Enel GP Innovation Competition Regulations

1. Introduction

Enel Green Power S.p.A. (hereinafter "Enel GP"), the Enel Group company dedicated to developing and managing worldwide energy generation from renewable sources is looking for low-cost solutions for technical issues and problems that Enel GP group encounters in its daily renewable energy production activities. To this purpose, effective on 12/09/2017, Enel GP launched on Enel group Open Innovability platform [www.openinnovability.enel.com] an innovation competition on one (1) issue to be solved (hereinafter the "Competition").

2. Description of the issue

The Competition is relevant to the following issue:

1) An alternative solution for H_2S abatement in geothermal power plants

Enel GP is looking for novel solutions to maximize H_2S abatement in geothermal power plants and at the same time reducing the OPEX associated with needs of chemicals. Moreover, the present end-cycle effect of the AMIS® (Abatement of Mercury and Hydrogen Sulfide) process is quite good: no materials from the reactions outcomes are handled as solid waste nor sulfur cake are produced to be reprocessed. These condition should be considered in the proposed solution and should not be penalized (or even better improved) by the new proposed solutions

A complete description of the issue is attached to these Regulations as ANNEX 1.

3. Definition of Submission

The proposer who takes part to this Competition (hereinafter the "Applicant") will submit information through ENEL group Open Innovability platform [www.openinnovability.enel.com] related to the issues described in paragraph 2 (collectively referred to as the "Proposal").

4. Payment

The best Proposal will be paid with 15,000 euro. If the winning Proposal is submitted by a team, the payment shall be made to the team representative and it will be the sole responsibility of the latter to distribute it among the team participants. However if withholding taxation or different tax treatment are required for the members of the team, payment will be made pro quota to each of them. If more than one proposal is selected, the prize amount will also be distributed pro quota among the winners (ex aequo). If the winning Proposal is submitted by a legal entity, the representative must be empowered to receive the payment in the company's name.

Payment will be made in Euros, or if required by the winner's local law, in its local currency equivalent based on the foreign exchange rate in effect on the date of the communication to the winner of the outcome of the Competition. The above amount represents a complete payment, net of any local taxes that Enel GP may be required to withhold, for any Accepted Proposal and the winner is not entitled to any other compensation of any kind. If local law does not require withholding of taxes, all taxes on the payment shall be the winner's sole responsibility. When applicable under the relevant tax regulations, payment will be made upon receipt of invoice.

5. Eligibility of participants

The Applicant, if a natural person, (as well as the natural persons in his/her team) must be at least 18 years old and have age of majority and legal capacity in the jurisdiction where he/she resides.

Eligibility will not however be granted to people involved in the organization and management of the Competition or admitted to the Open Innovability Portal back office, nor to their spouses or partners and their relatives up to the fourth degree determined according to Italian law.

Also, employees of the companies of the Enel Group who have worked in the technical sector of the Geothermal field, as well as their spouses or partners and their relatives up to the fourth degree, are not eligible for participation. Single natural persons, legal entities, as well as teams participated by natural persons and/or entities are allowed to participate. In case the participation in the Competition is made by a team or legal entity, the Proposal should be submitted by a representative who shall be the only contact person for the team or legal entity in relation to the Competition and shall have full representation powers and responsibility towards the team or legal entity. By applying to the Competition, the Applicant represents and warrants that:

