
TERMS OF REFERENCE FOR APPOINTMENT OF A SERVICE PROVIDER FOR ADVISORY SERVICES ON OWNER/OPERATOR AND FINANCING STRUCTURES FOR NEW BUILD NUCLEAR FLEET PROGRAMME FOR THE DEPARTMENT OF ENERGY HEAD OFFICES AT 192 VISAGIE STREET, CORNER PAUL KRUGER AND VISAGIE STREET, FOR A PERIOD OF 6 WEEKS.

1 BACKGROUND

1.1 The 9 600 MW nuclear programme as stipulated in the Integrated Resource Plan 2010-2030 would result in the single biggest procurement and associated financing structures ever undertaken in South Africa. Consequently, the Department of Energy would like to engage suitable external party/parties to investigate the optimal owner-operator structure, sources of capital and the potential funding/financing structures available to Government.

2 OBJECTIVES

- 2.1 On conclusion of this study, it is anticipated that the Department of Energy, where appropriate, will be in a position to identify and establish:
- 2.1.1 the appropriate owner-operator structure to source the required capital at both a project and programme level for the nuclear power plant projects (from a single station up to complete fleet);
 - 2.1.2 the appropriate financing structure, with consideration of revenues, equity contributions and borrowings that will enable the sourcing of the necessary capital at optimal financing cost within the fiscal constraints;
 - 2.1.3 the optimal corporate structure to enable the objectives, with consideration of legal, regulatory and other relevant constraints;
- 2.2 This should be based on the understanding of a South African State Owned Company operating in the South African environment, in addition to international best practice within the nuclear energy industry.

3 SCOPE OF WORK

3.1 The service provider is expected to address, as a minimum deliverable, all the items referenced in the Scope of Work below and to adequately address all the listed objectives above.

Benchmarking (studies)

3.2 An assessment of the international experience over the last 20 years with nuclear power plant financing and ownership, successes and failures and the reasons thereto.

3.3 A study on all the various forms of ownership of nuclear power plants, and an assessment of the role of the state as a shareholder in all cases. This should include an assessment of the success of the various ownership models at building nuclear plants on time and on budget over the last 20 years.

3.4 A study on the approach and experience of various operators at procurement and construction of nuclear power plants over the last 20 years. The aim of this is to arrive at a comparison of who the more experienced and successful operators are with respect to procurement and construction management of nuclear power plants as well as to identify best practices.

3.5 A study of various Loan Guarantee options, for example the US Loan Guarantee vehicle, for new nuclear plants and their applicability for South Africa.

3.6 Review of international nuclear owner-operator bodies to indicate where these roles are separated and where they are combined, including the relevant legislation that enables this to be done. It must also show the market structure of the country in which these operators are located.

Analysis

3.7 A study on the pros and cons of the owner-operator structures in the international and South African context (including a separation of the owner and operator model).

- 3.8 An assessment of the risk to Government of having conventional and nuclear generation capacity and assets under one utility, taking into consideration lessons from the Tokyo Electric Power Corporation (TEPCO) experience in the recent Fukushima Disaster, and similarly the risks if a new utility were the operator.
- 3.9 A study into the option of ring-fencing the nuclear component of Eskom.
- 3.10 A review of the impact of the current structure of the SA electricity regulatory framework on the proposed solutions as well as the potential impact of proposed changes in the electricity market, with specific focus on Independent Power Producers (IPPs) and Independent System and Market Operator (ISMO).
- 3.11 An assessment on the relative potential fiscal, monetary, balance of payments and economic impact on the South African economy for the different ownership and financing models.
- 3.12 A study on the capacity and impact of foreign currency funding and hedging of such exposures on the owner-operator and the South African financial markets and currency.
- 3.13 Assess the impact on the tariff trajectory of the proposed financing solution.
- 3.14 Conduct an analysis of the South African regulatory and legal environment in so far as it impacts:
 - 3.14.1 The various ownership and financing models
 - 3.14.2 The injection of capital for nuclear energy-related projects, private or other, into the country and possible partnership with a State Owned Company;
 - 3.14.3 The establishment of optimal owner-operator models for nuclear energy projects in South Africa; and
 - 3.14.4 The landscape for financing deals in the nuclear energy industry within a South African context;

