

TEG Regeneration with oxidizer for small capacity dehydration unit

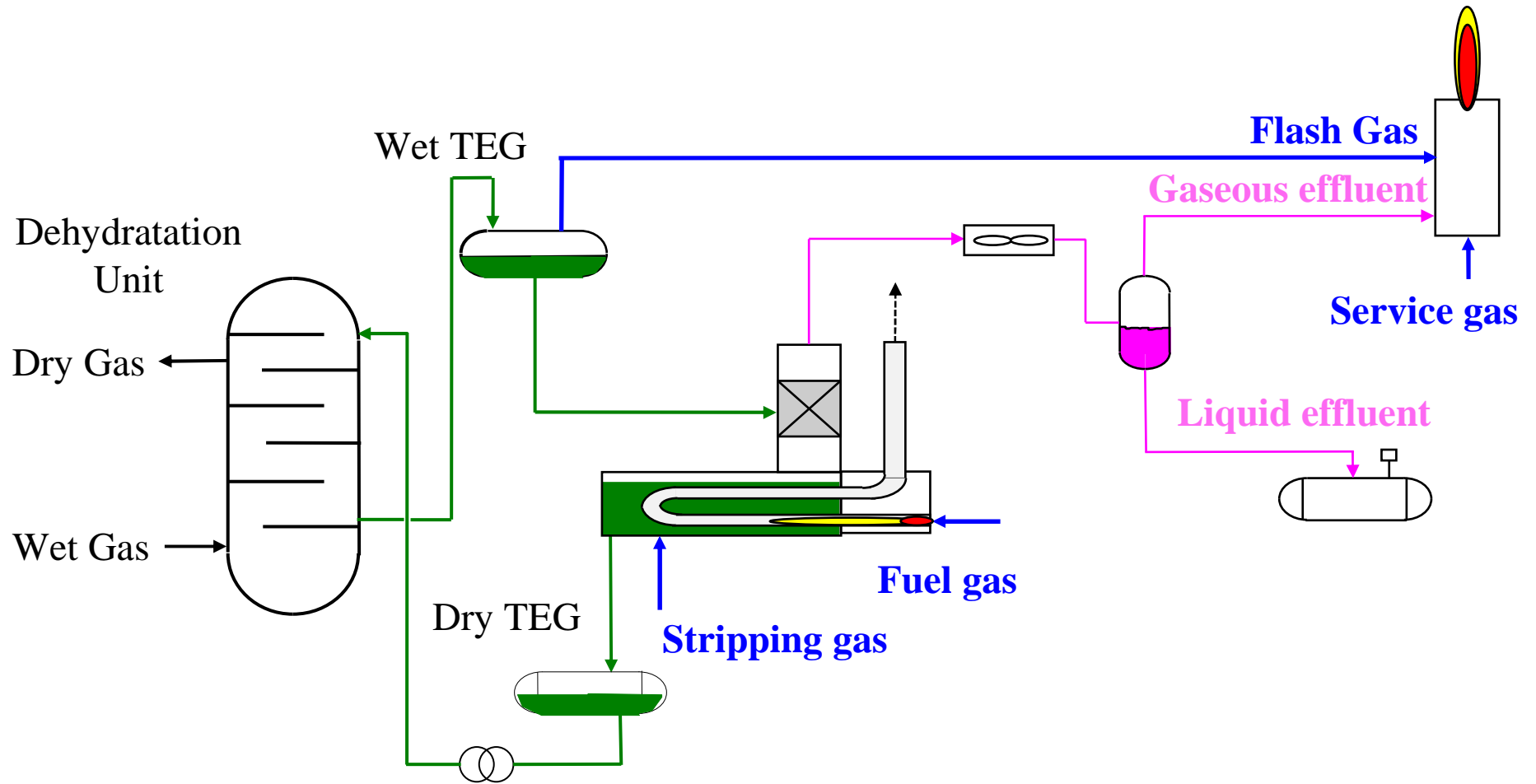
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Today Process

- Water is removed through dehydration units during withdrawal
 - GDF use absorption unit with TEG as absorption media
 - TEG is in a closed loop and is regenerated by boiling through a distillation column
 - Reneration units are shared with dehydration units through wet and dry TEG tanks
- Three big defects for regeneration units
 - Flare
 - Liquid effluent
 - Flame tube in TEG

