KILIFI COMMUNITY PETITION TO THE GOVERNOR AND THE KILIFI COUNTY GOVERNMENT

NUCLEAR POWER IS CURRENTLY UNFEASIBLE AND UNSAFE FOR KENYA

We, the undersigned citizens and residents of the Republic of Kenya and Kilifi County, and who are also taxpayers draw the attention of the Governor, the Kilifi County Government and the National Government of Kenya to the following:

- 1. **THAT** Kilifi County has a population of 1,453,787 according to the census of 2019, is home to 4,153 fishermen and has a total of 199,674 families practising agriculture on 112,879 ha of land. Agriculture, tourism and fishing are major economic activities in Kilifi and the indigenous Mijikenda people. The county depends largely on the distribution income from tourism, fruits, cashew nuts, supported by the biodiversity of mangrove forests.
- 2. <u>**THAT**</u> Matsangoni Ward (in Kilifi County, the North Coast region of Kenya) has been earmarked as the most preferred site for a Nuclear Power Plant by the Nuclear and Power and Energy Agency (NuPEA).
- 3. <u>THAT</u> Matsangoni beach and Reef and Mida Creek with its mangrove system, part of the Watamu Marine National Park and Reserve, is home to many endangered species of marine life and is included in the Watamu/Malindi UNESCO biosphere reserve. The area attracts many special interest conservationists, scientists and tourists who are opposed to the location of the project. This area is known as a biodiversity hotspot **and must be protected at all costs**.
- 4. <u>THAT</u> Matsangoni community also borders the Arabuko-Sokoke Forest. Nature Kenya states, "Arabuko-Sokoke Forest is the last large, protected fragment of East African Coastal forest, and home to four endangered mammals and six threatened birds. The forest also provides sources of livelihood for neighbouring communities and ecological services for the country; it must be conserved for the people of Kenya."
- 5. <u>THAT</u> the area is a home to coral reefs, mangroves, dolphins and whales which attract many tourists, researchers and special interest groups.

- 6. <u>THAT</u> the proposed location is a UNESCO Biosphere Reserve and a tentative World Heritage Site with UNESCO defining Biosphere Reserves as learning places for sustainable development.
- 7. **<u>THAT</u>** the area, therefore, is a very **valuable and vulnerable ecosystem** deserving of protection for Kenya's future generations and that Kenya's tourism with its socioeconomic benefits must not be exposed to such high risk ventures
- 8. <u>THAT</u> the Matsangoni and the wider Kilifi community have been excluded from the process that led to selection of this site by both the County Government and NuPEA.
- 9. **THAT** the Uyombo community and wider Kilifi community have been **denied access to information**, by NuPEA, regarding the nuclear power plant and have been **completely excluded** from the decision making process.
- <u>THAT</u> NuPEA is a State Corporation established under section 54 of the Energy Act of 2019 and tasked with the responsibility to promote and implement Kenya's Nuclear Power Program.
- 11. **<u>THAT</u>** NuPEA is mandated by law and under Section 56 of the Energy Act including among other functions to:

a) **undertake extensive public education and awareness** on Kenya's nuclear power programme;

b) in collaboration with the relevant government agencies, develop a comprehensive legal and regulatory framework for nuclear electricity generation in Kenya;
c) carry out research, development and dissemination activities in the energy and nuclear power sector.

d) propose **policies and legislation necessary for the successful implementation** of a nuclear power programme

e) identify **appropriate sites** in Kenya for the construction of nuclear power plants and their related amenities;

f) establish a well-stocked library and information centre on nuclear science and technology;

g) promote local, regional and international participation in research activities, particularly in technology-oriented research;

h) publish its research findings and other research materials;

