

REQUEST FOR EXPRESSION OF INTEREST (EOI) TO JOIN THE DESIGN FOR PERFORMANCE UK INDEPENDENT DESIGN REVIEW PANEL

1. Summary

1.1. About this document

The Better Buildings Partnership (BBP) is seeking Expressions of Interest (EOI) for suitably experienced energy efficiency experts to become members of the NABERS UK Independent Design Review Panel.

Successful applicants will join the panel to provide Independent Design Reviews for NABERS UK Design for Performance Agreements.

If you are interested in lodging an EOI for this opportunity, please prepare a submission in sufficient detail for your service capabilities to be assessed against the criteria listed in this brief.

1.2. Timings and evaluation

- Submissions must be received by **Close of Business, Thursday, 6th August 2020**.
- The BBP aims to review all EOIs and respond by Thursday 20th August 2020.
- Online training will take place at 10.00 – 12.00 on 7th, 9th and 11th September 2020
- A test Independent Design Review will follow successful completion of the online training.

1.3. Criteria

Applications to this EOI will be assessed against the following five evaluation criteria:

1. Market-leading expertise in energy efficient building design, construction and operation of new buildings and major refurbishments;
2. Demonstrated experience in building energy simulation;
3. Understanding of building tuning and post construction energy efficiency issues;
4. Ability to prepare concise, clear and convincing technical reports; and
5. Experience in working with building designers, developers and owners to propose and implement energy efficiency recommendations – particularly to achieve improved/excellent energy ratings.

Respondents must respond to each of the evaluation criteria for their application to be considered.

1.4. Instructions

Please provide an application using Appendix 1 of this EOI that addresses the:

- Objectives outlined in the brief.
- Experience and expertise requirements outlined in the brief.

2. Detailed Brief

2.1. Background information

The UK has a design-for-compliance culture which has led to the well-known ‘performance gap’ that exists between original design intent and how a building actually performs in-use.

The Design for Performance (DfP) initiative is an industry funded and backed project established to tackle the ‘performance gap’ and provide an approach, based on measurable performance outcomes, to ensure new office developments deliver on their design intent.

The DfP initiative is working to bring the knowledge and success of the Australian NABERS Commitment Agreement scheme to the UK by applying the same principles that have been so effective in Australia to a scheme that will enable developers of new UK offices to set operational energy performance rating targets at the outset of a project and verify their achievement by measurements after a year of occupation.

The scheme is underwritten by NABERS UK Design for Performance Agreements which allow buildings that do not yet have existing energy use data, such as new buildings or those going through major refurbishments, to participate in the NABERS UK rating scheme. Under the agreement, buildings commit to achieving a specific NABERS UK rating in operation.

A DfP Agreement essentially comprises the following requirements:

1. A nominated target NABERS UK energy rating.
2. A control plan, indicating how the project team will ensure that the major design and operational variables affecting post-construction energy use will be managed throughout the project such that there is a reasonable chance of being able to deliver the target rating.
3. An “advanced” simulation, predicting the post-construction NABERS UK rating of the building and testing the sensitivity of this prediction to common design, construction and operational issues.
4. An independent design review, reviewing the simulation to ensure that the predicted rating is credibly achievable and reviewing the design to identify risks and opportunities with respect to the achievement of the target rating.
5. Post-construction reports tracking the performance of the building once occupied.
6. A final NABERS UK rating independently verifying by measurement the achieved performance of the building.

The DfP Agreement process includes a review of the building design by an Independent Design Reviewer selected from a prequalified panel of reviewers with experience in both the design and post-construction operation of office buildings. The review scrutinises the design, metering plan and the advanced simulation outputs, forcing designers to pay more serious attention to HVAC plant selection, design and control. The overarching objectives of an IDR are to:

- Identify risks and opportunities in relation to the building achieving its target base building rating; and
- Identify and suggest potential improvements to the current design.

Members of the Independent Design Review Panel are recognised experts in both the energy efficient design and operation of buildings. They work under contract to the Design for Performance Agreement clients to provide independent and impartial advice.

BBP are currently developing documentation to describe the minimum scope of an Independent Design Review. This will form the basis of the training that will be conducted for Panel applicants.

