process.

10
11 For the past 15 years I have been principally responsible for the Authority's waste
12 forecasting and landfill life projections which form the foundation of the Authority's
13 planning activities. More specifically, I performed the economic analyses leading to the
14 decision to increase waste-to-energy processing capacity as the most cost effective,
15 environmentally sound and fiscally responsible alternative available to meet the
16 Authority's waste processing and disposal obligations.

17
18 **Q. On whose behalf are you presenting this testimony?**

19 **A.** I am presenting this testimony on behalf of my employer, the Solid Waste Authority of
20 Palm Beach County, Florida.

21
22 **Q. What is the purpose of your testimony?**

23 **A.** I support the Authority's petition for modification of its prior need determination (the
24 "Petition"). My testimony will describe the Authority's current and planned waste

1 management programs and will discuss the Authority's planning and implementation of a
2 critical expansion of its waste-to-energy ("WTE") capability as part of our overall
3 resource recovery and waste management operations. The Authority is well along in the
4 process of expanding its WTE and electric generating capacity by an additional amount
5 of approximately 93 megawatts of electric generation by MSW (the "Expanded
6 Facility"). My testimony demonstrates that the Authority must add the WTE component
7 of the Expanded Facility to its operations no later than 2015 in order to continue to meet
8 its legal obligation to process and dispose of solid waste in Palm Beach County in an
9 environmentally responsible manner.
10

11 **Q. Would you please describe the Authority's goals and operating principles?**

12 **A.** The Authority's system is designed and operated based on the principles of integrated
13 solid waste management. We strive to meet or to exceed the policies and goals of the
14 State of Florida and the United States Environmental Protection Agency ("EPA") with
15 respect to resource recovery and solid waste management. The Authority's programs are
16 designed to integrate solid waste transportation, processing, recycling, resource recovery
17 and disposal technologies while protecting the environment, achieving a 50% recycling
18 and waste reduction goal, and educating the public about solid waste management issues.
19 In other words, we strive to recycle what we can, burn what we can't recycle, and landfill
20 as little as possible. The Authority's systems and programs are designed to and do
21 accomplish these goals. Page 1 of Exhibit DJP-1 depicts the increasing amount of solid
22 waste processed by the Authority over the past 20-plus years, and shows the relative
23 amount that was recycled, burned and recovered or reduced through WTE processing, or
24 land-filled.

1 **Q. Is there a need for the Expanded Facility in order for the Authority to be able to**
2 **meet its MSW processing and disposal obligations?**

3 A. Absolutely. As I discuss in more detail below, without the Expanded Facility, the
4 Authority runs the very real risk of failing to provide sufficient processing and disposal
5 capacity to meet its MSW processing and disposal obligations to the detriment of the
6 Citizens of Palm Beach County and the State as a whole. The Authority is obligated by
7 Chapter 2001-331, Laws of Florida, to process and dispose of a substantial and increasing
8 amount of MSW. If we cannot recycle it, we must burn it or bury it in a landfill. We
9 cannot currently burn more because our existing Renewable Energy Facility No. 1 (the
10 "Existing Facility") is operating at full capacity. Although it would be possible, for a
11 short period of time, to landfill the MSW that otherwise would be burned to produce
12 electricity, this would quickly and prematurely exhaust our landfill capacity. The
13 Authority has been diligently attempting to identify and acquire a suitable site for a new
14 landfill to satisfy the County's disposal needs beyond the projected remaining life of the
15 existing landfill, but after three years of effort we have not been successful. Accordingly,
16 the Authority very clearly has a pressing need for the increased capacity that will be
17 provided by the Expanded Facility so it can continue to responsibly meet its legal
18 obligations.

19
20 **Q. Would you please describe the Authority's current MSW processing and disposal**
21 **operations and infrastructure?**

22 A. At the Authority's processing and disposal site in northern Palm Beach County, the
23 Authority owns and operates the Existing Facility, the landfills, the Recovered Materials
24 Processing Facility, the Ferrous Processing Facility, the Compost Facility, the Biosolids

1 Pelletization Facility, the Vegetation Processing Facility, and the Household Hazardous
2 Waste Collection Facility.

3
4 With regard to our renewable energy capacity, the Authority's Existing Facility disposes
5 of a significant portion of the MSW stream by incineration, and in the process generates
6 steam that is used in a utility-class steam turbine-generator with a nominal rating of 63
7 megawatts. Annually, the Existing Facility processes approximately 850,000 tons of
8 MSW, incinerates approximately 620,000 tons of MSW, and produces in the range of
9 400,000 megawatt hours of net electric energy for delivery to the FPL system.

10
11 The Authority also utilizes landfill gas as a replacement for natural gas to dry and
12 pelletize wastewater treatment sludge at the Biosolids Pelletization Facility on the site.

