CLAIMS

What is claimed is:

1. A method for regasifying liquefied natural gas (LNG), comprising:

providing heat to a LNG regasification process from a power plant; and, if the heat is not sufficient,

providing additional heat to the LNG regasification process from a cooling tower operated in a warming tower configuration.

2. The method of claim 1, further comprising cooling water in the cooling tower when the power plant is operational.

3. The method of claim 1, further comprising using the cooling tower to warm a heat transfer fluid.

4. The method of claim 1, further comprising chilling intake air for a gas turbine by transferring heat to the LNG regasification process.

5. The method of claim 1, further comprising condensing steam from a steam turbine in a heat exchanger by transferring energy to the LNG regasification process.

6. The method of claim 1, further comprising transferring energy from the power plant to the LNG regasification process through a heat transfer fluid.

7. The method of claim 6, further comprising heating at least a portion of the heat transfer fluid against an inlet air stream for a gas turbine.

8. The method of claim 6, further comprising heating at least a portion of the heat transfer fluid against condensing steam in the power plant.

9. A method for vaporizing a cryogenic fluid, comprising:

vaporizing the cryogenic fluid against a heat transfer fluid;

providing heat energy to the heat transfer fluid from a power plant; and, if the heat from the power plant is not sufficient to vaporize the cryogenic fluid,

providing heat energy to the heat transfer fluid from a cooling tower of the power plant operating in a warming mode.

10. The method of claim 9, further comprising heating at least a portion of the heat transfer fluid against an inlet air stream for a gas turbine.

11. The method of claim 9, further comprising heating at least a portion of the heat transfer fluid against a condensing fluid in a power plant.

12. A system for regasifying liquefied natural gas, comprising:

a cryogenic heat exchanger configured to regasify a stream of LNG;

a power plant;

a cooling tower configured to operate in either a cooling or a warming mode; and

a heat transfer fluid, wherein the heat transfer fluid is configured to:

provide heat to the cryogenic heat exchanger from the power plant; and, if the heat is not sufficient,

provide at least a portion of the heat to the cryogenic heat exchanger from the cooling tower.

13. The system of claim 12, further comprising an intermediate heat exchanger configured to transfer the heat from the cooling tower to the heat transfer fluid.

14. The system of claim 13 where intermediate heat exchanger is a plate-frame type, a shell-and-tube type, a tube-in-tube type, or a plate and shell type, or any combinations thereof.

15. The system of claim 12, wherein the power plant comprises a combined cycle power plant, comprising a gas turbine generator and a heat recovery steam generator.

16. The system of claim 15, further comprising an inlet air cooler on a gas turbine generator configured to transfer the heat to the heat transfer fluid.

17. The system of claim 12, comprising a steam condenser, and a heat exchanger configured to transfer heat energy from the steam condenser to the heat transfer fluid.

18. The system of claim 12, wherein the power plant comprises a steam generator, a steam turbine generator, a steam condenser, and a recirculation pump.

19. The system of claim 12, wherein the power plant comprises a geothermal power plant.

20. The system of claim 19, wherein the geothermal power plant comprises a binary cycle power plant.

21. The system of claim 12, wherein the heat transfer fluid is a single-phase fluid.

22. The system of claim 12, wherein the heat transfer fluid is water or a water/glycol mixture.

23. The system of claim 12, wherein the heat transfer fluid is phase-change fluid.

24. The system of claim 12, wherein the heat transfer fluid is propane, freon, a phase change refrigerant, or any combinations thereof.

25. The system of claim 12, wherein the cooling tower is an evaporative type cooling tower or a fin-fan cooling tower.

26. The system of claim 12, wherein the cryogenic heat exchanger is a submerged combustion vaporizer (SCV).

27. The system of claim 26, wherein the SCV is used in combustion mode to provide additional heat.

28. The system of claim 12, wherein the cryogenic heat exchanger is a shell-and-tube vaporizer.

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a cryogenic heat exchanger configured to regasify a stream of LNG;

a power plant;

a cooling tower configured to operate in either a cooling or a warming mode; and

a heat transfer fluid, wherein the heat transfer fluid is configured to:

provide heat to the cryogenic heat exchanger from the power plant; and, if the heat is not sufficient,

provide at least a portion of the heat to the cryogenic heat exchanger from the cooling tower, and

wherein the cryogenic heat exchanger is a shell-and-tube vaporizer.