



General

# 23 Key issues for operating and maintenance agreements

Investing in Energy Transition Projects  
March 2023



# Introduction

The Operating and Maintenance Agreement (**O&M Agreement**) supporting an infrastructure project has a significant impact on the project's long-term success. Accordingly, it is a key document from both the point of view of the Principal and the Lenders in reviewing the bankability of a project-financed project.

The purpose of this paper is to highlight the key issues in a draft O&M Agreement that must be addressed. Not all of these issues will be applicable to all projects. However, this checklist will be useful in identifying areas of the O&M Agreement that may require further attention.

This paper assumes the Operator is not one of the project Sponsors and has a true arms-length relationship with the construction Contractor. If that is not the case there will be a range of additional issues to consider, especially for the Lenders in a project-financed project. Some of these issues are considered briefly at the end of this paper.

## Pre-operational phase

Key issues to consider in relation to the pre-operational phase are:

- Does the Operator have a contractual role on the project before the handover of the facility by the Principal? In particular, does the Principal require the Operator to advise, prior to acceptance testing of the facility, on matters such as the necessary staffing levels, work Programmes, organisational matters and other administrative functions that must be put in place upon acceptance and handover of the facility to the Operator?
- Does the O&M Agreement set out the testing, commissioning and handover procedures, particularly having regard to the transfer of responsibility for the care of the facility from the construction Contractor to the Principal and/or Operator? Are these procedures back-to-back with the construction contract? Is there more than one construction contract or a number of different work packages with varying completion and handover dates?

An issue likely to arise in the negotiations will be the degree to which the Operator will be responsible during the period when the Operator's staff are in control of the facility but under the supervision of the construction Contractor – for example, during the acceptance testing phase but prior to handover. Usually, as a matter of contract, the construction Contractor remains responsible for the facility until handover. However, acceptance, commissioning and performance testing will normally be carried out by operations personnel. In these circumstances, the Operator is unlikely to agree to be liable. Therefore, there must be a clear statement in the construction contract that the construction Contractor remains liable until handover, regardless of whose personnel are physically conducting the testing.

Where there are a number of construction contracts for different components of the project with varying completion dates (for example, mining or hospital projects delivered under an Engineering, Procurement and Construction Management (**EPCM**) or construction management model with a number of separate work packages), the Principal needs to consider the extent to which the construction Contractors, the Principal and/or Operator will be responsible for care of the works during the period from when the first work package is completed and ready to be handed over, to the date of handover of the entire project to the Operator.

Ideally, from the Principal's and Lenders' perspective, the individual construction Contractors will remain liable for their scope of works until handover of the entire project. However, this may not be feasible depending on the nature of the project and the stage in the construction Programme, particularly as the Contractors will want to achieve handover as early as possible under fixed lump sum contracts to reduce their overheads and increase profit. In these circumstances the Contractor is unlikely to agree to be liable and to minimise gaps in liability, Lenders may require the Operator (rather than the Principal) to accept responsibility on completion of the individual work packages. Accordingly, there must be a clear statement in the O&M Agreement that the Operator is responsible during the interim period and must have the necessary resources available to perform those obligations from the time of handover of each work package.



# Operation of the facility

The substantive contractual obligation of the Operator is to operate and maintain the facility for the period specified in the O&M Agreement. A key issue is whether the responsibilities of the Operator during this period are set out in sufficient detail.

The O&M Agreement will need to cover matters such as:

- operating procedures
- maintenance of the facility (including major overhauls and scheduled/unscheduled outages)
- responsibility for procurement and maintenance of a spare parts inventory
- performance levels and performance guarantees to be met by the Operator
- interface with the construction Contractor(s) prior to handover and during the defects liability period
- interface with Principal's operations team (for example, where the Principal elects to undertake certain site-related services in respect of the operation of the facility) and the potential impact on the Operator's performance guarantees
- Principal's option to extend the term
- reporting requirements to the Principal, Lenders and perhaps to the government authorities
- maintenance of the continuing contractual relationship with the government authorities (if relevant) and utility suppliers on behalf of the Principal
- compliance with operational requirements imposed under the regulatory regime (for example, compliance with environmental controls and local ownership and industry participation requirements imposed on the project) and other project documents.

The description of the Operator's obligations is often complex and requires significant project management and technical expertise relevant to the project type and technology. This can, to some extent, be simplified by attempting to describe the general requirements of the Operator and relating those obligations to the performance results required to be achieved out of the operation of the facility, including all matters necessary and incidental to that performance. However, there are arguments against this approach, particularly if it is relatively simple for the Operator to claim additional payments under the agreed compensation regime. Therefore, care should be taken in electing this simplified drafting approach and advice should first be sought from appropriately qualified and experienced technical advisors.

