

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>life and fishery</i> • <i>Marine life in the Mannar area is found in the shallow coastal waters, Lagoon and the Salt Marshes and the confluence area of thonas. The lagoon and the shallow coastal areas are ecosystems with rich marine life where intense fishing activity is taking place.</i> • <i>In the planning stage (micro siting exercise), installation of wind turbines or the power plant facilities were completely avoided in these areas. Therefore, direct discharge of sediment laden water from construction activities will not occur. Further, a 50m coastal set back plus a 60m buffer was kept protecting project influences on the coastal waters.</i> • <i>Thonas are natural flow paths that carry runoff in the rainy season. They become active in the rainy season and flush inland water into the sea with heavy loads of sediment laden water. This is a natural phenomenon. We have avoided siting all turbines near these Thonas primarily due to structural stability risks, e.g., turbine 52 was shifted from its original location to avoid intervening with the runoff flow path of the Thona.</i> • <i>Apart from this in the micro siting exercise all fishing activity areas (access paths to fish anchorages etc) were avoided leaving about 200m buffer</i> • <i>As precautionary measure, the EIA has considered the potential indirect impact of remote discharge of sediment laden runoff from the construction site on the marine ecosystems with a well-defined mitigation measure. Mitigation of all construction phase water quality impacts from sediment laden wastewater and runoff have been described in the section 5.3.6.3 Mitigation of impacts on surface and groundwater quality (Construction phase: Erosion, soil scouring, sediment laden runoff, siltation and Turbidity in streams and sea water in the EIA, and section con -8, and con 9 in the EMP .In addition to this all-construction phase water quality impacts mitigation is comprehensively discussed in the section 5.3.6.8 of the EIA</i>

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			<i>The operation phase of wind farms does not produce any sediment laden wastewater or runoff to silt fishing grounds.</i> <i>With this explanation we are of the opinion that the EIA has comprehensively addressed all forms water quality impacts on the aquatic ecosystem both fresh water, ground water, and marine waters.</i>
17.	187	4.5.7 Impacts due to removal on Palmyra and coconut trees	Q: The families who are depending on palmyra directly and indirectly will be affected for their livelihood. It can affect the natural rainfall pattern and change to underground water deficit in Mannar. Furthermore, the importance of Palmyra growth for bats not mentioned. R: See response 44
18.	191	Impacts due to transportation of material and equipment and increase of traffic volumes during the construction period	Q: The construction activity, noise, and traffic congestion can disrupt the daily lives of local residents, affecting their quality of life and potentially leading to social tensions. And Construction vehicles can generate noise and air pollution, which can be disruptive to nearby residents and have potential health impacts. R: <i>Traffic noise and vibration in the construction phase</i> <i>Traffic congestion: The fact of traffic congestion in the construction phase has been considered in the EIA and a special traffic management plan has been proposed under section 5.3.7 where the contractor shall comply with the Part II of the "Manual of Traffic Control Devices for Road Work Areas, Road Development Authority (Second Edition, April 2004)" or their latest editions". This manual comprehensively addresses the requirement to comply with management of road traffic during construction works. It is also noteworthy that turbine locations and cable routes are mostly located in the areas where there are no public roads, residences and intense human activity. However, traffic on roads will be a significant concern during the on-land transportation of large turbine parts, material, machinery, and other equipment.</i> <i>Refer the EMP under con-31, Con 32</i> <i>Refer to the following sections of the EIA for Noise,</i>

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			<i>Vibration, and air pollution.</i> <i>In the absence of specific noise control regulations for road noise for construction projects the noise regulations of CEA will be applicable as given below.</i> <i>EIA: Section 5.2.3 Mitigating noise pollution and vibration impact during construction phase</i> <i>EMP: EMP-Con -16: Noise & vibration impacts on sensitive living receptors (human)</i> <i>EMP-Con- 14- Ambient Air quality deterioration (Dust, SPM, PM10, PM 2.5)</i> <i>EMP-con 15: Air quality deterioration ((SPM, PM2.5, PM10), Sox Nox, VOCs) by the emissions from construction machinery, vehicles and, power generators and other fuel combustion equipment With this explanation we are of the opinion that the EIA has comprehensively addressed the traffic, noise and vibration impacts</i>
19.	192	4.5.13 Impacts due to dewatering of tower footing locations	Q: Dewatering can lower the water table in the vicinity of the wind farm, potentially affecting local groundwater resources. This can impact nearby wells, wetlands, and other groundwater-dependent ecosystems. It also can affect surface water bodies such as streams, rivers, and lakes by reducing groundwater discharge into these systems. This can affect water flow patterns and impact aquatic ecosystems. R: <i>The aspect of dewatering for turbine footing has been recognized in the EIA and relevant mitigation measures are proposed under section 5.3.6.1 of the EIA. One important aspect to note that the groundwater resource in the project area is found in a extensive sandy deposits (This is specific to manner area).</i> <i>Due to seasonal variability of rainfall/evapotranspiration and high soil permeability most of the surface water bodies show a marked seasonal variability. Therefore, there are no perennial streams or lakes in the area and the surface fresh water is confined to small water retentions and sparsely situated large thonas (in the project area). Most of these surface water retentions dry completely in the dry season and they remain hydrologically active only in the wet season.</i>

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			• <i>Considering the duration of dewatering activity, and as turbines are located away from freshwater retentions the impact of drying up of large extent of aquatic systems will be unlikely, or very much localized and will not be strong enough to cause an extensive long-term impact on the hydrological dynamics of the fresh water aquatic systems.</i> • <i>Even the localized drying up of areas will remain dry only for a shorter period until the following rainfall (will be quickly recharged by the intensive north-east monsoon)</i> • <i>Similarly, possible impacts on the ground water wells are also low as the turbines are to be sited more than 200m away from residential areas as the domestic wells for the same reason. Therefore, possible impacts can be considered highly unlikely. However, as a precautionary we have suggested several measures in the EIA section 5.3.6.1.</i> <i>In addition to above, specific EMP measures are proposed for management of dewatering impacts on drainage and hydrology as given in con -7: mitigation of impacts on groundwater table and availability of groundwater - Depletion of groundwater and salinity intrusion and Damage to subsurface freshwater aquifer and the lens in the dunes.</i> <i>As an additional precautionary measure, the EMP proposes.</i> • <i>Alternative water supply can be provided in-case if water uses is affected. Drinking, cattle, and livestock grazing.</i> • <i>Compensation can be paid in case of any plantations, agricultural crops etc. are damaged due to drying up of surface water or groundwater.</i> <i>Note: It appears that the commenter has little acquaintances about the actual field conditions, subsurface geology in the project area and would like to kindly request to pay a visit to the project area in the both</i>

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			<i>wet and dry seasons to witness the actual surface water hydrology in the area and also review chapter 3 of the EIA report</i>
20.	193	4.5.14 Impacts due to waste and hazardous waste	Q: It can generate hazardous waste, such as used oils, lubricants, solvents, and electronic waste from decommissioned equipment. Improper disposal of hazardous waste can pose risks to human health and the environment, and it can lead to contamination of soil and water resources. This can have long-lasting impacts on ecosystems and human health. R: <i>The aspect of hazardous waste impacts is well recognized in the EIA and a separate section is dedicated to describe how to mitigate hazardous waste in the Construction/ Operational phase: Waste Disposal in the section 5.4.5.2 of the EIA and in section 5.3.6.6 Mitigation of impacts on surface and ground water quality, waste oil, and oil spills and also in the EMP under con-13: Hazardous Waste -oil, oil sludge, oily solid waste, spent chemicals resulting from machinery & turbine equipment- hazardous waste</i>
21.	193	4. 5. 15 Impacts on blade accidents, fall hazards etc.	Q: For this section, the Environmental Health, and Safety Guidelines for Wind Energy, 2015 and the Blade throw studies conducted for Pooneryn Phase I data were used. R: <i>Environmental Health, and Safety Guidelines for Wind Energy, 2015 is guideline published for mitigation of impacts including health and safety. This guideline can be used for developing mitigation of wind energy impacts regardless of size or location. Blade throw impact largely occurs due to turbine mechanical/operation failure and due to external environmental factors. Pooneryn and Mannar wind farms share turbines with similar technology and features. The other external factors are more or less similar. Besides the modelling study has shown the risk of blades becoming detached is very low, $10X^{-6}$.</i>
22.	xviii	Executive Summary	Q: How The Adani Green Energy Sri Lanka Limited (AGESL) was selected as the constructor and operator of the Phase II Wind Farm Project is unclear. The selection process through a tender calling has not taken place. Was the company selected through the correct procedure or was the company selected and the project was granted needs to be clarified in

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			a public hearing. The decision making behind the selection of this company and this particular project is concerning and questionable, therefore we request a public hearing to be held where this action can be clarified. <i>R: This does not fall within the scope of the EIA report.</i>
23.	xviii	Executive Summary > Figure A - Project Layout Plan	Q: The map given shows that several WTG's are within or close proximity of the buffer zones (1,600 mile area) of Vedithalathive Nature Reserve and the Adam's Bridge National Park. The approval for the construction of these WTG's in close proximity of important migratory bird staging areas where the wetland areas, water bodies and salt/ mud flats are used as breeding grounds. The approval of the Department of Wildlife Conservation is not given and the alternative locations for these WTG's are not given, even though the report acknowledges that several turbines fall within the buffer zone. Therefore, this approval should be obtained and made available to the public. <i>R: See response 21</i>
24.	xviii	Executive Summary	Q: Benefits through the project as described in the proposed CSR activities may not be adequate as it seems to have failed to address issues failed by the community. As the project will impact livelihoods, the suitable development activities through CSR projects should be designed/ planned through the consultation of communities and representatives of CSO groups where actual scenarios can be learned to plan a better CSR project approach. <i>R: A matter of opinion. See response 24.</i>
25.	xix	Executive Summary	Q: The report states that the land acquisition process is ongoing. If the project is yet to be approved, how is the land acquisition process underway? This raises serious concerns on the status of the project, the status of the approval of the EIA. Was the land acquisition initiated prior to the approval of the project EIA? This should be clarified during the public hearing. <i>R. Only the preliminaries have been started according to the legal procedure to practically to save time. No lands have yet been acquired.</i>

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26.	xx	Executive Summary	Q: The bird corridor shown in the Figure A is questionable as to how such a small, restricted area was considered to be referred to as a bird corridor when the entirety of Mannar Island and environs can be considered a 'bird corridor'. To identify and to 'declare' (although not legally, as there are no provisions in the Fauna and Flora Protection to Declare an area as a Bird Corridor, except in the case of 'Jungle Corridor's), scientific data related to bird migration paths and habitats should be considered. It is visible that data gathered through years of avifaunal studies on the migratory paths, number of individuals and species count of migratory birds were not considered in the decision-making process to identify this area as a Bird Corridor. Further it is questionable how a restricted area with a 1km width can be considered a corridor and provide protection to avifauna when the area does not have any legal protection, highlighting the fact that it can be used in the future for any other development. Furthermore, if this area is used as a corridor and the intention of the corridor is to create a passage way for birds to move through, why are there wind turbines located in the said corridor planned by the project proponent? This contradicts all intentions and further highlights that this is a mere distraction of the impact to avifauna. It is also questionable why this area was selected as a corridor when areas already identified with bird movement and breeding grounds are not considered for protective methods to be adopted or to be declared as either 'no-go area' or 'Protected area' with no development. Evidence have been shared on the impact caused to birds by Siting towers and overhead power cables in Vankalai Sanctuary. When it is evident that overhead powerlines and the turbines pose a threat to migratory birds, where the report itself acknowledges that 'in the case of Thambapawani Wind Power Project, higher bird collision risks than predicted have occurred, as there are reported bird collisions in the transmission line', it is seriously concerning why this project does not consider the underground laying of power cables to reduce risks. The project has failed to implement protective and/ or mitigatory measures where it is necessary to reduce the avifaunal collisions with turbines and transmission lines, and instead have decided on designating an area where the placement of turbines is still an issue. R: See responses 14, 16, 8, 7, 21, 45

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27.	xix	Executive Summary	Q: "Most of the lands are private lands, and the rest is state lands which includes the Coastal Zone. The exact ownership of the land to be utilized for the project will be determined during the land acquisition process, which is ongoing." - According to this statement, how can this activity be "ongoing"? If the project is yet to be approved, then how can the land acquisition process is already under way? This particular activity should be clarified during the public hearing. R: Please refer to the answer 25 above.
28.	xx	Executive Summary	Q: The bird corridor shown in Figure A is questionable as to how such a small restricted area was considered to be referred to as a bird corridor when the entirety of Mannar Island and environs can be considered a 'bird corridor'. To identify and to 'declare' (although not legally, as there are no provisions in the Fauna and Flora Protection to Declare an area as a Bird Corridor, except in the case of 'Jungle Corridor's), scientific data related to bird migration paths and habitats should be considered. It is visible that data gathered by prominent avifaunal experts on the migratory paths, number of individuals and species count of migratory birds were not considered in the decision-making process to identify this area as a Bird Corridor. Further it is questionable how a restricted area with a 1km width can be considered a corridor and provide protection to avifauna when the area does not have any legal protection. It is also questionable why this area was selected as a corridor when identified areas with bird collisions are not considered for protective methods to be adopted or to be declared as either 'no-go area' or 'protected area'. Evidence have been shared on the impact caused to birds by Siting towers and overhead power cables in Vankalai Sanctuary. When it is evident that overhead powerlines and the turbines pose a threat to migratory birds, where the report itself acknowledges that 'in the case of Thambapawani Wind Power Project, higher bird collision risks than predicted have occurred, as there are reported bird collisions in the transmission line', it is seriously concerning why this project does not consider the underground laying of power cables to reduce risks. The project has failed to implement protective and/ or mitigatory measures where it is necessary to reduce the avifaunal collisions with turbines and transmission lines, and instead have decided on designating an area where the placement of turbines is still an issue.