The Design for Performance Agreement process is currently open to commercial office buildings only. In their applications, applicants should focus on their experience material to commercial office buildings. There is a preference to understand applicant's experience in relation to the design and operation of multi-let offices.

Being 'Independent'

An Independent Design Reviewer cannot review any design in which they or their company/organisation has a stake in the design. Thus, they cannot come from the same company as any of the members of the design team, the project team, or the project/building owner.

A litmus test of independence is whether the reviewer or their organisation would be potentially affected in terms of capital costs, design/construction time via rework or similar arising from the implementation of any recommendation that might be made as part of a review.

Independent Design Reviewers are, however, selected from the panel and engaged by the project team. The fees charged for an Independent Design Reviewer's services are a commercial matter between the reviewer and their client.

These limitations do not preclude an Independent Design Reviewer being associated with the provision of the following services to the project:

- Preliminary design advice
- Simulation (including the simulation for the Project Agreement)
- Independent Commissioning Agent
- Assistance with building tuning
- Post-construction monitoring and verification.

Note however that the Independent Design Reviewer is precluded from conducting the formal NABERS UK rating that verifies whether the building has achieved its target.

Reviewers are Individuals

An Independent Design Reviewer is an individual person and not a team. While it is acceptable in practice for an Independent Design Reviewer to call on others to contribute specific inputs to a review, the Independent Design Reviewer has complete responsibility for the quality and sufficiency of the review. As a result, the applicants to the Panel must be able to demonstrate their ability to provide all the required services as individuals to a sufficient standard.

2.2. Why join the UK Independent Design Review Panel?

Successful candidates will be recognised as leading experts in their field and will be part of a select few individuals who will be able to undertake Independent Design Review for projects going through the Independent Design Review Process.

The IDR Panel essentially acts as a procurement framework panel of shortlisted suppliers who have the necessary skills to be able to undertake an Independent Design Review for any project.

Independent Design Review can only be undertaken by those on the Panel.

Each Independent Design Review is a substantive and highly skilled piece of work. Each will be project specific, depending on the scale and complexity of a building, but typical costs of any IDR are estimated to be between £5,000 to £10,000 but could be say £3,000 or £20,000 in some cases.

It is appreciated that in advance of the full launch of the scheme the number of projects that will require IDRs are limited. There are currently 11 planned projects from Pioneers implementing the projects. However, a number of the DfP Pioneers have already committed to implement DfP on all their future office developments. In addition, in light of the growing movement of Net Zero Carbon buildings, it is anticipated the need for implementing a Design for Performance approach will increase substantially.

Beyond the influence IDR Panel members will have on individual projects, in Australia the IDR Panel has had a significant indirect benefit to how energy efficiency is approached within design across the wider industry. In having oversight of a large number of major developments the IDR Panel has been able to disseminate best-practice to a wider range of design consultancies at a faster rate than would have been possible through the natural osmosis of design ideas. It is hoped that the UK IDR panel will also play such a role and have a significant role in helping educate the design and modelling industry in how to integrate best-practise in energy efficiency.

2.3. Experience and expertise requirements

To join the Independent Design Review panel, applicants must submit evidence that they meet the following selection criteria. The selection criteria describe the skills and experience required to complete an Independent Design Review for the NABERS UK Design for Performance Agreement:

- 1. Market-leading expertise in energy efficient building design, construction and operation of new buildings and major refurbishments; including:**
 - a. The process of construction**
 - b. The contractual arrangements associated with construction**
 - c. Technical specifications across architectural, mechanical, electrical and hydraulic disciplines insofar as they relate to energy efficiency**
 - d. Technical drawings, layouts and schematics**

Successful applicants will have an acknowledged reputation as a leader in building energy efficiency. They will need to demonstrate an extensive track record of improving the energy efficiency of a building through building design and operation.

Applicants must be experts in the energy efficient design and operation of building services including mechanical and electrical systems, building controls and lighting. Expertise in

efficient building facades and efficient energy supply is also desirable. Applicants should also have an excellent understanding of the building design and construction process and contractual arrangements and be capable of identifying and addressing process risks.

