The Next Generation Of Service Agreements
For Publicly Owned Waste-to-Energy Facilities - Pinellas County Case Study

Paul J. Stoller, Vice President, Camp Dresser & McKee, Presenter

Additional Authors
Anthony LoRe, Jr., P.E., BCEE, Principal, Camp Dresser & McKee
William Crellin, Jr., P.E., Camp Dresser & McKee
Robert Hauser, Jr., Director, Pinellas County Utilities Department of Solid Waste Operations

Introduction
This paper discusses one of the key lessons learned from administering the first generation of service agreements for public owners of waste-to-energy (WTE) facilities over the past 22 years and how those experiences were incorporated into a new service agreement for the operation and maintenance of Pinellas County’s 24 year old, 3,000 tpd WTE Facility to better protect the county’s interests. Additionally, a major issue raised by the operating companies during the competitive procurement process for continue operation of the facility is discussed and how that concern was addressed in the new service agreement is also presented. Capitalized words or terms used in this paper are defined within the new service agreement.

Owner’s Perspective
Control of Maintenance
It has become clear over the years that private operators of publicly owned WTE facilities place a high priority on maintaining both the processing and energy generating capability of a publicly owned facility, which relate directly to the profitability of that facility to the operating company. However, they have generally placed a much lower priority on maintaining and preserving the portions of the facility that are not process related because it lowers the operating company’s profit level, even though those items are equally important to the owner since they affect the value and remaining useful life of the facility at the end of the contract period. Pinellas County’s new service agreement incorporates additional provisions to ensure that certain minimum maintenance standards are applied to the whole facility for the entire contract period.

One of the major short falls of the original WTE service agreements was that they provided the public owner with very little control over the operation and maintenance of the entire facility. The only recourse the owner typically had if it was unsatisfied with the performance of the operating company was default and termination, which essentially is the “nuclear bomb” scenario. There were no “small arms” capabilities in the original service agreements that the public owner could use to motivate the operating company to address deficiencies in the physical condition of the facility such as missing insulation and lagging and corroded siding and structural steel. Repeated failures to address facility repair needs in a timely
manner or at all end up straining the relationship between the owner and operating company, because owners have been extremely vexed that many of the punch list items are asterisk by the engineer as having been on prior year punch lists, meaning that the deficiencies have been known for at least a year or more and have not been fixed. Therefore, in order to rectify the situation, a significant number of "small arms" options for the owner to exercise if necessary were built into the new service agreement.

The general approach of the "small arms" options was to build into the service agreement the right of the owner to withhold specified amounts of money from the service fee on a monthly basis after the operator had been put on notice that something needed to be cured, and after a specified period of time had elapsed and the operator had not cured the issue. Once the issue had been cured to the reasonable satisfaction of the owner, the withheld money would be paid to the operator as part of the next monthly invoice, without interest. As additional leverage to affect a cure, the owner also has the right to undertake the cure and have the operator pay for it. This is unlikely to be utilized by the owner for process equipment related deficiencies, but could be invoked for non-process related maintenance such as building repairs (e.g., roof leaks, damaged or rusting siding or drainage issues).

Another related failing of the original service agreements was that although there was often a general obligation for the operator to maintain the facility, there were no standards for what comprised "good maintenance practice". In order to address this deficiency, a series of specific maintenance standards were built into Pinellas County's new service agreement. The "Standards of Maintenance" are defined as follows:

"The Contractor shall perform maintenance, repairs and replacements to the facility and perform each and every component of the work in accordance with the more stringent of (a) the Operation and Maintenance Manuals, and other operating instructions produced, generated or modified by the Contractor relating to the Facility and consistent with Prudent Industry Practices,

(b) manufacturer's recommendations, as modified by the Contractor, and such modifications shall be consistent with (1) Prudent Industry Practices and (2) the requirements necessary to maintain the Facility's warranties (to the extent such warranties are available to the Contractor),

(c) the applicable terms and conditions of this Agreement,

(d) Prudent Industry Practice, and

(e) Applicable Laws.

Additionally, "Prudent Industry Practices" was defined as:

"Those practices, methods, techniques, specifications and standards of safety, maintenance, housekeeping, repair, replacement and performance, as the same may change from time to time, as are commonly performed by competent, qualified operators performing management, operation, maintenance, repair and replacement services on Solid Waste facilities of the type similar to the Facility, which in the exercise of reasonable judgment..."
and in light of the facts known at the time the decision was made, are (a) considered good, safe and prudent practice in connection with such services and (b) commensurate with a prudent standard of safety, performance, dependability and efficiency.

