

Gas Flaring Utilization at KK Station

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Abstract : The present study proposes a comprehensive approach to effectively utilize associated gas from the KK remote station, eliminating the practice of flaring and mitigating greenhouse gas (GHG) emissions. The proposed integrated system involves diverting the associated gas via a newly designed pipeline, seamlessly connecting to the existing 12-inch pipeline at the tie-in point. The proposed destination is the low-pressure system at A-100 or 3rd stage, where the associated gas will be channeled towards the NGL (natural gas liquid) plant for processing. To ensure the system's efficacy under varying gas production scenarios, the study employs two industry-standard simulation software packages, Aspen HYSYS and PIPSIM. The simulated results demonstrate the system's ability to handle the projected increase in gas production, reaching up to 38 MMSCFD. This comprehensive analysis ensures the system's robustness and adaptability to future production demands.

Keywords : associated gas, flaring mitigation, GHG emissions, pipeline diversion, NGL plant, KK remote station, production forecasting, Aspen HYSYS, PIPSIM

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