TERMS OF REFERENCE FOR APPOINTMENT OF A SERVICE PROVIDER TO CONDUCT AN IMPACT ANALYSIS FOR INTRODUCTION OF MINIMUM ENERGY PERFORMANCE STANDARDS FOR ELECTRIC GEYSERS FOR A PERIOD OF 22 WEEKS

1 BACKGROUND

1.1 The Energy Efficiency Standards and Labelling (S&L) Project is designed to introduce higher efficiency levels for household appliances. This requires that a set of minimum energy performance standards are developed for the priority appliances.

1.2 Twelve appliances have been listed for the S&L project and an impact analysis to determine feasible energy performance levels and effect of proposed minimum energy performance levels on key stakeholders was done. These performance levels are now included in the draft SANS 941 (which include all the listed appliances except for electric water heaters) and in the related technical regulations regulated by the National Regulator for Compulsory Specifications.

1.3 The twelve appliances selected for the S&L project are listed below:

- Air Conditioners
- Audio & video equipment
- Electric water heaters (geysers)
- Electric lamps
- Dish washers
- Washing machines
- Tumble dryers
- Washer-dryer combination
- Fridges
- Freezers
- Fridge-freezer combination
- Electric ovens

1.4 Of the twelve appliances, there was no agreement on the recommended minimum energy performance level for electric geysers. Geyser manufacturers were not satisfied with the engineering analysis and this necessitates that we re-conduct the impact study.

1.5 Electric geysers are critical to the success of the project. For example a reduction of energy performance level from the current E to a C level will contribute about 50% of the carbon reduction estimated for the project. As such it is important that this impact analysis is conducted to and that the manufacturers are agreeable to a higher level of energy efficiency.

2 OBJECTIVES

2.1 The objective of the study is firstly to establish the likely cost and energy performance of each possible energy efficiency class; secondly to assess the impact of the proposed energy improvements; and lastly determine the most appropriate minimum energy performance standard or energy efficiency class for electric water heaters in line with the Project objective to introduce more energy efficient appliances in the SA market.

2.2 The performance standard to be set will have to meet key requirements, including the following:

- The set standard must be technologically feasible;
- Must result in significant reduction in energy demand;
- Must be cost-effective from the end-user perspective;
- Unlikely to create an anti-competitive environment.

3 SCOPE OF WORK

3.1 The service provider will be under the overall supervision of S&L Project Manager and his/her daily work will be coordinated with the Project Manager.

3.2 The successful service provider will ensure that the expected outputs are completed on time and comply with the specific project criteria and requirements.

3.3 The service provider will work with the Lawrence Berkley National Laboratory (LBNL) and other institutions that will be considered by project management. LBNL and other institutions that will be involved in the project will provide guidance and expertise where necessary as per agreement with those institutions.

The scope of work will include the following outputs:

	Output	Verifiable Indicator	Means of Verification
1.	**Engineering assessment** ▪ Review of technologically feasible design options/energy efficiency classes both locally and internationally ▪ Assess practicality of manufacturing in SA	Potential energy efficiency classes and rationally for selected classes	▪ Report with proposed classes ▪ Comments from DoE, and SANS 151 Working Group on the proposed classes
2.	**Economic impact assessment of proposed energy efficiency classes** ▪ Assess impacts on manufacturers ▪ Assess impact on consumers	Impact analysis of proposed energy efficiency classes	▪ Impact analyses report ▪ Comments on report from local manufacturers and sample of consumers
3.	**Setting of minimum energy performance standard** ▪ Consolidate comments on proposed energy classes ▪ Set final minimum energy performance standard for geysers	Recommendation for a minimum energy performance class for geysers	▪ Report with recommendation ▪ Rationale for selecting energy class
4.	**Stakeholder engagement** ▪ Involve key stakeholder in all steps above ▪ Meeting with local	Meetings held and proceedings	▪ Number of meetings ▪ List of attendees ▪ Comments from

	geyser manufacturers		participants

3.4 Outputs and Schedule:

3.4.1 The project will commence following the signing of a contract between the Department of Energy and the successful service provider.

