



Allocation of fuel and flare

What can possibly go wrong?

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BACKGROUND

- NCS focus
- Framework in place
- Additional taxation

TERMS AND CONDITIONS FOR THIRD PARTY USE OF INSTALLATIONS

(Presented in the context of a tie-in and processing agreement)

20 FUEL AND FLARE GAS

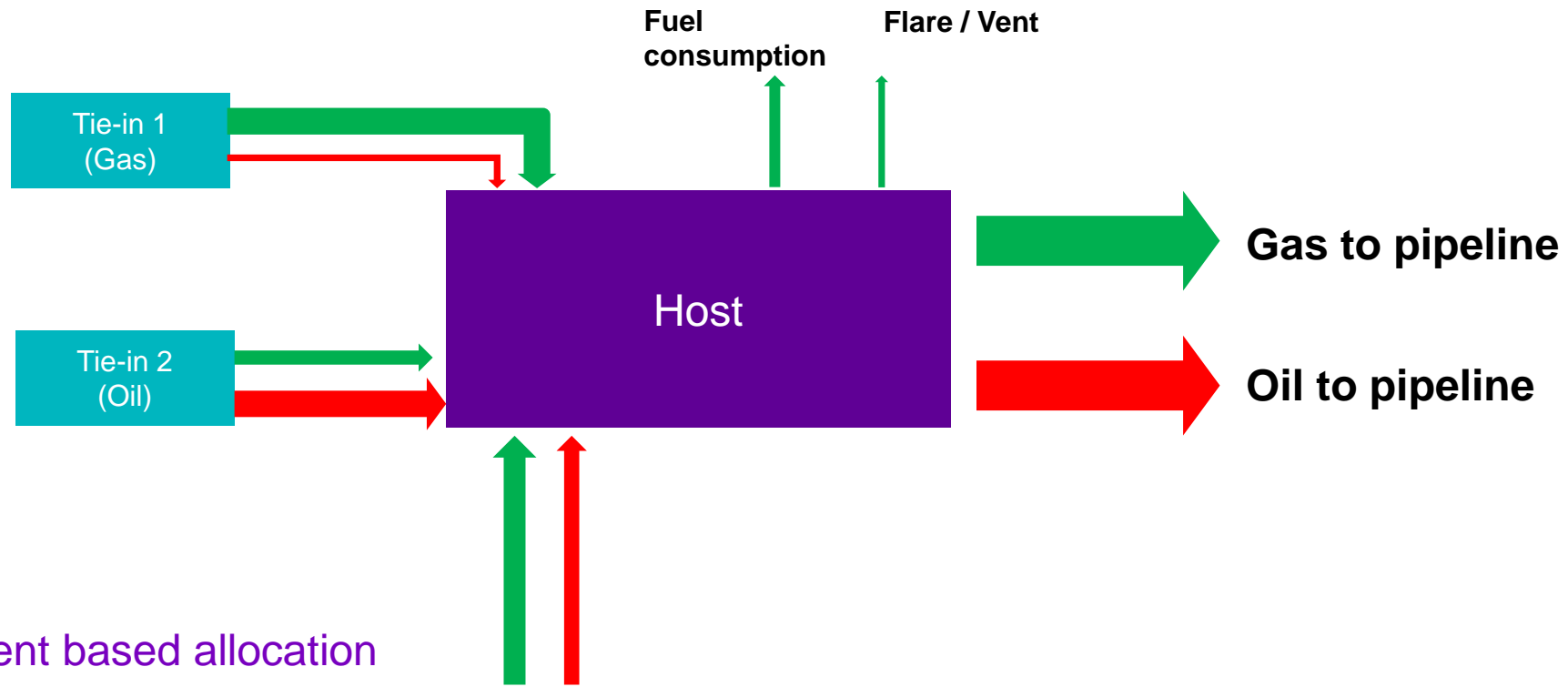
The User shall provide in kind and free of charge its allocated share of fuel and flare gas. The allocation of the User's share of fuel and flare gas shall be based on the pro rata use of the equipment necessary for the provision of Services to the User in accordance with Appendix C.

If the User is not able to provide fuel and flare gas in kind, it shall pay the Owner for a corresponding volume.

22 TAXES, DUTIES AND FEES

22.1 Taxes, duties and other fees and/or any other burdens imposed by the authorities, assessed in connection with the burning of petroleum and emissions from the Owner Facilities shall be charged to the User in accordance with the fuel and flare gas quantities allocated to the User in accordance with Article 20.