The applicant should provide examples and referees from relevant successful projects. Applicants may only include projects in which they played a leading role or where they were personally responsible for outcomes.

A sufficient qualification in this respect is a minimum of 8 years of experience in the design of buildings in the role of mechanical or electrical services consultant or designer.

2. Demonstrated experience in building energy simulation and interrogating building energy simulations, sufficient to understand:

- a. The inputs required for a building simulation
- b. The translation of design information into a simulation
- c. The limitations of simulation
- d. The interpretation of simulation results

Applicants should demonstrate their familiarity with building energy simulations by describing their approach to the review of these simulations. Applicants will be expected to be able to interpret energy simulation results and interrogate the simulation itself, including identifying incorrect assumptions and inadequate representations of building systems.

This should include examples and referees from relevant successful projects. Applicants may only include projects in which they played a leading role or where they were personally responsible for outcomes.

A sufficient qualification in this respect is a minimum of 3 projects in which the applicant has undertaken a simulation of a building including full representation of the HVAC system.

3. Understanding of building tuning and post construction energy efficiency issues.

Applicants must demonstrate that they have had sufficient involvement with buildings in post construction operation to understand:

- a. Common issues that arise in the construction of buildings that result in actual efficiency being poorer than a simulation predicts
- b. HVAC control optimisation and tuning
- c. Commissioning issues as they affect energy efficiency
- d. Institutional issues and constraints around the delivery of post-construction energy efficiency

Applicants should include examples and referees from relevant successful projects. Applicants may only include projects in which they played a leading role or where they were personally responsible for outcomes.

A sufficient qualification in this respect is a minimum of 3 projects in which the applicant has either undertaken a detailed energy audit of an operating multi-let commercial office building or been involved in post construction evaluation and improvement of building performance such as via Soft Landings for the same building type.

4. Demonstrated ability to prepare concise, clear and convincing technical reports.

Applicants should provide one relevant example of a written report to improve the energy efficiency of a building and discuss their approach in preparing convincing written reports for clients.

5. Extensive experience in working with building designers, developers and owners to propose and implement energy efficiency recommendations – particularly to achieve improved/excellent operational energy efficiency outcomes.

Applicants should describe their approach to communication with clients, including how they manage relationships with design teams and building owners when preparing recommendations. They should also detail their approach to managing difficult interactions, for example when their advice was not welcome.

Applicants should provide examples where their approach directly contributed to improved energy efficiency outcomes in a building's design, construction and operation.

Successful applicants must satisfy the evaluation panel that they meet each of these criteria.

During the evaluation process additional information may be sought from individual respondents.

Note:

- Applicants are recommended to provide referee contacts to support the application.
- Applicants will be expected to acquire some knowledge in advance of the online training in relation to NABERS UK or NABERS in Australia. Reference 'background reading' materials will be provided in advance and pre-recorded webinars made available introducing the NABERS Rules and Handbook. A summary of this background context will also be covered in the online training with special reference to the independent design review process.
- When NABERS UK accredited assessor training becomes available, members of the IDR panel will be expected to undertake the training and examination (but not the supervised ratings) but will not be charged for this unless they want to also become NABERS Accredited Assessors, in which case the normal applicable fees and supervised ratings processes will apply.
- Applicants are required to be UK residents, as the intent of this process is to build local skills. Former or current members of the Australian NABERS Independent Design Review Panel that are resident in the UK also have to pass through the prequalification process, but may submit a minimum of 2 independent design reviews they have undertaken as supporting evidence instead of or as well as the information requested above.

Respondents that are successful in all the evaluation criteria and any requests for further information will be invited to:

1. Attend an on-line training course (three 2 hour sessions over a week period);
2. Complete a satisfactory result in a short examination;
3. Undertake an initial review, which will be supervised and supported by an expert from the Australian Independent Design Review Panel to provide hands-on training; and
4. Undertake an assessment review, which will be assessed and graded by an expert from the Australian Independent Design Review Panel to determine whether it meets the required standard.

2.4. Instructions to applicants

Please provide an application using Appendix 1 of this EOI that addresses each of the five evaluation criteria listed in Section 2.3. A word version of this document is available separately.

