

Tender Opportunity

Provision of Building Energy Management System New Vic Theatre - Summer 2024

Introduction

The New Vic intends to carry out a series of environmental improvement projects that will reduce our energy costs and our carbon footprint. One of these key projects is the upgrade of our Building Energy Management System. The current system is out-dated, unreliable and inefficient. In addition, we are keen to include further upgrades that will enable us to achieve improved energy efficiencies across the building, including smart room controls and ventilation speed controls.

The document below outlines the purpose and requirements of this procurement and installation through to final commissioning. Please note the schedule for this work to be completed within the months of July and/or August, and exact dates will need to be negotiated with the New Vic Theatre in relation to other projects running simultaneously. We would expect the completion of this work to be carried out within a continuous 2 week period.

New Vic Theatre - Overview

Enjoying the distinction of having been Europe's first purpose-built theatre in the round, the New Vic is one of the country's most prolific producing theatres.

"A theatre very much on the up...fast becoming a significant player" (Lyn Gardner in the Guardian).

As one of very few arts organisations in a wide catchment area we're key to the cultural life of our region - engaging with nearly 1800,000 people annually. But we also make a significant economic impact, generating £11.4m worth of activity in the local economy last year.

At the core of our region are areas of serious deprivation with slow-moving economies and low social and educational aspiration and achievement. Our mission expresses our commitment to making positive changes to the lives of disadvantaged people across our region, increasing aspiration and ambition, lowering anti-social and criminal behaviour, improving neighbourhood relations.

Together our award-winning community programme, New Vic Borderlines, and our Education team ensure we're engaging with around 27,500 children, young people and adults per year.

The New Vic Theatre was built in 1986, although the theatre company pre-dates this. As one of very few purpose built theatres-in-the-round, the building itself has a special role to play in the architectural heritage of theatre development. But it is first and foremost a working, producing theatre, at the centre of its local community.

A Registered Charity

The New Vic is a registered charity supported by Arts Council England, Newcastle-under-Lyme Borough Council, Staffordshire County Council. As a charity, we attract significant additional funding from local people and businesses, Trusts, Foundations, sponsorship and a range of agencies for our work on stage and with the community.

For more information, please visit www.newvictheatre.org.uk

Objectives

New Vic Theatre wishes to issue a contract for the design and installation of a new building management system that enables user-friendly access to effectively and efficiently control the heating and ventilation plant, and to reduce our carbon footprint. Additionally, the installation of smart room controls to existing radiators, and ventilation speed controls.

Our key objectives are to:

- Install new control system located within each of the existing 3no control panels, including a fully integrated web-based control system (ensuring compatibility with existing network)
- Ability to monitor, measure and target energy consumption.
- Supply and configuration of all compatible control equipment and programming of all controllers.
- All associated electrical/mechanical installation and commissioning, including rotations of pumps and fans.
- Provision and installation of c. 90no Smart 'battery free' TRV actuators to existing theatre radiators, and c. 45no smart room temperature and humidity sensors, all integrated to new BEMS.
- Provide demand-based ventilation control solution for existing air handling unit supply & extract fans.
- Install 26no. frequency inverters and 14no. CO2 sensors with power & control wiring from the BMS fans.
- Inclusion of web-interface to allow users temperature/time/calendar control for each zone (smart room controls) and adjustment of operating modes and ventilation rates for each area (ventilation speed controls).
- On completion of works, provide full demonstration of system to relevant New Vic staff.
- A quarterly BEMS service contract.

New Vic Theatre is looking for a solution that:

- is reliable and easy to manage operationally and will show a significant improvement in environmental performance.
- delivers requirements quickly and efficiently within the timescales set out, with minimal disruption to New Vic's operating environment, and together with all necessary processes, documentation and training.
- are flexible with respect to future requirements and service options. New Vic Theatre must not be limited in respect of additions or amendments to the solution and must not be tied to any particular support provider except as provided in the contract.

Brief

The New Vic currently relies on an out-dated and limited Siemens BMS control system. In recent years it has become increasingly unreliable and no longer offers us the degree of control we require to meet our environmental objectives. Feasibility studies have identified upgrading our current system is a priority in reducing our energy costs and environmental impact.

There are three plant rooms in the main theatre building, each with a control panel for our ventilation system. Two of the plant rooms are situated in the roof space of the theatre (one north, one south) and accommodate the theatres air handling units. These currently have no variable speed controls and are either on or off.

The third control panel is in our boiler house, located on the outer edges of the main building, and easily accessed directly from the main road. This room also contains our three Remeha gas boilers which are also expected to be replaced as a separate project as part of the overall scheme (see separate tender document).