13
14 The on-site and off-site facilities relied upon by the Authority in fulfilling its solid waste
15 management obligations include the following:

- 16
17 ● Renewable Energy Facility No. 1 – The Existing Facility is an MSW fueled
18 refuse-derived fuel WTE facility. It has been operational for twenty years,
19 processing over 850,000 tons per year of solid waste into refuse-derived fuel that
20 is burned to produce renewable energy electricity.
21
22 ● Landfill Operations – The Authority operates both a Class 1 and a Class 3 landfill.
23 With a total of over 50 million yards of airspace, the landfill is expected to
24 provide disposal capacity over a remaining useful life of only about 16 to 21 more
25 years. A 16 year useful life would be associated with the University of Florida's
26 "high" population projections and higher waste generation rates becoming a
27 reality. A 21 year useful life could be a possibility if more moderate population
28 growth were to occur. However, neither of these projections makes an allowance

1 for unexpected landfill consumption that could result from a major hurricane or
2 other natural disaster. These factors underscore the importance of implementing
3 the Expanded Facility. Given the difficulty in siting and developing new landfills,
4 as is evidenced by the Authority's recent efforts, the Authority cannot presume
5 that developing a replacement landfill is a reasonable certainty.
6

- 7 ● Recovered Materials Processing Facility -- This facility receives, sorts, bales and
8 ships to market more than 120,000 tons annually of materials collected from
9 curbside and multi-family housing units and businesses. Materials include glass,
10 plastic, aluminum, ferrous cans, milk and juice cartons, newspaper, magazines,
11 residential mixed paper, unwanted mail, cardboard and office paper. This new
12 138,000 square foot facility has the capacity to process more than 300,000 tons
13 per year of recyclables.
14
- 15 ● Ferrous Processing Facility -- More than 30,000 tons per year of ferrous metal are
16 recovered at the Existing Facility, the Recovered Materials Processing Facility,
17 and the Landfill and prepared for market at the Ferrous Processing Facility.
18
- 19 ● Compost Facility -- This facility composts over 50,000 tons of vegetative mulch
20 with more than 60,000 tons of wastewater residuals from the East Central
21 Regional Wastewater Treatment Plant annually to produce compost that is
22 suitable for agricultural and horticultural uses. The facility provides a beneficial
23 outlet for processed vegetative waste and wastewater sludge thereby eliminating
24 the need to landfill or land apply the sludge.
25
- 26 ● Biosolids Pelletization Facility -- This facility processes wastewater residuals
27 utilizing a drying process that produces a pelletized product marketed to fertilizer
28 blenders. Constructed and operated by the Authority and five major wastewater
29 utilities, this facility has the capacity to eliminate the need to land apply over
30 150,000 tons of biosolids annually, thereby removing over 3,000 tons of
31 phosphorus per year from the Lake Okeechobee watershed. The sludge dryers are
32 fueled primarily with landfill gas from the adjacent landfill.
33

- 1 ● Vegetative Waste Processing Facility – The Authority receives as much as
2 250,000 tons of clean yard waste per year, approximately 100,000 tons of which
3 is processed through a grinder at this facility. Approximately half of the mulch
4 produced is delivered to the Compost Facility. The balance of this material is
5 delivered to a private sector biomass-to-energy facility where it is processed into
6 boiler fuel or used as a soil amendment on agricultural fields.
7
- 8 ● Household Hazardous Waste Collection Facility – The Authority provides a
9 county-wide household hazardous waste collection program through the main
10 facility on our processing and disposal site and satellite collection facilities at
11 each of our transfer stations. Materials and chemicals collected include motor oil,
12 fuel, paints, solvents, pesticides, herbicides, pool chemicals, fluorescent lamps,
13 batteries, electronics, and many other items.
14
- 15 ● Transfer Stations – The Authority operates five transfer stations distributed
16 throughout Palm Beach County and a sixth is currently under construction.
17 Transfer stations facilitate the transfer of solid waste and recyclables from route
18 collection trucks to tractor trailers, at a ratio of approximately 5 to 1. The benefits
19 include enhanced collection efficiency, fewer trips to and shorter lines at our
20 disposal facilities, fewer road miles, lower fuel consumption and reduced CO₂
21 emissions. These transfer stations accept and haul more than 1.3 million tons of
22 solid waste and recyclables per year, amounting to approximately 70% of the
23 waste stream.
24

25 **Q. Will the relative proportions of MSW that is recycled, landfilled and burned remain**
26 **the same in the future?**

27 A. No. As shown on Page 1 of Exhibit DJP-1, our reliance on the landfill has been growing
28 because the MSW stream remaining after recycling, processing and composting greatly
29 exceeds the capacity of the Existing Facility, thus placing unsustainable demands on our
30 landfills. As shown on Pages 2 and 3 of Exhibit DJP-1, the Authority projects that this

1 trend will continue and the amount of un-combusted waste requiring landfill disposal will
2 grow. It is the Authority's intent - with the addition of the Expanded Facility - to reverse
3 that trend and reduce the volume of MSW going to the landfill. As shown on Page 5 of
4 Exhibit DJP-1, addition of the Expanded Facility will result in a more optimal balance of
5 resource recovery and volume reduction while producing electricity from a Florida
6 renewable energy resource.

7
8 **Q. Would you please elaborate on the importance of reducing demand on the**
9 **Authority's landfill capacity?**

10 **A.** Landfills are depletable resources that are negatively impacted by two primary factors -
11 population growth and increased waste generation. Landfill capacity and life is the
12 driving factor behind our planning and decision making. To that end, we perform annual
13 analyses of our landfill capacity that we call the Landfill Depletion Model. The model
14 helps us identify the points in time when decisions must be made and helps to evaluate
15 alternatives that impact landfill life. The model considers the dynamic interrelationships
16 between the available processing and disposal options, population projections and
17 population growth rates, per capita generation rates, recycling rates, diversion rates,
18 incineration capacity and reduction effectiveness, landfill compacted densities, and cover
19 material requirements and produces a projected date of landfill depletion. As shown on
20 Page 2 of Exhibit DJP-1, if we do not implement the Expanded Facility, and assuming
21 future waste generation tracks our medium projection, we project that our existing
22 landfill will be fully depleted by 2031. As previously discussed, higher than projected
23 population growth or MSW generation rates, including unexpected increases in waste due

1 to hurricanes or other natural disasters, would deplete available landfill capacity much
2 more rapidly.

