

**CITY OF SACRAMENTO**

**1231 I Street, Sacramento, CA 95814**

**Permit No: 0505087**

**Insp Area: 3**

**Thos Bros: 318G5**

**Site Address: 5900 88TH ST SAC**

**Parcel No: 062-0060-078**

**Sub-Type: AOTHR**

**Housing (Y/N): N**

**CONTRACTOR**

NMI INDUSTRIAL CONTRACTORS  
11363 PYRITES WAY  
RANCHO CORDOVA, CA 95670

**OWNER**

GRAFIL INC  
5900 88TH ST  
SACRAMENTO, CA 95828

**ARCHITECT**

**Nature of Work: ADDITIONAL 1500 KVA SERVICE FROM EXISTING PRIMARY METER SECTION**

**CONSTRUCTION LENDING AGENCY :** I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name \_\_\_\_\_ Lender's Address \_\_\_\_\_

**LICENSED CONTRACTORS DECLARATION:** I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class C-60 License Number 284226 Date 5-10-05 Contractor Signature [Signature]

**OWNER-BUILDER DECLARATION:** I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

I am exempt under Sec. \_\_\_\_\_ B & PC for this reason: NEIGHBORHOODS, PLANNING AND DEVELOPMENT SERVICES

Date \_\_\_\_\_ Owner Signature \_\_\_\_\_

**IN ISSUING THIS BUILDING PERMIT,** the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 5-10-05 Applicant/Agent Signature [Signature]

**WORKER'S COMPENSATION DECLARATION:** I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

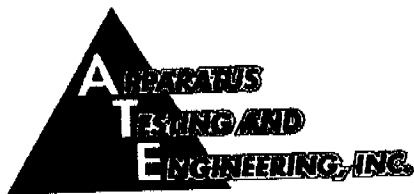
Carrier VIRGINIA SURETY COMPANY INC Policy Number 02500000514 Exp Date 07/01/2005

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 5-10-05 Applicant Signature [Signature]

**WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.**

**THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.**



Sacramento • Livermore

November 16, 2005

NMI Industrial Contractors  
8503 Weyand  
Sacramento, CA 95828

Fax: (916) 852-1635

Attention: Kurt Yaroboroh  
Subject: Ground Fault System Certification Performed at Graphil (Retest)  
A.T.E. Reference: S-7446

We wish to thank you for giving Apparatus Testing & Engineering, Inc. the opportunity to serve your testing needs on the above project. This letter and the attached Field Test Report constitute the Report for the Project.

**Please review the Results and Recommendations section of this report for items, if any, requiring further action.**

We appreciate your business and look forward to meeting your testing needs again in the future. Please do not hesitate to contact us if you require further information.

Very truly yours,

APPARATUS TESTING & ENGINEERING, INC.

Jim Lawler  
President  
NETA Certification: 98-4-1599

JL/dkm

Attachment

*People Doing Business With People®*

Sacramento • Phone (916) 853-6280 • Fax (916) 853-6258  
Livermore • Phone (925) 454-1363 • Fax (925) 454-1499  
P. O. Box 984 Folsom, CA 95763-0984

A REPORT  
ON THE  
GROUND FAULT  
SYSTEM  
CERTIFICATION  
PERFORMED AT  
GRAPHIL

FOR  
NMI INDUSTRIAL CONTRACTORS

BY  
APPARATUS TESTING AND ENGINEERING  
P.O. BOX 984  
FOLSOM, CA 95763-0984  
(916) 853-6280

Submitted by:  
Jim Lawler  
NETA Certification#: 98-4-1599  
November 16, 2005

Certified by:  
Jim Lawler  
NETA Certification: # 98-4-1599  
A.T.E. Reference: S-7446

## PROJECT REPORT

### I. PURPOSE

The purpose of the Ground Fault System Certification is to ensure that the components within the system and the system as a whole are installed in accordance with "National Electric Code 230-95" and are fully operational. Through such tests, the contractor is assured that his installation is correct and will provide protection against arcing ground faults.

### II. SUMMARY

Apparatus Testing and Engineering, Inc. was contracted by NMI Industrial Contractors to perform a Ground Fault System Certification at Graphil. The retest was conducted on November 16, 2006 by Jim Lawler, NETA Certification # 98-4-1599, of Apparatus Testing and Engineering, Inc.

