

Procurement of Reactive Power Support System (STATCOM) at Bluefield Substation – Budgetary Tender

Introduction & Invitation: Bluefield Power Authority (BPA) invites bids for the design, supply, and installation of a Static Synchronous Compensator (STATCOM) at the 220 kV Bluefield Substation to enhance grid stability. The tender number is BPA-2025-001, and the issue date is June 19, 2025. Qualified suppliers are invited to submit their proposals.

Project Background: The Bluefield region has experienced voltage fluctuations due to increased wind generation. The STATCOM will provide ± 60 Mvar reactive power support to stabilize the voltage.

Requirements and Scope of Work:

- **STATCOM rating:** ± 60 Mvar, 220 kV connection
- **Performance requirements:** Response time within one cycle, minimal harmonic distortion, $< 5\%$ THD for compliance
- **Associated equipment:** Step-down transformer, cooling system, control system integration with SCADA, etc.
- **Site works:** Foundation, enclosure for STATCOM, any civil works
- **Testing and commissioning:** Must perform on-site tests, grid code compliance verification

Bid Submission Details: Bids must be submitted by September 30, 2025, 5:00 PM, via the online portal. The technical and financial proposals should be submitted as separate PDF files.

Evaluation Criteria: Bids will be evaluated based on technical compliance (40%), experience (20%), and price (40%).

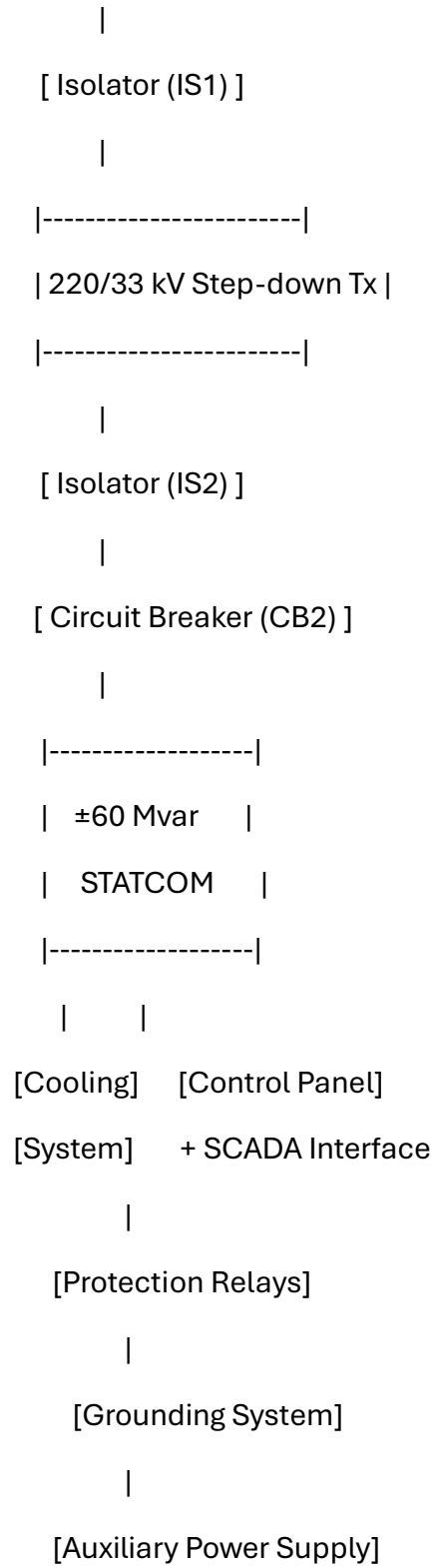
Pricing and Payment Terms: The budgetary tender requests a lump-sum price. Below is a simple table of cost breakdown:

Item Description	Estimated Cost (USD)
STATCOM Equipment	1,200,000
Associated Equipment	400,000
Site Works	300,000
Testing and Commissioning	100,000
Total Estimated Cost	2,000,000