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			<i>R: See responses 14, 16, 8, 7, 21, 45</i> <i>Further it is obvious that the existing 'Jungle corridor' provisions would not be applicable in this case as the Mannar island remains populated and no corridor on land can be demarcated through the island. However, the report recommends a corridor for the birds meaning an 'aerial corridor'. This would be further clarified in the addendum. It is up to the DWC and other authorities to take the initiative to maintain this aerial corridor which has been demarcated based on providing free aerial space between critical bird congregational locations.</i>
29.	xxi	Executive Summary	Q: "According to the bird collision risk assessment the collision impacts are minor" - How is the conclusion made? The data to support this claim is not given. Further, data that is claimed to be collected through the CEB study is not shared and in addition, not done independently. - "Thambapawani Wind Power Project, higher bird collision risks than predicted have occurred, as there are reported bird collision in the transmission lines" - If Thambapawani shows results of an increase in the bird collision risk than anticipated, with the number of turbines in existence only covering a section of the islands south coast. Further, what are the data used to come to the conclusion that the collision impacts are minor? In addition, what is the data used by Thambapawani to state that rates of collision are higher than expected? This data is not depicted in this report and therefore we request a public hearing to clarify this claim. <i>R: See responses 14, 16, 17, 15</i>
30.	xxiv	Executive Summary	Q: "A total of 4,256 Palmyra trees could get affected to facilitate the installation of the wind turbines in the Hard Standing Area (95mx90m). Additionally, 4981 Palmyra trees will also be cleared to establish the access roads and internal power cables." - This alone shows the high impact to livelihoods and vegetation, breeding and feeding grounds of birds, bats and other fauna in Mannar. The report does not clearly indicate the countermeasures to reduce impact livelihoods from the loss of palmyra groves with long term mitigations. In addition, the loss of vegetation cover and threats to fauna is not assessed. Destruction of habitats, including the feeding and breeding grounds of many

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			different fauna is not considered as impacts of the project. Only the direct impacts to habitats and fauna from transmission lines and collision are considered. Loss of vegetation, and the resulting threat to fauna, both avifaunal and other are not considered as it can be threatening in the long term. As many migrants, especially wintering migrants who are seeking shelter in these various habitats are expecting safety and for sources, which will be impacted by the project and are not acknowledged. R: See responses 20, 19
31.	xxv	Executive Summary > Table E -Summary of Impacts and Mitigation Measures Proposed. > 1. Mitigation Measure	Q: "Installation of a radar-based automated early warning system for detection and mitigation of bird collision risk together with several other mitigation measures indicated in the Section 5 and the EMP." - Radar Based Automated Early Warning System accuracy and precision can be questionable, as there are already claims to the accuracy of the warning system. Furthermore, this report does not give the data to support the turbine shutdown speeds and effectivity. R: See response 14
32.	xxv	Executive Summary > Table E -Summary of Impacts and Mitigation Measures Proposed. > 1. Mitigation Measure	Q: "Not providing overhead transmission cables across the bird corridor. Use of bird deterrents where there are overhead cable" - The corridor which the project proponent has identified as a pathway or a safe space for birds to move through, which is identified without any data is recommended for not having any overhead transmission lines, when the areas where bird movement is recorded will be developed with overhead transmissions causing impact to various fauna. The justifications given to this action needs to be further clarified during the public hearing. R: See response 8
33.	xxv	Executive Summary - Table E -Summary of Impacts and Mitigation Measures Proposed. 6. Mitigation Measure	Q: "Internal water sources will not be used for the construction works project will use external water sources 100%." -What are the identified water sources, and the methods of moving water? Was the potential to contamination of soil and existing water sources by using water from external sources considered? Was the water quality considered? Was the threat to biodiversity from IAS considered? This should be assessed in this EIA. The potential

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			threat of IAS spread in this already sensitive and threatened area will be further impacted if mitigation measures to IAS control is not implemented properly, not just during construction phase but in operation phase as well. <i>R: The external water sources have not been decided at this stage. For the construction work the contractor will decide at the supervision of the "Engineer". Needed tests will be called for the water quality of the external water source. For the operational stage water is only needed for the office and the NWSDB supply will be considered. These items will be given in the addendum to the EIA Report.</i>
34.	xxvi	Executive Summary > Table E -Summary of Impacts and Mitigation Measures Proposed. > 16. Mitigation Measure	Q: Obtaining UDA consent being listed as a "mitigatory measure" is questionable as to whether "Conflict with proposed projects, tourism, wildlife, or forest reserves" can be resolved or impact reduction can be achieved in this manner. UDA consent is for development in the Mannar Island under the zoning plan of UDA. However, the factors mentioned here and not, are under other authorities. Example, impact with wildlife should be mitigated through the involvement of the DWC where such approval is not given. Impacts to tourism will not be limited by an approval given from the agency when the main tourism attraction of Mannar is directly impacted by this wind farm project. Therefore, a weak mitigation measure questions the integrity of the reports' ability to provide answers and solutions as well as the clarity of the information given. <i>R: All these entities (DWC, FD, UDA, Archaeology, Fisheries, NAQDA, SL Tourism) are members of the technical evaluation committee. UDA has granted the preliminary clearance subject to the planning approval. Most of the turbines coming are in private lands which will not hamper any development activity. Any other issues arising during project implementation will be resolved with the concurrence with the UDA and any other relevant entity.</i>
35.	xxvi	Executive Summary > Table E -Summary of Impacts and Mitigation Measures Proposed. > 19. Mitigation Measure	Q: "Fill materials will be purchased only from GSMB approved sites, regular Inspections will be carried out and materials with poor quality will be rejected." as a mitigation measure for "Contamination of land by pollutants and spoils, invasive weeds, and seeds". - This does not provide information on the screening process of material being transported into and collected at the source. This will be a

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			failure from the project proponent end to comply to the NEA and the prevention of IAS spread into an already vulnerable environment which is damaged by the project. The project report should include the cost for the control of damage caused by the project. Especially in the case of controlling IAS as it is already causing damage to Sri Lanka's biodiversity and economy. In the case of material being imported through India or any other country, the screening process should be implemented thoroughly to prevent any further IAS contaminations to Mannar and Sri Lanka. <i>R: Instructional framework Section 7.2 / 7.2.2 of which Senior EHS officer who is responsible for all environmental health and safety issues. The material brought into sites and selection of sites for such extraction has to be approved by the EHS officers. The officer has to work within this specified framework and the failure of the PMU / EHS is not an obligation of the EIA. This is not a pristine environment. However, as a precautionary measure we have identified this issue as a potential problem. Therefore, the report has adequately addressed this as shown below. Exotics plant species found at the site Listed (Annexure 3-3; section 3.4.9) and raised a caution as to some danger due to their spread (Sections 4.3.9, 4.3.10) and also reported that monitoring of their spread in required is important (Section 5.3.5.7 and Annexure 6.1 EMP Con 3, Con 19)</i>
36.	xxvi	Executive Summary > Table E -Summary of Impacts and Mitigation Measures Proposed. > 24. Mitigation Measure	Q: "On-site sanitary facilities will be provided, away from water ways and drainage paths, other black and gray water will be disposed through septic tanks, open defecation will be strictly prohibited." - Monitoring of the disposal should be done by an external party, with recommendations made during the placement of such sites when site preparing. Preferably a mandated authority where they can be held accountable. <i>R: Usually, the EHS system monitoring is under the purview of the PMU. If parametric monitoring is required this will have to be undertaken by an external party. See section 6.1. See also section 7.2/7.1.2.</i>
37.	xxvi	Executive Summary > Table E -Summary of Impacts and Mitigation Measures Proposed.	Q: "All deep excavations will be fenced with suitable mesh sizes to prevent fall of animals, restrict activities to daytime and raising awareness among the workers as to risks and through mindful driving." - Impact to wildlife should also be included in this section, where DWC is notified to and counter

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		> 29. Mitigation Measure	measures should be mentioned to prevent wild fauna impacts with the prevention and education on poaching. <i>R: The collaboration of the DWC will be included as a recommendation by the CEA</i>
38.	xxvi	Executive Summary > Table E -Summary of Impacts and Mitigation Measures Proposed. > 30. Mitigation Measure	Q: "Early induction awareness for site crews." - For poaching awareness, site workers should be educated on the prosecution of individuals engaged in such illegal activities, including but not limited to poaching under the FFPO and other relevant laws of Sri Lanka which includes prosecution for wildlife trade, and other illicit materials. <i>R: See section 7.2.3</i>
39.	xxvi	Executive Summary > Table E -Summary of Impacts and Mitigation Measures Proposed. > 46. Mitigation Measure	Q: Monitoring should be done by DWC and FD. For Replantation, identified sites, species should be given. <i>R: FD has already been included / DWC collaboration will be included for different activities. E.g. we would also recommend a plan for the capture and relocation of any displaced animals to be done in collaboration with the Department of Wildlife along with initiatives that can be taken to facilitate the escape of mobile animals during the initial clearance of vegetation at turbine locations. This elaboration of this point would be included as an Addendum</i>
40.	xxvi	Executive Summary > Table E -Summary of Impacts and Mitigation Measures Proposed. > 46. Mitigation Measure	Q: "Approval of the Department of forest /wildlife will be obtained when implementing vegetative mitigation and land scaping work." Mitigation should be implemented from the beginning of clearing and construction where material will be transported to and from the sites of resources to construction. Further, representatives should monitor this vegetation to prevent any further damage to fauna and flora. <i>R: FD has already been included / DWC collaboration will be included for different activities. E.g we would also recommend a plan for the capture and relocation of any displaced animals to be done in collaboration with the Department of Wildlife along with initiatives that can be taken to facilitate the escape of mobile animals during the initial clearance of vegetation at turbine locations. This elaboration of this point would be included as an Addendum.</i>

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41.	xxvi i	Executive Summary	Q: "Development of extra access roads to the turbine could also be used by society. <u>This is a social benefit.</u>" - Fails to show the impact on the environment by clearing of the forest and compacting of the soil which will further increase the flood impact. Where these roads will not be a benefit but an added issue R: See response 19
42.	xxix	Executive Summary	Q: "Overhead double line cables are not generally recommended, in the areas where the bird movement is high as there is a strong possibility of bird collision, according to the past experience." - As stated, there are observable bird collisions all the way from Thalaimannar to Vankalai. Therefore, it is best to recommend underground cables. Agreed. We strongly recommended this. R: See responses 3 and 45 We have cited a documented finding from elsewhere and made several recommendations to reduce collision with transmission lines. But note that we have strongly recommended underground transmissions lines owing to this risk.
43.	xxix	Executive Summary > Table F- Final Turbine Arrangement	Q: "To avoid confusion the remaining turbine numbers were not sequentially renumbered. The originally adopted turbine numbers remain in the report text including maps without the abolished turbine numbers." - However, the Table F- Final Turbine Arrangement has given replicated numbers of turbine numbers. Furthermore, the total number of turbines given here including the replicated numbers and excluding the abolished turbines exceeds 52. Clarify this. R: Read 'Executive Summary' Table F – Final turbine arrangement and the explanation provided in the text box above it.
44.	9	1.4.8 Ecological Studies > (ii) To determine whether the proposed project supports any critical habitats or species.	Q: The National Red List Conservation Status of the Birds of Sri Lanka states that "Gulf of Mannar region and adjoining bird areas such as Vankalai and Vidattaltivu are vital wetlands with regard to the conservation of bird life. Gulf of Mannar region acts as a 'funnel' for the millions of migratory birds that use both the western and eastern migratory routes to enter the grounds for a

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			massive number of migratory birds.". This highlights the importance of the Mannar Region including its protected areas and the unique habitats. Furthermore, the Red List also acknowledges that 'establishment of wind farms in the coastal zone adversely affect the landfall and the important habitat of the migratory birds. Along with the establishment of wind turbines, the Mannar island and its habitats are under severe threat from encroachments, conversion of land, aquaculture development, waste dumping, and proposed mining projects. These activities severely threaten migratory birds. Especially for ground nesters such as terns which will loss breeding habitats closer to lagoons. Although the EIA assesses the impact from this project, the overarching impact to the region will be amplified by the proposed projects for the region, including the said project. <i>R: See responses 2,3, 19, 21, 30, 31</i>
45.	10	Methodological approach for the ecological study > Fauna > Birds	<i>Q: "the survey did not fall within the migratory period" -</i> Report states that survey 'did not fall within the migratory period'. The selection of the survey period seems to be deliberate to withstand from collecting migratory data and the use of existing data developed by independent experts. <i>R: See response 10</i> <i>Q:</i> The data used in this report for avifaunal surveys are not disclosed and are questionable. <i>R: See Annexure 9</i> <i>Q:</i> This point needs to be discussed during the public hearing. When data of migratory birds were collected by independent researchers and experts, why was the data not used for this study? <i>R: See responses 13, 12 B, 15 A. Data were not provided even on request.</i> <i>Q:</i> Why were the undisclosed CEB study data was used? How can the CEB data be accepted as non-biased? <i>R: The data generated from different studies specific to the Mannar region conducted by the avifauna expert was the only credible data available for the area.</i>

