

# Introduction of Thorium Reactor Nuclear Power Stations in Nigeria.

## Locations – [SCALPED]

### 1. Ondo State (Southwest Nigeria)

- **Likely Site Area:** Coastal or near-coastal regions, possibly near the city of Akure or the coastal town of Ilaje.
- **Geographical Region:** Southwest Nigeria.
- **Rationale:**
  - Proximity to the Atlantic Ocean offers access to abundant water for cooling.
  - Relatively stable geological conditions.
  - Access to infrastructure, including roads and electricity grids.
  - The potential for economic development in a region with existing oil and gas industries.

### 2. Lagos State (Southwest Nigeria)

- **Likely Site Area:** Epe or Lekki Free Trade Zone.
- **Geographical Region:** Southwest Nigeria.
- **Rationale:**
  - Proximity to Nigeria's economic hub, offering strong infrastructure and workforce availability.
  - Access to international ports for importing reactor components.
  - Availability of land in less densely populated areas like Epe.
  - Potential for high demand for electricity in Lagos' growing urban and industrial sectors.

### 3. Niger State (North-Central Nigeria)

- **Likely Site Area:** Bida or Kainji Dam vicinity.
- **Geographical Region:** North-Central Nigeria.
- **Rationale:**
  - Proximity to Kainji Dam offers synergies with existing hydropower infrastructure.
  - Abundant water resources from the Niger River.
  - Geologically stable area with lower population density, reducing the risk to large populations.
  - Strategic location for distributing power across the North-Central region.

### 4. Cross River State (Southeast Nigeria)

- **Likely Site Area:** Calabar or the surrounding coastal region.
- **Geographical Region:** Southeast Nigeria.
- **Rationale:**

- Proximity to the coast and Calabar River, providing water resources for reactor cooling.
- Access to Calabar Free Trade Zone, facilitating international collaboration and trade.
- Calabar's port could serve as a logistics hub for importing reactor components and materials.
- Potential for development in a region with less industrial activity.

## 5. Kaduna State (Northwest Nigeria)

- **Likely Site Area:** Near the city of Kaduna or Zaria.
- **Geographical Region:** Northwest Nigeria.
- **Rationale:**
  - Central location in Northern Nigeria, strategically positioned to distribute power across the northern regions.
  - Existing infrastructure with major roads and rail links.
  - Relatively stable geology and sufficient land availability.
  - Potential to stimulate economic growth in the region.

## 6. Akwa Ibom State (South-South Nigeria)

- **Likely Site Area:** Uyo or the coastal region near Oron.
- **Geographical Region:** South-South Nigeria.
- **Rationale:**
  - Access to coastal waters for cooling.
  - Proximity to the Niger Delta region with existing energy infrastructure.
  - Potential to leverage existing oil and gas expertise in the area.
  - Strong demand for power in an industrially active region.

## 7. Kogi State (North-Central Nigeria)

- **Likely Site Area:** Lokoja, near the confluence of the Niger and Benue rivers.
- **Geographical Region:** North-Central Nigeria.
- **Rationale:**
  - Access to abundant water resources from the Niger and Benue rivers.
  - Central location ideal for power distribution across Nigeria.
  - Relatively low population density, reducing potential risks to large urban populations.
  - Proximity to existing power infrastructure, including hydroelectric facilities.

## 8. Ogun State (Southwest Nigeria)

- **Likely Site Area:** Near Abeokuta or along the Lagos-Ibadan corridor.
- **Geographical Region:** Southwest Nigeria.
- **Rationale:**
  - Proximity to Lagos and Ibadan, two major economic centers, ensures high demand for electricity.
  - Existing industrial base that could benefit from stable power supply.
  - Relatively well-developed infrastructure and logistics networks.

- Geologically stable with sufficient land availability.

## **9. Rivers State (South-South Nigeria)**

- **Likely Site Area:** Near Port Harcourt or the coastal region.
- **Geographical Region:** South-South Nigeria.
- **Rationale:**
  - Access to coastal waters for cooling and proximity to oil and gas infrastructure.
  - Port Harcourt's status as an industrial hub ensures strong demand for electricity.
  - Potential to integrate with existing energy projects in the Niger Delta.
  - Access to international ports for logistics and transportation of reactor components.

## **10. Kano State (Northwest Nigeria)**

- **Likely Site Area:** Outskirts of Kano city or near major industrial zones.
- **Geographical Region:** Northwest Nigeria.
- **Rationale:**
  - High population density and industrial activity generate significant demand for power.
  - Central location within the Northern region, facilitating distribution of electricity.
  - Existing infrastructure, including roads, rail, and airports, supports project logistics.
  - Stable geology and available land on the city's outskirts.

## **Collaboration with Danish Experts**

Danish experts are likely to bring experience in advanced reactor design, safety protocols, and environmental sustainability, which will influence site selection criteria. Their involvement may also focus on ensuring that selected sites meet international best practices for safety, environmental impact, and community engagement.