

Invitation to Tender

Non-market Ancillary Services – Reactive power support

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| --- | --- |
| Project/Services: | Non-market Ancillary Services – Absorbing reactive power support |
|  |  |
| AEMO Project Manager: | Name: Nathan WhiteManager, Victorian Transmission PlanningEmail: Nathan.White@aemo.com.au  |
|  |  |
| Closing Date: | Responses due by 5:00pm (Melbourne time), 23rd June 2019. Responses to be emailed to Nathan.White@aemo.com.au. Note: emailed submissions are subject to a per email size limit of 30MB (multiple emails each of 30MB can be accepted by AEMO). |
|  |  |
| Validity Period: | 90 days from the Closing Date |
|  |  |

Australian Energy Market Operator Limited

ABN 94 072 010 327

Level 22, 530 Collins Street

Melbourne VIC 3000

Tel: 03 9609 8000

Fax: 03 9609 8080

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1. INVITATION TO TENDER
	1. Background

Australian Energy Market Operator Limited (AEMO) is an independent organisation responsible for operating eastern, south-eastern and western Australian energy markets and systems.

In addition to the day-to-day management of wholesale and retail energy market operations, AEMO operates the power system for the National Electricity Market (NEM) and the Victorian gas declared transmission system, is the energy market operator and power system operator for the South West Interconnected System in Western Australia, and undertakes ongoing market development and long-term system planning.

In Victoria, AEMO also plans and procures services for the operation and development of the shared electricity transmission network, and provides shared transmission services to network users.

* 1. Invitation to Tender

Under minimum demand conditions, and without operator action, high voltages can occur in Victoria following credible contingencies and in some cases in under normal (pre-contingent) operation. Short-term operational measures, such as de-energising 500kV lines, have been applied during periods of minimum demand.

AEMO is currently undertaking a Regulatory Investment Test for Transmission (RIT-T) to deliver a long-term solution to this issue, however the frequency and extent of operator actions has increased more rapidly than previously anticipated. In November 2018, AEMO was required to de-energise three 500kV lines, and issue directions to maintain Victorian voltages within operating limits due to multiple unit outages at low demand periods.

Repeated interventions of this frequency and magnitude can reduce the resilience of the system and pose additional power system security risks. As a result, AEMO declared an Network Support and Control Anciliary Service (NSCAS) gap in December 2018, and entered into a short term Non-market Ancillary Services (NMAS) agreement in March 2019.

The short term NMAS agreement concludes in September 2019, and AEMO is now seeking tenders for the provision of further NMAS (described in Section D) from parties located in Victoria and that have the capability to provide at least 150 MVAr of absorbing reactive power (or an equivalent impact on high voltages near the Keilor Terminal Station) during times of minimum system demand.

* 1. Indicative Timetable

This timetable is provided to give Recipients an indication of the anticipated timing for the procurement process. AEMO may change these times or steps, or stop or suspend the ITT process at any time.

|  |  |
| --- | --- |
| Activity | Indicative dates |
| Issue date for ITT | 10 May 2019 |
| Closing Date for ITT | 23 June 2019 |
| Expected date for completion of ITT evaluation | 7 July 2019 |
| Expected date for completion of negotiation with preferred Tenderer if required | 4 August 2019 |
| Expected contract execution and notification of unsuccessful Tenderers | 1 September 2019 |
| Expected commencement date of services | 14 September 2019 |

* 1. Glossary

In this document, capitalised words or phrases have the meanings set out below. A word or phrase defined in the National Electricity Rules has the same meaning when used in this document.

|  |  |
| --- | --- |
| **Addendum** | Any document issued after the date of this Invitation to Tender and labelled as an “Addendum” to this Invitation to Tender; collectively known as “Addenda”. |
| **AEMO** | Australian Energy Market Operator Limited ABN 94 072 010 327. References to AEMO include, where the context requires, AEMO’s employees, officers, contractors, consultants, advisers and other persons authorised to act for AEMO. |
| **AEMO Project Manager** | The person specified on the cover of this ITT. |
| **Business Days** | A day other than Saturday, Sunday and any other day not taken to be a public holiday in Victoria. |
| **Closing Date** | The date specified on the cover of this ITT. |
| **Invitation to Tender or ITT** | This document, including its schedules, attachments and appendices. |
| **NMAS****NER** | Non-market ancillary services.National Electricity Rules. |
| **Services** | The services described in Schedule 2 of the Tender Form. |
| **Statement of Compliance** | The schedule in **Section E** by that title. |
| **Tender** | The offer submitted by a Tenderer to provide the Services. |
| **Tenderer** | A person to whom AEMO has sent this ITT. |
| **Tender Form** | The document contained in **Section E**. |
| **Tender Period** | The time commencing between a Tenderer’s receipt of this ITT and the closing time for receipt of Tenders by AEMO. |
| **Validity Period** | The period specified on the cover of this ITT. |

1. ABOUT THIS ITT
	1. Legal Status

This Invitation to Tender is an invitation to treat and does not create any contractual or promissory rights.