1) He/she and the member of his/her team are eligible to participate in the Competition; With regard to the eligibility criterion requesting the absence of any lien of kinship or marriage with the people involved in the organization and evaluation process of the Competition, it is the Applicant's responsibility to verify with the members of his/her kinship or spouse (or with his/her team members' or legal entity's top management's kinship or spouse) whether any of them is connected in anyway with the Competition and request (by e-mail to scouting_innovation_egp@enel.com), if necessary, any additional information to EGP to fulfill such obligation; He/she accept to abide by these Regulations;
2) All the information contained in his/her Proposal is true, accurate and complete;
3) He/she has viewed and accepts the privacy policy of the Enel Open Innovability platform;
4) The Applicant owns all the rights, including, but not limited to, all intellectual property rights and/or has obtained any and all consents, approvals, or licenses required in order to make the Proposal and by participating to the Competition no third party rights are breached; Enel GP is not requested to verify the authenticity of the ownership of the rights of the proposal and any issues derived from third party claims that may arise are the solely responsibility of the applicants; nonetheless, Enel GP reserves the right to disclose the identity of the Applicant to any third party claiming that the material posted or uploaded by the Applicant to the Competition platform [www.openinnovability.enel.com] constitutes a violation of their IPRs, or their confidentiality/privacy rights. Enel GP reserves the right to ask for additional evidence or documents to validate that all information supplied by applicants is true and complete;
5) In case The Applicant is an employee of a legal entity, he/she is responsible for ensuring that his/her participation in the Competition complies with any policy of his/her corporation, agency, or institution may have regarding participation in contests of this type. If Enel GP has reason to believe that the Applicant may violate any of those policies, Enel GP reserves the right to prohibit the participation in the Competition or withheld the payment at any time.
6) If the Applicant is an employee of one of the Enel group companies, he/her undertakes to perform all activities necessary for the preparation and submission of the Proposal outside of his/her working obligations ;
7) The Applicant has not breached any laws in his/her country of residence regarding the legality of entering the Competition;
8) The Applicant is not in a position of conflict of interest with the Competition;
9) His/her Proposal does not: (i) violate the rights — including, but not limited to, copyrights, trademark rights, patent rights, or privacy rights— of any third party; (ii) prominently feature any trademarks or logos; (iii) contain content that is defamatory or in violation of any law, irrelevant to the Competition, or otherwise inappropriate, as determined by Enel GP, in its sole discretion;
10) The Applicant releases and undertakes to hold harmless Enel GP, and its subsidiaries, affiliates, employees and agents from any and all liability or any injury, loss or damage of any kind arising from or in connection with this Competition or any prize won.

Enel GP informs that Enel Group in managing the business activities and the relationships refers to the principles contained in its Code of Ethics, in the Zero Tolerance Plan against the corruption and in the Compliance Program pursuant to Italian Legislative Decree 231/2001 (available at www.enel.it, section "Company"). The Applicant shall comply with equivalent principles in conducting hereunder your business activities and in the management of your relationship with third parties.

Enel GP reserves the right to reject any Proposal that does not comply with these Regulations.

6. Application

Proposals will be submitted exclusively online through the Enel Group Open Innovability platform [www.openinnovability.enel.com] and shall be exclusively in English. Proposals submitted by any other means will not be considered. Proposals will be submitted in a single stage, by submitting an online Proposal, which will include:

1) Information about the Applicant; in case the Applicant is a team or legal entity, the natural person submitting the application shall be automatically treated as the team or legal entity authorized representative; in case the Applicant is a team, each team member must meet the eligibility criteria set forth above and must be indicated in an attached file "TEAM Composition";
2) Information about the Proposals [for more details, please read the issue description and the ANNEX 1];
3) A list, which shall specify all rights of ownership and use in the pre-existing intellectual property rights, see Article 8 below.
4) Possibility to upload documents for a maximum of 5 files

Applicants are strongly recommended not to wait until the last minute to submit the Proposal. Failure of the proposal to arrive in time for any reason, including extenuating circumstances, will result in rejection of the Proposal.

7. Phases and deadlines

The Competition is structured in the following steps:

Phase 1 – Submission

It will be possible to submit Proposals on the Enel Group Open Innovability platform [www.openinnovability.enel.com] from September 12, 2017 to October 12, 2017 (within 23.59 CET).Enel GP may decide to extend the deadline, for a maximum of additional 30 days.

In order to be eligible for evaluation, Proposals should be complete and submitted before the deadline through the Competition platform; Applicants must accept these Regulations, the Terms of Usage and Private Policy of the Open Innovability platform, as well as declare under their own responsibility the ownership or right of usage of any intellectual property rights involved in the proposal and the absence of conflicts of interest.

Communication to participants: after a formally valid submission, the applicants will receive a confirmation by email.

Phase 2 – Evaluation

Enel GP, availing itself of both internal and external resources, as deemed fit, will evaluate the Proposals from October 13 2017 to November 20, 2017 (within 23.59 CET), with a proportionate postponement in case of extension of the submission deadline. The Proposals must satisfy the requirements specified in ANNEX 1 and they will be evaluated based on the criteria below (in order of importance):

1) Technical feasibility and potential: the proposed technological solution can be realized/used and has a high level of quality and distinctiveness
2) Economics: Accuracy and credibility of the costs/benefit analysis
3) Business Potential: Relevance of the technology proposed to generate revenue and/or economic value
4) Applicant credibility: experience in technology or industry, educational qualifications, credentials, team composition (if the proposal is subscribed by a group)
5) Presentation of the Proposal: Completeness and clarity of the material.