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			<i>See responses 11, 10, 13, 15 A, 4</i>
46.	11	1.4.9 Avifaunal Study	Q: A total of 384 hours seems to be seriously inadequate and potentially undermine the actual data that could've been collected if the survey periods were longer and covered both the migratory period and non-migratory period as well as day and night. However, the report failing to do so questions the integrity of the results given by the models. This needs to be publicly clarified and the study is incomplete. Which is a crucial part of the study. Clarify this during the public hearing in Mannar and Colombo R: <i>See responses 15, 10, 11</i>
47.	12	1.4.9 Avifaunal Study > Figure 1-5: Sampling sites of the bat survey	Q: The sampling sites used in the study seems to be inadequate to give a realistic or accurate data of the presence of bats, density of populations and species and distribution, Therefore, this along with the number of sampling sessions carried out at each vantage point suggest that the data is incomplete and therefore the data used by this collection cannot be adequate enough to make any predictions on the impacts of bats. R: <i>See responses 15 and 20</i>
48.	17	1.4.11.4 key informant interviews, focus group discussions, stakeholder forums > Table 1-5: The stakeholders consulted.	Q: Why is the Department of Wildlife Conservation and Forest Department not consulted? Most concerning impact will be on fauna which is managed by DWC. In addition, the protected area buffer zones are impacted by the placement of turbines. Therefore, the consultations have failed to identify DWC as a stakeholder who can give recommendations which is not included in this report. R: <i>See response 21. The DWC / FD reviewed the document during a technical evaluation meeting before it was finalized, and the entire EIA report will be also reviewed by the DWC again. The project no doubt will only go ahead with their consent. Also, any additional conditions / concerns stipulated by the DWC will have to be addressed / included in the Environment Protection License.</i>
49.	17	1.4.13 Extended Cost Benefit Analysis	Q: "Impacts such as traffic congestion, noise pollution, damages to adjacent buildings, vibration impacts, dust and emission pollution, soil erosion, discharge of oil from

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			vehicles, solid waste, removal of trees, and nuisance to pedestrians, and road users etc. were considered." - Was the impact to avifauna, indirect impact to ecology through pollution, fragmentation of habitats, impacts to livelihoods, including fisheries, palmyra toddy tapping and other produce, tourism, and impacts to productivity of land was considered. If not, why was it not considered? <i>R: We regret to note the commenter has raised comments without going through the entire EIA and annexes and the poor understanding of practical implementation procedure for pollution control systems and offsetting mechanism of impacts currently practiced in the country. As stated earlier multiple times we have excluded sensitive ecosystems (coastal areas, protected areas at the project planning stage and all sensitive habitats within the project influence area was avoided by a micro siting exercise. This is mitigation by avoidance. This was followed by proposing mitigation measures to control pollution. By this we curtailed all forms of pollution entering the environment and ecosystems. This is clearly mentioned in Chapter 5 and the annex 6-1 EMP. Not only that, we have proposed institutional framework to establish a PMU and a implementation mechanism (chapter 7).</i> <i>We have excluded all fishing area access paths in the micro siting exercise. The intense tourism occurs only in the area of coastal beaches, protected areas. We have not touched them. Palmyra production is affected. Which is unavoidable. We have proposed a compensation package for that. An entitlement matrix is under preparation for this matter with concurrence of Palmyra Development Board. This board is the responsible agency. When it comes to productivity of lands, currently most of the lands proposed for the project belongs to few private owners. Most of the lands are open areas and scrub forest patches currently under pressure of degradation by anthropogenic activities. When productivity is concerned, we observe fractions coconut plantation, free moving livestock, and Palmyra products extraction from the naturally grown trees. All accountable productivity losses were considered in the EIA and will be compensated. Which is currently under preparation. This is the currently implemented practice for all development projects in the country.</i>
50.	22	1.8 Approvals needed for	Q: "Conditional preliminary clearance has been issued." -

Comment No	EIA Pg No	EIA Section reference	Comment
		the project from other state agencies and any conditions laid down by state agencies for implementation of the project. > Table 1-9: Approvals Needed > 9. Department of Wildlife Conservation (DWC)	This approval letter is not shared. <i>R: The DWC reviewed the document during a technical evaluation meeting before it was finalized, and the entire EIA report will be also reviewed by the DWC again. The project no doubt will only go ahead with their consent. Also, any additional conditions / concerns stipulated by the DWC will have to be addressed / included in the Environment Protection License.</i>
51.	28	Present ownership of the project site	Q: "The proposed project area is already published in the gazette ownership by the SLSEA as an Energy Development Area as per the provisions of the SLSEA Act (Refer section 1.6). The proposed area will be acquired by the SLSEA, and it will be leased to AGESLL on a long-term basis, for the development of the proposed project. Most of the project locations do not have any residential places." - Are the lands identified by the authority to be purchased? If so, what are the lands that have been earmarked for acquiring? R: <i>The EIA consultants for the present project, along with SLSEA officials have conducted in-depth and comprehensive community consultation programs (meetings and discussions) covering all the likely affected Grama Niladhari Divisions (GNDs) in the area. They also had discussions with officials of the relevant line agencies. The concerns and the responses of the community about the project interventions were given consideration (land ownership, land values, socio-economic background of potentially affected communities etc.) upon which the SIA has been prepared with detailed mitigation measures.</i> <i>Due consideration has been given to landownership and an actual ownership assessment was done through the relevant govt. agencies. The ownership of lands that will be affected by the installation of the towers have been identified under three ownership categories: state, companies, private. It was noted that most of the land is privately owned.</i> <i>III. The assessment revealed that the ownership of some lands is uncertain. The project proposes to mitigate these impacts i) by avoiding all lands with settlements ii) minimizing the permanent procession of land iii) providing compensation for</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>permanent/temporary loss of land and livelihood according to government approved criteria.</i> • <i>Please see Annex 3-4, Section 5.3.1 of the EIA report for the criteria proposed for the minimization of the land acquisition impact. In addition, a detailed plan is presented in the Resettlement Action Plan (RAP) which is currently under preparation, for the mitigation of land acquisition impacts. The RAP will consider each individual case.</i> • <i>Regarding the land loss due to noise impact is addressed in Section</i> Q: This information is not given. Is the AGESLL registered as a Sri Lankan company? The information of this company is not given in this report. R: <i>Adani Green Energy Sri Lanka Limited is a company registered in Sri Lanka</i>
52.	32	2.1.1.1 Wind power plant > Selection criteria of wind turbines capacity	Q: "Failure to meet these requirements can result in project delays and additional costs." - This shouldn't consider only the cost and delays to the project but to the overall countries cost impact as a result of loss of biodiversity. R: <i>The compliance Environmental and regulatory standards is vital and biodiversity is naturally apart of this.</i>
53.	33	2.1.1.1 Wind power plant > Table 2-4: Detailed specification for individual wind turbine	Q: What is the stop time at emergencies? R: <i>The shutdown process – slowing down the wind turbine rotational speed to less than 1 round per minute before it reaches the rotor blade. This system has the capability of tracking bird movement inside the windfarm except in the rotor swept area - which is 150 m</i> <i>See Annexure 5.1.</i> <i>See response 14.</i>
54.	39	Avifauna detecting mechanism/system and control mechanism.	Q: "The radar system can cover a range of 6-10 kilometers, providing surveillance coverage for the entire wind farm arrays, and the surrounding airspace." - If the radar system can detect only 6-10 km, with the average speed of individuals/ flocks of birds, how effective is the stopping speed of turbines? R: <i>The shutdown process – slowing down the wind turbine</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>rotational speed to less than 1 round per minute before it reaches the rotor blade. This system has the capability of tracking bird movement inside the windfarm except in the rotor swept area - which is 150 m See Annexure 5.1. See response 14.</i>
55.	39	Avifauna detecting mechanism/system and control mechanism. > Decision on Curtailment	Q: Turbine stopping speed is not given. R: <i>The shutdown process – slowing down the wind turbine rotational speed to less than 1 round per minute before it reaches the rotor blade. See Annexure 5.1.</i>
56.	41	Figure 2-15: Proposed locations (the red spots) for the bird detection radar facility	Q: The selection of the two radar facilities is unclear. Considering that the proposed 52 turbines are covering majority of the Mannar island all the way from Talaimannar Pier are towards Nadukudda, with a range of 10km maximum, although several layers of radar are used, the detection distance, and distance to the nearest turbine is minimal where any action that can be considered to prevent collision should be taken in short time period which is highly doubtful. The placement of the turbines and the proposed locations for radar facility is not clear. The maps aren't clear and the justification on why this area is suitable cannot be considered. This should be reevaluated and be clarified during the public hearing with the data from the Thambapawani Wind Farm, as how effective and the time gap between detection and stopping of wind farm operations. R: <i>The justification for this has been provided in Annexure 5.1. Radar is only one mitigatory measure. The operational phase bird/ bat collision performance monitoring has been mentioned in 7.1.3. See also response 14 A</i>
57.	42	Any other infrastructure required / provided by the project	Q: What is the methodology used to identify these sites? Not shared. Is it the accessibility, the soil, land cover? This needs to be clearly given in the EIA which needs to be evaluated by the public. R: <i>Key considerations included environmental factors such as site topography, closeness to sensitive elements such as water resources, forests, and factors which can influence</i>

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			<i>construction costs and sensitive environmental receptors. Accessibility to roads and other utilities, and necessary infrastructure were also considered. Regulatory and legal considerations, including zoning laws and permit requirements were considered (No project activities in the coastal set back of 50m +60m buffer). Socio-economic factors, such as residential areas, and proximity to cultural and historical sites were excluded. These factors will be considered collectively in selection of sites. In this we would like to emphasize that we have done a tedious and crucial work in selecting locations for major project facilities. We had to compensate by multiple limitation criteria in finalizing the locations (specially the turbines). The sites for other facilities have lesser restriction and it provides wider opportunity select a site with minimum environmental impact.</i>
58.	48	2.1.1.3 Land preparation	Q: "A total of 3953 Palmyra trees and 123 Coconut trees will be removed to facilitate the installation of the wind turbines. Additionally, 4,912 Palmyra trees will be cleared to establish the access roads and transmission lines necessary for this project. However, 9675 palmyra trees and 134 coconut trees were found outside the hard standing area (95x90 m2), but within the land acquisition boundary(170mx170m)." - Who is responsible for the monitoring of the number of trees being cut? Is the Palmyra board representatives along with forest department, wildlife department, and the dept. of agriculture will be present when the trees are cut? Furthermore, the report also says "A total of 4256 Palmyra trees could get affected to facilitate the installation of the wind turbines in the Hard Standing Area (95mx90m). Additionally, 4981 Palmyra trees will also be cleared to establish the access roads and internal power cables." How is the same report give two different data? R: <i>Refer to the Table 4-14 of the EIA for the final estimated figures for the purpose of the EIA.</i>
59.	49	Details of any permanent/Temporary access roads to be built / improved (existing condition and anticipated improvement) > Permanent	Q: When identifying lands to build roads, need to evaluate the habitats and vegetation as well as the water drainage of the soil as mentioned by soil conditions to prevent flooding if permeability of soil is affected. R: <i>These are standard requirements for road construction</i>

Comment No	EIA Pg No	EIA Section reference	Comment
		Access Roads:	<i>(presence of large trees, protected areas, flooding, permeability etc.) and is the obligation of the design and construction contracts. These are inbuilt pre-requisites of any construction projects.</i>
60.	53	2.2.3 Method of wind tower and blade transportation at the site.	Q: Justification to use the alternatives or the recommendations should be given. If the site distance is far from the landing zone, the noise, vibrations, congestion and impact to livelihoods and daily activities throughout the road area from Trincomalee to Mannar will be affected. This is not considered. Furthermore, the route given in the report falls within our borders 15 Protected Areas. If the route is selected as the final transportation method, the project proponent and company should be liable to any damage caused to communities, infrastructure, threats to wild fauna and flora. In addition, the project should also consult the line agencies responsible for the social, and environmental conditions along the selected route as well. To monitor, make recommendations to mitigate any unforeseen issues and reporting. R: <i>See response 36 on alternatives</i>
61.	56	2.2.13 Source, quantity & supply location of construction material such as sand/gravel/metal etc.	Q: When mined materials are transported and dumped or unloaded, the material should be screened to prevent any spread of contaminants and IAS. R: <i>This is not a pristine environment. However, as a precautionary measure we have identified this issue as a potential problem. Therefore, the report has adequately addressed this as shown below.</i> <i>Exotics plant species found at the site Listed (Annexure 3-3; section 3.4.9) and raised a caution as to some danger due to their spread (Sections 4.3.9, 4.3.10) and reported that monitoring of their spread in required is important (Section 5.3.5.7 and Annexure 6.1 EMP Con 3, Con 19)</i>
62.	56	2.2.15 Disposal of construction debris and solid waste	Q: Any non-biodegradable material, even though reused should not contaminate the surroundings, especially the soil and water sources whether they are freshwater or saline water. Therefore, necessary mitigation methods should be implemented to prevent contamination. This should be actively monitored by the responsible authorities.