- 12. **<u>THAT</u>** the **preservation and realisation of the right to a clean and healthy environment** for all as enshrined in Article 42 of the Constitution and recognized by the United Nations is anchored in the strict adherence to procedural environmental rights i.e access to information, public participation, and access to effective remedy in cases of violation. In ensuring the right to a clean and healthy environment, therefore, it is pertinent that all procedural rights are upheld without compromise.
- 13. <u>THAT</u> further no measures have been put in place for effective remedies or access to justice, disaster preparedness, mitigation, recovery and restoration, for the people of Kilifi Community and neighbouring areas, in case of a nuclear accident as witnessed in other countries.
- 14. **THAT** a special legal framework is needed to be set up for liability and compensation arising from nuclear damage which would guarantee effective remedies and or access to justice.
- 15. <u>THAT</u> all nuclear fuel sources (uranium or other) result in high-level waste that is highly radioactive, toxic, corrosive and therefore difficult to handle, and will need to be carefully contained and managed for tens of thousands of years after the power station has long been decommissioned.
- 16. <u>THAT</u> all NPPs produce both high-level and low-level radioactive waste which is hazardous to human life, marine and forest ecosystems and biodiversity. The cost and technical burden of caring for this waste becomes a multi-generational problem 24,000 years or more. Inevitably, this is a tax on future generations generations who did not have the benefit of the power produced from the NPP.
- 17. **<u>THAT</u>** the half-life of uranium is 4.5 billion years, therefore making it very toxic to the environment and the future generations.
- 18. **<u>THAT</u>** this makes the project highly sensitive, risky, extremely toxic, and dangerous for the county and beyond, for people, the land, flora and fauna into future generations.
- 19. <u>**THAT**</u> production of nuclear energy is an extremely sensitive venture that requires high levels of professionalism and strict due diligence and fidelity to the rule of law.

20. <u>**THAT</u>** On 29th September 2021, the Presidential Taskforce on the Review of Power Purchasing Agreements (PPAs), led by the Chairperson John Ngumi, presented their report to President Uhuru Kenyatta which concluded that:</u>

5.10.1 Findings

"According to the 2020-2040 Least Cost Power Development Plan, it is unlikely that the country will go into nuclear power production in the foreseeable future. A separate entity to promote and implement a nuclear programme in Kenya is therefore not necessary at this point, and this high level non generation role could be played by MoE. The Taskforce established that the scope of NuPEA's mandate involves aspects not related to nuclear energy such as research in other forms of energy and capacity building in other utilities. The envisaged role, which is not nuclear related, can be performed efficiently by the respective entities.

"The cost implication of running NuPEA as a distinct entity cannot be justified."

- 21. **<u>THAT</u>** the Ministry of Finance therefore erred in allocating Ksh 2 billion to NuPEA as there was no Justifiable function for Nupea's existence and therefore no need for the allocation.
- 22. **THAT** sustainable development calls for prioritising sustainability and community well-being and environmentally-friendly projects to avoid social and cultural disruption.
- 23. <u>**THAT**</u> NuPEA has exhibited a high level of mediocrity and unprofessionalism in choosing the location for the Nuclear Power Plant and establishment of a mega project such as a Nuclear Power Plant in such a manner will most likely lead to catastrophe.
- 24. <u>**THAT**</u> choosing Matsangoni ward significantly increases the cost on the taxpayer for risk mitigation due to the unique ecosystems and biodiversity found in the area.
- 25. <u>**THAT**</u> NuPEA has failed to perform a risk assessment analysis in choosing the proposed location
- 26. **<u>THAT</u>** Kenya has not signed the Vienna Convention on Civil Liability for Nuclear Damage that covers liability and compensation.