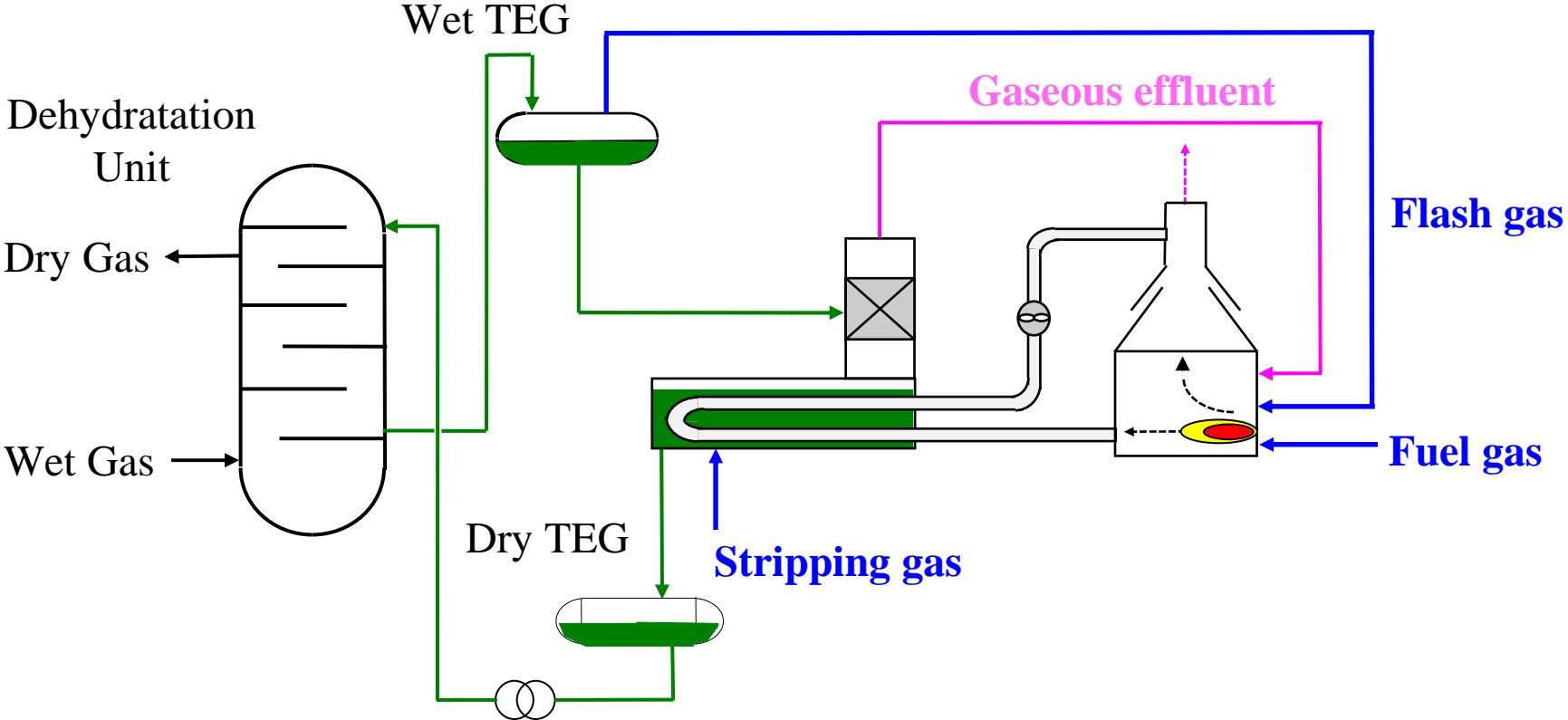
Classic regeneration



Goals

- Re-vamping of above facilities of UGS
 - Several TEG regeneration are obsolete
- Use of a regeneration process that has a lower environmental impact and a better efficiency
- TEG Regeneration with Oxydizer
 - No flare then much less visual impact
 - No more production of liquid effluent
 - TEG heated by fumes
 - Effluent and service (flash and stripping) gases used as fuel

Regeneration with oxydizer



Development for unit of small capacity 1/2

Small capacity

- Dehydration unit remotely located
- Small UGS with flow of max 100 000 m³(n)/h

Modification

- No need for sharing regeneration
- Regeneration unit indoor

Development for unit of small capacity 2/2

Results

- Indoor then better control of potential failures (gas leak and fire)
- Better design for remote location or unmanned plants

Where

- Project for conversion of gas field Trois-Fontaines into UGS in co-operation with our subsidiary PEG
- Potential development for obsolete regeneration on remote platform of salt cavern