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>R: See sections 5.3.6.3 to 5.3.6.8, 5.4.5, EMP Cons 7, 8, 10, 11, OPR 4, in the EIA report. We have taken maximum efforts in the EIA to curtail all forms of pollution entering the environment.</i>
63.	57	2.3.2 Operational activities of avifauna detection and collision preventing system (if any)	Q: Considering the proposed location of the Wind Farm being in the funnel point of the Central Asian Flyway, questions the consideration of data was used in an ethical manner to give the accurate picture of the situation. In terms of the avifaunal detection, the detection methodology using the equipment is clear, although it does not give the required information on the stopping time between detection and stopping of wind turbines. According to the given locations of the Radar system, it is unclear whether the bird will be detected by the radar or the turbine blade. Therefore, this needs to be clarified and alternative locations of radar and or any other mitigatory measure to prevent/ minimize collisions should be used. R: See responses 14, 15, 16
64.	58	2.3.5 Water source and required approvals.	Q: A hydrological study should be done to identify the ground water potential of the Mannar Island. R: Construction phase water will be obtained from external suppliers from approved external sources. If tube wells are to be constructed to extract water, it will be approved by the approval of water resource board. Operational phase water (only for domestic requirement about 5 m3 per day will be obtained from the WSDB.
65.	59	2.4 Resettlement (If any)	Q: A onetime compensation considering the current market value of commodities to balance out the loss of income may not be the same as compensating landowners in the long term. Therefore, a proper compensation schemes should be identified with tailor-made benefits in the long term for every landowner. R: This concern will be brought to the notice of the PP for necessary action
66.	59	2.5 Investment and funding sources	Q: How is the AGESL, a non-existing company in Sri Lanka at the moment is selected without following the procedure of tender calling to award the construction and operation

Comment No	EIA Pg No	EIA Section reference	Comment
			grant? <i>R: Project company selection process is out of the scope of EIA</i>
67.	61	2.6.1 Site alternatives > 2.6.1 Site alternatives > Sites with good wind resource > Table 2-9: Cumulative Site Evaluation Sources	Q: According to the ranking system given in " Global Energy Concepts, LLC Kirkland, Washington - Sri Lanka Wind Farm Analysis and Site Selection Assistance, Table 4-1. Site Ranking Criteria (page 15) ", the most suitable site would be Kalpitiya Peninsular. Furthermore, the table also takes "Social Acceptability" into consideration, which the EIA table has not included. <i>R: This project is highly resource specific. Terrain orientation to prevailing winds are better in Mannar than in Kalpitiya which is a positive aspect. See response 36 on alternative analysis</i>
68.	61	2.6.1 Site alternatives > 2.6.1 Site alternatives > Sites with good wind resource	Q: "The proposed site in Mannar satisfies the technical feasibility with respect to energy resource availability, terrain condition, vegetation character, soils, and also most of the socio - economic requirements such as land availability with good control of security in the area by the government, feasible site access (roads), resource availability in proximity (water, aggregates, soils) and transportation routes for power plant units (long blades and towers), material and construction machinery (feasible route is there from Trincomalee harbor) etc." - The proposed Mannar site does not satisfy the environmental aspects. How is this neglected? Why is this neglected? This should be clarified in the public hearing. Cumulative site values are given basing what? This data table given cannot be considered as it is not justified in this section. <i>R: See response 36</i>
69.	61	2.6.1 Site alternatives > 2.6.1 Site alternatives > Sites with good wind resource	Q: "Therefore, the proposed project can be strongly recommended at this location subject to the condition that required measures are taken for sustainable energy production while mitigating all forms of social, environmental, and other impacts associated with the project." The report states this is the recommended site based on conditions that neglects the ecological, sustainable environment protection in this area. Where is the

Comment No	EIA Pg No	EIA Section reference	Comment
			justification to show why the other alternatives identified in this section are not considered? This in terms alone is a good base for the CEA to cancel this project. <i>R: See response 36</i>
70.	64	2.6.3 Alternative options for locating towers that need to be done based on any studies e.g.: Avifauna study.	Q: "The best mitigation measure is to locate the turbines at site that is likely to result in the least number of collisions based on detailed field investigations of the spatio-temporal patterns of avifaunal activity based on the one-year study on the use of habitats in the proposed project development area by birds and bats. During the EIA process, the turbine array of the proposed wind farm has been carefully studied and locations of the wind turbines has been optimized to avoid collisions or if they cannot be optimized some of the wind turbines have been removed using the findings of the avifaunal study." Based on the data gathered by an incomplete survey/ investigation of avifauna during the non-migratory season to avoid collision by removing turbine location and coming up with alternative sites. Although alternative sites are not given here, the study being incomplete, there will be better recommendations to avoid the entire area if the study/ investigations used data gathered by experts on migratory bird routes identified by tagging individuals migratory and inland flying paths. <i>R: See responses 15, 16, 14, 3, 21, 8</i>
71.	65	2.6.5 Transportation option of wind turbines > Transportation by air (air lift)	Q: "This option is also not recommended considering cost factors but can be further evaluated if overall regional wind development exceeds at least 500 -750MW in the immediate future." - Even if there will be more projects, in the future, the current project for approval require the movement of turbines through an approved method. Therefore, whether the project owner will have the potential to expand in the future or not is unnecessary at this moment, as this is the project that is considered to be evaluated and options are to be evaluated needs to be considered first. <i>R: We have provided details of the 'air lift' under the section on analysis of alternative transportation options as is required in the EIA report. This option is not prioritized for this project considering the cost and the scale of operation, the provided justification is only for exclusion of this option.</i>

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72.	65	2.6.5 Transportation option of wind turbines > Transportation by road:	Q: "This requires temporary removal of certain disturbances including power and telecommunication lines, widening of certain roads and bends, disturbance to near communities and road users." - The road selected from Trincomalee Harbor to Mannar Island through Vavuniya town also falls through a number of protected areas and the main road also borders a number of protected areas and are known for the movement of elephant herds as well as other animals throughout the day. If selected, the road and surrounding changes can cause harm and congestion on and along the roads. Therefore, alternatives should be considered. Considering the distance from Trincomalee to Mannar should be used as a good measure to identify the time, cost, and impact of the transportation of blades and other material. <i>R: The recommended separate logistic study will include all aspects (load bearing capacities of the bridges and culverts, road widening requirements, temporary removal of telecommunication lines etc.) that would be applicable to the transportation of these components. See also response 42.</i>
73.	65	2.6.5 Transportation option of wind turbines > Transportation by road:	Q: "A transport feasibility study will be conducted for exact planning and identification of transport bottlenecks. An experienced logistic partner with experience in handling oversize cargo & equipment for similar work will be used. As there are no large cranes of sufficient capacity at northern ports of SL to handle WTG equipment, a cargo vessel/barge with such equipment handling facilities will be imported." - The transport feasibility study should also include the impact to the clearing of the roads where trees will be cut or branches of trees will be cut, the protected areas that will be coming in to contact, the time of day the movement will happen. The number of trips, mitigation methods for wildlife conflict, mitigation methods for human and infrastructure damage and complaint mechanism. This report, its findings and recommendations should be made available to the public at a request. Further, the section does not state how the increase of length from the previous turbines can have an impact on the existing roads that were used in the previous project to transport turbine blades. <i>R: Turbines have been previously transported to Mannar for the Phase I project using an on-land transport route, but this was</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>for shorter blade lengths. If the same route is chosen much of these roads are now cleared. The recommended separate logistic study will include other aspects that would be applicable to the transportation of these components. See also response 42.</i>
74.	66	2.6.5 Transportation option of wind turbines > Transportation by Sea:	Q: The feasibility of a jetty should be evaluated through a study conducted on the impacts to ecology and methods elaborated more in detail. Therefore, the information given in this report alone cannot be considered for selecting Sea Transportation method. The study should be conducted as this area has a lesser depth for the development of a jetty and the movement of ships. Therefore, consider the conduct of a new study for the construction of a jetty in Mannar or Alternative area. R: <i>We agree fully with the comment. See response 23. That is why we recommend a separate EIA if the option is decided. The comment has been raised multiple times in the documents and we have responded. Hence kindly refer to the relevant response.</i>
75.	66	2.6.5 Transportation option of wind turbines > Transportation by Sea:	Q: "At the time of preparation of the EIA report detailed feasibility studies with ground information for both the options were not available. Therefore, selection of transportation route and the mode will require the, a detailed study, and approvals from relevant authorities (e.g., RDA, CC&CRMD, MEPA, Sri Lanka Navy, Sri Lanka Ports Authority) are needed." - Authority will be needed from the DWC, and the FD when moving equipment requires the clearing of trees along the road in protected areas. The approval from the Sri Lanka Police should be considered. R: <i>See response 42.</i>
76.	66	2.6.5 Transportation option of wind turbines > Transportation by Sea:	Q: "A marine ecological survey of the sea route will also be needed in the shallow sea areas." - If Jetty construction is considered, the ecological study should be redone with impact assessment to evaluate the current marine conditions, sensitive ecologies and impact and alternative locations and methods. R: <i>See response 23</i>
77.	67	2.6.5 Transportation option	Q: "The Project Proponent will opt for any of the above

Comment No	EIA Pg No	EIA Section reference	Comment
		of wind turbines > Transportation by Sea:	options based on the technoeconomic evaluation and metrological / weather conditions in line with project timelines, to avoid traffic congestion." -This suggests that the ecological impacts and evaluation will not be considered for the selection of transportation method. <i>R: Transportation options have not been finalized. Thus, they are not a part of the EIA although details were provided to show a complete picture of the project. All necessary studies will be done in future and necessary approvals will be obtained.</i>
78.	68	2.6.7 No action alternative	Q: "The proposed project (The phase II contributes to meet the renewable energy target partly with the Mannar wind power park). If the project is not implemented the expected contribution will require to be achieved by other renewable sources, or carbon intensive nonrenewable sources and environmentally unsustainable technologies such as thermal/coal power. As Renewable Energy sources are limited, and availability of other renewable energy sources are already accounted into the plan, the possibility would be shifting to nonrenewable unsustainable sources such as thermal or coal power. If this is the case the country's power sector will suffer from several anomalies as indicated below." - The report highlights that the Proposed Phase II is the getaway for Sri Lanka's energy crisis. As this will be the most suitable solution, while not considering the potential of Solar throughout the country. As the country receives solar radiance during the majority of the year. In comparison with wind turbines, the number of unit's used for solar (solar panels) will be much more compared to the number of turbines that will be used. However, turbines are more likely to be built further away from urbanized areas, in the rural areas. The distance to supply energy will be higher, with the impact to wildlife and the cost to the taxpayer. In comparison, solar would be a better solution with wind being used in a much more managed way to be harvested by placing in suitable locations. This highlights the one-sided approach towards the wind power, similar to how only hydro was highlighted to be the best option few years ago. In both occasions, the solar potential was overlooked where many households and buildings can be equipped with solar both in urban and rural backgrounds without the having major environmental issues and cost higher constraints in cost.

