



SDI Review Form 1.6

Journal Name:	Current Journal of Applied Science and Technology
Manuscript Number:	Ms_CJAST_37937
Title of the Manuscript:	PERFORMANCE AUGMENTATION OF A GAS TURBINE PLANT USING AN ABSORPTION REFRIGERATION SYSTEM
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	1. Give the comparative analysis of your results with published results. 2. In support of conclusion no. 2 plot the thermal efficiency and net work output of cycle with turbine inlet temperature. 3. Put the nomenclature of used parameters in the manuscript. 4. Write the unit of net work output in the title of axis of figure no. 9 and 10 and the unit of specific fuel consumption in figure no. 11 and 12. 5. The phrase "The results showed that when the intake air temperature 12 decreases by 10-15 °K, the Efficiency and Net-work output increases by 7% & 4% respectively" of abstract in line 12-13 is required more explanation in the results and discussion section.	1. Literatureson the effects of cooling system on gas turbine performance were reviewed 2. Conclusion no. 2 is removed because values of turbine inlet temperature were not used. 3. Nomenclatures included 4. Units are written in title axis 5. explanation is made in the results and discussion section
Minor REVISION comments	1. Line 30 of page 1 "exist on yearly basis" correct as "exists on a yearly basis" 2. Line 31 of page 1 "ISO conditions almost all the times [3]" correct as ISO conditions almost all the time [3]. 3. Line 37 of page 1 "According to study by [4] on the Kolo-Greek SK30 GT, owing to high ambient temperature above the ISO value" Write the surname of researcher before reference number like According to study of Tolumoye [4] on the Kolo-Greek SK30 GT, owing to high 4. Line 41 of page 2 "[5] concluded that chillers can increase gas turbine power output by.." 5. Correct as Jonsson and Yan [5] concluded that chillers..... 6. Line 44 of page 2 "[6] presented a computer simulation of the..." Correct as Kakaras et al. [6] presented a computer simulation... 7. Line 48 of page 2 "The study of [7] showed that a 1% gain..." Correct as Elliot [7] showed that a 1 %.... 8. Line 49 of page 2 "In addition, [8] reported in his study that chillers..." Correct as "In addition, Mercer [8] reported in his study that chillers..." 9. Put the details of reference of [15], [16] and [17] in line 133 and 135 of page no. 4 and in line 149 of page 5. 10. Replace the word enters to get into in line 41 of page 2 "Turbine inlet chilling is defined as cooling the air before it enters get into the compressor of the gas turbine" 11. Replace for to in phrase in the line 47 "large penalty in the plant's performance for in high ambient temperatures lead to drop in performance" 12. Correct the word energies in the line 60 as energy in phrase "thermal energy or renewable ~~energies~~ energy as the power source" 13. Correct the phrase in the line 97 "The ~~daily-average~~ operating variables were statistically" as The average daily operating variables were statistically..	All the minor comments by the reviewer were corrected



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	14. Correct the word “other” as order in the line 267 15. Correct the word “network” as net work or specific work output in the line 278 and wherever it is found in the manuscript. 16. Correct the word “stimulated” as simulated in the line 281 17. Replace the word “shows” as “is shown” in the line 291.	
Optional/General comments	Add the recent inlet air cooling papers in introduction part Shukla, A. K., & Singh, O. (2016). Performance evaluation of steam injected gas turbine based power plant with inlet evaporative cooling. Applied Thermal Engineering, 102, 454–464. https://doi.org/10.1016/j.applthermaleng.2016.03.136 Shukla, A. K., & Singh, O. (2017). Thermodynamic analysis of steam-injected gas turbine cycle power plant with inlet air cooling. International Journal of Ambient Energy, Vol. 38 (6) https://doi.org/10.1080/01430750.2016.1155495 Shukla, A. K., & Singh, O. (2017). Thermodynamic investigation of parameters affecting the execution of steam injected cooled gas turbine based combined cycle power plant with vapor absorption inlet air cooling. Applied Thermal Engineering, 122, 380–388. https://doi.org/10.1016/j.applthermaleng.2017.05.034 G. Barigozzi, A. Perdichizzi, C. Gritti, I. Guaiatelli, Techno-economic analysis of gas turbine inlet air cooling for combined cycle power plant for different climatic conditions, Appl. Therm. Eng. 82 (2015) 57–67.	Shukla, A. K., & Singh, O. (2016). Performance evaluation of steam injected gas turbine based power plant with inlet evaporative cooling. Applied Thermal Engineering, 102, 454–464. https://doi.org/10.1016/j.applthermaleng.2016.03.136 Thanks