3
4 **Q. Why doesn't the Authority simply increase its landfill capacity?**

5 **A.** New, and to a lesser extent existing, landfills are subject to very stringent siting, design,
6 permitting, construction and operating constraints due to their potential to cause
7 significant environmental harm. Additionally, landfills consume large areas of land
8 which can be very expensive and in some cases acquisition costs can be prohibitive,
9 especially near populated areas. Furthermore, public opposition to landfills typically
10 prevents landfills from being located near existing or proposed development, forcing
11 them farther away from centers of population and into receding rural and agricultural
12 areas. For these reasons, the feasible potential sites for future landfill development by the
13 Authority are located far from the population centers of the County and the Authority's
14 current integrated site at which waste-to-energy, recycling, vegetation processing, and
15 composting occur prior to landfilling. Complicating matters further is the reality that the
16 only available large tracts of land in Palm Beach County suitably removed from existing
17 or proposed development are located within the Everglades Agricultural Area, much of
18 which has been or is in the process of being reserved for State and Federal everglades
19 restoration projects.

20
21 The financial and environmental costs of MSW transportation over long distances - in
22 terms of fuel consumption and greenhouse gas emissions - add significantly to the
23 economic and environmental cost of landfilling and to the overall cost of solid waste
24 management. The transportation impacts were one of the most significant factors driving

1 our decision to construct the Expanded Facility adjacent to our Existing Facility on our
2 existing campus. Having said that, the Authority has endeavored over the past four years
3 to acquire suitable property to construct new landfill space to carry the County for the
4 next 50 years or more into the future. At this point, there are no guarantees that our
5 efforts will be successful. But regardless, as noted previously, landfilling alone is not the
6 solution to a complex MSW management and disposal problem. Landfills are a valuable
7 resource that must be conserved. Combinations of complementary processes and
8 operations, including the Expanded Facility, are necessary to meet the Authority's waste
9 disposal, recycling and environmental preservation mandates and objectives.

10
11 Even if we were to discount the negative aspects of hauling MSW long distances – and in
12 some cases double-hauling – landfills in and of themselves are simply not a viable option
13 for solid waste management. In addition to the environmental detriment of hauling
14 MSW, natural decomposition of MSW in the landfill releases methane gas, a major
15 component of “landfill gas”. Methane is reputedly much more harmful as a greenhouse
16 gas than is carbon dioxide; in fact, the EPA estimates that it is 21 times more potent.
17 While we certainly collect and dispose of landfill gas in accordance with federal and state
18 regulations, the technology is such that a significant amount will inevitably escape to the
19 atmosphere. Importantly, volume reduction via combustion in the WTE facility produces
20 a more-or-less inert residue which, when disposed of by landfilling, does not release
21 methane gas into the atmosphere.

22
23 In the absence of the Expanded Facility, the Authority will need to substantially increase
24 landfill capacity sometime in the next several decades. We would prefer not to, and have

1 determined that the Expanded Facility provides a cost-effective, environmentally
2 beneficial and financially feasible means to defer new landfill development into the long-
3 term future while meeting our obligations in an environmentally sound and timely
4 manner.

5
6 **Q. Would you please describe the Expanded Facility's contribution to the Authority's**
7 **Integrated Solid Waste Management Plan?**

8 **A.** The Existing Facility has been operating at or near design capacity for more than ten
9 years and the depletion of our landfill is in sight. As it did in the 1980's, the Authority
10 must take significant aggressive action to ensure that we have the systems and programs
11 in place to manage the County's waste for the next 20, 30 or 50 years. The Authority has
12 determined that expedited implementation of the Expanded Facility is by far the most
13 appropriate and suitable solution available. The Expanded Facility will provide
14 additional MSW combustion capacity of up to 3,000 tons per day. Combustion reduces
15 the volume of MSW by approximately 90%, which in turn significantly reduces
16 landfilling of raw waste and extends the life of the landfill.

17
18 Further, as set forth in Florida's Energy, Climate Change, and Economic Security Act of
19 2008 (Section 403.7032, Florida Statutes), the solid waste used to produce renewable
20 energy counts toward the State's goal of reducing the disposal of recyclable solid waste
21 by 75%. As shown on Page 4 of Exhibit DJP-1, the proportion of combusted material to
22 uncombusted material destined for the landfill will increase dramatically when the
23 Expanded Facility comes online in 2015. Our current projections indicate, based on our

1 medium projection, that construction of a 3,000 ton per day mass burn Expanded WTE
2 Facility in 2015 will extend the life of our landfill by 18 years.

3
4 **Q. Has the Authority considered any other ways to increase MSW processing capacity?**

5 **A.** Yes. We consider expansion of our existing processing and disposal operations on a
6 regular basis and have looked at this in great detail over the past few years. Besides our
7 substantial in-house expertise, we also enlisted the aid of consultants and experts
8 knowledgeable in MSW handling, processing, recycling and disposal to assist us in this
9 regard. Among other things, we carefully analyzed our MSW waste stream, conducted
10 surveys and projections of the composition of the MSW stream in the future. As a result
11 of this analysis, the Authority constructed a new expanded Recovered Materials
12 Processing Facility. This facility has enabled the Authority to expand its recycling
13 program to include ferrous metals, residential mixed paper and unwanted mail, thus
14 reducing the amount of waste that otherwise would be land-filled.

