**1. General.**

*[General description, purpose and place of works]*

Flare Section Flare Stack D-2 and D-4 ACS designing, installation and

programming works.

**2. Attachments.**

*[List all related additional material (reference number and exact title of document). If any pictures, drawings or diagrams are provided to describe/illustrate the requirements, make sure that they are consistent with the requirements indicated in SOW].*

Attachment 1: Annex No 5 Cybersecurity requirements OL-TR-IR-021 rev00

Attachment 2: Projektas MN1811.pdf

Attachment 3: Projektas OLP00208.pdf

Attachment 4: Programming work handover & acceptance statement.

**3. Description and specifics of work.**

**3.1. Description of work.**

*[Define and explain each work that needs to be done. Indicate the main steps and actions to be executed by Contractor. Specify preliminary sequence of works. When planning the scope of work,* ***it is necessary to evaluate the results of inspections performed for the facility / equipment, to take into account the data of continuous inspections and previously recorded incidents (if any).]***

Contractor shall perform the following works:

1.1. Design the connection of the transmitters, controllers of flare stack D-2 and D-4 to Siemens S400 Safety control system;

1.2. Installation and connection works on the basis of design agreed with CS Group engineers of ORLEN Lietuva;

1.3. All programming works related to flare stack D-2 and D-4 control;

1.4. Submit all design documentation, controller and other equipment (if any) software with passwords, licenses.

**3.2. Special requirements (if any).**

*[Indicate specific requirements which might impact performance of works, price, results. (E.g. recommend to visit the site at specified time, etc.)]*

1. All equipment and software shall meet the requirements of 'Annex No 5 Cybersecurity requirements OL-TR-IR-021 rev00';
2. If new flare stacks D-2, D-4 are going to have new protectors, additional metering, control signals, then new Siemens S400 redundant controller with SAFETY modules must be installed;
3. Indications and controls have to be programmed into existing WinCC SCADA (version 7.5SP2, from 2027 will be v.8.1), using existing signal colors, faceplate, etc. ;
4. Controller has to be programmed with Step7 software (version 5.7). If new controller is going to be installed, it must be programmed with latest version of TIAportal (it is required to provided TIAportal software and licenses);
5. Provide required WinCC expansion licenses.

**3.3. Requirements for work execution and documentation.**

*[Specify the documentation to be provided by Contractor for work execution. If this is some data, indicate and describe the exact data needed and the standards to comply with. In case Contractor has to fill in some documentation, specify the desired format and contents, or refer to the requirements for the document preparation.]*

1. Equipment provided by the Contractor shall conform to the OL list of manufacturers and include a minimum of five-year support.
2. Contractor shall organize FAT and SAT.

**3.4. Qualification requirements for Contractor.**

*[Specify exact qualification requirements to be met by the Contractor. Describe requirements for works execution, design, reliability, staff, etc.]*

1. The Contractor shall have certified staff to perform programming work.
2. The Contractor shall develop a preliminary work schedule and get it approved by the Owner.
3. The Contractor shall provide a list of materials and licenses required for the programming.
4. The Contractor shall provide a list of analogous programming works completed in the last two years.
5. Contractor must hold certificate for work with electrical installations.

**4. Materials, equipment, and services provided by OWNER.**

*[If certain materials and equipment provided by OWNER will be used by Contractor for specific tasks, indicate what exactly will be provided and when]*

None

**5. Materials, equipment, and services provided by Contractor.**

*[List the items to be provided by Contractor as a part of works, and to be included in the price.]*

## The Contractor shall supply all materials, equipment, and licenses necessary for the full execution of the project.

**6. Requirements for work completion.**

*[Set the main milestones and deadlines or control points in the course of task execution where the OWNER is to review the completed tasks, approve, accept such as proper, or reject them.]*

* + 1. Software/hardware and licenses provided.
    2. Equipment installed.
    3. Programming work handover and acceptance statement signed.

**7. Requirements for work acceptance.**

*[Describe criteria according to which completed work will deemed compliant with requirements and accepted.]*

The works shall be considered fully completed when the following conditions are met:

1. Programs for all the equipment, with the possibility of editing by OL are provided;
2. Software source codes are provided;
3. Software passwords are provided;
4. Warranty for the installed equipment and works performed is provided;
5. Backup copies are provided;
6. User operating manual(s) in Lithuanian is (are) provided.