- 27. <u>**THAT**</u> by not signing the convention referenced in paragraph 26, shows lack of commitment to any form of redress of damage in case of any nuclear or radioactive accidents.
- 28. **THAT** the legal framework for management of nuclear power plants in Kenya is not adequate: EMCA 1999 is weak on risks assessment, liability and compensation.
- 29. **THAT** there is no effective legal framework for disaster management in Kenya, based on how floods, drought, Owino-Uhuru, Mombasa lead contamination case, Thange oil spill, Makueni and other disasters have been managed.
- 30. **<u>THAT</u>** there are no existing guidelines on health impact assessment with respect to projects and related disasters.
- 31. <u>**THAT**</u> there is no existing policy framework for radioactive waste management.
- 32. **<u>THAT</u>** there is no remediation policy in Kenya and NEMA is unable even to deal with the Owino-Uhuru lead contamination and poisoning that happened in 2009 and is fighting in court against remediation to the affected community.
- 33. **THAT** Japan's Ministry of Economy, Trade and Industry estimated the total cost of remediating the Fukushima site at ¥21.5 trillion (US\$187 billion), almost twice the previous estimate of ¥11 trillion (US\$96 billion).
- 34. **<u>THAT</u>** the Kenyan taxpayer cannot be made to take such a risk as the taxpayer cannot afford such remediation costs There is no report from treasury/no economic report indicating or showing viability of the project- what is there is that energy report that indicates non viability.
- 35. <u>**THAT**</u> there is no proven need for nuclear power as Kenya suffers no energy deficit and in addition Kenya has immense geothermal resources which offers clean energy with less risk. Renewables and grid upgrades can provide for even the most ambitious energy demand projections for Kenya.
- 36. <u>**THAT**</u> the SESA report being used to push for the establishment of the nuclear facility was not done by professionals in nuclear energy and radioactive waste management and reviews have shown various inconsistencies in the Strategic Environment SA.
- 37. <u>**THAT**</u> in parallel, through omission or commission, NEMA has failed to respect laws and procedures related to licensing as the research project was allowed to be implemented in a location that is contrary to the rules and regulations on the requirements related to the environmental impacts.

- 38. <u>**THAT**</u> NEMA is also legitimizing the illegal work of NuPEA by being part of the presentation and defense of the SESA report.
- 39. **THAT** the PS of Energy, during a visit to endorse the site, ignored the issues raised by the community and went ahead to rubber stamp NuPEA's decision on the location, signifying the groundbreaking of the project activities in the community, despite the concerns posed by the community.
- 40. <u>**THAT**</u> It is highly unethical to put a Nuclear Power Plant in a high risk zone and then put the KDF to protect it. This will be intentionally putting the human life of the KDF at risk in the proposed Buffer zone. It is only right and logical that the chosen site be a low risk area.
- 41. <u>**THAT**</u> NuPEA has interfered with the land adjudication and allocation process and forcefully demanded allocation of land to NuPEA in Uyombo.
- 42. <u>THAT</u> Kenya has enormous untapped renewable energy reserves that can more than meet even the most ambitious energy demand projections. Kenya's potential of Renewable Energy is 33,000 MW which is more than twice the targets of the auspicious Vision 2030 demand projections (17000 MW). The current energy mix of geothermal, wind, hydro, solar is sufficient to supply Kenya's needs if adequately harnessed.
- 43. <u>**THAT**</u> Kenya's true constraint in reaching more customers with grid-electricity, is the grid itself. The grid infrastructure is buckling under below par management, demand, wear and tear. We see no immediate or strategic plans for required maintenance, upgrading and stabilising this critical infrastructure.
- 44. **<u>THAT</u>** Not only is the Kenyan power grid incapable of serving the current demand, it would be outright dangerous to load an additional 1000 MW plant onto that grid, especially in Kilifi County, where grid failures are daily, power outages protracted and current infrastructure literally falling apart and setting fires as it goes. There is no requisite fire protection and response management personnel or equipment.
- 45. **THAT** NPPs require highly stable grids in order to operate, and must have a backup power supply sufficient to keep the cooling systems running in case of any shutdown of the reactors themselves. What is the plan for power backup? Where will the

requisite backup power come from and within the speed needed when the NPP inevitably fails? (Globally, all NPPs experience down-time)