AEMO is not obliged to accept any Tender or complete the process outlined in this ITT.

AEMO is not obliged to acquire all or any Services unless and until both AEMO and a selected Tenderer have duly executed a written contract in the form attached to this ITT, with any variations agreed between the parties.

AEMO may change the process or the description of the Services at any time by issuing an Addendum to Tenderers.

* 1. Confidentiality

This ITT may contain or be accompanied by confidential information about AEMO or its operations and markets, which is provided solely to enable Tenderers to submit Tenders. Tenderers must not use or disclose information in this document for any other purpose without AEMO’s prior written consent. Tenderers must take all reasonable steps (both physically and electronically) to protect the confidentiality of this document and all communications relating to it.

* 1. Intellectual Property

Unless otherwise indicated, AEMO owns any intellectual property rights in this ITT. Tenderers are permitted to use and copy this document for the sole purpose of preparing and submitting a Tender.

* 1. No Warranty

Except to the extent required by law:

* AEMO makes no warranties or representations on the accuracy, adequacy or completeness of the ITT or any other information provided to a Tenderer; and
* AEMO is not liable in any way for any loss or damage of whatever kind (whether foreseeable or not) however arising (including by reason of negligence), incurred by any person in connection with this ITT or any other information provided to a Tenderer.
	1. Queries and Communications with AEMO

If Tenderers find any discrepancy, error, or have any doubt as to the meaning or completeness of this ITT, or require clarification on any aspect of it, they should notify the AEMO Project Manager in writing, not less than 14 days before the Closing Date. AEMO may issue an Addendum to all Tenderers clarifying the discrepancy, error, doubt, or query (as the case may be) and may extend the Closing Date if AEMO considers it appropriate in all the circumstances.

No representation or explanation to Tenderers in relation to this ITT is taken to be included in the ITT unless it is contained in an Addendum.

All communications by Tenderers to AEMO about matters connected with this ITT must be made to the AEMO Project Manager unless otherwise authorised by the AEMO Project Manager.

* 1. Conditions of Submitting a Tender

Tenderers wishing to submit a Tender must comply with **Section C**. Tenderers must ensure that their employees, contractors, agents and consultants involved in the preparation or submission of a Tender are aware of, and comply with, all requirements applicable to Tenderers.

1. TENDER REQUIREMENTS AND EVALUATION
	1. Submitting a Tender

A Tender constitutes an offer by the Tenderer to provide the Services, which is capable of acceptance by AEMO. Tenders must meet the following requirements:

* All applicable sections of the Tender Form must be completed, including all relevant schedules.
* The Tender must be dated and signed (in the case of a body corporate, by a duly authorised officer).
* All supporting documentation evidencing the matters specified in Schedule 3 to the Tender Form must be included with the Tender, to the extent applicable to the proposed Service.
* If a Tenderer cannot comply with any element of the Tender Form or schedules, the Tenderer must specify in the Statement of Compliance the nature of, and reasons for, the non-compliance.
* Tenders must be lodged in electronic form to reach the following email address by **5:00 pm** (Melbourne time) on the Closing Date: tenderbox@aemo.com.au.
* Emailed submissions are subject to a per email size limit of 30MB (multiple emails each of 30MB can be accepted by AEMO)
* Additional documentation may be submitted with a Tender if, in the Tenderer’s opinion, it is necessary for a proper understanding of its Tender.

AEMO may decide to accept late or non-conforming Tenders, but is not obliged to do so under any circumstances.