**Punch List Process**

The new "small arms" options and Standards of Maintenance provided under Pinellas County’s new service agreement will be administered through a formal "punch list" process. Under the new service agreement, the Consulting Engineer has the right to conduct inspections of the Facility with the full cooperation of the Contractor to determine if the Facility is being repaired, replaced and maintained in accordance with the service agreement and the Standards of Maintenance as defined therein. Within fifteen business days following the completion of such inspection, the Consulting Engineer files a written report of its findings. To the extent that the Facility does not comply with the Standards of Maintenance, such written report identifies such items and specifies in reasonable detail as to how such items are not in compliance (the “Punch List Items”). The report further identifies the Cure that the Contractor is to pursue to bring such Punch List Items into compliance with the Standards of Maintenance, on an item-by-item basis, including the proposed timeframe, by which each Punch List Item must achieve compliance. In establishing such proposed timeframe(s), the Consulting Engineer is to take into account the time necessary to purchase or acquire the material, equipment and services needed to Cure each such Punch List Item, the work necessary to bring each such Punch List Item into compliance, the priority of such work relative to maintaining the Performance Guarantees and the Contractor’s other obligations under the service agreement, the availability of equipment and/or subcontractors to perform the work, the potential for coordination of such work with scheduled outages relative to applicable portions of the Facility and other relevant factors. If the Contractor does not formally dispute any or all of the Punch List Items and/or the timeframes, the Contractor is obligated to proceed to Cure all the Punch List Items within the stated timeframes.

To encourage the Contractor to effect a Cure within the timeframes, the County, effective on the first Day following the last day in the timeframe or any time thereafter, may withhold up to one thousand dollars per Day from payment of the Contractor’s monthly invoice until all non-compliant items are completed; provided; however, such continued per day withholdings stops on the date that either (1) the Contractor completes the corrective or curative actions of all outstanding non-compliant Punch List Items or (2) the County’s has given a written notice that the County has commenced a Cure of such outstanding non-compliant Punch List Items.

To keep the operator from being hit with an extensive Punch List the month after taking over operation of Pinellas County’s 24-year old facility, an Initial Punch List was developed during the reprocurement process based upon the Standards of Maintenance and included as a schedule to the new service agreement. Over 400 items were identified on and the proposers were directed to price there proposed operation and maintenance fee the cost of Curing all of those items, and the service agreement gave the operator 18 months to Cure all those items. If any of the items were not Cured after 18 months, they were subject to withholding in a similar manner to the normal Punch List items.
Operator's Perspective

Latent Defects

From the operating companies perspective, operating and maintaining publicly owned WTE facilities has traditionally been a lower profit margin endeavor compared to operating and maintaining WTE facilities that are owned by the operating company. This raises the concern, especially when taking over the operation of older publicly-owned facilities, that extremely high cost maintenance needs could be found after the takeover of operations in areas that could not be reasonably assessed prior to the takeover (sometimes referred to as “latent defects”). For certain items, if such repair needs are required, the cost could easily erase several years (or more) of expected profits and therefore this issue poses a significant risk to the operator.

Pinellas County’s new service agreement includes provisions to reduce the risk of latent defects to the operator, which ensured that the owner received a service fee that was not burdened with excessive contingency for protection against these potential latent defects.

Inspection and Testing

In order to deal with the issue of latent defects, the operating company is provided an opportunity to inspect and test certain components at the facility within a limited timeframe after taking over the operations. The details of these inspections and tests were incorporated into a schedule to the new Pinellas County service agreement. Figure 1 presents an example of the schedule contents. The specific provision addressing latent defects is as follows:

Not later than twelve billing months following the Commencement Date, the Contractor, if it elects to test or inspect any or all of the Potential Extended Punch List Items contained in Schedule 19, shall (a) retain one or more qualified independent technical, testing, engineering or inspection firms to conduct the specified test or inspection set forth in Schedule 19 on the Potential Extended Punch List Items set forth in Schedule 19 and (b) conduct and complete all such tests or inspections. The County shall have the right to witness all such tests and inspections. The Contractor agrees that the costs associated with retaining the independent technical, testing, engineering or inspection firms and the conduct of all such tests and inspections are included in the proposed operation and maintenance fee, including all lost revenues it could otherwise have earned under the terms of the service agreement.

If the results of such tests or inspections evidence that a Potential Extended Punch List Item complies with the criteria or standard set forth in Schedule 19 or if such tests or inspections are not conducted within the twelve month period specified above, such Potential Extended Punch List Item shall be deemed accepted by the Contractor “as is” and the Contractor shall no longer be afforded relief recognized under the service agreement if such item shall fail, malfunction or breakdown.