- 46. <u>**THAT**</u> It is therefore imperative that first, the Kenyan grid be upgraded into a modern grid, maintained and back up secured before Kenya can establish a NPP or even debate one.
- 47. **<u>THAT</u>** Renewable Energy options are more socio-economically feasible and attainable in resource rich Kenya than nuclear power. A look at global trends indicates that renewables are increasingly more affordable over time while the contrary is true of NPPs. Nuclear power plants are exponentially more depleting to the environment, society and financial resources. Especially given the multigenerational cost burden for decommissioning and long term storage of spent fuel that will be forced upon Kenyans.
- 48. **THAT** Nuclear power projects consistently run massively over budget and are completed notoriously over predicted timelines. The high cost of construction of the Nuclear power plant (500-600 Billion Kenya Shillings, minimum) is economically unviable, particularly when compared to the rapidly decreasing costs and significant potential of renewable energy sourcesNPPs are also notoriously late to complete. To meet the ambitious power demand projections, an NPP will come too late. Investing in renewable energy innovations that foster energy efficiency and new storage options is an example of what Kenya needs.
- 49. <u>THAT</u> The immediate political cost for Kenyan politicians will hang like an albatross given current sentiments in the country due to severe economic hardships. A multi-billion shilling project does not augur well for Kenyans who are struggling to meet their daily needs particularly in the currently selected locations.
- 50. **THAT** A distributed renewable power portfolio is significantly less vulnerable to the corruption enormous infrastructure projects such as a 1000 MW nuclear power station presents.
- 51. <u>**THAT</u>** Renewable Energy innovations and solutions will create and sustain more local jobs than the extremely complex and technical NPP related. A socio-economic and political win for Kenyans.</u>

- 52. <u>THAT</u> A key pillar of any NPP process includes that of public participation. NUPEA was mandated to "promote and implement Kenya's Nuclear Power Program". NuPEA has instead created significant acrimony among the public, and between agencies. NuPEA has not inspired confidence in its endeavour to advance and execute an NPP despite the technical, social, economic, environmental specifications on the process.
- 53. **THAT** The necessary attention and due diligence for effective stakeholder engagement was absent. When eventually held, the NPP was presented to the people as a pre-determined and foregone decision. This made any engagement with stakeholders immediately suspicious and untrustworthy and over time has resulted in an irresolvable conflict of interest.
- 54. **THAT** On 25th August 2023 Uyombo community participated in the <u>last meeting</u> convened by CJGEA and KANA and attended by the Principal secretary for Energy. An assurance was issued that NuPEA would further and deliberately engage the community in participation forums before proceeding with any work.
- 55. <u>**THAT</u>** On 20th May 2024, The Nuclear Power and Energy Agency (NUPEA) ventured into the Uyombo community and did a site handing over for the groundbreaking of the NPP related Meteorological and Seismic station.</u>
- 56. THAT On 21st May 2024, NUPEA undertook a groundbreaking for the NPP related meteorological and tower seismic station at Uyombo Girls Secondary School. The Environmental Impact Assessment (EIA) license for the meteorological station is from the National Environment Management Authority(NEMA). However, the procedural regulations stipulated in the Environment Management and Co-ordination Act (1999) states that a document, such as a questionnaire and its feedback data, should be attached to the EIA license to prove public participation. The absence of such a document is evidence that NuPEA did not carry out the requisite community participation process and thus acted in contravention of the law.
- 57. **THAT** The community urgently converged at the site and spoke to the NUPEA officials requesting that the activity needed to adhere to the regulations of Public participation as enshrined in the Kenyan constitution 2010 and Sessional Paper No. 3 of 2023.
- 58. **THAT** The community succeeded in their request and NuPEA officials left the community after shaking hands and reaching an agreement with the NuPEA officials and the area Chief and Assistant County Commissioner.

