PROJECT CHARTER

| SECTION 1. PROJECT INFORMATION | | |
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| Project name | Development and modernization of the heat supply system of Jizzakh city. Introduction of modern technologies for transportation and distribution of heat energy. | |
| Interrelation of the project with the Development Concept (name of the concept and the problem(s) the project solves within the concept) | The concept of integrated development and modernization of the heat supply system in Jizzakh for the period 2018-2022. Objectives: coordination and monitoring of program implementation, measures for timely commissioning of heat supply system facilities. | |
| The industry in which the project is implemented | Housing and communal services. Heat supply. | |
| Project location | The project is located in "Ittifok" district. DB-1 of Jizzakh city, Jizzakh region. | |
| Initiator (customer) of the project (name, TIN, address, phone number, date of establishment) | Ministry of Housing and Communal Services of the Republic of Uzbekistan (SUE Engineering Company for Construction of Apartment Buildings and Heating Facilities) TIN: 304931516 Tashkent, Niyozbek Yuli-1. +998 71 235-85-79 | |
| | info@mjko. uz Registration date: 17.04.2017r. | |
| Project Sponsor | IFI | |
| Project manager (project office) | Azimov Dilshod Suratovich - Deputy Minister | |
| Other project participants | State Unitary Enterprise of Jizzakh region"Issiklik manbai | |
| Date of document creation | 25.12.2019 _Γ . | |
| SECTION 2. PROJECT DESCRIP | PTION | |
| Reasons for initiating the project (business or other reasons for initiating the project) | The need to develop and modernize the heat supply system in Jizzakh | |
| Reasons for initiating the project (including the legal act that is the basis for initiating the project) | Decree of the President of the Republic of Uzbekistan December 2, 2019 № RP-4542 "On additional measures to improve heat supply and financial recovery of heating companies | |
| Goal and expected results of the project | Reconstruction and modernization of mains, distribution and in-house heating networks in order to achieve a quality heat supply for the population and social facilities; Reconstruction and modernization of pumping stations and central heating systems; Introduction of modern cost-effective and energy-saving technologies; Improving the efficiency of the enterprise and improving the quality of services of heating and hot water supply to residents of Jizzakh and Ittifak makh.: Introduction of a modern system for control and accounting, | |

| Project content | production and consumption of heat energy; Reducing heat production costs, efficient and rational use of raw materials and financial resources, improving the efficiency of the heat supply organization and, as a result, reducing the subsidy component of local budgets; Determination of the preliminary cost of construction and efficiency of capital investments. Creation of modern energy- and resource-saving heat supply system (taking into account the transfer to a "closed" scheme), quality and uninterrupted supply of heat energy, taking into account the needs of the population, social, cultural and domestic facilities in Jizzakh and district. Ittifak. Reconstruction and modernization of existing pumping stations, replacement of existing pumps with modern energy-saving equipment and installation of PFCs (reactive power compensators). Reconstruction and modernization of external and internal heating networks in order to achieve a quality heat supply for the population under the condition of economical and sustainable operation of the heat supply system. Introduction of new modern thermal insulation materials, in particular, the use of pre-insulated polyurethane foam pipelines. Introduction of a modern automated heat energy metering and control system (AHEMS) at all stages from heat generation to consumer consumption. Installation of electronic heat energy metering devices at the boundaries with heat sources and at inputs to residential buildings with data transfer to the central dispatcher's office. Reconstruction of supplying electrical networks with the |
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| Criteria for achieving project goals (measurable criteria for achieving project goals) | The estimated cost of the project is 89.5 million US dollars including credit funds of the IFIs of 75.0 million US dollars. |
| | Project implementation period: 2021-2025. |
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| | Energy savings of 185,000 kWh per year. |
| | Saving of heat energy 3.4 thousand Gcal per year. |

| Project houndaries | |
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| Project boundaries | |
| (description of the work included | |
| in the project) | The project provides for: |
| | 1. Preservation of centralized heat supply from the heat source |
| | SUE "Issiklik manbai": |
| | - reconstruction and modernization of the existing heating networks with a length of 11.7 km, taking into account the construction of five metering stations. The project is aimed at |
| | the construction of five metering stations on the boundaries of the balance of ownership with the centralized heat source; - Modernization of technological equipment of one of the |
| | existing pumping stations and two central heating stations, taking into account overhaul of the buildings; |
| | Modernization of electric power equipment (with the replacement of power transformers and the installation of backup transformers), the introduction of KMR; |
| | Overhaul (replacement) of power cable lines (6,10 kV) - 4,2 km and low-voltage (0,4 kV) - 1,1 km, including the laying of reserve lines. Current repair of power transmission lines to the planned rehabilitation of CHP (0,4 kV) - 3,8 km; |
| | Maintaining connection to the district heating system of 80 apartment buildings, including in max. Ittifak-60 and max. Yoshlik-20 apartment buildings Reconstruction of in house heating systems of apartment. |
| | Reconstruction of in-house heating systems of apartment buildings in Jizzakh, Ittifaq district, Yoshlik district. including to provide equipment of heat energy metering units at the inputs to apartment buildings of Ittifaq district - 60 units and Yoshlik district - 20 units; Jizzakh district Ittifak and Yoshlik community total 11.7 km. heating networks set |
| | The implementation of the project will contribute to: |
| | Quality heating of 80 apartment buildings, including in max. Ittifak - 60 and in district Yoshlik - 20 apartment buildings |
| Project Limitations (description of factors limiting the execution of the project (legal, financial, resource, schedule, as well as those imposed by other projects, etc.)) | Changes in project conditions, including legal conditions. Changes in the size of the approved project budget. Deterioration of the environmental and economic situation in the project region. |
| Project Assumptions (alternative options for project implementation mechanisms) | Financing of the project from the budget without the involvement of IFI loans |

| Expected risks of the project | Difficulties with project coordination and management (delays in project implementation). Uncoordinated changes in the heat supply scheme of the city (spontaneous installation of two-circuit gas boilers in apartment buildings, violation of hydraulic conditions, changes in heat loads). |
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| | Poor quality of construction and installation due to unqualified contractors/personnel (low-quality products). Denial of funding from the IFIs. Increasing the cost of the project. |