DEVI ELECTRONICS

Mfrs of: Electrical Power System Lab Equipment's, Test & Measuring Instruments. Mfrs of: Electrical Apartments, Street no: 4, Kakateeya Nagar, Habsiguda. Hyderabad – 500 007. # 1/2/29/3. Flat: GA, Hide Away Apartments, 9492047185, Dec. A, Hide Away 1, 120 A, Kakateeya Nagar, Habigutan 1, P. 040-27154985, 9492047185, 9440884985, 9441965959, 9441905959. svramanhyd@gmail.com

Letter of Acceptance

Ref: DE/PETW/ECE/2018-19/01

Date: 11/07/2018

To The Principal, Princeton Institute of Engineering & Technology for Women, Narapally, Secunderabad-500088.

Ref: Sponsorship for Project Dated: 18/06/2018

Subject: Acceptance of Financial aid for the project "Design of Cascaded H-Bridge Multilevel STATCOM for Power Quality Improvement".

Dear Sir,

Best wishes from Devi Electronics, Habsiguda, Hyderabad.

Our staff and officials have undergone the scope of work for the proposed project. We extend our full support to carry out this research work. In this regard, we are glad to sponsor your project "Design of Cascaded H-Bridge Multilevel STATCOM for Power Quality Improvement" with INR. 8, 00,000 (Eight lakhs rupees only)

Principal FRINCETON INSTITUTE OF ENGINEERING & TECHNOLOGY FOR WOMEN Chowdaryguda, Korremula (V), Ghatkesar (M), Medchal Dist, T.S-500083

s.saravan **Managing Director** (Devi Electronics)



DEVI ELECTRONICS

Mfrs of: Electrical Power System Lab Equipment's, Test & Measuring Instruments. # 1/2/29/3. Flat: GA, Hide Away Apartments, Street no: 4, Kakateeya Nagar, Habsiguda. Hyderabad – 500 007. А, нисе Ама, нисе Ам svramanhyd@gmail.com

Work Order

Ref: DE/WO/PETW/ECE/2018-19/01

Date: 11/07/2018

To The Principal, Princeton Institute of Engineering & Technology for Women, Narapally, Secunderabad-500088.

Ref: Sponsorship for funded project Dated: 18/06/2018

Subject: Release of Work order for the project "Design of Cascaded H-Bridge Multilevel STATCOM for Power Quality Improvement".

Dear Sir,

We have undergone the proposed project with our senior professionals. We extend our full support to carry out this research work. In this regard, we are glad to release the work order for the project "Design of Cascaded H-Bridge Multilevel STATCOM for Power Quality Improvement" from today onwards. The following terms of payment will follow as per the budget proposal to complete the project.

S. No.	Mode of payment	Amount (INR)	
1.	Term-1 (Work order& Analysis)	2,00,000	
2.	Term-2(Modeling and Design)	2,00,000	
3.	Term-3 (Fabrication, Machining and Testing and Delivery)	4,00,000	
	Total	8,00,000	

Best wishes from Devi Electronics, Habsiguda.

Rrincipal FRINCETON INSTITUTE OF ENGINEERING & TECHNOLOGY FOR WOMEN Chowdaryguda, Korremula (V) Ghatkesar (M), Medchal Dist, i.

s.saravan **Managing Director** (Devi Electronics)



Vijayapuri colony Chowdaryguda (V), Ghatkesar (M), Medchal (D), TS-500088.

(Affiliated to JNTUH, Hyderabad & Approved by AICTE, New Delhi)

DATE 18/06/2018

To The Managing Director, Devi Electronics, Habsiguda. Hyderabad-500 007.

Subject: Sponsorship for funded project - Regarding.

Dear Sir.

Best wishes from Princeton Institute of Engineering & Technology for Women.

Princeton Institute of Engineering & Technology was established in the year 2009. PETW is approved by AICTE New Delhi, affiliated to JNTU, Hyderabad. PETW is an ISO 9001:2015 certified institution and TASK. The faculties of various departments are actively pursuing research in their respective technical departments under R&D wing of PETW. Dr. AJMERA KRISHNAMURTHY, Professor, Department of ECE, is the principal investigator for this proposed work.

We request your kind cooperation and financial aid of INR. 8,00,000 (Eight lakhs Rupees Only) in the "DESIGN OF CASCADED H-BRIDGE MULTILEVEL STATCOM FOR POWER QUALITY IMPROVEMENT" Herewith we have enclosed the budget proposal for the project. Our faculty will contact you in person along with this letter.

Princeton Institute of Engineering & Technology is expecting positive response from you.

Principal Investigator

Dept. of ECE

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Vijayapuri colony Chowdaryguda (V), Ghatkesar (M), Medchal (D), TS-500088.

(Affiliated to JNTUH, Hyderabad & Approved by AICTE, New Delhi)

Date: 18/06/2018

Budget Proposal for "Design of Cascaded H-Bridge Multilevel STATCOM for Power **Quality Improvement"**

Introduction:

Cascaded H-bridge multilevel converter (CHB-MC) is a popular choice in many industrial applications due to its Modularity, ability to decrease switching loss while maintaining excellent harmonic performance, and the possibility to eliminate the step-up transformer in medium voltage applications.

An additional feature that makes this converter suitable for the STATCOM application is its linear relationship between level number and component count, as opposed to monolithic multilevel converters, where this relationship is quadratic.

Scope of work

In this project, low capacitance Cascaded H-bridge multilevel converter based STATCOM is designed to reduce capacitor voltage ripples. The proposed high bandwidth control structure ensures balanced capacitor voltages during highly dynamic transient events. The limited inductive capability makes the I-V characteristic of the LC STATCOM asymmetric. The LC STATCOM system offers better current THD, lower maximum capacitor voltage and an approximately 80% reduction in the required energy storage capacity when compared to conventional STATCOM. This project proposes more efficient and more reliable reactive power compensators.

