## **Energy Company Obligation (ECO) U-Value Consultation Questionnaire – Feb 16**



**Background** 

The questions below relate to the consultation on requirements for over-writing U-values for cavity wall insulation measures which can be found on our website:

https://www.ofgem.gov.uk/publications-and-updates/eco2-consultation-requirements-overwriting-u-values-cavity-wall-insulation-measures

Our proposals consist of three main parts:

- a. introducing an upper limit for overwritten U-values,
- b. stipulating the evidence that we expect to be in place when a U-value is overwritten and how we expect inputs to be collected, and
- c. a regime to monitor these measures; we suggest three approaches for implementing monitoring.

## **Notes For Completion**

Please complete all relevant sections of the document by selecting an answer for the question and then providing reasons/evidence for your response in the box provided. If you do not wish to answer a question please select 'N/A'. The questionnaire should be completed in typeface and returned via email to <a href="mailto:eco.consultation@ofgem.gov.uk">eco.consultation@ofgem.gov.uk</a> by close of play **7 March 2016**.

## **Respondent Details**

Organisation Name:	SSE
Completed By:	Tommy Atkins
Contact Details:	tommy.atkins@sse.com

1. U-value Limit	
<b>1.1</b> Do you agree that it the age bands B-K?	is unreasonable for the U-value of a cavity wall measure to exceed 1.6 W/m²K in premises in
C Strongly Agree	
Agree	
O Neither Agree Nor D	isagree
O Disagree	
C Strongly Disagree	
O Don't Know	
O N/A	
SSE agree that it is u premises in age band However, SSE believ industry experts to a where the assumed l	nreasonable for the U-value of a cavity wall to exceed 1.6 W/m2K for a typical s B-K.  Yes this approach to be too broad brushed and that Ofgem should work with lso determine a cap for the more modern properties (for example age band H-K) J-values are significantly lower than 1.6. As such we would recommend applying easures with amended u-values based on the specific age band of the property in
<b>1.2</b> Do you agree that w premises in age bands B	e should implement a limit of 1.6 $\mbox{W/m}^2\mbox{K}$ for overwritten U-values for cavity wall measures in -K?
C Strongly Agree	
● Agree	
O Neither Agree Nor D	isagree
O Disagree	
C Strongly Disagree	
O Dont Know	
O N/A	
Please provide details ar	nd supporting evidence for your response below.

SSE would welcome the maximum cap on amended u-values to help limit the risk of U-values calculated from incorrect data.

However we do have a concern that a cap may have the unintentional effect of encouraging U-value calculations which aim for specific results (e.g. 1.6 W/m2k).

SSE would question the approach that Ofgem will use include capped or Ofgem specified u-values in the ECO Scoring process, the current process is that ECO scoring tools take the property information (including the wall u-value) from the lodged EPC data. If the requirement is to use a capped or Ofgem specified u-value in the lodged EPC then Ofgem would need to seek agreement from DCLG as SSE believe this would currently be outside of the RdSAP/SAP conventions.

An alternative approach would be to allow the EPC to be lodged without the overwritten u-value and apply the capped or Ofgem specified u-value solely within the ECO scoring too, however this will require software development from all the companies who currently have approved ECO tools and BRE would be required to re-approve the tools to ensure the additional functionality works as intended.

2. Evidence Requir	ements
<b>2.1</b> Do you agree that re a borescope for example	levant inputs should be collected for the U-value calculation via an intrusive inspection, using e?
Strongly Agree	
C Agree	
Neither Agree Nor D	isagree
O Disagree	
C Strongly Disagree	
O Don't Know	
O N/A	
Please provide reasons f	or your response below.
	e of an intrusive inspection completed using a borescope is essential to provide vity condition and any existing insulation has been recorded correctly.
2.2 What types of evider	nce do you suggest would support the inputs used for a new U-value calculation?
Please provide reasons f	or your response below.