The Proposals lacking major elements for their proper evaluation or manifestly unsubstantiated will be discarded.

Communication to participants: Specific communication will be sent to the winner and to the unselected applicants.

Phase 3 –Winner Announcement

By December 13, 2017(within 23.59 CET), with a proportionate postponement in case of extension of the submission deadline, Enel GP will contact the winner asking for some additional information in view of payment which will be made to each winner by Enel GP within approximately 90 days after the completion of Enel GP's verification procedures and the submission by the Applicant of the required declarations. Payment is conditioned upon the winner's cooperation with Enel GP's verification procedures. An example of the required declaration is available as ANNEX 2 to these Regulations. Moreover Enel GP will ask the winner the tax code (or the VAT number if a legal entity) and a certification of the winner's signature from a Public Notary or its foreign equivalent.

After the payment to the winner, Enel GP will publish the name and the details of the winner of each issue with a description of their Proposal and the reasons for their choice on the Open Innovability platform, Enel.com and enelgreenpower.com websites and Enel Group's social channels (Facebook, LinkedIn and twitter).

8. Intellectual property rights

8.1 For the purpose of these Regulations, "Intellectual Property Rights" also abbreviated "IPRs" means rights in, to and under:

i. inventions, patents, patent applications and statutory invention registrations;

ii. know-how such as any information, including, without limitation, product designs, processes and processing methods, apparatus specifications, production specifications and techniques, raw material specifications and sources, test methods and standards, manuals, invention records, formulae, calculations, research records and reports, and marketing surveys and reports, which are possessed and known in any form whatsoever, whether communicated orally or embodied in plans, drawings, photographs, tapes, discs, memoranda, notes, reports, studies, or samples, and whether such information is patentable or unpatentable;

8.2 Participation in the Competition does not grant any protection to intellectual property rights ("IPRs"). Although the Proposals may refer to an innovative and creative use of already existing tools that cannot be protected as an intellectual property right, it is possible that IPRs are involved in the Proposal. In such case, Enel GP recommends that Applicants provide adequate protection to their IPRs prior to submission of the Proposal, as following the submission or any relevant information published on the Enel Open Innovability platform (including information about the winner) the IPRs may enter the public domain. Enel GP waives any liability connected to the use of unprotected IPRs by the applicants.

Where industrial and intellectual property rights, including rights of third parties, exist prior to the Competition ("pre-existing intellectual property rights"), Applicants shall establish a list which shall specify all rights of ownership and use in the pre-existing intellectual property rights and must submit this list when the Proposal is submitted as its attachment.

8.3 Notwithstanding any different provision in the Terms of Usage of Open Innovability platform, upon acceptance by Enel GP of the Proposal and payment of the amount set out in Sect. 4 of these Regulations, the Applicant grants to Enel GP a non-exclusive, worldwide, unlimited, perpetual, irrevocable and royalty-free license, with the right to sub license, to use, make, have made, market, copy, modify, lease, sell, distribute, and create derivative works of the Proposal. If the Applicant uses any process in the development of the Proposal which are subject of patent rights owned by such Applicant , Enel GP is granted a worldwide, non-exclusive, perpetual, royalty-free right and license, to practice any patented process used in the Proposal. The Applicant shall execute all papers and do all actions deemed necessary by Enel GP to ensure that Enel GP acquire the licenses and rights as set forth in these Regulations. Such cooperation and execution shall be performed without compensation other than the amount set out in Sect. 4 above.

9. Enel GP rights on submissions

By entering this Competition It is also understood and accepted that

1) Enel GP has the right to (and is licensed to with no extra charges) (i) use, review, assess, test, and otherwise analyze Proposals and all their contents in connection with this Competition; and (ii) feature Proposals and all their contents in connection with this Competition (including but not limited to internal

and external presentations, tradeshows, and screen shots of the Competition entry process in press releases) in all media (now known or later developed);

2) The Applicant agrees to sign any necessary documentation that may be required for Enel GP and its designees to make use of the rights granted above;
   Enel GP may have developed or commissioned materials similar or identical to the Proposal and any claims resulting from any similarities to the Applicant Proposal is waived;
3) Enel GP cannot control the incoming information disclosed to Enel personnel in the course of entering the Competition, or what Enel personnel will remember about any Proposal. It is also understood and accepted that Enel GP will not restrict work assignments of the personnel who have had access to the Proposal. By entering this Competition, the Applicant agrees that Enel GP cannot be held liable under this section or copyright or trade secret law for the use of information which Enel personnel may retain in their memories while developing or deploying our products or services;
4) After the winner announcement, Proposals may be posted on a website selected by Enel GP or viewing by visitors to such website. Enel GP is not responsible for any unauthorized use of the Proposal by visitors to such website. While Enel GP reserve these rights, is not obligated to use the Applicant's Proposal for any purpose, even if it has been selected as a winning Proposal.