### III. TEST PROCEDURES

- A. Neutral-ground connection inspected to verify connection ahead of ground fault sensor and neutral disconnect link.
- B. Neutral-ground conductor checked for correct size and clearance from exposed, energized conductors.
- C. Polarity of neutral current sensors checked to verify correct connection in relation to phase current sensors.
- D. Minimum ground fault current required to operate protective device determined; current recorded as ground fault pickup current.
- E. Ground Fault current applied to system at minimum of two values in excess of pickup current to verify ground fault time operation is within parameters of manufacturer's time-current curves.
- F. Monitor and test panels tested and verified for performance of required functions.
- G. Neutral insulation resistance checked to verify that no additional ground paths exist in system.

**IV. RESULTS AND RECOMMENDATIONS**

- A. The ground fault system tested satisfactorily as installed and is operational and acceptable for service.
- B. In the absence of engineered settings, pickup current and time delay settings were temporarily made for service energization. Apparatus Testing & Engineering, Inc. accepts no liability for these settings. The as left settings are 500 amps pickup, 0.20 seconds time delay. The design engineer should be contacted for final settings.

**DATA  
TEST  
SHEETS**



SACRAMENTO (916)853-6280 • LIVERMORE (925)454-1363



**GROUND FAULT SYSTEM TEST REPORT-1**

CUSTOMER: NMI INDUSTRIAL CONTRACTORS		LOCATION: GRAPHIL		JOB NO.: S-7446	
				DATE: 11/16/05	
				TESTED BY: JL	
SWGR. PNL IDENTIFICATION: 32B			TEST EQUIPMENT USED: MULTI-AMP MS-2, AVO MEGGER		
GROUNDFAULT INFORMATION			ELECTRICAL TEST DATA		
MFG. SQ-D	TYPE RJ	RELAY PICKUP	467 AMPS		
CAT. NO. RJF36200J44A		RELAY TEST AT 100%	0.20 SECONDS		
RANGE 600-1200 AMPS 0.1-0.4 MO SECONDS		RELAY TEST AT 300%	0.18 SECONDS		
		RELAY TRIP AT 57% CONTROL VOLTS	ACCEPTABLE	NOT ACCEPTABLE	X NOT APPLICABLE
SYSTEM CONFIGURATION		NEUTRAL INSULATION RESISTANCE	X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
X RESIDUAL	ZERO SEQ.	MONITOR PANEL OPERATION	X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
BREAKER/SWITCH INFORMATION		NEUTRAL SENSOR POLARITY	X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
MFG. SQ-D	TYPE RJ				
STYLE NO. RJF36200J44A					
RATING	2000 AMPS 600 VOLTS	VISUAL INSPECTION			
		NEUTRAL GROUND LOCATION	X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
GROUND FAULT SYSTEM SETTINGS		NEUTRAL LINK ACCESSIBILITY	X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
CURRENT	500 AMPS (A)	SENSOR MOUNTING	X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
TIME DELAY	0.2 SECONDS				
PT	IN	OUT	X	N/A	
REMARKS					



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FULL MEMBER

GROUND FAULT SYSTEM TEST REPORT-1									
CUSTOMER: NMI			LOCATION: GRAPHIL			JOB NO.: S-7436			
						DATE: 11/10/05			
						TESTED BY: TM			
SWGR. PNL IDENTIFICATION: 5832B					TEST EQUIPMENT USED: MULTI-AMP MS-2, AVO MEGGER				
GROUND FAULT INFORMATION					ELECTRICAL TEST DATA				
MFG. SQ-D		TYPE RJ			RELAY PICKUP		480 AMPS		
CAT. NO. RJF3620U44A					RELAY TEST AT 100%		0.20 SECONDS		
RANGE 500-1200 AMPS		0.1-0.4 I/O SECONDS			RELAY TEST AT 300%		0.19 SECONDS		
					RELAY TRIP AT 67% CONTROL VOLTS		ACCEPTABLE	NOT ACCEPTABLE	X NOT APPLICABLE
SYSTEM CONFIGURATION					NEUTRAL INSULATION RESISTANCE		X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
X RESIDUAL		ZERO SEQ.			MONITOR PANEL OPERATION		ACCEPTABLE	NOT ACCEPTABLE	X NOT APPLICABLE
BREAKER/SWITCH INFORMATION					NEUTRAL SENSOR POLARITY		X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
MFG. SQ-D		TYPE RJ							
STYLE NO. RJF3620U44A									
RATING 2000 AMPS		600 VOLTS			VISUAL INSPECTION				
					NEUTRAL GROUND LOCATION		X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
GROUND FAULT SYSTEM SETTINGS					NEUTRAL LINK ACCESSIBILITY		X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
CURRENT 500 AMPS					SENSOR MOUNTING		X ACCEPTABLE	NOT ACCEPTABLE	NOT APPLICABLE
TIME DELAY 0.2 SECONDS									
IT		IN	OUT	X	N/A				
REMARKS									
2									