* 1. Tenderers to Perform own Due Diligence

By submitting a Tender, a Tenderer is taken to have:

* satisfied itself of the requirements of this ITT;
* made all reasonable enquiries, investigation and assessment of available information relevant to the risks, contingencies and other circumstances relating to the Services; and
* satisfied itself as to the correctness and sufficiency of its Tender.
	1. Tenders Commercial-in-Confidence

Tenders will be treated as confidential and will not be disclosed outside AEMO except:

* as reasonably required for the purpose of assessing the proposed Services;
* as required by law, or in the course of legal proceedings;
* if requested by any regulatory or other government authority having jurisdiction over AEMO, or its activities; or
* to AEMO’s external advisers, consultants or insurers,

in which case the Tenderer is deemed to have consented to this disclosure by providing the Tender.

* 1. No Anti-Competitive Conduct

Tenderers must not:

* discuss this ITT with any other person they know has received this ITT or might reasonably be expected to have received it; or
* engage in any conduct that is designed to, or might have the effect of, lessening competition in the supply to AEMO of the Services.

Tenderers who wish to engage in legitimate teaming or sub-contracting discussions with persons who might deliver the Services must obtain AEMO’s prior approval to do so.

* 1. No Improper Assistance or Inducements

Tenderers must not seek or accept the assistance of employees, contractors or consultants of AEMO in the preparation of their Tenders and must not make any offers or engage in any activities that are likely to be perceived as, or may have the effect of, influencing the outcomes of the ITT process. Tenderers must at all times comply with all applicable laws in relation to the offering of unlawful inducements in connection with their Tenders.

* 1. No Reimbursement for Costs of Tender

No Tenderer is entitled to be reimbursed for any expense or loss incurred in the preparation and submission of its Tender or for any costs incurred in attending meetings with AEMO during the Tender evaluation process.

* 1. No Publicity

Tenderers must not make any public or media announcement about this ITT or the outcome of this ITT without AEMO’s prior written permission.

* 1. Disqualification

AEMO may, at its absolute discretion, immediately disqualify a Tenderer from further participation in the tendering process if AEMO believes that Tenderer has contravened a requirement of **Section B** or **Section C** of this ITT.

* 1. Tender Evaluation Process and Timing

AEMO’s assessment of Tenders may include, but is not limited to, an evaluation of the following matters as relevant to the provision of the Services:

* Compliance with ITT requirements;
* Ability to meet the performance levels specified in section D.3 while meeting the minimum technical requirements specified in section D.4;
* Tenderer’s capacity and resources, including personnel, financial stability and facilities;
* Value for money
* Evaluation of risk, potential liability and proposed contract terms and conditions.
* Any other factors AEMO considers to be relevant.
	1. Clarification

If AEMO considers that a Tender is unclear in any respect, it may seek clarification or further information from any or all Tenderers at any time during the evaluation process. Failure to supply clarification to AEMO’s satisfaction may result in the disqualification of a Tender.

AEMO has no obligation to seek clarification of any Tender, and reserves the right to disregard any information that it considers to be unclear.

* 1. Contract Execution

AEMO’s proposed form of contract for the Services is set out in the **Attachment** to this ITT.

Unless specifically requested in this ITT for one or more Services, Tenderers should not include their own standard or general conditions of contract with their Tenders. Tenderers who wish to seek changes to the proposed form of contract should provide a copy of the document showing the exact form of the requested change, tracked in Microsoft Word.

Tenderers will be taken to have accepted the contract in its current form in the Attachment unless they include a tracked copy of the contract marked in this way.

AEMO requires the terms of the contract to be concluded and the document signed by the successful Tenderer within 20 business days of AEMO’s notification of acceptance of the relevant Tender. AEMO reserves the right to reconsider rejected Tenders if the contract is not finalised within that period.

AEMO is not bound by the terms of any contract document and has no obligation to acquire the services unless and until the contract is signed by an authorised officer of AEMO.

* 1. No Obligation to Debrief

AEMO is under no obligation to debrief any Tenderer as to AEMO’s evaluation of Tenders, or give any reason for the acceptance of or non-acceptance of any Tender.

1. REQUIREMENTS FOR SERVICES
	1. Need for Services

Under minimum demand conditions, and without operator action, high voltages can occur in Victoria following credible contingencies and in some cases in under normal (pre-contingent) operation.

AEMO is currently undertaking a Regulatory Investment Test for Transmission (RIT-T) to deliver a long-term solution to this issue, however the frequency and extent of operator actions has increased more rapidly than previously anticipated. Repeated interventions of this frequency and magnitude can reduce the resilience of the system and present additional power system security risks. As a result, AEMO declared an NSCAS gap in December 2018, and entered into a short term NMAS agreement in March 2019.