3.4.2 The project is expected to have duration of no longer than twenty-two (22) weeks and the following table provide guidance in this regard.

Output	Estimated Duration to Complete
Engineering assessment	6 weeks
Economic impact assessment of proposed energy efficiency classes	6 weeks
Setting of minimum energy performance standard	4 weeks
Stakeholder engagement	6 weeks

4 PAYMENTS

4.1 The Department will not make an upfront payment to a successful service provider. Payment will only be made in accordance to the delivery of service that will be agreed upon by both parties and upon receipt of an original invoice.

5 REPORTING REQUIREMENT AND PROGRESS MEETINGS

5.1 It is envisaged that the Department of Energy will require an initial meeting with the successful service provider to agree on the project process and options to be investigated.

5.2 Progress meeting feedback shall be held as when necessary, but at least twice a month. The venue for these meetings will be in Johannesburg or Pretoria. Representatives from the advisors' organisation shall be obliged to attend. Where applicable, conference calls shall be held to facilitate such meetings.

6 COMPLETION DATE

6.1 The duration of the project is twenty two (22) weeks effective from the date a contract is signed with the successful service provider.

7 COMPULSORY INFORMATION SESSION

7.1 Briefing session will be held on **10 December 2013** at the Department of Energy, at 192 Corner Paul Kruger and Visagie Streets at 10H00.

8 TAX CLEARANCE CERTIFICATE

8.1 The bidder is required to submit an original and valid Tax Clearance Certificate issued by the South African Revenue Services together with the bid documents before the closing date and time of the bid. Failure to comply with this condition will invalidate the bid

9 Copyright and Intellectual Property

9.1 The Department of Energy will become the owner of the information, tools, methodologies, documents, programmes, advice, recommendations and reports collected, furnished and/or compiled by the service provider during the course of, and for the purposes of executing deliverables in this terms of reference.

9.2 The copyright and intellectual property of all information, tools, methodologies, documents, programmes, advice, recommendations and reports compiled by the service provider during the course and for the purposes of executing these terms of reference will vest in the Department of Energy.

10 EVALUATION METHODOLOGY

10.1 Cost

10.1.1 The service provider will be requested to provide a quote regarding the work to be undertaken for this project.

10.1.2 The total cost must be VAT inclusive and should be quoted in South African currency.

10.2 Broad-Based Black Economic Empowerment

10.2.1 Provisions of the Preferential Procurement Policy Framework Act (PPPFA) of 2011 and its regulation will apply in terms of awarding points.

10.2.2 Bidders are required to submit original and valid B-BBEE Status Level Verification Certificates or certified copies thereof together with their bids, to substantiate their B-BBEE rating claims.

10.2.3 Bidders who do not submit their B-BBEE status level verification certificates or are non-compliant contributors to B-BBEE will not qualify for preference points for B-BBEE.

10.2.4 A trust, consortium or joint venture must submit a consolidated B-BBEE status level verification certificate for every separate bid.

10.2.5 The B-BBEE status level verification certificates submitted must be issued by the following agencies:

10.2.5.1 For bidders who qualify as Exempted Micro Enterprises:

a) Accounting officers as contemplated in the CCA; or
b) Verification agencies accredited by SANAS; or
c) Registered auditors (Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates).

10.2.5.2 For bidders other than EMEs:

a) Verification agencies accredited by SANAS
b) Registered auditors approved by IRBA

The table below depicts the B-BBEE status level of contribution:

B-BBEE Status Level of Contributor	**Number of points (80/20 system)**
1	20
2	18
3	16
4	12

5	8
6	6
7	4
8	2
Non-compliant contributor	0

10.3 Company Experience

10.3.1 The company should at least have the following:

a) 5 years proven experience in the field of electrical appliances or related field.

b) Expertise in impact analysis (social, economic and environmental).

c) Expertise in energy efficiency of appliances and related products.