Finally, having regard to the long-term nature of O&M Agreements, the parties should be aware that there is a real likelihood of a substantial change of circumstances during the period of the O&M Agreement (for example, where political change occurs, legislative regimes are expanded/altered or the original contract regime is otherwise altered). Accordingly, the Operator's entitlement to relief and additional compensation in such circumstances must be clearly stated in the O&M Agreement. Ideally, from the perspective of the Principal and Lenders, those entitlements will be back-to-back with the Principal's entitlement under any offtake agreements or other project documents.

## Fully wrapped agreement vs side agreements

By 'fully wrapped' O&M Agreement, we mean that all obligations and responsibility in relation to operations and maintenance of the facility are allocated to a single party (the Operator) and both the Principal and the Lenders have a clear line of recourse to that party.

If, for example, key aspects of the operation and maintenance of the facility (particularly those that may impact on the performance of the facility) will be performed by a third party under a different agreement, then the Lenders will require a clear allocation and delineation of all obligations and responsibilities for the operation and maintenance of the facility between the parties so there are no 'gaps' where residual risk or obligations are left with the Principal.

If, in respect of a project-financed project, the Principal retains significant risk or responsibility for operating and maintaining the facility, the Lenders will usually require some form of Sponsor support.

## Principal's obligations

The main obligation on the Principal during the period of the O&M Agreement should be to pay the Operator. Payment will, as a practical matter, be made out of the proceeds of the offtake agreement and should, if possible, be quarantined to these amounts.

However, there will probably be other major continuing obligations, for example, the supply of utilities, fuel, water and other consumables. In addition, the O&M Agreement should provide for other specific obligations on the part of the Principal. For example, there may be an obligation on the Principal to provide an initial spare parts inventory (which should be back-to-back with the spare parts inventory to be provided by the Contractor under the construction contract). Further, there may well be an obligation on the Principal under the offtake agreement to maintain records in relation to the Operator's compliance with particular matters (for example, use of fuel and waste disposal), which may affect the Principal's payment obligations under the O&M Agreement. The O&M Agreement should also provide for payment mechanisms (for example, mechanisms to cater for payment of Principal-supplied spare parts, major overhaul expenses, costs arising for work performed by the Operator beyond the scope of services described in the O&M Agreement, changes in law and other potential factors that give rise to necessary adjustments to the payment provisions).

## Performance obligations

The O&M Agreement must specify the performance obligations of the Operator during the period of the O&M Agreement. The performance criteria should typically include matters such as availability, outages, production levels and other technical, quality, safety and environmental protection performance criteria, depending on the nature of the project. The O&M Agreement should also specify the performance levels that might give rise to rights to damages and/or termination under the O&M Agreement where performance falls below certain levels. This is discussed in more detail later in this paper. In some cases, there may also be a gain share mechanism providing for bonuses where the Operator's performance exceeds particular levels. Reference should also be made to the performance levels achieved by the construction Contractor at handover. These levels, with appropriate adjustments (for example, degradation curves), should form a baseline of the Operator's performance obligations. In addition, on a power project for example, it is imperative that the technical and legal advisors ensure that the performance testing and performance guarantee and liquidated damages schedules to the O&M Agreement are back-to-back with the corresponding schedules to the construction contract.

## Force majeure

An important issue is: does the O&M Agreement adequately provide for the consequences of a force majeure event?

In the negotiation of the project documents (where the Principal's obligations are largely limited to payment, as is the case with O&M Agreements), the force majeure provisions should be common to all of the documents. To the extent such provisions are not aligned and there are significant gaps in liability retained by the Principal, the Lenders will usually require some form of Sponsor support.

The parties should be aware that the consequences of a force majeure event during the construction period are severe but probably manageable in that the force majeure event, even if prolonged, will simply increase the cost of construction and delay completion. This risk can be allocated between the parties to the project prior to commencement of the project and taken into consideration in determining the economics of the project and contingencies.

The consequences of a prolonged force majeure event during the operation period, however, may lead to an insoluble difficulty. In this event, the Operator may not be able (even if it was prepared to increase its financial commitment which, typically, it is not) to perform its obligations to the performance standard set out in the O&M Agreement. This will have a direct effect on the offtake agreement and the project revenue stream, affecting (possibly beyond repair) the ability of the project to repay the Lenders.

The O&M Agreement should, therefore, impose an obligation on the party affected by the force majeure event to take all possible steps to overcome the event, including reasonable expenditure of funds. The failure to perform contractual obligations because of the event, however, will typically prevent such a party from being in default.