15
16 Moreover, in view of the significant quantity of MSW that cannot presently be
17 incinerated due to lack of available incineration capacity as well as the need to conserve
18 the Authority's valuable landfill capacity, an alternative that the Authority looked into
19 quite rigorously was the potential to "export" the Authority's remaining unprocessed
20 waste to an off-site landfill or other such facility for disposal. Other than the Expanded
21 Facility, this appeared to present the only other option capable of reliably managing Palm
22 Beach County's high volume of waste without depleting the Authority's landfill.
23 Accordingly, because the Authority has been approached on a number of occasions over
24 the years with proposals to ship our waste out of the County, we undertook a serious

1 evaluation of the potential for waste export early on in the current planning process. In
2 the end, the export option that seemed most feasible was to ship MSW to Waste
3 Management Inc.'s Okeechobee Landfill.

4
5 However, our analyses indicated that in the best case, hauling waste to Okeechobee
6 would add some 63 travel miles per load and, over the initial 50 year period, impose \$1.3
7 billion in additional transportation cost, consume 74 million more gallons of fuel, and
8 produce an additional 1.6 billion pounds of CO². As significant as these economic and
9 environmental impacts would be, the business risks would be equally significant –
10 perhaps even more so for several reasons. First, the cost of transporting waste over
11 longer distances is heavily dependent on fuel and labor costs. Increased travel distance
12 creates greater exposure to disruptions in fuel supplies and fuel price spikes. Second, the
13 potential exposure to accidents is directly proportional to the distance traveled and the
14 amount of time spent on the road. Third, delays in shipping due to road closures,
15 accidents or other unforeseen incidents would result in higher waste inventories at our
16 transfer stations, which would create bottlenecks and long lines and perhaps encourage
17 illegal dumping. Fourth, disposal capacity may not be available indefinitely, which
18 would require us to seek other and potentially more costly alternatives in the future.
19 Finally, every change in law or regulation would create a “re-opener” in our disposal
20 contracts that would present unquantifiable and unacceptable economic and business risk.
21 Without our own disposal option, the Authority would not be in an advantageous position
22 with respect to contracting with private sector landfill operators.

1 The Authority has created a sound, efficient and economical system that maintains
2 ownership, and just as importantly, total control over its waste management systems.
3 This approach reduces risk, increases reliability, provides stability, retains or creates jobs
4 in the County, and keeps money and other financial benefits in the County. This is not to
5 say that we don't recognize that there may from time-to-time be strategic advantages to
6 working with other partners when mutually agreeable and consistent with the Authority's
7 objectives. For example, we have an ongoing waste exchange agreement with the private
8 sector firm Waste Management through which MSW from Martin County is delivered to
9 our Existing Facility and an equal quantity of our MSW is delivered from the Delray
10 Transfer Station to a third-party owned facility in north Broward County. This
11 arrangement results in a mutual reduction in hauling distances and accompanying fuel
12 and transportation expenses. We also have a "standby" agreement with Waste
13 Management for the delivery of waste to their landfills if needed.

14
15 For the reasons discussed above, however, waste export out of the County is simply not a
16 viable MSW disposal plan for the Authority and certainly does not constitute a viable
17 alternative to the Expanded Facility.

18
19 **Q. Did the Authority consider any other alternatives to the Expanded Facility?**

20 **A.** We looked at a several other things conceptually, but due to the large volumes of MSW
21 with which we deal, the composition of the MSW stream and the markets for recycled
22 materials, none were identified as suitable for the Authority's crucial need to dispose of
23 large quantities of MSW in a reliable manner. As previously stated, we recently
24 constructed a new Recovered Materials Recycling Facility, which in addition to

1 providing sufficient capacity for the foreseeable future, has enabled the Authority to
2 accept additional materials in the recycling program, including ferrous cans, residential
3 mixed paper and unwanted mail. That said, experience indicates that the amount of
4 recyclable material as a percentage of the MSW stream remains relatively constant, and
5 in fact may be diminishing due to market factors such as reduced newspaper circulation
6 and increased reliance on electronic media. Moreover, our recycling and materials
7 recovery operations already operate at high efficiencies removing the vast majority of
8 targeted recyclable materials. As a result, it is simply not feasible or realistic to expect
9 volume reduction of MSW from improvements in residential recycling, commercial
10 recycling, metals recovery, composting and vegetative waste processing comparable to
11 that which the Expanded Facility can provide. Granted there may be some incremental
12 gains, but overall the impact of such improvements on our MSW disposal needs will be
13 insufficient to significantly reduce projected future landfill consumption to the extent
14 desired.

15
16 In the time-frame and on the scale that the Authority needs to expand its MSW
17 processing capability, the only alternative to the Expanded Facility that could handle the
18 volumes involved and provide the necessary volume reduction would be incineration
19 without energy recovery. However, that concept would be inconsistent with the State's
20 policy of resource recovery, contrary to the Authority's goals, a waste of a valuable
21 renewable energy resource, and costly to the State and its citizens.

22
23 The bottom line of the Authority's analysis and expert opinion, bearing in mind the heavy
24 burden imposed on the Authority with respect to MSW within the county, is that no

1 realistically available alternatives to the Expanded Facility – alone or in combination –
2 would be capable of meeting the Authority’s demonstrated need for increased waste
3 management and disposal capacity. After several years of study, analysis and other
4 efforts by the Authority, its consultants and staff, it is clear that the Authority must add
5 the Expanded Facility to its operations no later than 2015 in order to meet its long-term
6 disposal obligations, conserve valuable landfill space, and achieve the State-mandated
7 75% recycling goal.