The addition of Smart Room TRV Controls to existing radiators is seen as a solution to an ongoing problem with current unresponsive valves, resulting in rooms over-heating and windows being opened to compensate.

Each of the upgrades will require a single, user-friendly, web-based software package to control individual elements, with assigned permissions relevant to levels of responsibility. The BEMS should allow easy adjustment to meet the changing demands of the building, and by doing so, reduce wasted energy.

Works will need to be programmed to allow the New Vic to continue with its daytime operations and this will be coordinated between the successful contractor and supervising member of New Vic Staff.

We are aware that there may be a number of options that would achieve our aims and would like to work with a supplier with appropriate technical knowledge to find the most suitable options for the New Vic, based on our needs.

We are therefore offering the opportunity to discuss our requirements and then make a fully costed proposal based on your individual proposed solution that will achieve our stated objectives.

Environmental Responsibility

In developing our project we have worked in partnership with Keele University SEND and Staffordshire Business Environmental Network (SBEN). Through partnership with Keele University SEND we will achieve better energy management, reduce our reliance on fossil-fuel derived energy over the long term, significantly reduce energy waste and, following completion of our project, contribute to ongoing research data trialling innovative ways of energy use and management.

Through SBEN we have accessed independent Green Energy Assessments which have provided multiple capital projects that will each deliver progress on our journey to reaching net zero. These proposals are forecast to make a significant contribution to a reduction in carbon emissions of over 100,000 kg CO₂e – a 46% reduction on current emissions of which efficiencies from BEMS upgrade and Smart Room Controls is expected to contribute an annual saving of 28.9 and 12.1tCO₂e/yr respectively.

Process

Scoping Meeting

In order to provide a tender please contact us to arrange a meeting to discuss and review our current situation and objectives.

Following this meeting, we will require a written quotation that includes details of the solution you propose with full costings.

Content

In order to be considered, all tenders must include the following:

- Contact details of your organisation, including postal address, email and phone number.
- A short summary of your proposed methodology for completing the brief above and achieving the key objectives of the contract.
- A short summary of the relevant experience and skills of the organisation and of each team member to be assigned to this contract, including any external team members you intend to sub-contract. Any sub-contracting should be clearly highlighted.
- Costs for all items, including hardware, parts and labour including hour and day rates as appropriate and costs for all other items identified within the proposal.
- Details of your actions and commitment to environmental sustainability.
- Confirmation that you can complete the project with the time frame indicated or an explanation stating the earliest completion date and reason for the latter date.
- Signature of a director or approved signatory to verify the accuracy of all information included in the quote and as confirmation of availability to deliver the contract between the start and end dates.
- Details of two organisations for whom you have provided similar services that will provide references

Next steps

To arrange a date and time for the Scoping Meeting, please contact Theatre Manager, David Sunnuck, either by emailing dsunnuck@newvictheatre.org.uk or by telephone on 01782 381356,

Format and delivery

Please submit one electronic copy of your quote by email (attached in Microsoft Word or pdf format, to a maximum file size of 5MB per email) to slockett@newvictheatre.org.uk to be received by 5pm on Friday 3 May 2024.

We will contact you to update you about the outcome of the tender process by Friday 17 May 2024 at the latest. All candidates submitting a tender will be notified of the outcome of their submission. Only one respondent will be successful.

Timescales

- Invitation for tenders available from w/c 22 April
- Scoping meetings take place between 22 April and 3 May 2024
- Deadline for quote submissions by 5pm Friday 3 May 2024
- Anticipated start date w/c 3 June 2024
- We will contact all unsuccessful tender submitters
- **Installation of the upgrades listed above – to be completed within a 2-4 week time frame in July &/or August. Exact dates will need to be negotiated with the New Vic Theatre in coordination with other projects running simultaneously.**

Evaluation Criteria

Candidates will be assessed on the basis of the following criteria:

- Overall value for money.
- Appropriateness of the proposed solution to our needs
- Evidence of capacity to deliver the objectives outlined within the timescales identified.
- Commitment to environmental sustainability.
- Relevant Experience and skills of the personnel who will work directly on this commission.
- Reference responses.

Scoring System

Criteria	%
Overall value for money	45%
Appropriateness of the proposed solution to our needs	15%
Evidence of capacity to deliver the objectives outlined within the timescales identified	15%
Commitment to environmental sustainability	10%
Relevant Experience and skills of the personnel who will work directly on this commission.	10%
Reference responses	5%

Confidentiality

NEW VIC

All information gathered from New Vic Theatre and from third party organisations and companies in the course of this contract must be held as confidential by the contractor and not disclosed to any third party without prior permission from New Vic Theatre.