Project Status Letter

PSL Number 04-ALL-GG

Covering period from 2/13/16 to 2/19/16

Prepared by: ECE 492 Design Team

Tasks that have been completed in the previous week:

Team: New ATP draft completed to be presented on Monday

TSV: Replacement heat sinks chosen and ordered (under MechE budget), I2C able to be demonstrated

GLV: Ordered a precharge relay, two relays for safety loop reset buttons, and replacement master switch. Prototype safety loop built using breadboard. Paper draft of TSI completed. Software environment setup for programming JGB, one JGB successfully programmed using code provided by John. CAD drawing created for prototype safety loop.

VSCADA: Virtual CANbus readin capability completed

MCM: data acquired for static characterization

Tasks ongoing

GLV - working to demo operating relay using JGB or SCADA computer, testing if motor controller can close AIRS, creating KiCAD drawing of board for VCI safety loop power box

VSCADA - Graphing spoofed CANBus, Adding logging to subsystem models, completing basic read only user interface for maintenance mode

TSV - Hardware corrections and modifications for PackMan, panel CAD drawing

MCM - Devising scheme for motor+controller modeling, old VSCADA code being evaluated for calibration, DAQ calibration ongoing, variable throttle data being collected

Tasks due to be complete next week.

TSV - I2C and CAN able to be demonstrated, PCBs and parts ordered, CAD drawing for control panel completed

VSCADA - Computer for VSCADA software ordered

GLV - able to open/close relay using either JGB or SCADA computer, test if motor controller can close the AIRS

MCM - Conference call with Curtis to address controller questions, motor+controller modeling scheme accomplished, static characterization data collected with variable throttle

Overdue tasks

TSV- creating CAD drawing for control panel (panel for positive terminal side completed, more parts need to be found to complete drawing), CAN communication not possible until board is remanufactured, PCBs and parts still need to be ordered

GLV - safety loop rack mount panel built (safety loop instead to be installed in the rack on a pre-made mount)

MCM - motor+controller modeling scheme devised (measurement with variable throttle and calibration needs to be completed first)

Cost Summary

Budget Category	New This Period	Total Spent to Date	Budget Remaining	Total Budget
TSV	\$0	\$0	\$850	\$850
GLV	\$117.87	\$117.87	\$782.13	\$900
VSCADA	\$0	\$65	\$335	\$400
Cabling	\$0	\$0	\$300	\$300
MCM (Motor Char. + Model)	\$0	\$0	\$250	\$250
Shipping	\$0	\$9.50	\$290.50	\$300
Totals	\$117.87	\$192.37	\$2807.63	\$3000

Receiving Report

N/A

Purchase Requests

- Automotive Relay, SPDT, 40A, 24V (Appendix I)
- 350A Contactor, 24VDC coil, 15in flying leads, no auxially contact (Appendix II)
- Hella 2843 Series 100A Rating Battery Master Switch (Appendix III)

Appendix I:

			Departme rial Requ			
	Course:	ECE 492		Req Number	002	
	Professor :	Nadovich/Yu				
	Requeste d By:	Joseph Cericola on behalf of Timothy Andrews			Digi-Key	
	Requeste d Date:	18-Feb-16		Web Site	www.digik ey.com	
	Ship By:	Ground		Phone	1-800-344 -4539	
#	Quantity	Vendor	Description	Unit	Total	Rcvd
	- Cuminot,	Part		Price	Price	11010
1	2	PB1800-ND	Automotive Relay, SPDT, 40A, 24V	\$3.94	\$7.88	
				Shippin g Fees		
				Grand Total:	\$7.88	
		Instructor Approval:				
		Department Approval: (Over \$500)				

Appendix II:

			Departmerial Req			
	Course:	ECE 492		Req Number:	003	
	Professor :	Nadovich/Yu				
	Requeste d By:	Timothy Andrews		Vendor:	Gigavac	
	Requeste d Date:	18-Feb-16		Web Site	www.giga vac.com	
	Ship By:	Ground		Phone	1-805-68 4-8401	
#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	1	GX14CA	350A Contactor, 24VDC coil, 15in flying leads, no auxially contact	\$92.00	\$92.00	
				Shipping		
				Fees Grand Total:	\$92.00	
		Instructor Approval:				
		Department Approval: (Over \$500)				

Appendix III:

			Departm rial Requ			
	Course:	ECE 492		Req Number:	004	
	Professor :	Nadovich/Yu				
	Requeste d By:			Vendor:	Amazon	
	Requeste d Date:	18-Feb-16		Web Site	www.amazo n.com	
	Ship By:	Ground		Phone	1-734-414- 0900	
#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
			Hella 2843 Series 100A			
1	1	2843011	Rating Battery Master Switch	\$17.99	\$17.99	
1	1	2843011	Rating Battery Master	·	\$17.99	
1	1	2843011	Rating Battery Master	Shipping Fees	\$17.99	
1	1		Rating Battery Master	Shipping	\$17.99 \$17.99	
1	1	2843011 Instructor Approval:	Rating Battery Master	Shipping Fees Grand		