If the results of such tests or inspections evidence that a Potential Extended Punch List Item does not meet the criteria or standard set forth in Schedule 19 (the “Extended Punch List Item(s)”), the Contractor shall have the obligation, provided appropriate authorization and funding is provided by the County, to cure such Extended Punch List Item so that it complies with such criteria or standard set
Steam Drums
The following nondestructive tests, criteria or standards and repair or replacement guidelines have been established for steam drum No. 1, steam drum No. 2 and steam drum No. 3:

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<tr>
<th>Test/Inspection Requirements</th>
<th>Criteria or Standards</th>
<th>Repair or Replacement Guidelines</th>
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<td>a) Ultrasonic thickness testing of the shell and end caps. Test points shall be located at a maximum of two (2) linear feet along the length of the shell and at a minimum of eight (8) locations circumferentially, with a minimum of eight (8) points being tested on each end cap and equidistant to the extent practical. The Contractor shall strive to test at these locations to the extent practicable. If obstructions interfere at these locations, the closest available points should be tested.</td>
<td>Minimum wall thickness for the design pressure as calculated using the ASME Code for Boilers and Pressure Vessels and NBIC guidelines.</td>
<td>Any areas failing to meet the criteria or standard shall be subject to repair or replacement in accordance with ASME procedures as an Extended Punch List Item.</td>
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<td>b) Visual inspection of the steam separators, vortex eliminators, drain lines and all other internal components.</td>
<td>Customary repairs or replacements as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practice.</td>
<td>Repair or replacement items identified by the independent qualified third party inspection firm shall be subject to repair as an Extended Punch List Item.</td>
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<td>c) Magnetic particle testing of the shell and heads, and all weldments.</td>
<td>ASME Boiler and Pressure Vessel Code and NBIC requirements for the repair of cracks or replacement of shell and heads. Testing in accordance with NACE Recommended Practice 0590-96.</td>
<td>Any areas failing to meet the criteria or standard shall be subject to repair or replacement in accordance with ASME and NBIC procedures as an Extended Punch List Item.</td>
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The Contractor shall be responsible for the first fifty thousand dollars ($50,000) in repair or replacement costs for all of the Extended Punch List Items associated with steam drum Nos. 1, 2 and 3. The County shall be responsible for all repair or replacement costs in excess of such fifty thousand dollars ($50,000) for all of the Extended Punch List Items associated with steam drum Nos. 1, 2 and 3. Repair or replacement costs shall be limited to outside contractor and material costs, exclusive of test and inspection costs which shall be the sole responsibility of the Contractor.
forth in Schedule 19.

In other words, the County will pay to cure latent defects that are revealed by objective tests performed by a qualified third party provided they are identified within one year of the takeover date. As shown in Figure 1, Schedule 19 included a “deductible amount” of the first “x” dollars for the repair or replacement in order to account for the cost of normal maintenance that could reasonably be expected for this component given the age of the facility. Requiring the operating contractor to bear the costs of the inspections and testing also ensures that operator only tests those components for which he has reasonable concern.

Payment for Latent Defects

A contingency fund of five million dollars was established within Pinellas County’s new service agreement for purposes of covering the cost of any latent defects found during the first 12 months of operation in accordance with Schedule 19. Following the receipt of the results of each test or inspection of a Potential Extended Punch List Item the result of which evidences an Extended Punch List Item, the Director of Solid Waste and the operator shall agree in writing as to (a) the fixed price to cure such Extended Punch List Item, (b) the payment milestones and the percentages of the fixed price applicable to each payment milestone or, as applicable, the Direct Costs payment milestones, (c) the timeframe for commencing and completing the Cures and (d) any modifications to the Performance Guarantees and the Work under the service agreement. Monies required in excess of such five million dollars for a cure of an Extended Punch List Item shall require an amendment to this Agreement that is subject to approval and execution by the Board of County Commissioners.

The County also has the right to direct the Contractor to make such Cures of any or all items on the Extended Punch List Items as the County deems necessary and advisable at the operator’s direct costs, inclusive of profit, subject to cost substantiation, inclusive of profit. The Contractor shall comply with the County’s direction in a reasonably timely manner provided appropriate authorization and funding is provided by the County.

Summary and Conclusions

Pinellas County’s new service agreement represents the next generation of service agreements for publicly owned WTE facilities. Additional provisions were included in this service agreement to address specific shortcomings in the first generation of service agreements for these types of facilities. These improvements specifically included increasing the degree of control that the owner has to affect more timely repairs and maintenance to the facility. This change is expected to promote a more positive working relationship between the owner and operator and to better preserve the value of the facility, which represents the County’s single largest capital investment. The County also recognized the need to assume some of the risk for latent defects during the procurement process for a new operator. Accepting some of the risk helped to preserve the pool of potential operating vendors and resulted in the County obtaining very competitive prices for the continued operation of their facility, a vital part of their integrated solid waste management system.