8
9 **Q. Has the current economic downturn affected the amount of MSW the Authority**
10 **currently receives, or the amount it is projecting to receive in the future?**

11 **A.** With regard to current waste receipts, the answer is yes. For the year ended September
12 30, 2009, incoming deliveries of garbage and trash – our two largest waste streams and
13 those that are primarily targeted for combustion – were down approximately 13%
14 compared to the year ended September 30, 2007. Data for the current year indicates that
15 the waste stream is stabilizing. As previously addressed, the Authority uses the Landfill
16 Depletion Model to estimate landfill depletion based on projections of future waste
17 deliveries. As this analysis is performed annually, the Authority has evaluated the trend
18 in waste deliveries and the revised population projections from the University of Florida
19 as well as other factors and incorporated these trends in the projections of future waste
20 generation. Based on these projections, and after an evaluation of multiple combustion
21 unit and facility sizing scenarios in February 2010, the Authority Board approved the
22 sizing of the facility at 3,000 tons per day.

1 **Q. Would delay in adding the Expanded Facility cause adverse consequences?**

2 **A.** Yes, it most certainly would. Delaying the Expanded Facility would have significant
3 adverse impacts on the Authority's ability to dispose of MSW by more rapidly depleting
4 the remaining landfill capacity, to comply with its legal obligations to dispose of MSW,
5 to add a much-needed source of renewable energy to Florida's electric utility fuel mix,
6 and would deprive the local economy of hundreds of millions of dollars of investment in
7 plant and equipment and the hiring of hundreds of worker to construct and operate the
8 Expanded Facility.

9
10 The Authority and citizens of Palm Beach County will be forced to identify, purchase,
11 develop, finance and implement less reliable, less desirable and less environmentally
12 friendly means of MSW processing and disposal in contravention of the State solid waste
13 disposal policy and the specific responsibilities and goals of the Authority. The State and
14 its citizens would be forced to accept the negative consequences of disposing of MSW
15 via landfill where it will consume valuable real estate, will decompose to release methane
16 gas – a significant green house gas – and potentially result in other negative impacts.
17 Moreover, the long term costs associated with operating a new landfill, including the cost
18 of hauling MSW over fairly long distances, will be much more costly and risky to the
19 Authority and the citizens.

20
21 Finally, to consider a new landfill as a substitute for the Expanded Facility, it must be
22 assumed that the Authority will be able to locate, finance, purchase and permit suitable
23 real property; and, be able to construct and begin commercial operation of a new landfill
24 in a timely manner – a highly risky assumption that would not be confidently predictable.

1 **Q. How is the Authority funded and how does the Authority intend to cover the capital**
2 **and operating costs of the Expanded Facility?**

3 **A.** The Authority is responsible for MSW and recycling collection in unincorporated Palm
4 Beach County; and, for disposal of all MSW produced in the County. The Authority
5 provides solid waste and recycling collection through private haulers that are issued
6 exclusive franchises through a competitive bid process conducted every five years in
7 accordance with Chapter 2001-331, Laws of Florida. The collection enterprise is funded
8 by a Mandatory Collection Special Assessment assessed against every residential unit in
9 the County and billed on the annual property tax bill. Commercial customers are billed
10 directly by the franchise hauler.

11
12 The primary funding mechanism for solid waste disposal is the Non-ad Valorem Special
13 Assessment charged on the annual property tax bill to the owner of every property in the
14 County. The Assessment is a system of user fees based on a property's potential to
15 generate waste as determined by waste generation studies. While residential units are
16 assessed for 100% of the cost of disposal, commercial properties are billed partially
17 through the assessment and partially through tipping fees. This "split assessment" is
18 intended to provide an incentive for businesses to control the amount of waste they
19 generate and to encourage recycling. In addition to the Assessment and commercial
20 tipping fees, system revenues include tipping fees for materials that aren't assessed (such
21 as building debris, tires, vegetation and wastewater sludge); revenues from the sale of
22 electricity; revenues from recycling; interest income; and other revenues from other
23 miscellaneous sources.

1 The Authority's Indenture of Trust dictates the Authority's fund structure and also
2 establishes minimum requirements for revenues in total and the Assessment specifically.
3 Among other things, the Indenture establishes minimum debt service coverage (annual
4 net revenue divided by annual debt service must equal at least 1.10) and minimum
5 Disposal Assessment (the Disposal Assessment must at least equal debt service)
6 requirements. Each year, the Authority establishes and adopts a budget for the upcoming
7 fiscal year and through this process determines the required assessment rates. The
8 Budget and rate schedule are approved and adopted by the Board and in accordance with
9 the Indenture, approved by the Consulting Engineer.

10
11 The Authority has performed financial feasibility studies to project the impact of the
12 Expanded Facility on future budgets and rates, and based in part on those projections and
13 in consideration of the environmental benefits previously discussed, the Board has
14 determined that the Expanded Facility is the most economical solution to achieve the
15 Authority's objectives.

