

REQUEST FOR INFORMATION

Well Design Manual – advisory services

Please issue your reply till 22.06.2015 COB

Dear Sirs.

On behalf of ORLEN Upstream (further "The Company"), I would like to invite you to participate in a market research for drilling advisory services. Should you be interested in presentation your credential in below presented scope of work please issue your reply in compliance with point 3 of this document.

At this stage of market research, ORLEN Upstream is not selecting supplier in procurement process. Your reply will be valuable response for our internal planning procedures.

The Company intends to create its internal Well Design Manual (WDM) and is currently searching for a Drilling Consulting Company that will support ORLEN's personnel in a subject matter.

1 Scope of work

Well Design Manual shall cover:

- 1. Introduction chapters with step by step description of well design process, i.e. planning process overview, subjects that need to be covered during well planning, data acquisition and analysis, cooperation between departments, roles and responsibilities, pre-spud meeting, procurement process, documentation preparation (AFE, drilling program, forecast, time vs depth curve, etc.).
- 2. Drilling Program contents and requirements for preparation of Drilling Program.
- 3. Completion design.
- 4. Well path design.
- 5. Casing design.
- 6. Cementing.
- 7. Drilling and completion fluids.
- 8. Well control, kick tolerance, BOP stack, specific requirements for HPHT, shallow gas, high angle and horizontal wells.
- 9. Directional drilling, surveying, formation evaluation, BHA design.
- 10. Bits program.
- 11. Torque and drag, hydraulics.
- 12. Wellbore stability, safe mud window, formation integrity tests.

Relations between above topics should be covered, e.g. how completion design impacts casing program, well path design and directional drilling tools, etc.

2 Workshop sessions

Drilling Consulting engineer will spend ca. two weeks (10 working days) in Company's office in Warsaw, Poland to discuss with ORLEN Upstream drilling engineers all the matters and decide on their implementation in the WDM.

Further work will be executed in Drilling Consulting engineer's home office. After completion of final version of WDM, it will be presented to ORLEN Upstream for approval.

3 Information to be issued to ORLEN Upstream

- a) Fixed fee for the preparation of Well Design Manual including 10 working days of workshop session that will be conducted in ORLEN Upstream's office in Warsaw. Please also present fixed fee in compliance with above scope of work but including only 5 working days of workshop session in Warsaw.
- b) Credentials supports experience within Oil & Gas industry with similar scope of work.
- c) Sample of drilling manuals created for Oil and Gas Operators (contents, sample chapters).
- d) Documented experience on technically advanced drilling projects: HPHT, ERD, underbalanced, multilateral, sour conditions, slim hole.
- e) CV of Consultants that could be potentially dedicated to the project.
- f) Software's that support well design that are used within the Drilling Consulting Company or Drilling Consultants are familiar with them.
- g) List of documents/ information required from the Company in order to effectively fulfill requested scope of work.
- h) Corporate documents (Tax Document, Court Register Document).

4 CONTACT PERSON

Please issue your response to the e-mail address presented below

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