

Justification

Project: Modernization and reconstruction of existing technological installations of Kyrgyz Petroleum Company CJSC refinery in Jalal-Abad.

Total cost of the project: 409,9 mln US dollars, the amount of applying for financing of the project: 309,9 mln US dollars.

Project initiator: Kyrgyz Petroleum Company CJSC.

Sole shareholder of the initiator company: Kyrgyzneftegaz OJSC.

The project envisages renewal of the refinery's production facilities on the basis of the current technological configurations. The current design capacity of the refinery is 500 thousand tons of oil per year, the total area of the refinery is 27.3 hectares. The current technological facilities of the refinery are not able to ensure the compliance of the products with the environmental standards, that is why the project initiates modernization in order to improve the quality of the products, to produce the fuel (gasoline and diesel fuel) complying with the technical regulations 013/2011, class K5, equivalent to the Euro V quality requirements. The main technological component to be implemented is a liquid-phase catalytic cracking (LPC) unit, which ensures deep refining of oil and production of lighter products.

The technical audit and feasibility study for the project were carried out by SPEC Engineering INC (SPEC Energy DMCC), and UOP Honeywell, an international oil refining licensor, was engaged as a subcontractor to help study the refinery upgrade configuration.

The Law of the Kyrgyz Republic "On State Procurement" of 14 April 2022, part 5, article 2 excluded procurement performed by the State and municipal enterprises, as well as joint stock companies, where 50 percent or more of the authorized capital is owned by the State, including their subsidiaries.

Therefore, according to the point 2 of the Resolution of the Cabinet of Ministers of the Kyrgyz Republic of June 10, 2022 No.301 "On Approval of the Standard Procedure of Organization and Execution of Purchases by the State and Municipal Enterprises, Business Companies, where 50 and more percent of the equity is owned by the State, including their subsidiary companies" the tender was held on the basis of the approved internal regulations of the Kyrgyz Petroleum Company CJSC.

As part of the modernization of CJSC Kyrgyz Petroleum Company's refinery, special attention was given to the companies with experience in performing similar works and services to perform the works specified in the Terms of Reference for the Feasibility Study for Modernization (Reconstruction).

Proposals were sent to the following companies: LLC "Maxton-Engineering" RF, LLC "SAPR-NEFTEORGHIM" Russian Federation, "SEG" (Swiss Engineering Group) RF, VERITAS DOO FZ-LLC (UAE), Spec Energy DMCC (UAE), "INKO-TEK" LLC, "IT-ENTERPRISE" Republic of Kazakhstan, "TAQAT AL SAMA" UAE.

Commercial proposals were received from these companies for audit and feasibility study development. The mentioned companies expressed their willingness to cooperate with the invitation of the working group members to get acquainted directly to the places of production and technical activities of the companies concerned.

During the negotiation process Maxton Engineering LLC and VERITAS DOO FZ-LLC (UAE) refused from further cooperation with Kyrgyz Petroleum Company CJSC.

№	Name	Location	Time frame	Cost (som)
1.	INCO-TEK LLC	Republic of Tatarstan	8-10 months	27 981 100
2.	«IT-ENTERPRISE»	Republic of Kazakhstan	6-8 months	31 304 400
3.	Spec Energy DMCC	UAE	4 months	24 635 660
4.	«TAQAT AL SAMA»	UAE	Not specified	26 463 240

In order to get acquainted with the activities and capabilities of the abovementioned companies on site, the Board of Directors of Kyrgyz Petroleum Company CJSC organized visits to the mentioned companies on protocol assignment.

Based on the results of the tender among the companies that submitted commercial proposals, by studying the cost, timing and technical capabilities of the participants, the working group recommended to the Board of Directors to engage Spec Energy DMCC.

The relevant protocol approved the decision of the working group on the selection of the company to audit and develop the feasibility study.

It should be noted that the company UOP did not participate in the tender, was engaged independently by Spec Energy DMCC as a subcontractor.

The process units under consideration are not separate equipment, but act as complete process units with pumps, heat exchangers, columns and catalyst-filled reactors. Each technology has a copyright license, implemented in metal and is in operation at large-scale refineries around the world. AXENS and UOP Honeywell are among the world leaders in this area and hold the licenses for deep refining technologies.

All process units are interconnected with each other and the exclusion of one of them will affect the quality of products. The contractor considered several options for deep oil refining with the involvement of heavy residues and increasing the depth of oil refining with a maximum yield of light petroleum products (79% for light) quality not lower than K5.

Without implementing the above-mentioned technologies, obtaining quality fuel and refining depth is not possible.

The company's products are designed to cover the needs of the domestic market of Kyrgyzstan. Domestic market consumption of light oil products according to the statistics is from 1 100 000 tons/year to 1 300 000 tons/year. 95% of all petroleum products are imported to Kyrgyzstan.

The quality of imported petroleum products does not always meet the necessary requirements. When the plant will reach its full capacity after the modernization and use oil extracted from domestic fields as raw material, it will cover the country's demand for high quality light oil products by 25-30%. The cost of production and transportation of oil to the plant is much cheaper than the cost of imported commercial petroleum products, which will eventually affect the price of petroleum products.

When calculating the economic indicators in the feasibility study, laid the purchase of oil on the side of quotations, in the ratio of 50% local and 50% purchased raw materials.