16
17 **Q. How will the proposed contract for the sale of renewable energy to FPL benefit the**
18 **Authority and the citizens of Palm Beach County?**

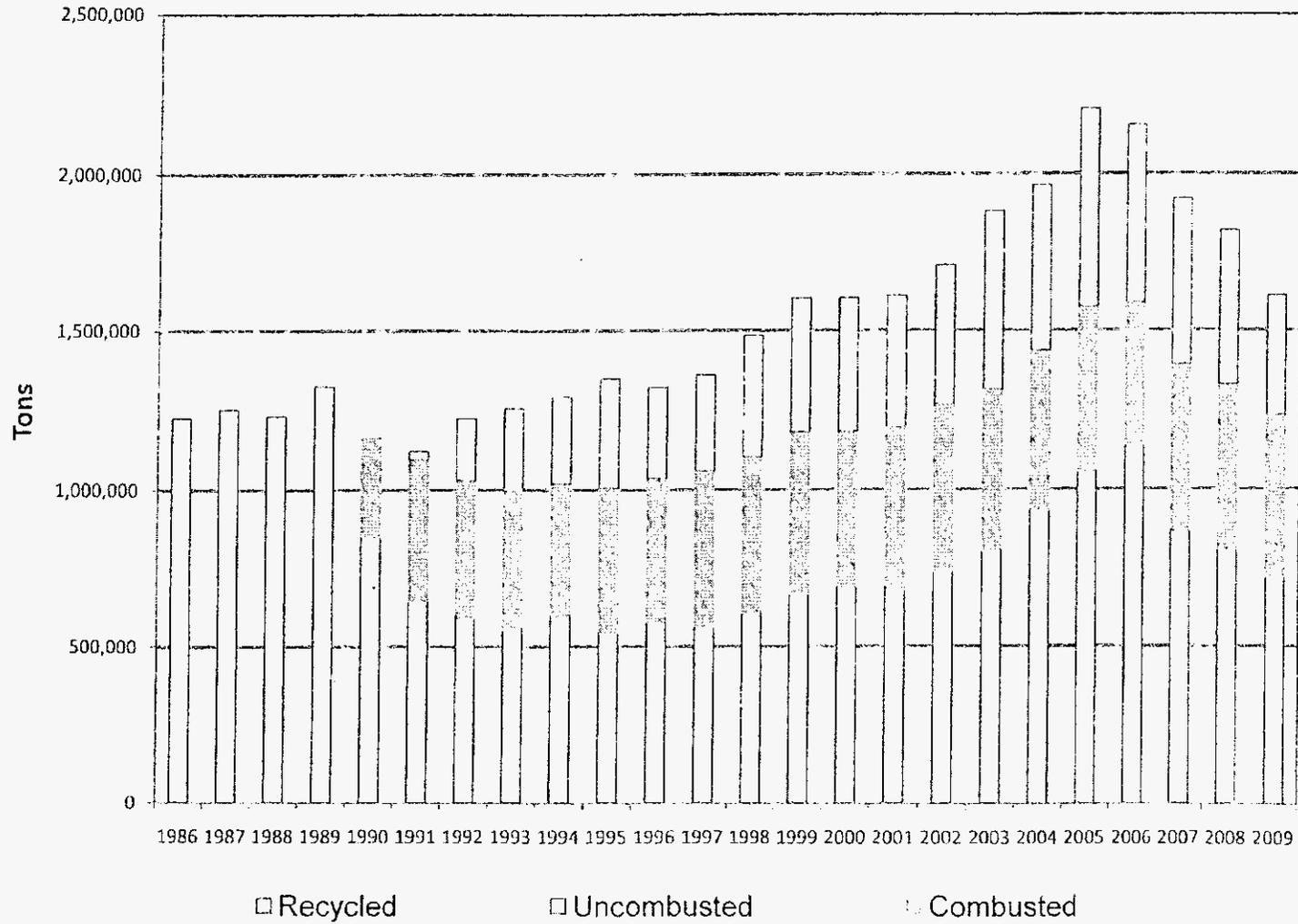
19 **A.** As discussed in the Petition and the testimony of Mr. Bruner and Mr. Hartman, the
20 Authority is negotiating with FPL for the sale of electrical output of the Expanded
21 Facility consistent with the terms outlined in Appendix A of the Petition. The sale of
22 energy under the proposed contract will be structured under Section 377.709, Fla. Stat.,
23 as an advanced funding program for a local government municipal solid waste facility
24 that produces renewable energy. The proposed contract will include an advanced

1 capacity payment to assist in funding of the electrical component of the Expanded
2 Facility, which includes the generator, turbine, and related transmission facilities. The
3 proposed contract will also include energy payments that will provide the Authority with
4 a stream of revenues that which will contribute to the Authority achieving its financial
5 objectives for the Expanded Facility. As a result, the Expanded Facility will provide the
6 Authority and the citizens of Palm Beach County with a financially viable means to
7 dispose of solid waste.