10.3.2 The company must include at least 3 contactable references as proof of experience in related projects.

10.4 Team leader and team members' experience

10.4.1 Team Leader must have at least seven (7) years' experience in the field of electrical appliances and efficiency of appliances.

10.4.2 Individual team members must have at least five (5) years' experience working on efficiency of electrical appliances.

10.4.3 CV's of the team leader and team members must be attached to the technical proposal as proof.

10.5 Qualification

10.5.1 Team leader and team members must at least have the following:

a) Advanced degree in electrical engineering.
b) Relevant qualification in energy management or energy efficiency.

c) Qualification in economics (attuned to SA socio-economic environment).

10.5.2 Certified copies of qualifications must be attached to the proposal. Failure to attach copies, bidders will forfeit functionality points in this category.

10.6 Project Plan

10.6.1 The project plan or proposal should, in addition to price, include intermediate and final outputs and identified timeframes/milestones.

10.6.2 Proposed Methodology.

10.6.3 Management of the project.

10.6.4 The successful service provider may be required to present their Project Execution Plan.

11 EVALUATION CRITERIA

11.1 Bids will be evaluated on **80/20** point system as outlined in the PPPFA of 2011.

11.2 The proposals will be evaluated in phases outlined below:

Phase 1: Bidders will be evaluated based on functionality/technical capability. The minimum threshold for functionality is **70 out of 100 points**. Bidders who fail to meet minimum threshold will be disqualified and will not be evaluated further for price points.

No	Criteria	Weights
1	**Company Experience**	**20**
	▪ 5 years proven experience in the field of electrical appliances or related field.	10
	▪ Expertise in impact analysis (social, economic and environmental).	5
	▪ Expertise in energy efficiency of appliances and related products.	5
2	**Experience of Team leader and team members**	**20**

	▪ Team Leader must have at least five (5) years' experience in the field of electrical appliances and efficiency of appliances. ▪ Individual team members must have at least two (2) years' experience working on efficiency of electrical appliances.	10 10
3.	**Qualifications** ▪ Team leader and team members must at least have the following: - Advanced degree in electrical engineering. - Relevant qualification in energy management or energy efficiency. - Qualification in economics (attuned to SA socio-economic environment).	**20** 10 5 5
4	**Project Plan** ▪ Project plan should include intermediate and final outputs and identified timeframes/milestones. ▪ Proposed Methodology. ▪ Management of the project.	**40** 20 10 10
Total		**100**

For purpose of evaluating functionality, the following values will be applicable:

0=	**Very Poor**	Do not meet the requirements
1=	**Poor**	Will not be able to fulfil the requirements
2=	**Average**	Will partially fulfil the requirements
3=	**Good**	Will be able to fulfil the requirements
4=	**Very Good**	Will be able to fulfil better in terms of the requirements adequately
5=	**Excellent**	Will fulfil the requirements exceptionally

Phase 2:

Price	**80**
B-BBEE compliance	**20**

12 FORMAT AND SUBMISSION OF THE PROPOSAL

12.1 All the standard bidding documents (SBD) must be completed in all respects by bidders. Failure to comply will invalidate a bid.

12.2 Bidders are requested to submit two (2) copies: 1 original plus copy of the proposal and bid documents.

13 CLOSING DATE

13.1 Proposals must be submitted on or before **19 December 2013** at Department of Energy, 192 Corner Visagie and Paul Kruger Streets**,** Pretoria in the bid box marked Department of Energy .**No late bids will be accepted.**

14 ENQUIRIES

14.1 All technical enquiries to be directed in writing to:

Mr Ike Ndlovu/Mr Maphuti Legodi
Tel: 012- 406 7314/7645
Email: ike.ndlovu@energy.gov.za/maphuti.legodi@energy.gov.za

14.2 All bid enquiries to be directed to :

Ms Rachel Moerane/Ms Daisy Maraba
Tel: 012- 406 7747/7748
Email:rachel.moerane@energy.gov.za/daisy maraba@energy.gov.za