- 59. **THAT** on the 21st of May 2024 contrary to all prior made assurances and agreements on public participation, the NuPEA team returned to the community under heavy police protection and sort to forcefully begin the ground breaking activities.
- 60. **THAT** Some women ventured into the school to make inquiries but they were brutalised by the police who immediately called for backup from Ngerenya Police station and they began beating the community members.
- 61. **<u>THAT</u>** The police report says they dispensed 137 Live rounds, 44 Blanks and 70 teargas canisters on the unarmed people of Uyombo Injuring women and children in the process.
- 62. <u>THAT</u> The reliability of this SESA report is highly questionable for its technical ineptitude. It does not appear to have been prepared by a multi-professional team of Nuclear Power and Nuclear Power Plant informed experts which is an imperative. SGS has no practical expertise in Nuclear and NEMA is a regulatory agency posing as a Lead Agent for NuPEA contravenes the EMCA act. This makes the reliability and accuracy of the report highly questionable and its professionalism doubtful. Subsequently, <u>a professional review</u>, by multiple professionals including nuclear scientists, of the SESA report have identified glaring, significant, repeated deficiencies which make the proposed NPP unfeasible and high risk inducing.
- 63. <u>**THAT**</u> the Uyombo community were brutally maimed by the police at the behest of NuPEA and the community is entitled to compensation from NuPEA for the injuries sustained.

https://drive.google.com/drive/folders/15nW_UTESFVsMLSoSpanQh3y0HfC340gs?usp=sh aring

64. **THAT** The people and environment of Uyombo lie within the hard-won acknowledgement of the location as a UNESCO Biosphere Reserve. The area includes social and ecological systems and biodiversity including unique marine and terrestrial ecosystems critical in Global sustainable development research. It's a site that is not only globally recognized but one that promotes sustainable global solutions to the climate crisis.

https://www.unesco.org/en/mab/wnbr/about https://unesco.go.ke/biosphere-reserves/

- 65. <u>**THAT**</u> NuPEA is threatening to deploy Small Modular Reactors (SMRs), a technology that lacks global data and support, which would effectively make Kenya a test case for the collection of data on SMRs. The technology is still in its prototype stage and has not been fully tested or proven to be advanced.
- 66. **THAT** NuPEA has insisted that a political decision has already been made, despite the absence of any documented record outlining how this decision was reached.
- 67. <u>THAT</u> The 2023 SESA report page 54 Section 2.4 referring to the site characterization Basis of site location states that " The social and environmental characteristics of the site and its environment could influence the impact of released radioactive material on humans and the environment. <u>The site should</u> not be located near ecological valuable or vulnerable areas nor densely populated areas.

This disqualifies Uyombo as a site because of the UNESCO biosphere, the Arabuko sokoke, The Watamu marine park and the Mangrove forest at Mida creek. NUPEA should therefore disinvest in further expending Kenyan taxpayers funds on a site that is already disqualified by the SESA report.

THEREFORE, the Kilifi Community PRAYS that the President of Kenya, through the Governor of Kilifi, urgently consider this an economic, environmental and moral issue for the country and that they act with a view to issue: -

- 1. <u>Orders</u> to all responsible state agencies to totally remove Matsangoni and Kilifi County from the list of possible sites for a Nuclear Power Plant.
- 2. <u>Orders</u> to institute mechanisms to prosecute individual NuPEA officials found culpable of wasting taxpayers funds by recommending Kilifi as their preferred site.
- 3. **Orders** to NuPEA to stop interfering in the issuance of title deeds to the Uyombo community.
- 4. <u>Orders</u> to make a declaration that the systematic denial of access to information to the Kilifi Community by NuPEA about how the Nuclear Power Plant would affect them and what precautionary measures must be taken, violated the Community's right to information as provided under Article 35(1)(a), (b) and (3).
- 5. <u>Orders</u> that all the members of the Uyombo community who were brutally maimed by the police at the behest of NuPEA to be compensated by NuPEA and the Attorney General for the injuries sustained.
- 6. **Orders** for the Nuclear Power and Energy Agency(NuPEA) to be disbanded as recommended in the John Ngumi led Presidential Taskforce of 2021.

7. <u>Orders</u> to make a declaration that the Community's rights to a clean and healthy environment guaranteed by Article 42 of the constitution, Article 12(2)(b) of the International Covenant on Economic, Social and Cultural Rights (ICESR) and Article 24 of the African Charter on Humans and People's Rights (ACHPR) have been contravened by the actions and omissions of the NuPEA