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>R: To generate the same amount of energy the land requirement for solar would be around 300 ha. It should be noted that only around 52 ha would be used under the present project for permanent structures. It should be noted that having roof top solar should consider many other aspects such as grid connectivity.</i>
79.			Q: Green Energy is not Green when it is green washed, to hide the impacts to environment in the long term. Example, the wildlife impact in both wind and freshwater animals in hydro. However, solutions such as solar can be used if incorporated to power mix to reduce GHG emissions and comply with NDT's and SDGs and other climate change mitigation targets. <i>R: Solar is not an option as the damage to terrestrial / aquatic ecosystem would be far worse. Hence large scale solar to harness the same amount of energy in ecologically sensitive areas is not recommended. See also response 38.</i>
80.			Q: The report fails to justify the alternatives to wind instead of highlighting the rejection of a no project alternative. The alternatives that can be considered is the extension of wind farms in North Mannar District and South Mannar District towards Maraichchukaddi. With less impacts to wildlife and reduce distance where energy should be supplied to. <i>R: See response 36</i>
81.	192	4.5.12 Impacts due to transportation of material and equipment and increase of traffic volumes during the construction period.	Q: "The transportation will cause obstruction traffic movement especially if done in the daytime." - "If done in daytime" suggests that done during night is an option which is not clearly stated in this report. Therefore, this needs to be clarified by the project proponent and contractors. If nighttime is chosen, the impacts will be different as the transportation routes fall within and borders protected areas with wildlife activities at night creating contact with wildlife, and causing noise and vibration impact to communities along roads as well as wildlife. Therefore, the most suitable should be given. <i>R: Day time has been raised as a concern due to nuisance to the public. Where we have given recommendations on way to minimize the nuisance to public if daytime transportation is</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>used. Usually matters like will be resolved in the detailed project planning and work scheduling. The PMU is responsible for effective implementation of works with minimum environment and social impact. The logistic study for transportation route was not finalized when the EIA. Therefore, we have recommended this for a separate study. We completely agree that the most suitable options should be considered and approved by the PMU. However, we would like note that the potential impacts would last only a shorter period mainly during transportation of large equipment and machinery and the impacts can well manage with proper planning and complying to National regulations.</i>
82.	71	3.1.2 Geology and Soil General geology of the area	Q: The presence of sedimentary limestone beneath Quaternary formations suggests potential geological vulnerabilities. While this limestone could create groundwater-rich aquifers, it also poses risks due to its chemical weathering capabilities, potentially leading to weaker subsurface conditions. This underscores the importance of thorough geotechnical investigations before establishing wind turbine foundations. Neglecting this step could result in significant environmental consequences. It's imperative that comprehensive assessments are conducted to mitigate any adverse impacts on Mannar Island's delicate ecosystem and safeguard against potential hazards arising from the limestone bedrock. R: <i>The given foundation design is a basic design used for turbine foundations suitable for sandy, calcareous soils considering various geo-technical/structural integrity factors such as soil properties, wind turbine specifications, and environmental conditions. However, it is imperative to conduct a detailed site-specific geotechnical investigation to furnish precise data on soil properties, geological features, and environmental factors unique to the foundation design at the site, to ensure optimal foundation design with structural integrity. This aspect is already considered and described in section 2.2.9 of the EIA under "Any piling activities envisaged (No. of piles and filing period etc. to be indicated".</i> <i>The risk of chemical weathering and potentially weaker subsurface conditions is an exaggerated speculation. This could occur mainly if acidic effluents are discharged in freshwater limestone rock substrate. The limestone aquifer</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>which usually situated deep under the sandy soil formation is soaked with high saline sea water with alkaline pH with ample buffering capacity. This is not at all a concern to EIA as this project does not use or emit any acidic discharges in quantities substantial to cause a significant chemical weathering. Hence, we have to reject this part of the comment. Foundation design without considering a proper geotechnical assessment is more of structural stability concern rather than an environmental consequence. For this reason, no project will install towers without a geotechnical investigation and analysis as the cost of damage will be substantial that no project proponent would be willing to accommodate. Usually, geo technical investigations are conducted during the detailed design stage with serious considerations on the foundation design to ensure the structural integrity of the turbine</i>
83.	77	3.1.4 Hydrology and Drainage 3.1.4.1 Surface water bodies including lagoon within the site and in the study area.	Q: The section of the environment assessment report raises grave concerns regarding the impact of the proposed project on the vital water bodies within the project area. These include crucial ecosystems such as brackish water thonsas, freshwater waterholes, and saltwater marshes, which support a rich array of biodiversity including wetland birds and mangrove patches. The description of these water bodies highlights their importance as habitats and highlights their vulnerability to disturbance. Moreover, the mention of floods and the recognition of Pesalai as a flood-prone area further emphasize the environmental risks associated with the project. Any development in such sensitive areas must be approached with extreme caution to prevent irreversible damage to these vital ecosystems and project proponents should provide their novel approaches to mitigate hydrology related issues around the area. R: <i>The EIA team is in 100% agreement with the comment. Any development with haphazard manner without considering the project impacts on the environment can result in irreversible and extensive damage to the delicate balance of the environment and the ecosystems. Taking this into consideration is the whole purpose of doing the EIA. The EIA addresses these aspects by evaluation of project details (chapter 2), studying extensively the existing environment under multiple subjects (chapter 3) and analyzing and evaluation of the impacts (chapter 4).</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>The mitigation measures are proposed based on careful evaluation of impacts. In relation to this comment the mitigation measures are proposed under several levels as follows</i> • <i>At the project planning stage (in this we have excluded all ecologically sensitive water bodies and aquatic ecosystems such as shallow coastal water areas, the coastal set back of 50m plus 60m buffer zone, the entire lagoon area and all protected areas while leaving 1.3 km buffer from protected areas.</i> • <i>Considered an extensive micro siting exercise in which all original turbine locations were physically verified against 31 micro siting criteria and adjustment were made to avoid, minimize, and reduce the impacts as much as possible. (all water retention areas, thonas were avoided with a buffer)</i> • <i>The impacts that could not be tackled merely by above two were addressed with a impact specific mitigation measures, followed by an EMP and EMoP with plan to negate water pollution (pl refer to relevant sections on water pollution control above)</i> • <i>By this the EIA has taken an extensive effort to protect the aquatic ecosystems including the marine coastal systems, the lagoon and marshy grounds in the protected areas with avoidance and good pollution control system to mitigate pollution of water bodies around the direct project area</i> • <i>Regarding the floods, the project has no intervention with the presale area and their floods as the areas has been already excluded from the project. The flood risk in the project area has been analyzed by a 2-D flood model and it has been found that most of the turbine locations are flood prone even with no project. mitigation measures have been proposed to negate any project induced flood risk. These measures will mitigate the aggravation of floods due to project with special reference to construction of approach roads (refer section 5.3.6.2 Mitigation Measures for drainage impacts, Mitigation of Drainage Impacts by Design). The approach used in the</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>flood risk assessment and the mitigation is latest currently being practiced in any development project of similar nature.</i>
84.	81	3.1.4.3 Surface water availability, quality, and present uses of surface water	Q: The EIA report highlights issues surrounding surface water availability and quality within the project area. Despite the temporary presence of surface water in sporadic waterholes and seasonal streams, these resources are vital for local fauna and groundwater recharge. However, the report indicates that these water bodies are not utilized for human consumption or other essential purposes. Moreover, the analysis reveals significant variations in water quality, with elevated levels of hardness and electrical conductivity, likely due to tidal movements and high salinity lagoon waters. Additionally, the presence of high ammonia levels and fecal coliforms underscores the potential contamination risks posed by wildlife and livestock interactions, posing threats to both aquatic ecosystems and human health. Such findings emphasize the urgent need for comprehensive measures to protect and preserve these fragile water resources. Need to conduct assessment related to high ammonia levels and fecal coliforms. R: <i>The first three paragraphs quote the sections of EIA. The fourth paragraph suggests the likely cause of high salinity and hardness in the water resources. In inland water the high salinity (EC) and hardness is due to saline water in the lower subsurface water layers moving upwards due to capillary action in the porous sandy aquifer and loss of water from evapotranspiration. In the dry period, the saline water reaching the surface evaporates leaving salt in the soil.</i> <i>The high ammonia and FC are due to wildlife and livestock animals. Due to these reasons the surface water is not suitable for consumption. The well water preserved in pockets of freshwater of sandy aquifer is used for drinking. The high ammonia and fecal coliforms are due to a natural cause, and it is a part of the natural nutrient cycling process which is required for ecosystem sustenance. This has no relation to the proposed project.</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>The findings are the baseline water quality concerns without the project and has no connection to the current project. As the project related water pollution concerns have been already addressed in the EIA. The raised concerns are outside the scope of EIA. We kindly request the commenters to focus only on the project specific impacts that could constructively contribute to the EIA.</i>
85.	141	4 ANTICIPATED ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT 1.0 Analysis of Environmental Risks 4.1.1 Risk Assessment Methodology	Q: “ERA uses 5 level scale for both probability and consequences. The hazard and consequences scales are combined to form an interactive matrix” According to the reliance on a 5-level scale for probability and consequences oversimplifies the complexity of environmental impacts, potentially leading to an underestimation of risks. Moreover, the report lacks transparency regarding the specific criteria used for risk evaluation, leaving room for subjective interpretation and potential biases. The significance of risks must be rigorously examined, considering the interconnectedness of environmental, societal, and economic factors. Furthermore, the mitigation measures proposed seem generic and may not sufficiently address the nuanced challenges posed by the project. A more strong and transparent approach is imperative to accurately assess and mitigate the environmental risks associated with the project. R: Risk assessment (RA) method and transparency: <i>The likelihood and consequence method are a widely used approach for risk assessment and it is being used in environmental risk assessment, RA method offers several advantages over traditional methods like the Leopold Matrix.</i> <i>The RA method evaluates both the probability of an event and the severity of its consequences while providing a systematic framework for prioritizing environmental impacts.</i> <i>Its simplicity and versatility make streamlining decision-making processes. It allows tailored application to various</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>environmental elements and incorporating multidimensional nature of impacts. it ensures a thorough understanding of risk profiles, in line with international standards. The detailed methodology is given in annex XX. As the RA is a commonly used method in current EIAs' world-wide the commenters can reach the information via internet for further details and understanding</i> <i>• Risk matrix: The comment on undermining the credibility of five-scale consequence and likelihood risk assessment approach, and the matrix overlooks its practical benefits. In the risk evaluation, possible under estimation and biasness of impact ranking has been minimized by using a vast range of site/impact specific studies, data, assessments, environmental quality monitoring and social assessments, model studies followed by systematic evaluation of impacts against prescribed environmental and social norms and regulations.</i> <i>• A team of subject specialized experts' professional judgement supported with diversity of studies and assessments were used in the RA</i> <i>• Four rounds of evaluations (including independent) risk evaluation attempts were done before finalizing the final risk rank (Approach similar to Delphi method)</i> <i>• The matrix will provide simple, effective and clear communication of decision-making. It is a structured approach used even in most complex risk assessments. Approach is aligned with established international standards, this method offers a versatile and efficient means of evaluating environmental risks, dispelling misconceptions of oversimplification and bias.</i> <i>• Possible underestimation of risks and overs implication will however has no effect on the final outcome (mitigation) as all impacts have been treated with the mitigation measures.</i> <i>We cannot agree on the general comment on the generic nature of the mitigation measures as the proposed methods are widely used effectively in the similar projects in the world and in Sri Lanka as well. We have made the EMP (annex 6-1) as a project contract document. By doing so the project implementation</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>contractor becomes legally bound to effective implementation of EMP in addition to the EPL.</i>
86.	156	4.2 Noise and vibration impacts 4.2.1 Noise Impacts 4.2.1.1 Expected noise level during the construction period. Special attention needs to be paid, in case piling activities are carried out.	Q: The EIA report concerning noise and vibration impacts presents a concerning oversight of the potential environmental repercussions associated with the proposed wind power project. Despite acknowledging noise pollution during both construction and operation phases, the report fails to adequately address the severity of these impacts on local communities and ecosystems. The report mentions potential health impacts from infrasound and low-frequency noise but relies on outdated research to dismiss these concerns. It cites a review of scientific literature, presumably to support its claims, yet fails to incorporate recent studies that have indicated adverse health effects associated with wind turbine noise, such as sleep disturbance, annoyance, and even potential cardiovascular effects. <i>Pedersen, E., Waye, K. P., & Persson Waye, K. (2007). Wind turbine noise, annoyance and self-reported health and well-being in different living environments. Occupational and Environmental Medicine, 64(7), 480-486.</i> Moreover, the report's assertion that noise levels are within permissible limits overlooks the subjective experience of affected individuals and fails to consider cumulative impacts on wildlife behavior, including marine mammals and birds. Studies have shown that noise pollution from wind turbines can disrupt bird communication, nesting, and foraging behaviors, leading to decreased reproductive success and population declines. Similarly, underwater noise pollution can have detrimental effects on marine mammal communication, navigation, and feeding habits. <i>Pedersen, E., Waye, K. P., & Persson Waye, K. (2007). Wind turbine noise, annoyance and self-reported health and well-being in different living environments. Occupational and Environmental Medicine, 64(7), 480-486.</i> <i>Loss, S. R., Will, T., & Marra, P. P. (2013). Direct mortality of birds from anthropogenic causes. Annual Review of Ecology, Evolution, and Systematics, 44, 123-138.</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			Furthermore, the reports hasn't recognized the potential impacts on security activities neglects the broader implications of noise disturbance on human well-being and safety. Research has highlighted the adverse effects of environmental noise on cognitive performance, concentration, and overall quality of life. In regions where security activities are crucial for public safety, noise disturbances can compromise situational awareness and response effectiveness, posing risks to both security personnel and the general public. <i>Erbe, C., & Fisher, F. H. (2004). Underwater noise of whale-watching boats and potential effects on killer whales (Orcinus orca), based on an acoustic impact model. Marine Mammal Science, 20(4), 727–745.</i> Considering these critical oversights, it is evident that the environment assessment report fails to provide a comprehensive evaluation of the potential noise and vibration impacts associated with the wind power project. To ensure environmental sustainability and minimize adverse effects on local communities and ecosystems, a more thorough and transparent assessment process is imperative. R: <i>We would like to emphasize that This project is not the first wind farm project in the world and in the country. Therefore, studies were available on the health impacts of wind turbine noise to humans. We have used a review of scientific literature to evaluate the operational phase wind turbine impacts on sensitive human receptors. The literature used is published in 2017 by the Vermont Department of Health, in the US. We have used this literature for our EIA due to its credibility and recent origin (published in 2017) Ref: Wind Turbine Noise and Human Health: A Review of Scientific Literature. https://www.healthvermont.gov/sites/default/files/documents/pdf/PHA_wind_turbine_sound_05_2017</i> <i>This literature gives well documented account of scientific studies on impact of wind turbine noise on human. As depicted by the literature the impacts of wind turbines are largely related to annoyance and does conclude quote "At noise levels studied, there was no evidence of a direct effect of wind turbine noise on any of the health outcomes considered. But nuisance and sleep</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>disturbance related secondary impacts have been documented". Which we have acknowledged in section 5.4.4.5</i> <i>In the noise impact assessment of the proposed wind project was based on the following</i> <i>The background noise level measurement already exceeds the nighttime reference noise level. Refer table 3.8. According to the above table, the existing noise levels in some of the measurement locations have already exceeded the prescribed maximum permissible noise levels for both day and night. And the main contributor appears to be noise from blowing winds on trees, dunes, water bodies, sea wave breaking. All these are mostly natural noises.</i> <i>We considered predicted noise levels exceedance with respect to the National noise standards and observed that and only five receptors exceed the reference level of 45 DB marginally. Refer Table 4 5: Predicted noise levels at most sensitive receptors and the responsible turbine: Reference standard 45 dB A nighttime noise exceedances or closeness of baseline noise to the prescribed national standards for low and medium noise areas suggest that the masking effect on wind turbine noise during operation would neutralize even the marginal noise impacts (as it is nuisance) of the few turbines predicted by the model.</i> <i>Under such circumstances the regulations permit an additional 3dB and with that addition, all marginally affected receptors (3dB) will be within the safe level. Therefore, no special mitigation measure was considered as required.</i> <i>Modeling has considered the ground as a hard surface hence assumes low absorbance of noise, but in actual situation the surfaces absorb noise and dissipated noise is considered lower than the predicted.</i> <i>As nighttime noise is exceeded, the noise level inside the bedroom is important that can be still lower than the reference level when the rooms are covered with roof</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>and walls.</i> • <i>Although we presume that the actual wind turbine noise on the receptors is low, mitigation Measures for noise impacts is given in section 5.4.4.5 as a precaution.</i> • <i>Management of indoor noise and sleep disturbances by the operation of the wind turbines at the reduced mode for specific turbines based on complaints and measurements.</i> • <i>Grievance redress -Stakeholder consultation to change the social perception on noise impacts.</i> • <i>Offsetting of the impacts by compensation</i> <i>In addition to this we have considered</i> • <i>siting wind turbines 250m away from all sensitive receptors and proposing all other, machine technology, blade technology, O & M conditions measures that keep the wind turbine noise low.</i> • <i>The literature quoted by the commenter is published in 2007, based on a single research study. This study infers annoyance as the most highlighted impact of wind turbine noise, and it states that urban people consider turbine noise less annoying than the rural, due to high background noise in urban areas. Similarly, as the background noise is already high in Mannar due to earlier stated natural noises sources, we believe that the annoyance based secondary impacts would be much lower in the proposed project area. Finding of the commenter's literature is complimentary to that of the EIA.</i> • <i>We would like to emphasize that this project is not the first wind farm project in the world and in the country, we have conducted highly logical and technically valid evaluation for assessment of turbine noise impact. the proposed measures are the commonly practiced practically achievable measures used in wind turbine projects operating worldwide. Therefore, we too have stick to these practical measures if the project is to be implemented.</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>Regarding the noise impact on aquatic marine life, Avifauna etc. we have accepted the fact of gap in knowledge worldwide and in Sri Lanka</i> <i>See response 5, 28A also.</i>
87.	174	4.3.3 Impact on animals due to erection of transmission line	Q: "During preconstruction stage vegetation will require to be cleared in areas where the wind turbines will be constructed (0.85 ha around each wind turbine location), along access roads, crane staging areas, and assembling area for suspended turbine components." The anticipated clearance of vegetation, including the felling of large trees, poses a grave threat to the habitat of various terrestrial species, particularly understory birds, herpetofauna, small mammals, and large mammals such as spotted deer. These species rely on the thick thorny scrub patches, coastal forests, and Palmyra groves for resting, foraging, and refuge, and the loss of these habitats will undoubtedly lead to population declines and increased vulnerability to predation. The removal of Palmyra trees specifically jeopardizes bat species such as the Short-nosed fruit bat, which use the leaves of these trees for roosting during the day. Additionally, the project's impact on the habitats of feral donkeys and Mannar ponies, unique features of the Mannar landscape, raises concerns about the conservation of these species and their ability to thrive in the altered environment. Address these issues adequately not only threaten the survival of vulnerable species but also undermines the overall ecological integrity of the region. Therefore, it is imperative that comprehensive conservation strategies are implemented alongside the wind power project to mitigate its adverse impacts on biodiversity and ensure the long-term sustainability of the ecosystem. The mitigation measures are not given properly with practical mechanisms. R: See response 19, 20, 6 <i>Of the 150 Ha of land proposed to be acquired for permanent facilities, only around 52 ha will be used for the project, and all of the other areas will be released to the community for agriculture and other selected activities.</i> <i>Further, it is recommended that suitable areas be maintained with the intervention of either the Forest</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>Department or the Department of Wildlife Conservation. This will be included as Addendum to the EIA report. A plan for proposed replantation has been included in the report (Annex 5 -3).</i> <i>The importance of this point is well noted. Therefore, we would also recommend a plan for the capture and relocation of any displaced animals to be done in collaboration with the Department of Wildlife along with initiatives that can be taken to facilitate the escape of mobile animals during the initial clearance of vegetation at turbine locations. This elaboration of this point would be included as an Addendum.</i>
88.	181	.4.1.6 Impacts due to disturbance to the reservation and bank stability along the lagoon /estuary or other water bodies located within the project site frontage (if any)	Q: During the extraction of groundwater for construction purposes, it should be noted that advisable and adequate levels of groundwater should be maintained, and over-extraction should not take place for any reason. As the area is part of the Dry Zone of Sri Lanka with low water availability, it is always advisable to maintain a natural and adequate groundwater level to reduce the impact on the environment, natural surface waterbodies, and water available for human use. Even though it is more likely that drinking water in this region is either supplied by external parties using cans, groundwater is more likely to be used for agricultural and other household purposes. Therefore, it should be noted that groundwater should not be reduced due to any circumstance, especially during the rainy seasons to avoid conflicts with the locals and damage to the environment. Debris and different waste materials such as spoil, vegetational debris, scrap materials, packing materials, food waste, and plastic waste should not be dumped haphazardly inside the turbine site or in the immediate adjacent environments. This waste should not be mixed with natural water sources, whether they are seasonal coastal streams, lagoons, canals, or even the ocean itself and surface water bodies present in the area. And should not be dumped directly onto natural or man-made depressions in the immediate areas even temporarily. Therefore, proper waste management practices should be conducted at all times to keep the areas unpolluted, as well as when transporting material to dumping sites. R: <i>The comment is complimentary advice. The EIA has</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>comprehensively addressed the aspect. None of the project activities are located in the areas of lagoon or the estuaries. Hence their reservations are not affected.</i> <i>• There are no rainfed agriculture in the project area to be affected by the project.</i> <i>• Common potable water is groundwater extracted using shallow wells. As all turbines are located away from the well fields, possible water table drawdown and drying up of wells are highly unlikely.</i> <i>• When ground water is extracted or dewatering for piling is carried out, a pump test will be done to decide the optimum extraction or dewatering. The optimum is the required water level maintenance avoiding over drainage.</i> <i>• In case of piling the dewatering activity will last only for a shorter period only during the piling activity. Considering the nature of aquifer quick recharging is expected.</i> <i>• As distances between two turbines are minimum 400m, cumulative effects of multiple turbines are unlikely.</i> <i>• The aspect of groundwater level drawdown will be minimized by a well-documented procedure as given in the section on 5.3.6.1 Proposed mitigation measures for ground water resource and related impacts of the EIA report. and annex 6-1: EMP- con-7</i> <i>The aspect of all forms of water pollution has been comprehensively documented in section 5.3.5.8 Reduced impact of debris, 5.3.6.3 -5.3.6.8 and the relevant sections of the EMP Annex 6-1</i>
89.	182	4.4.1.8 Open dumping of concrete waste/release of wastewater, Water pollution: TSS, Turbidity, TDS	Q: "If untreated grey water and black water generated from on-site toilets and sanitary facilities are discharged to the environment it will pollute the groundwater. If discharged into open drainage areas it will contaminate the open freshwater bodies, salt marshes and mudflats. The impacts are highly locally significant and long-term." According to section 23H (1) of NEA, no person shall pollute any waters of Sri Lanka so that the condition of the waters is so changed as to make those waters unclean, noxious, poisonous, impure, detrimental to the health, welfare, safety or property of human beings, poisonous or harmful to animals, birds, wildlife, fish, plants or other forms of life or detrimental