1.0 Professional Fees

Our Lump Sum professional fees for carrying out the above the scope of work will be INR.8, 00,000 (Eight lakhs Rupees only)

Fincipal PRINCETON INSTITUTE OF ENGINEERING & TECHNOLOGY FOR WC Chowdaryguda, Korremula (V), Ghatkesar (M), Medchal Dist, T.S-5000P





PRINCETON INSTITUTE OF ENGINEERING AND TECHNOLOGY FOR WOMEN Vijayapuri colony Chowdaryguda (V), Ghatkesar (M), Medchal (D), TS-500088.

(Affiliated to JNTUH, Hyderabad & Approved by AICTE, New Delhi)

2.0 Terms of Payment

S. No.	Mode of payment	Amount (INR)
1.	Term-1 (Work order& Analysis)	2,00,000
2.	Term-2(Modeling and Design)	2,00,000
3.	Term-3(Fabrication, Machining and Testing and Delivery)	4,00,000
<u></u>	Total	8,00,000

Kindly acknowledge the receipt of this proposal and looking forward to get the work order.

Principal Investigator





Vijayapuri colony Chowdaryguda (V), Ghatkesar (M), Medchal (D), TS-500088.

Affiliated to JNTUH, Hyderabad & Approved by AICTE, New Delhi)

Date: 23/07/2018

To The Managing Director, Devi Electronics, Habsiguda, Hyderabad- 500 007.

Project: Work order for "Design of Cascaded H-Bridge Multilevel STATCOM for Power Quality Improvement".

Ref: DE/WO/PETW/ECE/2018-19/01 Dated 11/07/2018.

Dear Sir,

As per your work order and subsequent discussions with principal investigator, I request you to kindly release the following bill amount.

	Bill - 1	
S. No.	Mode of payment	Amount (INR)
1.	Term-1 (Work order& Analysis)	2,00,000
	Total	2,00,000

Thanking You

Principal Investigator

Principal PRINCETON INSTITUTE OF ENGINEERING & TECHNOLOGY FOR WOMEH Chowdaryguda, Korrenula (V), Ghatkesar (M), Medchal Dist, T.S.9

Principal

I MINCETON INSTITUTE OF Plincipal & TECHNOLOGY FOR Chowdaryguda, Korremula / AV-N Ghatkesar (M), Medchal Dist, T.S.





Vijayapuri colony Chowdaryguda (V), Ghatkesar (M), Medchal (D), TS-500088.

(Affiliated to JNTUH, Hyderabad & Approved by AICTE, New Delhi)

Date: 07/08/2018

To The Managing Director, Devi Electronics, Habsiguda, Hyderabad- 500 007.

Project: Work order for "Design of Cascaded H-Bridge Multilevel STATCOM for Power

Quality Improvement"

Ref: DE/WO/PETW/ECE/2018-19/01 Dated 11/07/2018.

Dear Sir,

As per your work order and subsequent discussions with principal Investigator, I request you to kindly release the following bill amount.

	Bill - 2	
S. No.	Mode of payment	Amount (INR)
1.	Term-2(Modeling and Design)	2,00,000
	Total	2,00,000

Thanking You.

Principal Investigator

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Vijayapuri colony Chowdaryguda (V), Ghatkesar (M), Medchal (D), TS-500088.

(Affiliated to JNTUH, Hyderabad & Approved by AICTE, New Delhi)

Date: 21/08/2018

To The Managing Director, Devi Electronics, Habsiguda, Hyderabad- 500 007.

Project: Work order for "Design of Cascaded H-Bridge Multilevel STATCOM for Power

Quality Improvement"

Ref: DE/WO/PETW/ECE/2018-19/01 Dated 11/07/2018.

Dear Sir,

As per your work order and subsequent discussions with principal Investigator, I request you to kindly release the following bill amount.

	Bill - 3	
S. No.	Mode of payment	Amount (INR)
1.	Term-3 (Fabrication, Machining and Testing and Delivery)	4,00,000
	Total	4,00,000

Thanking You.

Principal Investigator

Principal FRINCETON INSTITUTE OF ENGINEERING & TECHNOLOGY FOR WOL Chowdaryguda, Korrem: + Ghatkesar (M), Medchal Dist,

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PRINCETON INSTITUTE OF ENGINEERING AND TECHNOLOGY FOR WOMEN Vijayapuri colony Chowdaryguda (V), Ghatkesar (M), Medchal (D), TS-500088.

(Affiliated to JNTUH, Hyderabad & Approved by AICTE, New Delhi)

GRANT UTILIZATION CERTIFICATE

Date: 10/09/2018

This is to certify that the grant of Rs. 8,00,000 (Rupees Eight lakhs only) from Devi Electronics as per the following installments was received by Princeton Institute of Engineering & Technology, Secunderabad for the project "Design of Cascaded H-Bridge Multilevel STATCOM for Power Quality Improvement" via electronic money transfer NEFT or cheque to institute SBI & HDFC bank account.

Name of the Company	Term	Proposed Amount	Released Amount
Devi	1	2,00,000	2,00,000
Electroni	2	2,00,000	2,00,000
cs	3	4,00,000	4,00,000
Total Am	ount		8,00,000

Principal Investigator

Anon Mich

Principal

FRINCETON INSTITUTE OF ENGINEERING & TECHNOLOGY FOR WC Chowdaryguda, Korreniu Ghatkesar (M), Medchal Dist, Principal PRINCETON INSTITUTE OF ENGINEERING & TECHNOLOGY FOR Chow

