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They don't make 'em like that anymore How to get the most out of upgrades — Avoiding contractual pitfalls — page 24 For a slice of the American pie — page 26

# Avoiding pitfalls in service contracts

#### A GOOD PLACE TO START IS THE WORK SCOPE DEFINITION

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hile many owners are looking to enter into a Long Term Service Agreement for the first time, others are realizing the challenges of actually implementing LTSAs that were entered into when the equipment was first ordered years ago. Still others are faced with analyzing LTSAs that they did not negotiate, but inherited as part of an acquisition.

LTSAs typically commit the OEM or a non-OEM service provider ("contractor") to provide, on a relatively "fixedpriced" basis, parts and maintenance services for a gas or steam turbine. Commercially speaking, LTSAs can offer many advantages to owners, including the predictability of relatively fixed long-term maintenance costs and contractually guaranteed or incentivized contractor support. However, these very complex agreements can often contain pitfalls that can cause an unwary owner to bear an inordinate amount of risk, or may result in costly and time-consuming disputes with the contractor.

#### A comprehensive work scope

No two LTSAs are alike. But for the sake of discussion, this article assumes an LTSA whereby the contractor's workscope substantially includes:

- All regularly "scheduled" maintenance on the equipment, including providing parts and labor, the compensation for which is a relatively fixed-price (i.e., a fixed monthly amount or a variable amount which is "fixed" in the sense that there is an established agreement as to pricing of dollars-per-operating-hour or per start-ups on the equipment)
- All "unscheduled" maintenance work (i.e., recovery from trips).

One of the most common pitfalls in LTSAs is the lack of a clearly defined scope of the contractor's responsibilities for providing scheduled maintenance on the equipment. The risk an owner faces

as a result of such a lack of clarity can be costly, especially in the context of an LTSA that contains fixed-pricing for scheduled maintenance work (the corollary to which is typically that work outside of the contractor's defined workscope costs extra).

For instance, imagine an owner whose gas turbine has just been taken offline for its first scheduled major maintenance outage. The owner believes that the contractor will provide all parts that may be necessary as part of its scheduled maintenance work-scope. Suddenly, however, the owner receives a

scheduled maintenance program (e.g., high availability and maximum output) and require that the contractor's scheduled maintenance work-scope include any other activities required to meet those goals. This is especially recommended in the absence of contractor guarantees regarding equipment performance.

With each of these components present in the LTSA's definition of scheduled maintenance work scope, the risk of disputes regarding what is and what is not covered as part of the contractor's scheduled maintenance work scope will be minimized, which will benefit all parties.

## Ork-scope can be automatically reduced by service bulletins

notice from the contractor that it is waiting for the owner to replace some spare parts. Or worse yet, the contractor goes ahead and replaces such spare parts and bills the owner for such work, in addition to the invoice for scheduled work.

The way to avoid this pitfall is as basic as the pitfall itself: The LTSA should clearly and completely define the contractor's work scope with regard to scheduled maintenance. In this respect, such definition should include several key components. First, it should include a complete list of all component parts of the equipment that are subject to the scheduled maintenance obligations of the contractor.

Second, it should describe the general nature of the contractor's scheduled maintenance obligations with respect to each such part (e.g., inspect, repair, refurbish, replace, etc.).

Third, the work-scope definition should include a description of activities for each scheduled maintenance outage, outlining the contractor's obligations in it. Ideally, the contract should also specifically list the parts or activities that are not included in the scheduled work-scope, with express language that such exceptions are the only exceptions.

Finally, as a "catch-all" concept, it is helpful to define the goals of the overall On a related note, owners must take care to avoid contractual provisions giving the contractor the unilateral right to reduce its scope under the LTSA. One example (of many) of a possible path for such a reduction may be through the issuance of new "service bulletins" and "technical advisories."

Some LTSAs are structured so that these sorts of bulletins and advisories can effectively amend the contractor's work-scope, because the work-scope is defined to include them. If the owner has no input on the implementation of the recommendations in such bulletins or advisories, then the owner will run the risk of being contractually obligated to allow the contractor to implement the recommendations, even if doing so would serve to reduce the work-scope.

A simple solution to this particular problem would entail requiring that the implementation of any advisory or bulletin occur only with the owner's prior written approval.