REFERENCE MODEL

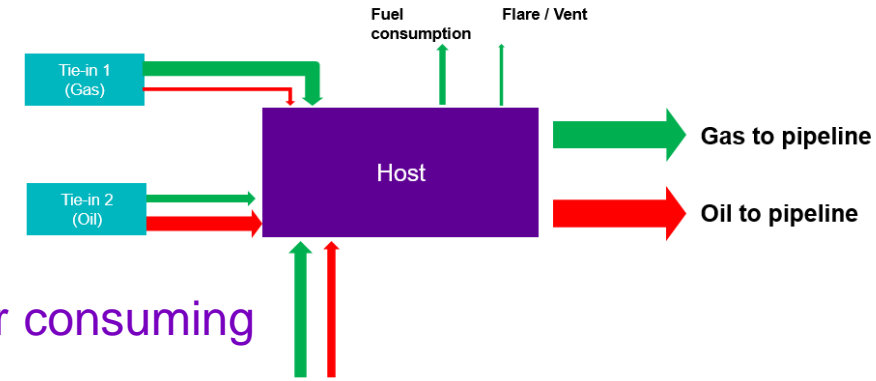


- Mass/Component based allocation
- Total fuel and flare measured fiscally. Possible to split further based on equipment power consumption
- Fuel and flare composition from GC or sampling

FUEL ALLOCATION – MAIN PRINCIPLES

... equipment necessary for provision of the Services to the User

- Not really feasible to track fuel consumption from every single power consuming «equipment».
- Need to find the right balance between different Users use of main «equipment» and need for simplicity.
- Recommend to split in:
 - equipment predominatly involved in oil processing/export
 - equipment predominatly involved in gas processing/export
- What about fuel required for common use independent of oil/gas processing/export ?
- Daily versus monthly allocation cycle
- **Recommend to keep it simple, resist temptation to make it overly complex**



$$\text{Common Fuel Qty (Gas)} \times \frac{\text{User allocated gas}}{\text{Total produced gas}}$$

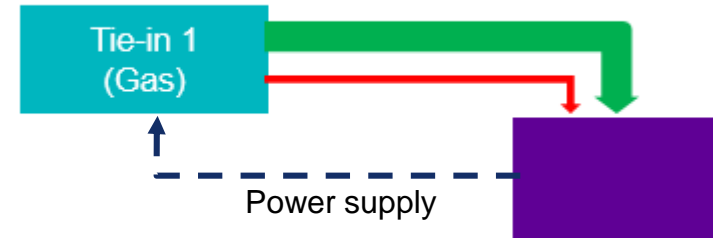
$$+ \text{Common Fuel Qty (Oil)} \times \frac{\text{User allocated oil}}{\text{Total produced oil}}$$

(Deducted per component from User allocated gas)

DIRECTLY ATTRIBUTABLE FUEL

... equipment necessary for provision of the Services to the User

- Equipment dedicated for one User (e.g. subsea compression, drilling unit at host, general power supply).
- Avoid «double dipping», power supply may be covered in tariff to host...
- Two approaches:



- Deduct from allocated gas (after processing)
- Deduct from wet gas before processing

$$User\ attributable\ fuel + Common\ Fuel\ Qty\ (Gas) \times \frac{User\ allocated\ gas}{Total\ produced\ gas}$$

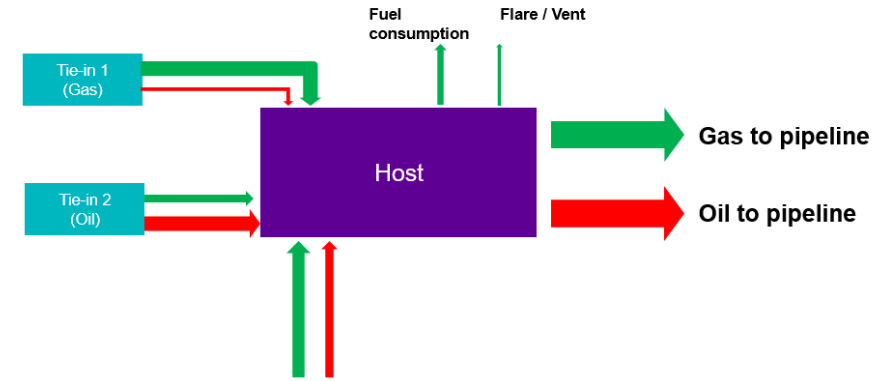
$$User\ attributable\ fuel + Common\ Fuel\ Qty\ (Gas) \times \frac{(User\ allocated\ gas - User\ attributable\ fuel)}{(Total\ produced\ gas - all\ attributable\ fuel)}$$

- What if a User is allocated more fuel than its entire gas production?

FLARE ALLOCATION – MAIN PRINCIPLES

... be based on the pro-rata use of equipment

- Much lower quantities.
- Can it follow same principle as fuel gas allocation?
- Would it not be more correct to attribute flare to the User causing the event?
- ***Again, recommend to keep it simple, if possible treat in same manner as for fuel***



CONCLUSION

...what could possibly go wrong?

- *Large variety in current practises related to fuel and flare allocation*
- *Relative high number of audit exceptions indicate need for better understanding and more explicit App C definitions (at equation level)*
- *Fuel and Flare reallocation has knock-on effects on CO2 duty payments. Time consuming and source of conflict.*
- *Signs of such improved practise in recent tie-in agreements.*

QUESTIONS?