10. Changes to Regulations

BY submitting the Proposals, Applicants acknowledge and accept that Enel GP could vary these Regulations at any time. This includes changes to dates for deadlines and events, locations or specifications of the Competition.

Enel GP will post any change to these Regulations on the Competition platform [www.openinnovability.enel.com]. Applicants should regularly visit the Competition platform to check if any update of the Regulations has been posted.

11. Conflict

In the case of any conflict between the terms of these Regulations and the Terms of Usage of the Open Innovability platform, these Regulations shall prevail

12. Cancellation, changes or suspension of the Competition in case of irregularities in the Competition

If someone cheats, or a virus, bug, internet bot, catastrophic event, or any other unforeseen or unexpected event that cannot be reasonably anticipated or controlled (also referred to as force majeure) affects the fairness and/or integrity of this Competition, Enel GP reserves the right to cancel, change, or suspend this Competition. This right is reserved whether the event is due to human or technical error. If a solution cannot be found to restore the integrity of the Competition, Enel GP reserves the right to select winner from among all eligible entries received before Enel GP had to cancel, change or suspend the Competition. If any Applicant or member of a team attempts to compromise the integrity or the legitimate operation of this Competition, or if Enel GP has reason to believe that an Applicant or member of a team have compromised the integrity or the legitimate operation of this Competition by cheating, hacking, creating an internet bot or other automated program, or by committing fraud in any way, Enel GP may seek damages to the fullest extent permitted by law. Further, Enel GP may disqualify and ban any unfair participant from any future competition.

13. Costs and taxes

Any cost and tax relevant to the participation to the Competition or the receipt of payment shall be exclusively borne by the Applicants. Applicants are requested to check the applicable costs, duties and taxes according to the laws of the jurisdiction where they reside or where are otherwise obliged to pay taxes.

14. Limitation of liability

In addition to any other limitation of liability contained in these Regulations, Enel GP is not liable for possible deficiencies of the platform. Enel GP is not responsible for problems regarding computers, networks or any other reasons that may lead to lost, damaged or late entries.

15. Future collaborations

Winning the Competition does not not give any other right than receiving the payment. Nevertheless, Enel GP may, at its sole discretion, negotiate with winner and other Applicants future agreements.

16. Governing law and jurisdiction

The Competition is ruled by Italian law. Any disputes shall be exclusively set by the Courts of Rome.

ANNEX 1 ISSUE DESCRIPTION

Title of the ISSUE: **An alternative solution for H_2S abatement in geothermal power plants**

ABSTRACT

Sustainable integration of geothermal power plants and related infrastructures, abatement of the gaseous emission and of the cooling tower drift, reduced noise level, etc., allow the preservation of natural beauties, environmental features and life quality of the people living near the plants.

One of the major problem of the geothermal energy is related to the atmospheric emission of the power plants, mainly hydrogen sulphide and mercury in elemental form.

Hydrogen sulphide is characterized by an odor threshold concentration of few ppb (part per billion), remarkably lower than the reference value of 100 ppb (as 24 hours average) established by the World Health Organization (WHO) for the protection of the population health.

Hydrogen sulphide concentrations in the ambient air, measured both by ENEL and ARPAT (the Environmental Protection Agency of Tuscany) are much lower than WHO reference value, so that this compound doesn't pose any problem for the population health. However, the bad smell of hydrogensulphide is often perceived in the geothermal areas, depending on the atmospheric conditions and represents a real nuisance.

As for mercury, the emissions of this element are quite low, but there is some concern about possible build-up in the long term operation even at significant distances from the power plants, due to the mobility of this element.

Emission cleaning and in particular the elimination of the bad smell of hydrogen sulphide is a crucial point for the perfect compatibility between geothermal exploitation and valuable use of the territory, fundamental requirement for the consensus of the local communities.

