DEFENSE NUCLEAR FACILITIES
SAFETY BOARD
WASHINGTON, D.C. 20004-2901

OFFICE OF THE
INSPECTOR GENERAL

June 8, 2020

MEMORANDUM TO: Glenn Sklar
General Manager

FROM: Dr. Brett M. Baker ***/RA/***
Assistant Inspector General for Audits

SUBJECT: INDEPENDENT EVALUATION OF DNFSB'S POTENTIAL COMPROMISE OF SYSTEMS (SOCIAL ENGINEERING) (DNFSB-20-A-07)

The Office of the Inspector General (OIG) contracted MRE Technology Solutions, LLC. (MRETEC) to conduct an independent evaluation of the Defense Nuclear Facilities Safety Board's (DNFSB) Potential Compromise of Systems (Social Engineering). Attached is MRETEC's report titled *Social Engineering Evaluation - DNFSB*. The evaluation objective was for MRE Technology Solutions LLC (MRETEC) to perform a cybersecurity Social Engineering evaluation against the DNFSB. The evaluation was performed to assess the efficacy of DNFSB's security controls and cybersecurity awareness training. The findings and conclusions presented in this report are the responsibility of MRETEC. OIG's responsibility is to provide adequate oversight of the contractor's work in accordance with the Council of Inspectors General on Integrity and Efficiency Quality Standards for Inspection and Evaluation.

The report presents the results of the subject evaluation. Following the exit conference, DNFSB staff indicated that they had no formal comments for inclusion in this report.

MRETEC identified weaknesses in the area of physical testing and makes recommendations to strengthen identified weaknesses by improving the efficacy of DNFSB's security controls and cybersecurity awareness training.

Please provide information on actions taken or planned on each of the recommendation(s) within 30 days of the date of this memorandum. Actions taken or planned are subject to OIG follow up as stated in Management Directive 6.1.

We appreciate the cooperation extended to us by members of your staff during the evaluation. If you have any questions or comments about our report, please contact me at (301) 415-5915 or Terri Cooper, Team Leader, at (301) 415-5965.

Attachment: As stated

cc: R. Howard, DNFSB

MRE Technology Solutions LLC

Social Engineering Evaluation - DNFSB

May 18, 2020

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ISO 9001:2015

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Acronym List

Acronym	Definition
ANS	American Nuclear Society
ASME	American Society of Mechanical Engineers
BBC1	Broad-based Campaign 1
BBC2	Broad-based Campaign 2
BBC3	Broad-based Campaign 3
CISPREP	NRC system
CS-IRT	Computer Security Incident Response Team
DC	District of Columbia
DNFSB	Defense Nuclear Facilities Safety Board
DOE	Department of Energy
EDT	Eastern Daylight Time
HQ	Headquarters
ID	Identification
IRS	Internal Revenue Service
ISNATT	International Society for Nuclear Air Treatment Technologies
IT	Information Technology
MRETEC	Short Name for MRE Technology Solutions (LLC)
NQA	Nuclear Quality Assurance
NRC	Nuclear Regulatory Commission
NW	Northwest
OPM	Office of Personnel Management
OSINT	Open Source Intelligence
PDF	Portable Document Format
PIN	Personal Identity Number

1.0 Introduction/Executive Summary

This document provides an overview of a cybersecurity Social Engineering evaluation against the Defense Nuclear Facilities Safety Board (DNFSB). The evaluation's fieldwork was performed during the period of December 18, 2019 – February 4, 2020. The evaluation included both DNFSB personnel and the DNFSB facility located at 625 Indiana Avenue, North West (NW), Number 700, Washington, District of Columbia (DC).

This document is provided as Deliverable Number 4 under Contract No. GS-35F-215CA, Order Number 140D0418F0452.

The objective of this task was for MRE Technology Solutions LLC (MRETEC) to perform a cybersecurity Social Engineering evaluation against the DNFSB. The evaluation was performed to assess the efficacy of DNFSB's security controls and cybersecurity awareness training.

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Results of this evaluation will support DNFSB in providing feedback on the efficacy of their security controls.

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2.0 Finding and Recommendations

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Recommendations

The physical plant recommendations are provided below.

1) Verify or update training about password protection/release an internal memo that reminds personnel about their responsibilities to protect passwords. The training/memo should contain a reference to the consequences of violating the safeguarding procedures.
2) Within the next year, perform follow-on checks to see if passwords are being protected.
3) Remove the open password for the MATLAB system.

3.0 Objective, Scope, and Methodology

3.1 Objective

The objective of this task was for MRETEC to perform a cybersecurity Social Engineering evaluation against the DNFSB. The evaluation was performed to assess the efficacy of DNFSB's security controls and cybersecurity awareness training.

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Results of this evaluation will support DNFSB in providing feedback on the efficacy of their security controls.

3.2 Scope

The scope of the Social Engineering evaluation included evaluating vulnerabilities for individual DNFSB employee/contractors (approximately 90 personnel) and the DNFSB facility located at 625 Indiana Avenue, NW, Number 700, Washington, DC.

3.3 Methodology

MRETEC conducted this evaluation in accordance with the Council of Inspectors General for Integrity and Efficiency Quality Standards for Inspection and Evaluation. Those standards require that we plan and perform the evaluation to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our evaluation objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our evaluation objectives.

MRETEC performed the Social Engineering evaluation using the following attack vectors and techniques:

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Each of these techniques are described herein.

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