Comment No	EIA Pg No	EIA Section reference	Comment
			to any beneficial use made of those waters. <i>R: The comment is complimentary; The EIA has comprehensively addressed the aspect. The aspect of all forms of water pollution has been comprehensively documented in section 5.3.5.8 Reduced impact of debris, 5.3.6.3 -5.3.6.8, section 5.4.5 5.4.5 Mitigation Measures for Construction/ Operational Waste Disposal and the relevant sections of the EMP annex 6-1.</i>
90.	184	Impact on currently unproductive land	Q: “Around 39.1% (81.7 ha) of the project land is comprised 60.2 Ha of scrub jungle (28.8%), 17.4 Ha of open barren land (8.35%) and 4.1 Ha of existing paths (25%). While 46.5% of this land category will be permanently restricted to its users, the remaining land will be available once the construction is over. However, the scrub jungles are far interior and not a site for usual community access. Hence, no significant impacts are expected due to this land use.” While it is mentioned that a substantial portion of the project land comprises scrub jungle and barren land, totaling 39.1%, the report dismisses the potential consequences of altering these landscapes. Despite stating that some of this land will be permanently restricted to users, it overlooks the ecological importance of scrub jungles and barren lands as critical habitats for various species and essential components of local ecosystems. The assertion that scrub jungles are far interior and not sites for usual community access undermines their ecological value and fails to recognize their potential role in supporting biodiversity and ecosystem services. This oversight suggests a lack of consideration for the broader environmental impacts of converting currently unproductive land for the wind power project. By neglecting to address the significance of preserving unproductive land and its ecological functions, the report overlooks the potential loss of biodiversity, habitat fragmentation, and ecosystem degradation. This highlights a critical flaw in the assessment process and underscores the need for a more comprehensive evaluation of the environmental consequences of land use changes associated with the project. <i>R: Almost the entire project land is under private ownership and would be under the threat of clearance even under the no project alternative. Since these lands are considered</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>under a large-scale project, the EIA specifically focuses on making the best possible recommendations for safeguarding forests and other important habitats. See response 19.</i>
91.	184	4.5.7.2 Impact on Coconut Trees	Q: “Totally 260 coconut trees will be affected by turbine construction. Number of palmyra and coconut trees to be felled or likely to be felled are presented in Table 4-14 and in Figure 4-10.” This aspect underscores the need for thorough mitigation measures and consideration of alternative approaches to minimize the adverse impact on coconut tree populations and their associated ecosystems. R: <i>See response 44.</i> Any losses that have been overlooked will be taken care of through EMP 6.1.Pre Con 3, Section 5.4 GRM.
92.	194	4.5.17 Public and occupational health and safety	Q: “The project area's public health would suffer from the influx of workforce, particularly communicable diseases” Referring to the environment assessment report acknowledges the benefits of wind power but fails to adequately address significant health and safety concerns associated with the project. While it highlights potential risks to workers during construction and addresses noise pollution mitigation, it overlooks the subjective experience of affected communities and fails to address potential mental and physical health impacts adequately. Additionally, the report neglects to address the potential negative impacts on public health due to the influx of workers and risks of aircraft accidents and communication signal interference. Overall, the report's treatment of public and occupational health and safety concerns appears insufficient, highlighting the need for more robust risk assessment and mitigation measures. R: 5.4.6 Mitigation Measures for environmental/Occupational Health and Safety (EHS/OHS) We accept the fact that the health and safety focusing on the site workforce. They are the group working at very location where project activities are taking place exposed with highest risk to health, injury and death. The worker health and safety concern has been addressed in section 5.4.6 Mitigation Measures for Environmental

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>/Occupational Health and Safety (EHS/OHS).</i> <i>When the worker's health and safety is protected with well-established health and safety management plan it automatically covers the community too.</i> <i>The concerns specifically of the interest of the public has been covered under separate sections. Please refer to sections 5.3.7 Traffic Management, 5.2.3 Mitigating noise pollution and vibration impact during construction phase, Annex-6-1: Con14, Com15, Con-16, Con-17, Con 26, con 27, Con 28, 29,30, 31, 32, 33, 34, 35, 36, As these are common public health and safety, and disturbances related concerns they will become a contractual obligation under the contractual agreement and will be covered under separate health and safety action plan in EMAP.</i> <i>With above the EIA has comprehensively addressed the public health and safety aspects as well as has made the project responsible and obligatory to conform the required public health and safety norms</i>
93.	192	4.5.13 Impacts due to dewatering of tower footing locations.	Q: "The impacts can be significant but localized with persistent salinity over several years." - The project study identified that the Mannar island has a restricted number of freshwater sources and are important to the natural replenishment of freshwater which also proves to be vital for the millions of birds that are flying through the pathway of Mannar. Therefore, any impact to water sources, whether they are localized or not can be detrimental in the long term as saltwater intrusion may impact the vegetations that will be under severe threat due to projects such as this. Their quality and levels of groundwater will be impacted in an already dry arid zone where water is scarce. This impact will be felt by the wells used and aquifers in the area. R: No project activities in sensitive aquatic, Lagoon, and coastal ecosystems (protected areas). The discharge of effluents to these will not take place due to substantial distance between project activities and the sensitive ecosystems, all forms of indirect influences have been taken care off by a well-designed waste management system (refer below for details)