Owing to the particular features of the Italian power plants (small and unattended) and of the geothermal fluids (high content of non condensable gases), the abatement technologies available on the market were not suitable and entailed excessive costs. As a consequence, it became necessary to develop an innovative process. This objective was achieved through the invention of AMIS® technology below outlined.

The invention of a proprietary technology (AMIS® - acronym for "Abatement of Mercury and Hydrogen Sulfide" in Italian language) for the abatement of hydrogen sulphide and mercury emission and its application both to new geothermal plants and to the retrofit of the existing one's is a cornerstone of the New

Geothermal Deal in Italy. Hydrogen sulphide is responsible of the bad smell often perceived in the geothermal areas.

AMIS® is an environmentally friendly process because doesn't produce sulphur based by-products to be landfilled or recycled.

At present, all power plants are equipped with AMIS® systems. The process consists of three basic steps:

• Removal of mercury by chemical absorption;

• Selective catalytic oxidation of hydrogen sulfide to sulfur dioxide;

• Sulfur dioxide scrubbing by a side stream of cooling water.

According to the ammonia content of the steam, which contributes to neutralize the absorbed SO_2, the process may require the addition of chemicals (e.g. sodium hydroxide) to maintain the cooling water within the desired pH range. NaOH is injected in the column feed. Unfortunately, the cost of sodium hydroxide is getting an operative issue.

Therefore, Enel GP is looking for novel solutions to maximize H_2S abatement and at the same time reducing the OPEX associated with needs of chemicals.

THE ISSUE

Enel GP is looking for novel solutions to maximize H_2S abatement in geothermal power plants and at the same time reducing the OPEX associated with needs of chemicals. Moreover, the present end-cycle effect of the AMIS® (Abatement of Mercury and Hydrogen Sulfide) process is quite good: no materials from the reactions outcomes are handled as solid waste nor sulfur cake are produced to be reprocessed. These condition should be considered in the proposed solution and should not be penalized (or even better improved) by the new proposed solutions

Any proposed solution should address the following **Solution Requirements**:

1. The proposed solution must maximize H_2S abatement in geothermal fluids, without using or minimizing chemicals

2. The proposed solution must be economical (including capital, installation and maintenance costs) in order to be amenable to mass deployment in geothermal plants

3. The solution must be easy to install and require low maintenance

4. The proposed solution must be adaptable to typical geothermal plants

5. The solution must use no toxic chemicals or have any negative impact on the environment

6. The proposed system should offer the Seeker “freedom to practice” or be available for potential licensing. There should be no third party patent art preventing the use of specific equipment and materials for their commercial application.

The submitted proposal should include the following:

1. Detailed description of the proposed solution that can meet the above **Solution Requirements**.

2. Rationale as to why the Applicant believes that the proposed solution will work. This rationale should address each of the **Solution Requirements** described in the Detailed Description and should be supported with any relevant examples.

3. Data, drawings, case studies, patent and journal references or any additional material that supports the proposed solution.

AMIS PROCESS DETAILS

Geothermal fluid extracted from the reservoir by production wells is carried to the power plants by a steel pipe network.

The fluid mainly consists of steam with some percentage (from less than 1% up to 15%) of non condensable gases (NCG). Figure 1 shows the simplified scheme of a standard geothermal power plant not equipped with emission control systems.

After expansion in a turbine, the fluid enters a direct contact condenser operating at a very low pressure (about 0.08 bar absolute), where the steam is condensed and the NCG are cooled to reduce compression power by the cold geothermal water flowing from the cooling tower basin.

NCG are drawn out of the condenser by a centrifugal compressor and released to the atmosphere from the cooling tower.

Steam condensation increases the temperature of the cooling water. Water from steam condensation and cooling water leave the direct-contact condenser at a temperature of about 35°C. An extraction pump sends the hot water to the top of the cooling tower where it is cooled down to about 25°C by a counter-current flow of air. Cold water is collected in the tower basin to repeat the cycle.

About 75% of the water from steam condensation is evaporated in the air flow. The balance, which represents the cooling tower overflow, is reinjected through reinjection wells in the geothermal reservoir, thus contributing to the exploitation sustainability.

