

Economic analysis of natural gas liquid(NGL) recovery process in offshore plant

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In this study, NGL recovery process with cryogenic heat exchanger is applied various methods which are original turbo-expander(ISS), gas sub-cooled(GSP), the cold residue (CRR), recycle vapor-split(RSV) and IPSI-1. This methods are for offshore case. ISS was considered as base case. GSP, CRR, RSV's process schemes focus on improvement at the top of the demethanier column. and the IPSI-1 scheme focuses on the bottom of the demethanizer column. All the process schemes were simulated by aspen HYSYS version 7.3 with a common set of operating standard. The economic evaluation for each process scheme was made by regarding the capital cost and operating cost.

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