- 3.14.5 An assessment on whether South African legislation allows the roles of the owner and operator to be separated.
- 3.14.6 An assessment on whether South African framework allows the owner or operator to be foreign owned either in minority or majority (in terms of NNR Act, Policy and associated regulations)
- 3.14.7 Other relevant legal and regulatory issues
- 3.14.8 Where necessary, propose other regulatory frameworks to accommodate a more optimal financing and owner-operator structure.
- 3.15 Conduct a detailed analysis of the key considerations for potential investors', including recent trends and preferences. Information provided should include as a minimum:
 - 3.15.1 global appetite for nuclear energy/infrastructure financing and the competitive funding environment within which the owner-operator will have to operate;
 - 3.15.2 sources of debt, hybrid-equity, and equity available to the owner-operator, and the financial, economic, and political context within which these sources are assumed to be available; and
 - 3.15.3 a decision framework on the appropriate debt and equity levels in the case of Joint Ventures and/or other financing structures.

Conclusions and Recommendations

- 3.16 Suggested owner operator funding models for South Africa
 - 3.16.1 Recommendation of the optimal owner operator structures for South Africa.
 - 3.16.2 Provide an integrated risk assessment of the various options and recommendations.
 - 3.16.3 Provide details of tasks and associated schedules for the role out of the various funding solutions and practical implementation in support of procurement.

3.16.4 Identify Key Success Factors (KSFs) and a framework to manage these KSFs during the procurement.

3.16.5 Estimates of the resources (time and budget) required for each of the owner operator structures establishment in South Africa.

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 a dully compliant 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 a selected venue 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 DOCUMENTATION

6.1 For all phases, the successful service provider shall organise all project files and data banks in a systematic way, with adequate indexing. Two copies of these files shall be submitted to Department of Energy after completion of each phase. The files shall contain all documents produced and, in particular:

- calculation sheets;
- correspondence;
- copies of minutes of meetings; and
- copies of all memoranda produced.

6.2 The copyright in the end product will vest in Department of Energy and be presented with it's logo, and it will be at liberty to use the report and results as deemed necessary.

7 COMPLETION DATE

7.1 The duration of the project is 6 weeks after signing of the contract with the successful service provider.

8 COMPULSORY INFORMATION SESSION

8.1 Briefing session will be held **on the 13 December 2012 at 10h00** at the Department of Energy, at 192 Corner Paul Kruger and Visagie Streets.

9 TAX CLEARANCE CERTIFICATE

9.1 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

10 CONFIDENTIALITY OF INFORMATION

10.1 The names of all the members of the service provider team must be disclosed for the prior approval of Department of Energy. Any changes, replacements and/or additions should be submitted for prior approval of Department of Energy.

10.2 All members will have to sign a Non-Disclosure Agreement before project commencement, and may be required to undergo security screening and tests as the Department of Energy deems necessary.

11 CONFLICT OF INTEREST

11.1 A comprehensive list of service provider team members involved in the study must be disclosed as part of the response documentation. For each team member there must be:-

11.1.1 A concise resume detailing the members related experience.

- 11.1.2 A declaration from each member detailing any possible conflict of interest in terms of this section.
- 11.2 Department of Energy reserves the right to exclude any member whom Department of Energy deems, at its own discretion, to have a possible conflict of interest from the study. In this case the advisor will be requested to replace the excluded member with another suitable candidate. The replacement candidate must submit the above mentioned resume and declaration and be approved by Department of Energy in writing.
- 11.3 An advisor (including members of a joint venture, consortium, or other unincorporated grouping) is not allowed to have an interest, whether direct or indirect, in any party that is or becomes involved in the project as a potential investor, advisor to any investor, or in any other capacity that is regarded as creating an actual or perceived conflict of interest. Any party that intends to become involved in the transaction in such a capacity and that has a relationship with the advisor as described will be disqualified, in addition to any other steps that may be taken against the advisor.
- 11.4 The advisor shall disclose all information in its proposal regarding any interests that may result in an actual or perceived conflict of interest.
- 11.5 Please note that Department of Energy reserves the right to disqualify any bidder in circumstances where a conflict of interest exists or is perceived to exist or where a bidder has failed to disclose any conflict of interest or any other material information that may have affected the award of the tender.
- 11.6 A service provider may be considered to have a conflict of interest with one or more parties in this process if:
- 11.6.1 they have controlling partners in common; or
- 11.6.2 they receive or have received any direct or indirect subsidy from any of them; or
- 11.6.3 they have the same legal representative for purposes of this proposal; or

- 11.6.4 they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on, the proposal of another bidder or to influence the decisions of Department of Energy regarding this process; or
- 11.6.5 the service provider is affiliated with a firm or entity that has been hired (or is proposed to be hired) by Department of Energy or the lender.