#### Allocate startup risks

The typical LTSA with an OEM involves the OEMs providing maintenance for equipment that the OEM itself has, under separate contract (perhaps via an OEM affiliate), sold to the owner. Under most standard equipment procurement contracts, the OEM would have certain obligations to ensure that the equipment is capable of achieving commercially operational performance levels. An OEM, in trying to meet such obligations, may spend weeks at a site troubleshooting equipment-commissioning issues. During this time, the equipment may be repeatedly started-up, run for several hours, and then (intentionally or unintentionally) shut down, thereby increasing the number of working hours.

But the pricing for many LTSAs is based upon the number of "hours" of equipment operation or the number of equipment "starts," or a combination of both. In many an LTSA, the basis of such pricing fails to distinguish between hours and starts occurring before or after the Commercial Operation Date (COD). As a result, such pre-COD hours or starts can be charged to the owner under the LTSA, even if they resulted from defects in the equipment provided by an OEM.

A smart owner will insist that it is appropriate that all pre-COD hours and starts related to equipment defects are not charged under the LTSA. This might sometimes be accomplished via mirroring-provisions in both the LTSA and the turbine procurement agreement.

#### Paying for non-outages

As OEMs continue to develop longer-lasting parts, it is more likely that scheduled maintenance outages that both parties had in mind when signing an LTSA may not be required in the future. Many LTSAs contain provisions that clearly allow the OEM to use new technology without the owner's approval. Broad OEM language in this respect can easily be read to allow the use of longer-life parts.

From one perspective, the OEM should be incentivized to develop longer-life parts because the elimination of outages benefits the owner by keeping the turbine generating revenues longer. However, such language can easily produce an inequitable result if the LTSA requires the owner to pay for an outage that is no longer needed.

Also, some operating insurance policies may exclude coverage for items deemed to be "proto-typical" or the like. Thus owners must protect themselves from the hazards of signing LTSAs that allow the OEM (or non-OEM) to unilaterally install any "new technology" parts.

#### Who controls tuning

Inevitably, there is an inherent tension between the owner's objective to maximize the output of its turbine within acceptable limits and the contractor's objective to minimize wear and tear on the machine. One arena where this tension plays out is in the post-outage tuning of the turbine.

An LTSA that fails specifically to address post-outage tuning parameters may lead to disputes over the rights and responsibilities related to this issue. A simple clause in the LTSA addressing this matter (and possibly providing that the final parameters of any tuning of the turbine will be subject to the owner's approval), will go a long way toward minimizing any such conflict.

#### The importance of warranty

Despite the "long term" nature of LTSAs, owners often make the mistake of not focusing on events under the contract that will occur in the distant future. For example, upon the completion of the last major inspection that, assuming a maintenance-based term, will signal the end of the LTSA term, a number of important issues will arise.

These include: What quality of parts will be installed into the equipment at that time? What obligations will the contractor have with regard to those parts after the LTSA expires? It is best for an owner to focus on and avoid these potential pitfalls from LTSA inception.

To illustrate this point, consider the scenario where a contractor installs a refurbished turbine blade during a scheduled maintenance overhaul occurring in the middle of an LTSA's term. Under most LTSAs, the contractor will have many incentives to ensure that, at least during the term of the contract, the quality of such a blade is such that it will last as long as possible. For example, some LTSAs require the contractor to bear a certain amount of the costs related to unscheduled maintenance. Other LTSAs will require that the contractor pay liquidated damages if the equipment's availability does not meet certain guaranteed levels.

However, once the LTSA term ends, these incentives all but disappear. As a result, if one or more substandard parts are installed at the end of the LTSA term, an owner may be left with no remedy under the LTSA (past a standard limited parts warranty claim, which may expire within as early as one year) for outages caused by these "last-installed" parts. Ideally, owners can protect themselves by asking to include an extended warranty covering such parts, a guarantee as to their pedigree, and requiring the contractor to shoulder some risk with respect to collateral damage caused by a defective "last-installed" part.

#### Renegotiating contracts

In most cases, an existing "pitfall" can be just as detrimental to the contractor as to the owner. Consequently, owners should not discount the possibility of renegotiating and amending documents for the sake of improving them for all parties involved. Thus, the important thing to remember is to avoid these pitfalls if you can, but if you find yourself at the bottom of one, you can always climb your way out.

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Both Thompson and Yost have negotiated LTSAs worth over \$7.0 billion covering over 140 gas and 70 steam turbines.