SSE agree with the types of evidence proposed in paragraph 2.5 of the consultation. We believe that to ensure consistency in the industry that Ofgem should publish a standardised U-value Site Notes form which can be used to record the construction elements of walls which would be used in the U-value calculation.

SSE also strongly believe that if amending U-values it should be a requirement to calculate both the pre and post install U-values. Calculating one U-value without the other can lead to misleading scoring, for example, by gaining the advantage of a poorly performing wall for the pre-install calculation and gaining a further advantage of using the RdSAP default wall construction for the post-install calculation. This would overestimate the potential carbon savings and the same is true when only completing a post-install U-value calculation and leaving the pre-install value as the default.

2.3 Do you agree that the types of evidence listed in paragraph 2.5 are practical to provide?	
C Strongly Agree	
• Agree	
Neither Agree Nor Disagree	
O Disagree	
C Strongly Disagree	
O Don't Know	
O N/A	

Please provide reasons for your response below.

SSE believes that whilst it would be practical to provide most of the types of evidence listed in paragraph 2.5 there are elements which cannot be viewed, such as the dry lining of a property. It would not be practical to provide evidence of whether these elements are insulated or not.

SSE is also concerned that in order to identify some elements of the wall which can be viewed, such as the blockwork, a level or expertise and experience is required and photographic evidence is not always of sufficient quality to allow accurate desk-based validation.

SSE believe that to ensure consistency in the industry that Ofgem should publish a standardised U-value Site Notes form which can be used to record the construction elements of walls which would be used in the U-value calculation.

SSE would expect to receive a site survey form and associated photographs to support all elements of the wall included in a U-value calculation which could reasonably be viewed.

If photographic evidence is to be required then SSE believes Ofgem must provide clear guidance to setout the expectations they may have of such photographs (e.g. date stamps, GPS).

2.4 Do you agree that the evidence listed in paragraph 2.5 is sufficient to support an overwritten U-value?

C Strongly Agree		
○ Agree		
• Neither Agree Nor D	isagree	
O Disagree		
C Strongly Disagree		
O Don't Know		
O N/A		
Please provide reasons f	or your response below.	
SSE has concerns that the evidence listed in paragraph 2.5 may not be sufficient to support an overwritten U-value for all properties, specifically where elements which cannot be viewed, such as the dry lining of a property, are insulated. It would not be feasible to evidence such insulation which can have a significant impact of the U-value of a wall.		
We would also raise a concern that whilst borescopes are invaluable for identifying the cavity condition on-site (where the camera can be maneuvered around to survey the cavity), the images themselves are hard to interrogate as part of a desk based assessment as the snap-shot images are rarely clear or detailed due to the nature of cavities. Therefore, SSE would not agree with any expectation that Suppliers are responsible for making decisions on U-value calculation accuracy purely based on boroscope images. The boroscope images would only provide assurance that an intrusive survey has taken place on-site.		
Furthermore even with the evidence correctly recorded on-site SSE has concerns that within the software used to calculate the wall U-values there are multiple options for wall elements which may match the site description however these options will have varying resistance and lambda values which will impact the resultant U-value. There is also the ability within these tools to manually edit or create wall elements where the user may specify the resistance or lambda values manually. SSE's understanding is that these calculations are not audited against on-site evidence by accreditation bodies and that the expertise required to review the appropriateness of these calculation means it is not a feasible check for a Supplier to complete.		
<b>2.5</b> Do you agree that the inputs for a U-value calculation should be collected by an independent person to increase confidence in the accuracy of overwritten U-values for CWI measures?		
Strongly Agree		
• Agree		
O Neither Agree Nor D	isagree	
O Disagree		
C Strongly Disagree		
O Don't Know		
O N/A		

Please provide reasons for your response below.

SSE recognises the additional assurance which can be taken from data collected by persons independent to the measure. However, SSE has concerns as to who would be deemed appropriately qualified to collect the information relating to the inputs for a U-value calculation accurately. We believe a clear set of competencies and strict guidance would be required to ensure consistent and accurate site surveys are completed by appropriate individuals.