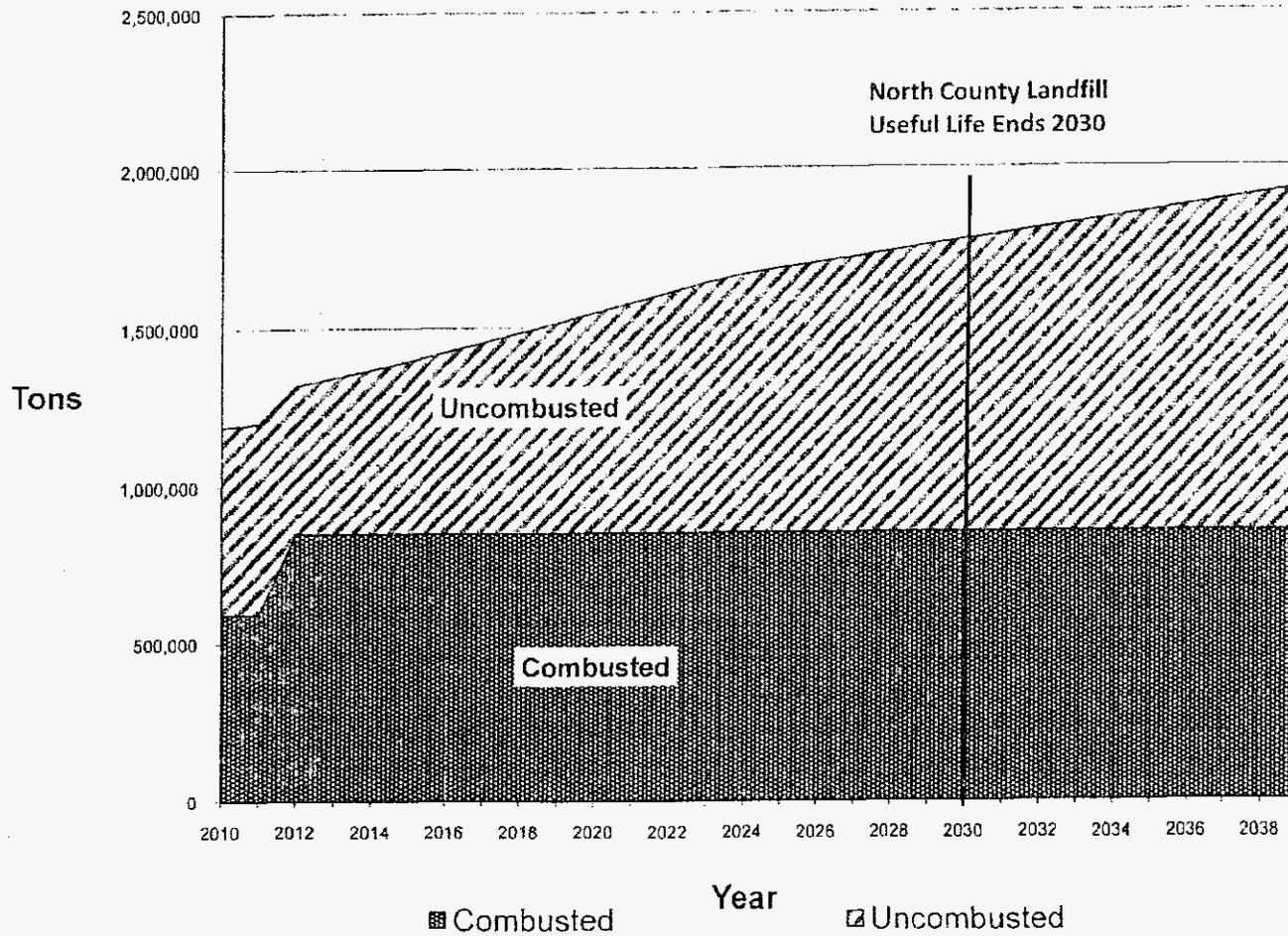
8
9 **Q. Does this conclude your direct testimony?**