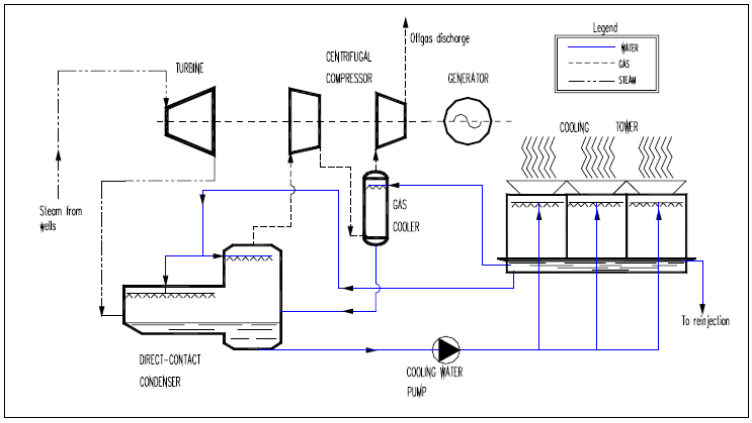

Figure 1: simplified scheme of geothermal plant

Instead of being released to atmosphere, NCG can be sent to the AMIS® system for mercury and hydrogen sulphide abatement. A simplified scheme of a standard geothermal power plant equipped with AMIS®system is shown in Figure 2.

The figure features the three fundamental steps of the AMIS®process:

-removal of mercury by chemical absorption;
-selective catalytic oxidation of hydrogen sulphide to SO2;
-SO2 scrubbing by geothermal water.

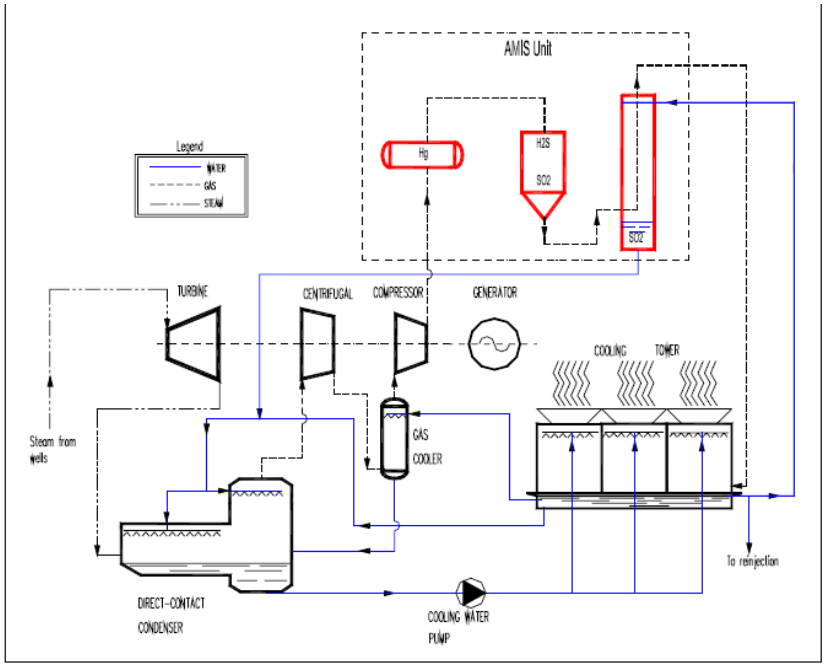

Figure 2: the AMIS® scheme

1st step: Mercury removal

Elemental mercury is removed from NCG stream by chemical absorption on a fixed bed of sorbent (selenium mass or sulphurized activated carbon). Before entering mercury absorber, the process gas is cooled and subsequently compressed in order to achieve the optimum temperature (about 70°C)

and relative humidity conditions for the reaction. In addition, gas compression provides the head required to compensate the draft losses of the AMIS® system.

2nd step: Catalytic oxidation of hydrogen sulphide

The selective catalytic oxidation of hydrogen sulphide (H_2S) to sulphur dioxide (SO_2) is the second basic step of the process. NCG are heated up to the minimum temperature required by the catalyst to promote oxidation according to the reaction:

$$H_2S+3/2\ O_2 \Rightarrow SO_2 + H_2O$$

The reaction is exothermic. The enthalpy of the hot stream leaving the catalytic reactor is recovered to preheat the cold stream leaving mercury absorber. The process is completely regenerative, so that no external heating is required during normal operation.

Some air is added to the gaseous stream to be treated in order to provide the oxygen needed for H_2S oxidation and catalyst temperature control.

