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National
Association of
Regulatory
Utility
Commissioners

NARUC REGULATORY PARTNERSHIP PROGRAMME - SITING ISSUES

*Presented By Martin Asare
Energy Commission of Ghana*



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SITING ISSUES *Contd.*

- No Siting Board for Utility Infrastructure for Ghana.
- Environmental Protection Agency is responsible for Environmental Issues
-
- *Slogan: It is an offence to start a project / development without an Environmental Permit*
-
- EPA Permit is prerequisite for granting EC Licence / Permit to construct or develop.
-
- EPA Certificate must be obtained for operating old or new facility.



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SITING ISSUES *Contd.*

EPA Requirements:

- Application
- Site and Block Plan
- Zoning letter from T & CPD
- Letter from GNFS
- Letter from GHA / Urban Roads
- Letter from District Assembly
- Processing & Permit Fees.



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SITING ISSUES *Contd.*

- Right of Way
 - Government Compulsory Acquisition
 - Private Acquisition
 - The Rightful Owner of Land
 - Issue about Compensations
 - Markings to identify buried Pipelines



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SITING ISSUES *Contd.*

- **Construction**
- EC Requirements
 - EPA Permit
 - Proof of Ownership to Land
 - Block & Site Plan
 - Detailed Engineering Design with Appropriate Data
 - Construction Fee
 - Site Investigation



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SITING ISSUES *Contd.*

Transmission Planning / Expansion

System	Pipe Diam. (ins)	Length (km)	Estimated Cost US\$M
East (GT. Accra, Volta, Eastern & Central Rgs.)	6-12	487	151
West (Central, Western, Ashanti, B-Ahafo, NR, U.E & U.W)	6-20	1175	485
Total			636



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SITING ISSUES

Contd.

- Transmission Planning & Expansion
 - Considerations
 - Supply and Demand Forecast
 - Pipeline selection to meet total expected capacity
 - Capital and O&M costs
 - Strategic Expansion and Environmental
 - Issues
 - Optimum Design (lowest service cost and lowest initial capital)



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SITING ISSUES *Contd.*

- The demand forms the basis for the design flow. The demand is typically evaluated based on:
- End-User Requirements
- Market Growth Potential
- Historical Demand Profile (if any)
- Profile of Seasonal & Periodic Fluctuations (if any)



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SITING ISSUES *Contd.*

- Enforcement and Compliance Investigations
 - Through appropriate Rules and Regulations
 - Through physical site investigations
 - Through informal meeting

- Institutional Failures
 - Lack of monitoring mechanism after issuance of Licence to operate



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SITING ISSUES *Contd.*

- The Way Forward.....
- *To establish a Siting Committee of Utility Infrastructure under the umbrella of the EC to provide One-Stop –Shop approval or energy service providers.*
- *It is an offence to construct or develop an energy infrastructure without the Siting Committee's approval*