2.5. Costs

Costs are split into two components

- i. The initial online training course (£500).
- ii. Following the successful completion of the online training course, the supervision and assessment of a 'test' Independent Design Review (£1,200).

2.6. Submission of EOIs

Submissions of EOIs in the prescribed format must be sent to:

Chris Botten, Programme Manager, Better Buildings Partnership

c.botten@betterbuildingspartnership.co.uk

Submissions must be received by **Close of Business, Thursday, 6th August 2020**.

2.6. Additional information

- [BBPs Design for Performance: A new approach to delivery energy efficient offices in the UK](#)
- [NABERS Australia Commitment Agreements](#)
- [NABERS Australia Energy Ratings](#)

APPENDIX 1: UK Independent Design Review Panel Application Form

The following form should be completed and submitted to c.botten@betterbuildingspartnership.co.uk by Thursday 6th August 2020.

Supplementary information can be attached as pdf files.

Applicant Details			
Name:	Name		
Employer:	Employer	Job Title	Job title
Email:	Work email address	Contact number:	Enter contact number
Relevant Qualifications:	Insert any relevant qualifications here		
Section 1. Experience and expertise in energy efficient building design, construction and operation of new buildings and major refurbishments			
<p>Click or tap here to enter text.</p> <p>Applicants should set out their experience and expertise in energy efficient building design, construction and operation of new buildings and major refurbishments; including:</p> <ul style="list-style-type: none"> • The process of construction • The contractual arrangements associated with construction • Technical specifications across architectural, mechanical, electrical and hydraulic disciplines insofar as they relate to energy efficiency • Technical drawings, layouts and schematics <p>Successful applicants will have an acknowledged reputation as a leader in building energy efficiency. They will need to demonstrate an extensive track record of improving the energy efficiency of a building through building design and operation.</p> <p>Applicants must be experts in the energy efficient design and operation of building services including mechanical and electrical systems, building controls and lighting. Expertise in efficient building facades and efficient energy supply is also desirable. Applicants should also have an excellent understanding of the building design and construction process and contractual arrangements and be capable of identifying and addressing process risks.</p> <p>The applicant should provide examples and referees from relevant successful projects. Applicants may only include projects in which they played a leading role or where they were personally responsible for outcomes.</p> <p>A sufficient qualification in this respect is a minimum of 8 years of experience in the design of buildings in the role of mechanical or electrical services consultant or designer.</p>			

Section 2. Experience in building energy simulation and interrogating building energy simulations

Click or tap here to enter text.

Applications should provide demonstrated experience in building energy simulation and interrogating building energy simulations, sufficient to understand:

- The inputs required for a building simulation
- The translation of design information into a simulation
- The limitations of simulation
- The interpretation of simulation results

Applicants should demonstrate their familiarity with building energy simulations by describing their approach to the review of these simulations. Applicants will be expected to be able to interpret energy simulation results and interrogate the simulation itself, including identifying incorrect assumptions and inadequate representations of building systems.

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Applicants should provide one relevant example of a written report to improve the energy efficiency of a building and discuss their approach in preparing convincing written reports for clients.

Section 5. Experience in working with building designers, developers and owners to propose and implement energy efficiency recommendations – particularly to achieve improved/excellent operational energy efficiency outcomes

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Applicants should describe their approach to communication with clients, including how they manage relationships with design teams and building owners when preparing recommendations. They should also detail their approach to managing difficult interactions, for example when their advice was not welcome.

Applicants should provide examples where their approach directly contributed to improved energy efficiency outcomes in a building's design, construction and operation.

Section 6. References

Click or tap here to enter text.

Insert contact details of relevant references for the projects referenced here.

Applications should be aware that referees will not necessarily be approached as part of the initial selection process but may be approached, if required, at any time up to the confirmation of the establishment of the final UK IDR Panel. However, for avoidance of doubt, candidates will be notified in advance before approaching their referees.

Review (Internal use only)

Reviewed By:	Name	Date:	Date	Recommendation:	
Approved By:	Name	Date:	Date	Decision:	