CLAIMS

1. Method of processing a liquid natural gas stream, the method comprises

a) operating a vaporization unit by:

- providing a first liquid natural gas stream from one or more storage tanks,
- pressurizing the first liquid natural gas stream providing a pressurized liquid natural gas stream,
- vaporizing the pressurized liquid natural gas stream obtaining a pressurized vaporized natural gas stream,

b) operating a slushification unit by:

- providing a second liquid natural gas stream from the one or more storage tanks,
- passing the second liquid natural gas stream to a slushifier in which the second liquid natural gas stream is cooled down and depressurized to triple point conditions of the liquid natural gas stream to obtain a slush of liquid and solids and a cooled vapour phase,
- withdrawing the cooled vapour phase from the slushifier providing a cooled vapour stream and
- passing the cooled vapour stream to the vaporization unit.

2. Method according to claim 1, wherein the method comprises

- obtaining a boil-off gas stream from the one or more storage tanks.

3. Method according to any one of the preceding claims, wherein passing the cooled vapour stream to the vaporization unit comprises

- compressing the vapour stream providing a compressed vapour stream, and

- combining the compressed vapour stream with the compressed vaporized natural gas stream providing a combined natural gas stream.

4. Method according to claims 2 and 3, wherein the method further comprises
    - compressing the boil-off gas stream providing a compressed boil-off gas stream, and
    - combining the compressed boil-off gas stream and the pressurized vapour stream with the compressed vaporized natural gas stream providing a combined natural gas stream.

5. Method according to claim 2, wherein the method comprises
    - compressing the boil-off gas stream providing a compressed boil-off gas stream,
    - feeding a vapour recondenser feed stream to a recondenser, the vapour recondenser feed stream comprising at least part of the recompressed boil-off gas stream,
    - passing a liquid recondenser feed stream to the recondenser, the liquid recondenser feed stream comprising a side-stream taken from the first liquid natural gas stream,
    - obtaining a recondensed stream from the vapour recondenser feed stream and the liquid recondenser feed stream,
    - combining the recondensed stream with a remainder of the first liquid natural gas stream obtaining a re-combined first liquid natural gas stream, and
    - pressurizing the re-combined first liquid natural gas stream to provide the pressurized liquid natural gas stream.

6. Method according to claim 5, wherein passing the cooled vapour stream to the vaporization unit comprises

- compressing the vapour stream providing a compressed vapour stream,

and wherein the vapour recondenser feed stream further comprises the compressed vapour stream.

7. Method according to any one of the preceding claims, wherein operating the slushification unit comprises:

- feeding a third liquid natural gas stream as motive stream to a motive stream inlet of an eductor,
- feeding at least part of the cooled vapour stream to a suction stream inlet of the eductor,
- obtaining an eductor outlet stream from an eductor outlet, and
- passing the eductor outlet stream comprising the motive stream and the cooled vapour stream to the vaporization unit.

8. Method according to claims 5 and 7, wherein the vapour recondenser feed stream comprises the eductor outlet stream.

9. Method according to claims 5 and 7, wherein the eductor outlet stream is re-combined with the recondensed stream or with the first liquid natural gas stream.

10. Method according to any one of the preceding claims, wherein the method further comprises

- obtaining a slush stream from the slushifier and
- feeding the slush stream to a slush dispenser.

11. Method according to any one of the preceding claims, wherein the method comprises

- sub-cooling the second liquid natural gas stream to

obtain a sub-cooled second liquid natural gas stream, and

- passing the sub-cooled second liquid natural gas stream to the slush vessel in which the second liquid natural gas stream is further cooled down and depressurized to triple point conditions.

12. Method according to claim 11, wherein the slushifier comprises a sub-cooler heat exchanger, and sub-cooling the second liquid natural gas stream comprises:

- passing the second liquid natural gas stream through the sub-cooling heat exchanger.

13. Method according to claim 11 or 12, wherein sub-cooling the second liquid natural gas stream is done with a sub-cooling refrigerant cycle.

14. Method according to any one of the preceding claims, wherein operating the slushification unit comprises selectively switching between operating the slushification unit at a production level and an interruption level, wherein a first flow rate of the second liquid natural gas stream associated with the production level is greater than a second flow rate of the second liquid natural gas stream associated with the interruption level.

15. System for processing a liquid natural gas stream, the system comprises a vaporization unit, wherein the vaporization unit comprises

- a pressurizer unit arranged to receive a first liquid natural gas stream from one or more storage tanks and generate a pressurized liquid natural gas stream,
- a vaporizer arranged to receive the pressurized liquid natural gas stream and generate a pressurized vaporized natural gas stream,

wherein the system further comprises a slushification unit, wherein the slushification unit comprises

- a slushifier arranged to receive a second liquid natural gas stream from one or more storage tanks and generate a slush of liquid and solids and a cooled vapour stream,

wherein the vaporization unit is in fluid communication with the slushification unit to receive at least part of the cooled vapour stream.

16. System according to claim 15, wherein the slushification unit comprises a slush vessel and an expansion-cooling device, such as one or more parallel throttle or expansion valves or one or more parallel spray nozzles, wherein the expansion-cooling device is positioned in the flow path of the second liquid natural gas stream to the slush vessel.

17. Slush of liquid and solids obtained by any one of the claims 1 - 14 or by a system according to any one of the claims 15 - 16, wherein the slush is a mixture of solid and liquid natural gas.