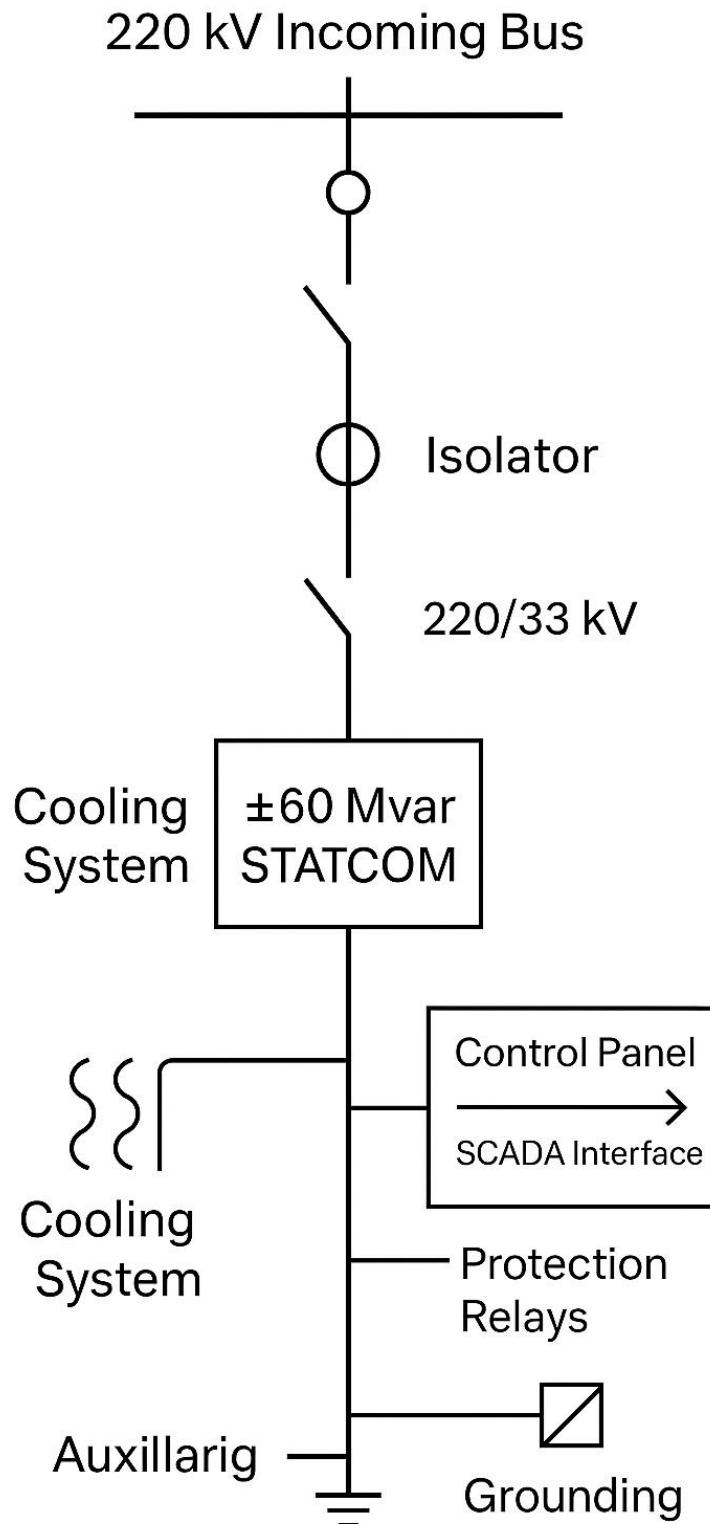
Terms and Conditions: The bidder must provide at least 2 years of on-site support. A penalty of 0.5% of contract value per week of delay will be imposed for late completion.