We also have concerns with the potential for disputes between the independent assessment and a future TM visit or audits. Determining the correct outcome when two qualified individuals disagree on this type of data can be challenging and time consuming.

If independence is required in the site survey then SSE believe this should allow for reduced monitoring post install.

<b>2.6</b> Do you agree that an independent person collecting the inputs for a U-value calculation would be practical to implement taking into consideration cost, time and customer journey implications?
C Strongly Agree
♠ Agree
O Neither Agree Nor Disagree
O Disagree
C Strongly Disagree
O Don't Know
○ N/A

Please provide reasons for your response below.

SSE believe it would be practical to implement independence into the collection of U-value inputs when taking into consideration cost, time and customer journey implications. U-values are typically only amended to increase potential carbon savings and the additional savings would help provide the additional funding required to allow for independent assessments. We also feel this would have the benefit of helping to limit U-value amendments to situations where they are entirely necessary in-order to allow a measure to go ahead or where the default RdSAP u-values are clearly not appropriate.

3. Option 1 – Additi	onal Monit	oring Questions	
<b>3.1</b> Do you agree that opt	ion 1 would in	crease confidence in the accuracy of	overwritten U-values for CWI measures?
C Strongly Agree			
C Agree			
O Neither Agree Nor Dis	agree		
O Disagree			
Strongly Disagree			
O Don't Know			
O N/A			
Please provide reasons fo	r your respons	e below.	

SSE do not believe that additional Score Monitoring questions will increase confidence in the accuracy of overwritten U-values. SSE do not believe that Technical Monitoring Agents (TMAs) can be relied upon to be suitably qualified to identify the inputs required to calculate a U-value (see answer to 3.3).

Furthermore it would not be possible for a TMA to assess the pre-install insulation levels of a cavity from an on-site inspection, this is one of the key items to validate.
<b>3.2</b> Do you agree that option 1 would be practical to implement, taking into consideration cost and time implications?
C Strongly Agree
○ Agree
C Neither Agree Nor Disagree
O Disagree
• Strongly Disagree
O Don't Know
O N/A
SSE do not believe this approach will be would be practical to implement. SSE use the Etech IT solution to provide measure data to our Technical Monitoring team, this change would require a significant overhaul as the system does not currently identify or record if pre-install u-values have been amended. Measures with amended u-values are identified following our evidence checking process which is completed in a separate system which does not have links to the RdSAP data required for the TMAs. This proposal would also require additional development to update the following: RdSAP extracts issued to TMAs, the reporting template used by our Supply Chain, the questionnaire used by the TMAs, The Etech monitoring system and the SSE monitoring system. In addition, the reporting templates used internally and externally with Ofgem will require updates. TMAs have developed smart systems to record and use the current questions and there will no doubt be a cost and time factor in updating their systems in order to be in line with any additional questions.  SSE have concerns that adding additional proposed questions will delay inspection times and may therefore delay delivery times to supplier and potentially Ofgem. We are also concerned about additional strain being place on the Technical Monitoring process due to an increase in disputes regarding these questions.  Without robust training being provided to TMAs we would have considerable concerns that there would be inconsistent quality happening across the industry. This training would add to the cost of ECO and timescales for being able to implement the questions.
3.3 Do you agree that a score monitoring agent is suitably qualified to answer the proposed questions relating to the U-value inputs?
C Arran
C Noither Agree
Neither Agree Nor Disagree