10 **A. Yes it does.**

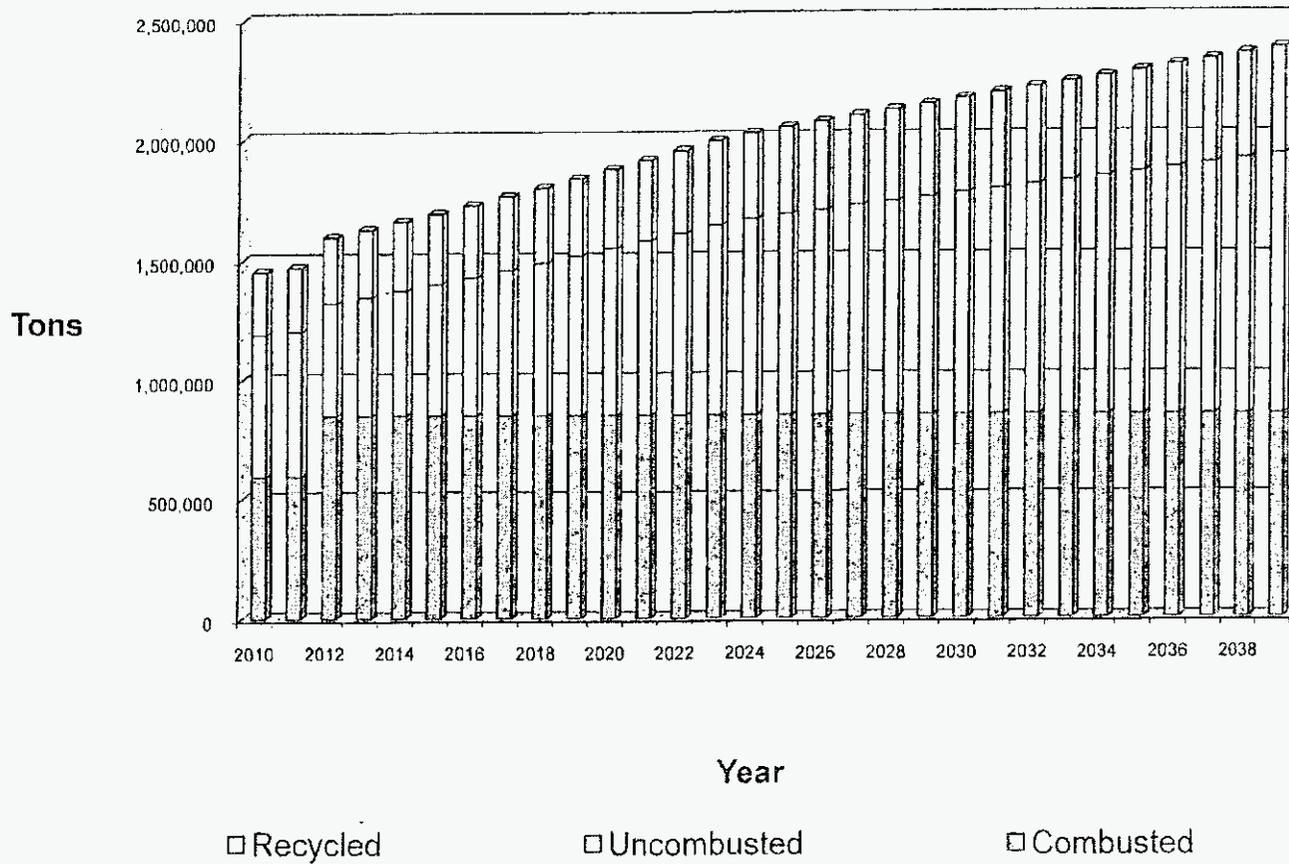
Historic Waste Separation



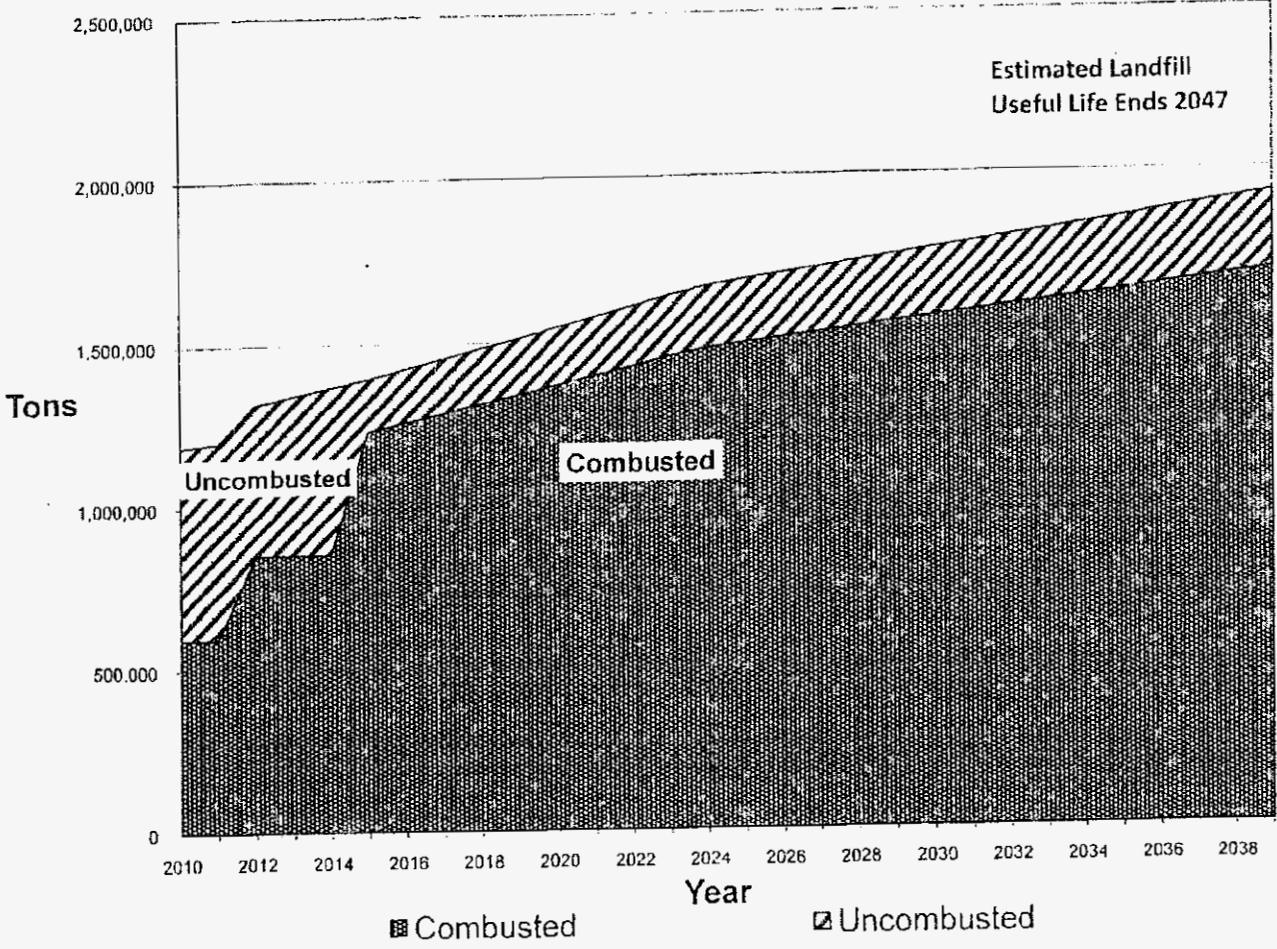
Projected Waste Disposition Without Expanded Facility



Projected Waste Separation Without Expanded Facility



Projected Waste Disposition With Expanded Facility



Projected Waste Separation With Expanded Facility