Annexes:

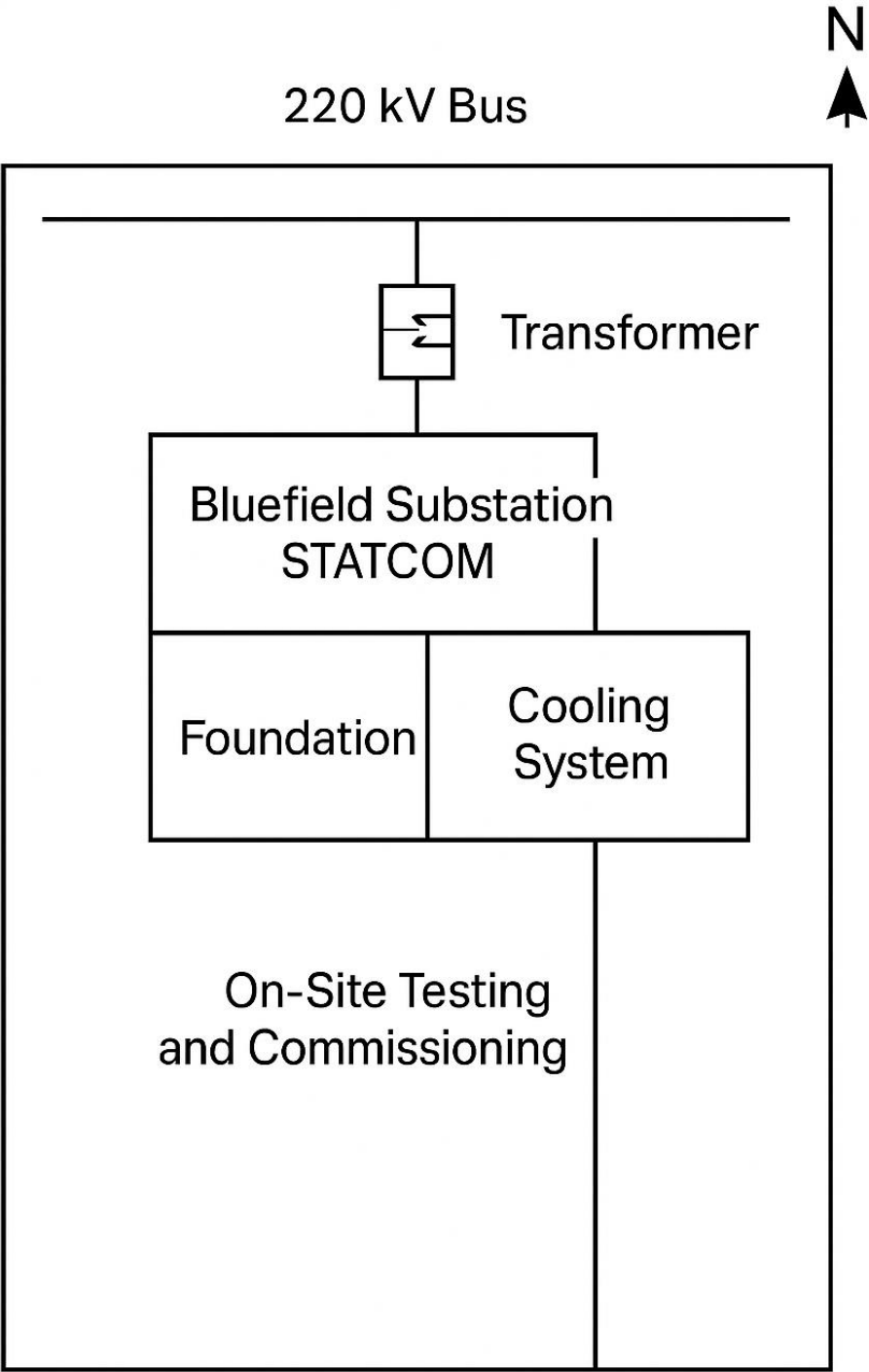
- Annex A: Site Layout (illustrating proposed STATCOM location)



Single Line Diagram as an image



Site Layout



Site Layout