O Disagree		
Strongly Disagree		
O Don't Know		
O N/A		
Please provide reasons for	or your response below.	
RdSAP conventions state DEA's are not qualified to produce (or therefore verify) U-Value calculations as they are not trained to do so as part of the qualification. We are specifically concerned that TMAs would not consistently be able to accurately validate all the wall elements which can be included in the U-value calculation, for example the inner blockwork can be difficult to inspect post install. In some properties this can be viewed from the loft space but this will not be consistent across all properties and differentiating between Low, Medium or High density blocks is likely to be beyond the capability of some TMAs.		
Without robust training being provided to TMAs we would have considerable concerns that there would be inconsistent quality happening across the industry. This training would add to the cost of ECO and timescales for being able to implement the questions.		
<b>3.4</b> Do you agree that to overwritten U-values are	the proposed additional score monitoring questions are appropriate for identifying where e incorrect?	
C Strongly Agree		
Agree		
Neither Agree Nor Di	isagree	
O Disagree		
<ul><li>Strongly Disagree</li></ul>		
O Don't Know		
O N/A		
Please provide reasons fo	or your response below.	
We have provided ans	swers specific to each proposed question:	

Is the age band stated in the xml files the same or within one age band of the premises?

Determining the age band stated within one age band is quite subjective if visual styles only are used. This could be backed by documentary evidence (as it should for an EPC) we don't believe this practical for a TMA as would lead to a high number of disputes requiring resolution. If a U-value is calculated then the Age Band of the property does not have a bearing on the measure score as the score is derived from the calculated U-value rather than from the default which is derived from the Age Band and Construction Type. However any proposed U-values Caps may be effected by the age band of a property

Is there evidence of any pre-existing wall insulation?

Pre existing wall insulation is going to be impossible to verify post install without completing an intrusive inspection which we do not believe is practical for a TMA and could invalidate the wall guarantee.

Does the wall thickness shown in the evidence match the property to a +/- 10% tolerance?

This should be possible for a TMA validate

Does the density of the inner block match that used in the U-value calculation?

DEA's are not qualified to ascertain wall elements such as inner block density. It's not part of the required RdSAP data set for producing an EPC.

Do any of the inputs in the U-value calculation differ from those identified on site?

DEA's are not qualified to ascertain some of the U value elements and it's not part of the required RdSAP data set for producing an EPC.

**3.5** Are there any additional questions that you think would help to identify inaccuracies in overwritten U-value calculations?

Please provide reasons for your response below.

SSE strongly believe that this is an inappropriate use of the TMA inspection and assurance on amended U-values should come from a pre-install assesment or some other means.

**3.6** Can you please estimate how long you think it will take for these new questions to be implemented into your systems?

Please provide reasons for your response below.

SSE believe that Ofgem must allow at least 6 months for such a significant change to be implemented as it will impact multiple systems for Suppliers, Installers and Technical Monitoring Agencies. There is also the time required for TMAs to be suitably trained to complete the additional checks in a consistent manner.

**3.7** Do you foresee any issues if the questions were implemented during a monitoring quarter?

• Yes	
O No	
O Don't Know	
O N/A	
Please provide rea	asons for your response below.
predefined way	s would cause significant issues as all current reporting tools are set up to function in a  To identify and record information with new fields would require system development

and would not be as straightforward as simply adding a field to a notification template due to the level of validation which would be required to ensure data is accurate. Starting to use a new reporting format mid way through a quarter is something that we believe should be avoided.

<b>4.1</b> Do you agree that option 2 would increase confidence in the accuracy of overwritten U-values for CWI measures?		
○ Strongly Agree		
O Neither Agree Nor Disagree		
O Disagree		
○ Strongly Disagree		
O Don't Know		
O N/A		
Please provide reasons for your response below.		
SSE believe that this option provides the greatest level of confidence in the accuracy of overwritten U-values when compared with the other options. As an obligated supplier our primary concern is that we have confidence in the eligibility and scores of our notified measures as early as possible following the notification of a measure. By completing the audit on a monthly basis this ensures that assurance is obtained regularly and quickly. This approach also fits well with other Ofgem monthly processes such as Duplicates, Score Verification & measure processing. We find that our interactions with the wider supply chain, for example to obtain further evidence, are more reliable when we can go back to them soon after notification of the measures.		
However, SSE does have some concerns that for Ofgem to correctly evaluate evidence some assurance would need to be provided to demonstrate that the individuals completing those checks were suitably qualified or had undertaken specific training.		
<b>4.2</b> Do you agree that option 2 would be practical to implement, taking into consideration cost and time implications?		
© Strongly Agree		
○ Agree		
O Neither Agree Nor Disagree		
O Disagree		
C Strongly Disagree		
C Don't Know		
○ N/A		
Please provide reasons for your response below.		
SSE cannot see any barriers to implementing this option.		

measures, do you agree with the sample size and reporting timeframes outlined in paragraph 2.12?	
C Strongly Agree	
C Agree	
Neither Agree Nor Disagree	
O Disagree	
C Strongly Disagree	
O Don't Know	
O N/A	

Please provide reasons for your response below.