This agreement concludes in September 2019, and AEMO is now seeking tenders for the provision of further Non-market Ancillary Services from parties located in Victoria and that have the capability to provide at least 150 MVAr of absorbing reactive power (or an equivalent impact on high voltages near the Keilor Terminal Station) during times of minimum system demand.

Location of Services

At times of low Victorian demand, and subsequent low congestion on the 500kV network, credible contingeny events can cause overvoltage conditions in the electrical vicinity of the Keilor Terminal Station, that are difficult to manage without operator intervention.

As such, service providers that are able to offer absorbing reactive power support Services in Victoria, and electrically close to Keilor Terminal Station, will have the greatest impact, followed by service providers located in more distant part of Victoria.

Description of Services

The Services must meet the performance levels specified in section D.2 while meeting the minimum technical requirements specified in section D.3.

AEMO is seeking a service that is suitably located (electrically) to manage high voltages near the Keilor Terminal Station, which is typically not already operating at times of minimum demand when this service would be required, and which is capable of providing at least 150 MVAr of absorbing reactive power support (or equivalent impact on voltages).

It is expected that the services will mostly be required during periods of light load in Victoria, such as during shoulder seasons, weekends, or public holidays. Services may also be needed more commonly overnight (or early afternoon as rooftop solar penetration grows).

It is estimated that the services may be required approximately 30 to 45 times across the proposed 18 month period, with average duration of each activation being between 5 and 10 hours (excluding any startup time).

The services should be simple and practical to activate following communication from the AEMO Control Room, and at any time of day or night.

Preference will be given to services:

* with a short activation lead-time
* with capability to vary reactive output once activated
* with capability to absorb reactive power while maintaining zero active power production
	1. **Performance Levels**

|  |  |
| --- | --- |
| **Requirement** | **Performance Level** |
| Maximum time taken to become fully available to provide the service following receipt of a request from AEMO. | 4 hours |
| Minimum level of reactive power absorbing capability for all facilities comprised in NMAS Equipment | 150 MVAr |
| Continuous time NMAS Equipment must be capable of providing the minimum level of reactive power absorbing capability. | 10 hours |

* 1. **Minimum Requirements**

The units/facilities that provide the Services must:

1. be capable of transmitting measurements of reactive power output to AEMO's systems every 4 seconds;
2. be capable of sustaining continuous contracted levels of performance of reactive power absorption upon receipt of a communication from AEMO;
3. comply with any relevant performance standards registered with AEMO; and
4. comply with any relevant requirements under the NER.
5. TENDER FORM

To: Australian Energy Market Operator Ltd
Level 22, 530 Collins Street
MELBOURNE VIC 3000

(AEMO)

**Tender for *Non-market Ancillary Services – Reactive power support***

From:

|  |  |
| --- | --- |
| Tenderer (full company name): |  |
| ABN: |  |
| Address: |  |
| Website: |  |
| Contact Person: | Name: |  |
|  | Title: |  |
|  | Telephone No: |  |
|  | Fax No: |  |
|  | E-mail: |  |

**1. Offer**

The Tenderer offers to provide to AEMO the Services described in **Schedule 2**:

* in accordance with the requirements of the ITT, subject only to any variations specified in the Statement of Compliance in **Schedule 1**; and
* at the price or prices specified or determined in accordance with **Schedule 3**.

**2. Agency/Joint Tender**

The Tenderer is/is not[[1]](#footnote-1) acting as agent or trustee for another person, or lodging a Tender jointly with other persons.

(If the Tender is acting as an agent or trustee, full details must be provided in this section.)

**5. Supporting Information**

The Tenderer provides in **Schedule 4** details of its capability to provide the Services, as required by AEMO to support this Tender.

**6. Conflicts of Interest**

The Tenderer provides in **Schedule 5** a conflict declaration for the Tenderer’s personnel nominated to provide the Services, and details of how any conflicts are to be addressed.

**7. Validity Period**

This Tender constitutes an offer to provide the Services that remains open for acceptance by AEMO for the Validity Period.

**8. Contract (only if amendments are proposed)**

The Tenderer provides in **Schedule 6** a copy of AEMO’s proposed contract with the Tenderer’s requested changes tracked in the document.

**9. Addenda to ITT (include only if Addenda received)**

In the preparation of its Tender, the Tenderer acknowledges having received the following Addenda to the ITT:

Addendum No. Dated

Addendum No. Dated

Addendum No. Dated

NOTE: Capitalised terms in this Tender Form and Schedules are defined in the ITT.