12 COST

- 12.1 The service provider will be requested to provide a quote regarding the work to be undertaken for this project.
- 12.2 The total cost must be VAT inclusive and should be quoted in South African currency (i.e. Rands)

13 BROAD BASED BLACK ECONOMIC EMPOWERMENT

- 13.1 Provisions of the Preferential Procurement Policy Framework Act (PPPFA) 2011 and its regulation will apply in terms of awarding points.
- 13.2 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.
- 13.3 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.
- 13.4 In a case of Exempted Micro Enterprise, the following documents MUST be submitted:
- 13.4.1 Verification agencies accredited by SANAS
- 13.4.2 Registered auditors approved by IRBA
- 13.5 Bidders who qualify as EMEs**
- 13.5.1 Accounting officers as contemplated in the CCA; or
- 13.5.2 Verification agencies accredited by SANAS; or

13.5.3 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).

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

B-BBEE Status Level of Contributor	Number of points (90/10 system)
1	10
2	9
3	8
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

13.6 Company Experience

13.6.1 Service providers should have at least five (5) years recent experience in nuclear power plant advisory directly related to ownership and financing structures, with a record of successful nuclear programme involvement.

13.6.2 Service providers should clearly indicate the role played at their involvement in the abovementioned assignments, including the duration and size of the teams deployed.

13.6.3 The Service provider must have at least 5 years in the South African electricity sector at advising on financing and structuring of procurement.

13.7 Team Leader and Team Members

13.7.1 Team leaders and team members must possess at least a postgraduate degree in economics, finance, or engineering related disciplines.

13.7.2 The team leader must have at least 15 years of experience in the nuclear power sector, more-especially in the field of nuclear finance. Other members of the team should have at least 5 years of similar experience.

13.7.3 Curriculum Vitae's of the team leader and team members must be attached to the technical proposal.

13.7.4 The role, location and commitment of each member in the team during the assignment must be specified.

13.8 Independence

13.8.1 The service provider should demonstrate that the team members are sufficiently independent from any particular nuclear power plant supplier.

13.9 Project Plan

13.9.1 It is required that a detailed project plan indicating resources and time of delivery of each aspect of the scope of work would be completed for initial review and feedback from the Department of Energy.

14 EVALUATION PROCESS

14.1 Bids will be evaluated on 90/10 point system as outlined in the PPPFA of 2011. The proposals will be evaluated in two phases:

14.2 **Phase 1:** Bidders will be evaluated based on functionality. 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 and preference points for B-BBEE.

<i>Evaluation criteria</i>	<i>Weight</i>
1. Company Experience Capacity and experience to recommend the optimal solutions for structuring, procuring and raising financing for nuclear projects and programmes, including, experience in successfully developing and executing assignments of a similar nature;	15
2. Team Leader and Team Members Based on qualifications, experience, commitment and role of members.	15
3. Independence Assurance of independence from all possible vendors of Light Water Reactors in the nuclear energy industry	10
4. Project Plan The approach to the successful delivery of the stated objectives and scope of work, including the quality and depth of the proposal in terms of the scope of work, as outlined below	
a. Benchmarking (studies)	30
b. Analysis	20
c. Conclusions and Recommendations	10

14.3 Phase 2: Price and B-BBEE

<i>Evaluation criteria</i>	<i>Weight</i>
Price	90
B-BBEE Compliance	10

14.4 Optional Phase 3: The Department will at its discretion require an interview to be conducted with up to three of the highest scoring service providers. This will include a brief presentation of the Project Plan by the service providers.

15 FORMAT AND SUBMISSION OF THE PROPOSAL

15.1 All official forms (SBD) must be completed in all respects by bidders. Failure to comply will invalidate a bid.

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

16 CLOSING DATE

16.1 Proposal must be submitted on or before **20 December 2012 at 11h00** at the Department of Energy, 192 Visagie Street, Corner of Visagie and Paul Kruger Street, Pretoria in the Bid Box marked Department of Energy. **No late bids will be accepted.**

17 ENQUIRIES

17.1 All technical enquiries to be directed in writing to Mr Jeetesh Keshaw

Tel: 012 406 7621

Email: Jeetesh.keshaw@energy.gov.za

17.2 All bid enquiries to be directed to Ms Lebogang Mosuwe or Ms Daisy Maraba

Tel: 012 406 7742/ 7748

Email: Lebogang.mosuwe@energy.gov.za, Daisy.Maraba@energy.gov.za