SSE believe that 5% would be an appropriate initial sample for Ofgem to review. However we would suggest that Ofgem allow for a sliding scale so that future sample sizes could be reduced based on the results of previous months.

SSE would strongly encourage the reporting timeframes to be monthly not quarterly. A quarterly timeframe would lead to the potential exposure to an unacceptable and unnecessary level of risk.

The gap between the submission and determination of measures increases the cost of the scheme to end consumers. The nature of the ECO supply chain dictates that suppliers must either hold retentions (which increase the cost of carbon) or accept that the subsequent recover for lost measures is unlikely. In both cases, this cost is minimised by monthly reviews.

5. Option 3 – Audit	: Regime	
<b>5.1</b> Do you agree that option 3 would increase confidence in the accuracy of overwritten U-values for CWI measures?		
C Strongly Agree		
C Agree		
Neither Agree Nor D	isagree	
O Disagree		
Strongly Disagree		
C Don't Know		
O N/A		
Please provide reasons for your response below.		
Ad-hoc audits would give Suppliers very little confidence in measures with overwritten U-values as we would not have visibility of when measures would be reviewed. As an obligated supplier we would be left holding the risk of measures with amended U-values until such an audit was announced. For the reasons set out in our response to 4.3 we recommend regular monthly reviews.		
<b>5.2</b> Do you agree that option 3 would be practical to implement taking into consideration cost and time implications?		
C Strongly Agree		
C Agree		
O Neither Agree Nor Disagree		
O Disagree		

O Don't Know		
O N/A		
Please provide reasons for your response below.  SSE do not believe this is a practical approach due to the level of risk we would have to carry whilst		
awaiting an audit. Furthermore the potential for an audit in the lead up to final determination of the obligation which might put in doubt measures previously notified beyond the point at which we could notify new measures to cover any shortfall is an unacceptable risk for an obligated supplier this would unnecessarily undermine the integrity of the scheme.		
6. Additional Ques	tions	
<b>6.1</b> Do you have concerr	ns with U-values being overwritten for other ECO measure types?	
Please provide details and supporting evidence for your response below.		
We view U-value ame	endments to CWI measures as the most significant risk.	
	with any of proposals outlined, could you please suggest an alternative approach which you assurance that U-values are being accurately overwritten for CWI measures?	
Please provide details ar	nd supporting evidence for your response below.	
SSE believes that the proposal presented at the U-value workshop which would to set new default U-values based on the age band of the property has considerable merit. This would minimise the level of complex evidence and validation required.		
However, SSE is concerned that it may not be possible to implement this process in a reasonable timeframe given the time available to complete the ECO2 obligations. These defaults would need determined and then incorporated into the ECO Scoring Tools which would need to be re-approved by BRE.		

• Strongly Disagree

**6.3** Do you agree that the proposals outlined above will enable U-values to continue to be overwritten for CWI measures where this is appropriate?

Please provide reasons for your response below.

Provided Ofgem set clear guidance setting out what evidence is to be collected and retained to support overwritten U-values and adopt Monitoring Option 2 we would agree that this will allow for U-values to continue to be overwritten for measures where it is appropriate, given the time remaining the obligation we believe this is the most practical approach. Ofgem would be setting the standard for the validation of amended U-value evidence which would provide a clear guide to the industry.

We hope that Ofgem ensure these issues are eliminated in any future scheme where deemed scores are introduced.