Dated this day of 20

|  |  |  |
| --- | --- | --- |
| **EXECUTED** by ***[name of Tenderer]*** by its duly appointed representative in the presence of: | ))) |  |
| ..............................................................……..Witness..............................................................……..Name of witness (print) |  | ..............................................................……..Authorised Officer..............................................................……..Name of Authorised Officer (print)..............................................................……..Title of Authorised Officer (print) |

SCHEDULE 1 – STATEMENT OF COMPLIANCE

*[Delete whichever is not applicable]*

*[Name of Tenderer]* confirms that this Tender conforms in every respect with the Invitation to Tender.

OR

*[Name of Tenderer]* confirms that this Tender conforms in every respect with the Invitation to Tender **other than** in the following respect(s):

* [*insert if applicable*]

SCHEDULE 2 – DESCRIPTION OF SERVICES

The Tenderer proposes the following Services:

|  |  |
| --- | --- |
| **Service Name**  | **Description** |
| Absorbing reactive power support | *[Tenderer to complete]* |

# [Type of service] - Specifications

## [Facilities]

The Tenderer will provide the Services using the following generating units or facilities:

|  |  |
| --- | --- |
| Facility/Equipment | Description |
|  |  |
|  |  |
|  |  |

The description should include the reactive capability range of each unit or facility including detail of whether these quanties are available separately, and how services would be enabled / disabled.

## Performance Requirements

The Tenderer will provide the Services to meet AEMO’s performance requirements as follows:

|  |  |
| --- | --- |
| Performance Requirement | Response/Specified Performance Level |
| Location. | *[Describe the electrical location of the Service]* |
| Availability levels, time and constraints | *[When will be Service be available and in what conditions will the Service be unavailable?]* |
| Minimum level of Service  | *[Describe the amount and nature of the Service which can be provided when enabled]* |
| Lead time.  | *[What lead time is required prior to activation?]* |
| Duration of Service  | *[How long can the Service can be continuously provided?]* |

SCHEDULE 3 - PRICING

*[Tenderer to propose a pricing model for the Service(s) which must as a minimum include the following:*

* *An Enablement Charge (in 2019 dollars) – this may include a fixed (availability) component and/or a variable cost ; and*
* *If applicable, any additional charges proposed for the Services (including the basis and frequency of when those charges will be applied).*

*and provide sufficient detail to enable AEMO to assess the proposed pricing against other tendered proposals.*

*Tenders with lower or no availability charges will be viewed more favourably.]*

SCHEDULE 4 – SUPPORTING INFORMATION

In support of its Tender, the Tenderer must provide the following information:

Your Approach

1. Describe how you would work with AEMO to deliver the Services to meet the requirements in **section D** of the ITT.
2. List any requirements for systems and facilities that would be required for installation and interface (where applicable).
3. Discuss any other issues or requirements not outlined in the ITT.

Additional Information

1. Provide any other information you feel is relevant. This should be limited to two pages in total.

SCHEDULE 5 – CONFLICTS OF INTEREST

**PART A: CONFLICT DECLARATION**

Except as identified below, none of the personnel presently identified by [Name of Tenderer] to work on the provision of the Services to AEMO:

1. is, or has a close relative[[2]](#footnote-2) who is, a member, director, employee or contractor of AEMO;
2. is, or has a close relative who is, a director, employee or contractor of a registered participant in a market that AEMO operates or of any business likely to be affected by the Services;
3. has, or has a close relative who has, a material financial interest in a registered participant in a market that AEMO operates or in any business likely to be affected by the Services;
4. has any other affiliation, position, engagement or interest that could reasonably be seen as a conflict of interest with that person’s involvement in the provision of the Services.

**Identified Conflicts**:

| **Person Affected** | **Nature of Conflict** |
| --- | --- |
|  |  |
|  |  |

**PART B: HOW EACH CONFLICT IS TO BE ADDRESSED**

[The Tenderer must outline how any conflicts of interest identified in Part A are to be addressed.]

SCHEDULE 6 – PROPOSED CONTRACT CHANGES

*[Delete whichever is not applicable]*

*[Name of Tenderer]* does not propose any changes to the form of contract proposed by AEMO with the Invitation to Tender.

OR

*[Name of Tenderer]* has included a Word version of AEMO’s form of contract with the Tenderer’s requested changes tracked.

1. Delete as appropriate. [↑](#footnote-ref-1)
2. Spouse, de facto partner, parent, sibling or child. [↑](#footnote-ref-2)