Comment No	EIA Pg No	EIA Section reference	Comment
			• <i>Common potable water is groundwater extracted using shallow wells. As all turbines are located away from the well fields, possible water table drawdown and drying up of wells are highly unlikely.</i> • <i>When dewatering for piling is carried out, a pump test will be done to decide the optimum extraction or dewatering. The optimum is the required water level maintenance avoiding over drainage.</i> • <i>In case of piling the dewatering, activity will last only for a shorter period only during the piling activity. Considering the nature of aquifer quick recharging is expected.</i> • <i>As distances between two turbines are minimum 400m, cumulative effects are unlikely.</i> • <i>The aspect of groundwater level drawdown and salinity intrusion management is well documented in the section on 5.3.6.1 Proposed mitigation measures for ground water resource and related impacts of the EIA report. and annex 6-1: EMP- con-7, The aspect of all forms of water pollution has been comprehensively documented in section 5.3.5.8 Reduced impact of debris, 5.3.6.3 -5.3.6.8 and the relevant sections of the EMP annex 6-1. We have made the EMP (annex 6-1) as a project contract document. By doing so the project implementation contractor become legally bound to effective implementation of EMP in addition to the EPL</i>
94.	197	5.1 Mitigation by Design during the Preconstruction Stage > 5.1.1 Avoidance at project layout planning/readjustment stage > Table 5-1: Micro siting criteria for wind power plant facilities: Mannar > xxvii > Rationale	Q: Was the coastal zone management plan from 2018 used to identify the setback areas? The zones will be changed, and regulations may change in the 2024 version, and compliance with CCD regulations should be revised. R: <i>We have left 50 m coastal setback plus additional 60 m (additional safety) for the closest turbine to the coast. For the Mannar the coastal set back of 50 is considered as there are no specific set-back defined</i>
95.	198	5.1 Mitigation by Design	Q: "Excluded at all possible circumstances" - What are all

Comment No	EIA Pg No	EIA Section reference	Comment
		during the Preconstruction Stage > 5.1.1 Avoidance at project layout planning/readjustment stage > Table 5-1: Micro siting criteria for wind power plant facilities: Mannar > xxvii > Criteria	possible circumstances identified? R: Exclusion in all possible circumstances" refers to a careful site selection approach to exclude sensitive areas under all possible conditions. This principle proactively identifies and excludes locations where the establishment of a facility could pose significant risks or adverse impact. It involved a comprehensive evaluation process that considers not only immediate concerns but also potential long-term consequences, including environmental, social, and cultural factors. • This approach involved thorough site sensitivity evaluation, professional judgment and exploring alternative options. • By these all-avoidable impacts were prevented and efforts on mitigation will be restricted only to unavoidable situation • All unavoidable cases were treated with mitigation measures. • This is a widely used stage wise impact mitigation measure practiced by an any development project.
96.	198	5.1 Mitigation by Design during the Preconstruction Stage > 5.1.1 Avoidance at project layout planning/readjustment stage > Table 5-1: Micro siting criteria for wind power plant facilities: Mannar > xliii > Project Activity	Q: "Avoided" - This is an unclear point. Information is not checked before sharing. To reduce impacts on birds near a village tank what was avoided? Assuming any project activities, wasn't this action replicated for the natural freshwater retention areas as well? As they are more suitable for avifauna and other wildlife. R: • Avoidance in all circumstances" refers to a careful site selection approach to avoid sensitive areas under all feasible conditions. This principle proactively identifies and avoid locations where the establishment of a facility could pose significant risks or adverse impacts. It involved a comprehensive evaluation process that considers not only immediate concerns but also potential long-term consequences, including environmental, social, and cultural factors. • This approach involved thorough site sensitivity evaluation, professional judgment and exploring

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>alternative options.</i> • <i>By these all-avoidable impacts can be prevented and efforts on mitigation will be restricted only to unavoidable situations</i> • <i>All unavoidable cases were treated with mitigation measures.</i> • <i>This is a widely used planning stage impact mitigation measure practiced by any development project.</i> • <i>In the case of village tank. We have avoided siting any turbines in the village tank area or its proximity. Therefore, all possible circumstances of direct impact of project activities on the village tank is avoided 100%. This includes possible risk of bird collision with turbines. As there are no turbines located in the village tank area possible direct collision of risk of birds is avoided.</i> • <i>To obtain clarity regarding the planning stage mitigation exercise it is important to have a good acquaintance on procedure followed in mitigation of impacts practically in the entire project cycle. And we recommend commenters to obtain further exposure by referring to relevant literature in the subject area for better understanding.</i>
97.	198	5.1 Mitigation by Design during the Preconstruction Stage > Avoidance at project layout planning/readjustment stage > Table 5-1: Micro siting criteria for wind power plant facilities: Mannar > xlv > Rationale	Q: For "Palmyra tree clusters", to "Minimize damage and habitat destruction", "Maximum Avoidance" is used as a criteria for micro siting. - This is contradictory when nearly 10,000 trees of Palm are to be removed and a significant number of coconuts also planned to remove. How is removal of already nut bearing plants of various growth stages and optimizing productivity goes together? Either it should be on avoiding lands with those cash crops as given in the table or give a single plan as to whether removing is the way to go or not removing. R: <i>Use of Maximum Avoidance criteria at micro siting exercise</i> <i>In the project area, naturally, Palmyra trees of various ages are found everywhere. When overlaying original turbine layout on the ground turbine locations overlaps with grown palmyra trees requiring their removal for the turbine construction. In the</i>

Comment No	EIA Pg No	EIA Section reference	Comment
			<i>micro siting exercise, each and every turbine location was physically visited by the EIA team and micro level adjustment was done to avoid sensitive elements. Palmyra trees are one such element. In the micro-siting exercise turbine locations were shifted away from the Palmyra trees in all possible circumstances. This exercise could not avoid the cutting of Palmyra tree by 100% but significantly reduced the number to be cut. We further recommend turbine readjustment during the project layout-setting in execution process.</i> <i>Productivity loss by removal of already nut bearing plants of various growth stages The EIA report has meticulously examined the impact of the project on Palmyra plants. The initial assessment has identified 13,371 Palmyra plants within the designated lands for wind turbine construction. It is worth noting that this preliminary count is a conservative estimate, encompassing (yet to yield fruits), mature plants (yielding at full capacity) and that are too old (yield less than the average), as well as both male and female specimens. Consequently, the actual impact of Palmyra removal will likely be less significant than anticipated, as outlined below:</i> <i>• Loss of income from Palmyra is primarily substantial for mature and older trees. However, the estimation includes younger plants which are yet to contribute to the tree clusters significantly in future.</i> <i>• While 13,371 plants are estimated to be within the total land area (160m*160m land pieces for each turbine), only 3,953 are located within the hard stand area (90*95m) of each plot earmarked for construction. Efforts will be made to minimize tree removal even within this area, with vegetation, including Palmyra, that will be preserved in the remaining land parcels.</i> <i>• Since Palmyra's primary use is for producing tubers and fruit pulp, where female plants being crucial, the number of impactful tree removals is halved due to the typical 50% female distribution in naturally grown plantations.</i> <i>• Wind turbine locations are dispersed across the island, preventing concentrated Palmyra removal from affecting specific households disproportionately.</i> <i>• Additionally, a significant number of trees slated for</i>

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			<i>removal are located more than 1km away from settlements, diminishing their direct impact on local livelihoods, particularly in terms of accessibility due to the distance from the plants.</i> <i>Hence, the actual Palmyra impact is expected to be significantly less than has been estimated in the EIA report. The forecast was to find the worst-case scenario. Accordingly, the mitigation measures have been recommended in the report, although their necessity may be reduced given the low impact than what is anticipated.</i>
98.	199	5.1 Mitigation by Design during the Preconstruction Stage > 5.1.1 Avoidance at project layout planning/readjustment stage > Table 5-1: Micro siting criteria for wind power plant facilities: Mannar > lviii	Q: "Proposed 1km wide Bird Corridor", "Avoidance of turbines and overhead power cables within bird corridor" is the criteria in Micro siting. - The corridor itself contains 6 turbines within. What is the point of the 1km wide bird corridor when there are turbines? Birds won't fly into Sri Lanka just through this bird corridor R: We accept the fact that in the original wind turbine layout, 6 turbines were within the proposed bird corridor. This layout is the one used for background studies including the Avifauna study. However, in the final layout plan the 6 turbines were removed from the proposed corridor as a mitigation measure. Refer Figure A- Project Layout Plan - Executive summary.
99.	200	Impact of Turbine Number 37	Q: "The examination, including a comparison of Google images spanning several years (2019 and 2021) and a drone image in 2019, revealed that the shading of tree cover on the ground and the occurrence of waterlogging during the wet season have shown the image as a thick, forest-like vegetation landscape. Therefore, the location was unchanged." - Was this information given to the FD that the location will not be changed even though they have recommended to shift the location? The site recommendations were given by the FD stating that it is a known habitat for migratory and resident birds as well as other animals and therefore this should be avoided. Your observation in the report also states it is a thick, forest-like vegetation which can be observed by the Figure 5-2 Images of Turbine 37 Google Image 2021: Submitted to Forest Department with the consent request letter. If this was submitted to them and the recommendations were given to

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			avoid, the justification given here in this section cannot be accepted as a proper justification showing that this area should be cleared. <i>R: We have done a fact-finding exercise and provided elaborations on this as reported in Section 5.1.1 Impact of turbine number 37 figure 5.2 to state that it is not a thick scrub patch. The Forest Department will review this and instruct accordingly. But it should be reiterated that this land is not state land and would be prone to clearance in any case even in the absence of this project.</i>
100.	200	Impact of Turbine Number 37	Q: "Further the Survey Department extracts for the land acquisition confirms that this a site with a garden with a temporary building and 156 palmyra trees (20-40 years old). Please refer to Annex1-1 for further information." - If it is being removed because of 156 palmyra trees with a garden and temporary building this should be properly conveyed in the EIA with evidence to convey this message to Forest Department. If the particular land is not under the jurisdiction of the FD, then the line agency approval for this particular land should be taken. <i>R: Almost the entire project land is under private ownership and would be under the threat of clearance even under the no project alternative. Since these lands are considered under a large-scale project, the EIA specifically focuses on making the best possible recommendations for safeguarding forests and other important habitats. See response 19. Any losses that have been overlooked will be taken care of through the EMP 6.1. Pre-Con 3, Section 5.4 GRM.</i>
101.	200	Impact of Turbine Number 37 Figure 5-2-Images of Turbine 37	Q: Google images given in the report "Figure 5-2-Images of Turbine 37" does not tally with the 9.09960264600 79.76865329700 coordinate location given in the annexure. Further, the Google "satellite" image for this coordinate in 2019 shows only cloud cover. Therefore, the image given in the report or the coordinate given in the annexure are not tallying. Clarify this in the Public Hearing. However, both the image in the report, and the Google Image for the above coordinate shows that the area is covered in thick vegetation, but not waterlogged. However, it is best this point is clarified during the hearing as well. <i>R: The annex number has not been provided. However, the</i>

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			<i>turbine coordinates are given in Annex 1-1 (3). The given coordinate 9.09960264600 79.76865329700 is the location of T44, and obviously it does not tally with the position of T37. This comment has been given without properly checking the coordinates.</i>
102.	206	5.3 Mitigating Social Impacts > 5.3.1 Mitigating Land Acquisition Impact > Table 5- 3 Entitlement matrix > 3. Permanent loss of agricultural /commercial/ plantation land to the acquisition	Q: "A one-time livelihood restoration grant of 100,000Rs per household to restore their livelihood." - The amount given as a one time grant is merely adequate in the current economic context to people who would be able to earn more in the long term by the continuation of their existing livelihoods. Reconsider the costing for the one-time grant with fare compensation amount that will actually help the affected families to restore their livelihoods. R: This concern will be brought to the notice of the PP for necessary action.
103.	206	5.3 Mitigating Social Impacts > 5.3.1 Mitigating Land Acquisition Impact > Table 5- 3 Entitlement matrix > 5. Permanent loss of standing trees	Q: "Cash compensation is determined by the Divisional Secretary based on the type, age, productivity, and lost income during the life cycle of the trees." - This should be applied to Palmyra, Coconut and Cashew. R: See response 24, 44 Any losses that have been overlooked will be taken care of through EMP 6.1. Pre-Con 3, Section 5.4 GRM.
104.	206	5.3 Mitigating Social Impacts > 5.3.1 Mitigating Land Acquisition Impact > Table 5- 3 Entitlement matrix > 6. Temporary loss of livelihoods during the construction period	Q: "Cash compensation is determined in consultation with the department of agriculture/ department of Agrarian/Fishery Department based on the loss of harvest, operation, loss of workdays, and incomes." - Overall, consultations should include the actual scenarios with people. The input of the affected or potentially affected people should be considered as well and evaluated with the responsible authorities. "Priority for the employment opportunities in project construction work during the construction period." - "Priority for the employment" is not a long-term compensation or adequate to continue livelihoods as the compensation will be restricted only to the construction phase, and daily wage worker pay will be different than that of the income generated through fishing and related activities. R: All compensation will be paid according to the existing rules and regulations which have been adopted in similar projects.