# Underperformance

The O&M Agreement must include detailed provisions for the consequences of default by the Operator in its performance obligations.

In particular cases (for example on a power project) the O&M Agreement should specify the performance levels below which the Operator is in default under the O&M Agreement and the options for remedy available to the Principal in the various circumstances arising out of the different levels of that default.

Typically (again, for example on a power project) such performance requirements should specify matters such as output, availability, outages and other specific performance-related events.

The O&M Agreement may also specify a liquidated damages regime to be imposed where the Operator fails to perform to the specified levels. The inclusion of a liquidated damages mechanism under the Agreement is necessarily linked to a limitation of liability clause, which effectively caps the Operator's potential losses in respect of any underperformance by the Operator. Typically, liability for consequential losses (which are losses caused to one of the parties because of the particular economic situation of that party) is expressly excluded. Such exclusion will usually expressly include loss of revenue, profit and/or other economic consequences of underperformance by the Operator (other than in respect of any pre-agreed liquidated damages).

# Changes/variations during the term of the agreement

Another key issue is whether the O&M Agreement makes provision for adjustments to the payment to be made to the Operator where, within limits, the obligations of the Operator under that O&M Agreement are extended or reduced during the period of that O&M Agreement.

For example, where amounts paid to the Operator are based on the operational efficiency of the facility, the O&M Agreement should make allowance for an adjustment in the payment to the Operator where the quality of fuel or other consumables falls below the technical criteria specified in the O&M Agreement.

Similarly, the O&M Agreement should typically provide for an adjustment in the payment entitlements of the Operator where there is a material adverse event (such as change in law), which results in the Operator being required to perform obligations beyond those obligations described in the O&M Agreement at the time of execution (for example, increased environmental regulations leading to a more detailed treatment of wastes being required).

To the extent that particular changes can be and are anticipated in the O&M Agreement at the time of execution (for example, inadequate quantities of or low-grade fuels), the payment adjustment provisions should be specified in the O&M Agreement at the time of execution. To the extent that such changes cannot be anticipated (for example, changes in law) or, where the parties elect not to specify at the time of execution of the O&M Agreement (for example the effects of inclement weather), the O&M Agreement will need to provide a mechanism to determine the resulting price adjustment.

In the absence of any such contractual mechanism, the Operator will probably be able to resist the imposition by the Principal of the obligation to perform the Operator's changed duties. As a result, it is imperative that the Principal includes a suitable contractual mechanism in the O&M Agreement to cater for such changed circumstances.

# Termination/step-in

If, during the period of the O&M Agreement, the Principal or the Operator defaults to the point where the other party seeks to terminate the O&M Agreement, the Lenders will insist on creating a suitable regime to ensure the continued operation of the facility to repay the Lenders from the proceeds of the offtake agreement.

For this reason, the provisions of the O&M Agreement should, in addition to the normal contractual terms setting out the grounds for and procedures to be employed in relation to termination of the O&M Agreement, contain additional provisions requirement the Operator to enter into an agreement with the Principal and the Lenders to give, first, temporary step-in rights and, if necessary, assignment rights to the Lenders.

# Operator is also a project Sponsor

If the Operator is also a project Sponsor, it will be critical for the Lenders in a project-financed project, to ensure that the Operator cannot use its position as a project Sponsor to avoid obligations or obtain concessions under the O&M Agreement. This issue should be dealt with in the joint venture or shareholders' agreement between the project Sponsors.

In addition, in such circumstances consideration should be given to the most appropriate way to remunerate the Operator. For example, should the Operator be earning a profit, or should all profits be earned by the project?

# Operator and construction Contractor are the same or related entities

In circumstances where the Operator and the construction Contractors are the same or related entities ultimately controlled by the same parent company, rather than a true 'arms-length' relation, the Principal should include a mechanism that prevents the Operator and construction Contractor from (i) relying on the delay or underperformance by the other to obtain relief from the Principal under their respective contracts and (ii) seeking to rely on the actions of the other as a defence to a claim by the Principal for delay or non-performance ('no relief and horizontal defences provisions').

These provisions can be included in the O&M Agreement itself (in which case back-to-back clauses should be included in the construction contract) or otherwise in a separate coordination or wrap agreement that sets out the coordination and interface obligations of the parties in relation to the project.

# How to contact us

If you have any questions about this paper, please contact the editor, Damian McNair, Partner, Energy Transition.

PwC Australia has a dedicated Energy Transition business, consisting of a hub of 132 multidisciplinary and highly-skilled experts helping to facilitate Australia's successful transition to a decarbonised economy by 2050. We are helping accelerate our clients through the energy transition and their related ESG priorities as Australia moves to a net zero economy.

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