3rd step: Sulphur dioxide scrubbing by geothermal water

The final step of the process is the absorption of the produced SO_2 by geothermal water.

In most cases, geothermal fluids contain basic soluble compounds, especially ammonia, so that these are naturally present in the geothermal water. Basic compounds allow the absorption of acidic components, such as sulphur dioxide.

In the AMIS® system, SO_2 absorption is achieved in a packed column, filled with metallic rings to enhance contact between gas and liquid phases.

The efficiency of the SO_2 absorption essentially depends on the molar ratio between produced SO_2 and ammonia in the geothermal water. If geothermal water contains enough ammonia, SO_2 removal is close to 100% without addition of any chemical. Otherwise, it is possible to achieve the same result by adding ammonia water, thereby increasing the natural ammonia content of the geothermal water, or, as an alternative, sodium hydroxide (NaOH).

<u>This is the critical point we are focusing in the present challenge.</u>

The reaction products of SO_2 scrubbing are soluble (sulphites, thiosulphites and thiosulphates).

The water leaving the absorption column re-enters the cycle of the geothermal water, controlled by the cooling tower overflow.

AMIS® is a patented process (Inventor: Dr. Aldo Baldacci; patentee: ENEL SpA).

EFFICIENCY

AMIS® process exhibits a very high abatement efficiency, higher than 99% for both pollutants.

It allows an overall reduction of plant emission in the range of 95%-99% for mercury and 75%-85% for H2S. Overall reduction is calculated with reference to the uncontrolled plant emission. It takes into account also the emission related to the liquid stream leaving the condenser, which is not treated by the AMIS® system. As a consequence, overall removal efficiency is lower than removal efficiency of the AMIS® system.

As an example, we are going to highlight the reference value of the first full scale AMIS® system, commissioned on 2002 as retrofit of Bagnore 3 geothermal plant, located in southern Tuscany, with a nameplate capacity of 20 MW and a steam flow rate of 130 t/h of saturated steam.

The geothermal fluid feeding Bagnore 3 plant is produced by a water dominated field. NCG content of the fluid is in the range from 5% to 12% by weight, depending on the production wells feeding the

plant. Therefore, the AMIS® system is designed for a maximum NCG flowrate of 15,600 kg/h, with a turn down of 1:3.
Average H2S and Hg concentration, on a dry gas basis, are 1% v/v and 2.5 mg/Nm3, respectively.

REFERENCES

The following links can be used by Applicants as a first introduction to the AMIS® technology:

Baldacci A., 2001. Italian Patent #01305033 dated 10 April 2001 (applied for 16 October 1998).Baldacci A., M. Mannari and F. Sansone, 2005: "Greening of Geothermal Power: An Innovative Technology for Abatement of Hydrogen Sulphide and Mercury Emission." Proceedings of World Geothermal Congress 2005, Antalya, Turkey, 24-29 April 2005.

Cesare Pertot, Fabio Sabatelli, Massimo Messia, Marco D'aleo, 2013: "Assessment of Geothermal Power Plants Impact on Air Quality – Effect of H2S Abatement with AMIS® in the Larderello-Travale-Radicondoli Geothermal Area (Tuscany)". Proceedings of European Geothermal Congress 2013, Pisa, Italy, 3-7 June 2013

Fabio Sabatelli, Massimo Mannari, and Roberto Parri, 2009: "Hydrogen Sulfide and Mercury Abatement: Development and Successful Operation of AMIS® Technology", GRC Transactions, Vol. 33, 2009

ANNEX 2 EXAMPLE of WAIVER Declaration

Company (the “Employer”) is aware that _____ (the “Employee”) has developed a solution for the Enel Open Innovability Challenge, entitled “TITLE” which the Employee has assigned (delivered?) to Enel Green Power S.p.A. under a submission made on (DATE) accepting the Regulations of the Challenge and the Terms of Usage of the Open Innovability platform.
The Employer is aware that the solution submitted by the Employee won the Challenge mentioned above and the relevant prize will be awarded according to the condition already defined and laid down.

Employer hereby acknowledges that the above solution has been developed by the Employee exclusively for the Enel Open Innovability Challenge and not within the scope of the employment, and unconditionally, absolutely, and forever waives and releases the Employee from any obligation of assignment of the intellectual property rights to the Employer with respect to the solution developed for Enel Green Power S.p.A. and/or any of its nominees.
This letter is hereby executed by a duly authorized representative of Employer.