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105.	206	5.3 Mitigating Social Impacts > 5.3.1 Mitigating Land Acquisition Impact > Table 5- 3 Entitlement matrix > 8. Unforeseen impacts	Q: Death and injury caused during construction and operation as 'unforeseen' should be considered in this matrix and compensation plan, and adequate compensation should be given according to the laws of Sri Lanka. R: <i>Comment is well acknowledged. Implementation of project health and safety aspect is the direct responsibility of the PMU. The contractor/s plays a pivotal role in implementing health and safety measures in the construction site. As the party responsible for executing the project, the contractor is contractually bound and tasked with ensuring that all work activities are conducted in accordance with applicable national health and safety regulations and contractual requirements which include the compensation according the labor law of the country</i>
106.	227 - 235	6 EBCA	Q: Although the report gives a general summary of the project's economic viability, the environmental impact assessment of the report has some significant gaps and areas that need more attention. Lack of detailed breakdown of the specific costs and benefits considered in the analysis. Understanding the components contributing to the economic indicators is important for a comprehensive evaluation. R: <i>See response 35.</i>
107.	Pg 229 - 232		Q: The study makes reference to the valuation of environmental damages, but it is unclear about the precise techniques used and the methodology behind the assignment of monetary values. A more thorough description of the valuation techniques would strengthen the environmental impact assessment's credibility. R: <i>See response 35.</i>
108.	229	6.5.4 Cost of environmental damage	Q: Although the paper acknowledges the difficulty in pricing ecosystem services, it offers little insight on the process of quantifying and charging for services like biodiversity and carbon sequestration. These services are site-specific and complex, and more sophisticated approach is required than simply using standardized numbers from databases. R: <i>See response 35.</i>

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109.	230		Q: While the financial value of the shadow flicker impact is briefly mentioned, the report lacks a detailed discussion on the potential social and environmental consequences. A more comprehensive assessment, including the methodology for assigning monetary values, is needed. The cost of the reforestation initiative is included in the study, but the environmental advantages are not thoroughly examined. A comprehensive explanation of the advantages evaluation will enhance the environmental effect evaluation. At some points such as impacts human health and life haven't considered the indirect costs where it is better to obtain both direct and indirect costs estimations and open the source to the public during public comment period is important. <i>R: The benefits of replantation are well known and need not be specified here. The exact benefits accrued will be dependent on the species grown and the extent of the replanted patch etc., which is still being finalized. See response 19. See response 35 for cost-benefit analysis</i>
110.	234		Q: The public should be able to assess the impacts and advantages from the project in the report with more transparency when social survey results and benefit transfer assessment information are need to give in more detail. <i>R: Point is strongly valid. The EIA has been opened for public comment for such concerns to be raised. The valid concerns would be addressed in the revision of the report with relevant points being noted when drafting agreements. A part of this responsibility lies with the CEA.</i>
111.	234		Q: The report seems to focus more on changes in project costs and benefits, overlooking potential variations in environmental expenses. It's crucial to dig deeper into these environmental costs through a separate analysis, as there's a lack of clarity in how they are valued. The details about the environmental and social impacts are a bit sparse and deserve more attention. It would be great to understand the assumptions made, especially regarding the discount rate. The valuation of environmental and social impacts seems to depend on a variety of assumptions and external sources, which might benefit from a bit more explanation for us non-

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			experts. Comment if too broad. <i>R: See response 35 regarding cost-benefit analysis</i>
112.	217 - 218	5.4.1.5 Electrocutation	Q: EIA mentioned about “birds change their flight path from least 80 feet away from the line” which will be impractical given the situation that proposed project location is a highly sensitive to biodiversity and many migratory bird’s habitat and nesting area due to unique geography. Migratory birds, especially those traveling long distances, may have specific route and feeding requirements. Altering perch availability may not be a practical solution, as migratory birds may need specific locations for rest during their journey. R: <i>See responses 3</i> <i>We have cited a documented finding from elsewhere and made several recommendations to reduce collision with transmission lines. But note that we have strongly recommended underground transmissions lines owing to this risk.</i> <i>See response 45 also.</i>
113.	216	Restriction of turbine operation	Q: While collaboration with the Department of Wildlife Conservation is mentioned, the EIA could provide more details on how this collaboration will be structured. Clarifying the roles and responsibilities of each party, the decision-making process, and how information will be shared can enhance transparency and ensure a more effective partnership. R: <i>In the project implementation phase a PMU is established with qualified and experienced staff. The actual collaboration procedure will be decided by the PMU and Dept. of wildlife conservation. The stated structure including the roles and responsibilities of each party, the decision-making process, and how information will be shared can enhance transparency and ensure a more effective partnership will be decided by the PMU and DWD. Therefore, it may not be necessary to dedicate a separate comprehensive section to this aspect in the Environmental Impact Assessment (EIA) since it falls under the purview and obligation of the PMU.</i>

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114.	209	5.3.6.1 Proposed mitigation measures for ground water resource and related impacts	Q: The observation that "dewatering in limestone aquifers during the excavation requires to be done with proper investigation and follow the detailed geotechnical investigations" is stated. Since limestone aquifers act as a natural water storage system, improve water quality, and sustain a steady flow of water throughout the year—even during the dry seasons—it is important to carefully examine the detailed report before approving the EIA report. The disruption of the ecosystem may result in altered water flow dynamics and groundwater contamination. Therefore, excessive extraction of groundwater may result in groundwater depletion. R: <i>Geologists and geotechnical engineers are skilled at figuring out how much water needs to be removed during piling and how to do it safely. They use their expertise to determine the rate the water should be pumped out and where it should go, while also noting areas with high water pressure or places where sinkholes might form. By conducting tests of the ground and pumps rates, they can design customized dewatering systems that work best for each situation. Although there might not always be a strict rule requiring a detailed geotechnical investigation report before CEA approval, the Central Environmental Authority (CEA) can decide if it's necessary based on the circumstance and can include that in their terms and conditions.</i>
115.	240	iii. The contactor shall, Participate in site inspections requested by the PMU and or Authorities (CEA, RDA, CC & CRMD, FD) to review the EMP performance	Q: DS and DWC needs to be added. R: <i>Comment is well taken. Given is only a tentative list the PMU will decide the required agencies. certainly, the indicated stakeholder will be included.</i>
116.	236	Environmental Monitoring Programme - Parametric Monitoring	Q: Monitoring of water bodies near the construction site to ensure that there are no contaminant discharges that could harm aquatic ecosystems, Monitoring soil quality to ensure that construction activities do not lead to soil erosion or contamination, Monitoring wildlife populations and their habitats to identify any potential impacts from construction activities and to implement mitigation measures and Monitoring waste generation and disposal practices to ensure compliance with regulations and to minimize environmental impacts needs to be added to this section.

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			R: The aspect has been detailed in the EIA. PI refer to the section 7.1.2 Environmental Monitoring Programme (EMoP) Parametric Monitoring Aspects (For the Construction Stage). this section covers the regulatory and other obligatory requirement of EMoP given in the annex 6-2. This is the accepted reporting and implementation procedure in all large-scale development projects in the country
117.	237	Monitoring vibration induced building cracks	Q: It is needs to conduct regular inspections of the buildings to identify and monitor any cracks that may develop over time. R: The aspect has been detailed in the EIA. PI refer to the section 7.1.2 Environmental Monitoring Programme (EMoP) Parametric Monitoring Aspects (For the Construction Stage). Monitoring vibration induced building cracks.
118.	238	Record keeping and reporting: A record-keeping system for daily incidents of bird and bat fatalities due to collision hazards will be implemented. These records will be systematically reported to the Department of Wildlife Conservation (DWC).	Q: It is important to analyze the data collected from surveillance and carcass searches to assess the level of collision risk and identify any patterns or trends in bird and bat activity and Implement mitigation measures based on the findings of the monitoring program, such as adjusting turbine operations to reduce collision risk during peak migration periods. Therefore, needs to prepare reports detailing the results of the monitoring program, including the number and species of birds and bats affected, as well as the effectiveness of mitigation measures implemented. R: See section 7.1.3 under bird/bat carcasses; and under record keeping and reporting where this has been addressed
119.	239	The PMU (The client's Project Management Unit) is also responsible for satisfactory implementation of a Grievance Redress Mechanism (GRM)	Q: It is need to included clear procedures for reporting, investigating and resolution of complaints. It should ensure confidentiality, impartiality and a fair hearing for all parties involved. R: In Sri Lanka, numerous major projects have implemented a Grievance Redress Mechanism (GRM) successfully. This indicates that the necessary expertise and capacity are readily available within the country. Once the Project Management Unit (PMU) is set-up with adequately competent staff, the GRM can be swiftly established. The process for setting up and implementing the GRM is well-defined and comprehensive. While reporting is an essential

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			<i>component of the GRM, it's just one part of a multi-tiered system that cannot be simplified. Therefore, it may not be necessary to dedicate a separate comprehensive section to this aspect in the Environmental Impact Assessment (EIA) since it falls under the purview and obligation of the PMU.</i>
120.	240	7.2.3 Training and awareness for contractor's staff	Q: It is needed to provide comprehensive training for all contractor's staff before they begin work on wind farm. This training should cover general health and safety procedures as well as specific hazards and risks associated with working on wind turbines. R: <i>Comment is acknowledged and complimentary, has been already included in the EIA under 7.2.3 Training and awareness for contractor's staff.</i> <i>It will be formulated and carried out by the EHS officers of the PMU, the contractors EHS officers in their specific work areas. Therefore, it may not be necessary to dedicate a separate comprehensive section to this aspect in the Environmental Impact Assessment (EIA) since it falls under the purview and obligation of the PMU.</i>
121.	241	Carry out environmental quality tests	Q: The contractor should procure the services from a competent local company. R: <i>Comment is acknowledged and complimentary, has been already included in the EIA under 7.1.2 Environmental Monitoring Programme (EMoP) Parametric Monitoring Aspects (For the Construction Stage) Environmental Monitoring Programme- Parametric Monitoring in "The contractor should obtain the services of a competent local organization registered with CEA"</i>
122.	241	Once the final project plan and design details are completed the SLSEA/AGESL/Consultants should update the EMP with project specific details	Q: SLSEA should take the responsibility for update the EMP with project specific details. R: <i>Comment is acknowledged and complimentary, has been already included in the EIA under 7.2 Implementation Arrangements</i>
123.		Annex 2.1 - Detailed Layout and Foundation Drawings	Q: Not specific detailed layout and foundation drawings used for this project and what is the justification of using other project drawings for this project (used 45 WTG layout,

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			Pooneryn Sri Lanka and MUNDRA PROTYPE 2 - India) <i>R: Various foundation types are utilized for wind turbine installations, each tailored to suit specific soil conditions, turbine specifications, and site requirements. The use of foundation designs from previous projects, 45 wind turbine layout in Pooneryn, Sri Lanka, and the Mundra prototype, is justified as follows.</i> <i>The given foundation design is a typical design used for turbine foundations suitable for sandy, calcareous soils considering various geo-technical/structural integrity factors such as soil properties, wind turbine specifications, and environmental conditions. The given layout and foundation drawings provide valuable initial guidance, especially considering their relevance to similar environmental and geological conditions (Poonaryne & Mannar Sandy soils in calcareous deposits/ rock bearing) for the purpose of EIA. However, it is imperative to conduct a detailed site-specific geotechnical investigation to furnish precise data on soil properties, geological features, and environmental factors unique to the foundation design at the site, to ensure optimal foundation design with structural integrity. This aspect is already considered and described in the section 2.2.9 of the EIA under Any piling activities envisaged (No. of piles and filing period etc. to be indicated)</i>
124	242	8 CONCLUSIONS AND RECOMMENDATIONS > 8.2 Conclusions	Q: "In conclusion, the local communities in the project region will significantly gain socioeconomic benefits from the wind power project." - The EIA has failed to highlight what these benefits in the long term are. Even though compensation is mentioned, the loss of livelihoods in the long-term are not properly addressed and therefore compensation alone cannot be considered as a community gain. Impact, it is a community loss. The number of individuals alone who will be depending on Palmyra and related agricultural activities will not be properly compensated. A onetime compensation for any agricultural/ plantation losses will not justify as a local community gain. R: <i>This concern will be addressed through an entitlement matrix which is currently under preparation. Under this both short- and long-term economic losses will be considered according to the government approved</i>

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			<i>procedures.</i> <i>Multiple CSR activities for the community empowerment under education, community health, community infrastructure, and livelihood which includes the fishery community have been proposed under the project. See Annex 5-4.</i> <i>Access roads that will be constructed as a result of the project, would facilitate mobility, and transport facilities for the Specifically, for the fishing community training has been recommended for fish yields and productivity improvement, for promoting mangrove conservation, and for providing basic infrastructure for economically weaker fisher communities. Additionally, training and awareness for fish product preservation, marketing, packaging, and forwarding has been proposed.</i> <i>Currently the Palmyra production is conducted informally, and hence a systematically organized method of production would benefit the community in all aspects.</i>
125	242		Q: "Through compensation payments, the project will increase landowners' incomes and give the nation a new source of clean energy. It will also generate both temporary and long- term employment opportunities." - The Project CSR plan itself is questionable as to how it will add benefit to the community. The existing community will be losing land and its productivity even though none of the houses and structures are impacted, livelihoods are impacted. R: <i>At present much of the land is under the ownership of a few who at present lease the Palmyra tree to other dependent parties in the community.</i> <i>It must be reiterated that although around 150 ha will be purchased only 52 ha will be utilized for permanent structures related to the projects. This includes access roads, which will also be available for the community for transport. The rest of the 98 ha will be under the state and available for us by the community for permitted activities which include agriculture. Thus, this situation would be more beneficial to the communities.</i>