

## Assessment of diploma work supervisor

Title: **Economic Evaluation of Centralized and Autonomous Power Supply Systems in Oil and Gas Industry**

Name of student: **Vadim Ershov**

Student's task was to make both basic technical and economical evaluation of the electricity supply of oil and gas fields. The student prepared new version of the supply exploiting the diesel power unit fuelled by associated petroleum gas together with a classic variant using connection to the centralized electric system. The student accomplished all points of the diploma work successfully.

The author checked his variant of electricity supply for allowed current, for allowed voltage drop and mechanical integrity that results in the minimum feasible cross-section. Subsequently for the second variant he designed the diesel station and its cost: fuel cost, maintenance, connection cost and savings of fees for APG burning. These calculations are thoughtful and show a good engineering competence of the author.

In the final part of the diploma work the student made the cash-flow calculation and the NPV evaluation. Finally the sensitivity analysis on the NPV was conducted. Concerning formal aspects of the work I have point out that an equation numbering would be useful for readers.

Question for the author:

1. Are the projects of the DPS for oil fields prepared today? The year 2020 is quite close ...

The final assessment of the diploma work is

**– B very good –**

31. 5. 2017

Ing. Martin Beneš