

## MAINTENANCE TABLE

APPARATUS/EQUIPMENT	DEPARTMENT	FREQUENCY	PROCEDURE NO.	START DATE	COMPLETION DATE
3 <sup>rd</sup> Rail Main Line/Park Avenue Tunnel	Traction Distribution	Yearly	1A		
3 <sup>rd</sup> Rail Yards/GCT	Traction Distribution	Bi-Annually	1B		4/28/09
Snow Melters/DC Territory - Plant	Traction Distribution	Weekly/October – April	2A		3/9/09
Snow Melters/DC Territory - Cabinets	Test	Weekly/October – April	2B		7/23/09
Snow Melters/AC Territory – CB Cabinets	Substation	Weekly/October – April	2C		6/18/09
DC Feeders/Jumpers	Traction Distribution	Yearly/6 Months	3		
High Tension Aerial Line/H&H	Transmission	Yearly	4 (Note 3)		
High Tension Aerial Lines/NHL	Catenary	Yearly	5A (Note 3)		3/9/09
Catenary System Main Line Fixed Tension	Catenary	Yearly/3 years	5B		3/9/09
Catenary System Main Line Auto Tension	Catenary	Yearly/3 years	5C		3/9/09
Catenary System Yards	Catenary	3 Years	5D		3/9/09
Section Insulators	Catenary	Yearly	5F		4/28/09
Balance Weights	Catenary	Bi - Annually	5G		4/28/09
DC Circuit Breakers ( FBK )	Substation/H&H	Yearly	6A		3/9/09
DC Circuit Breakers ( HSN )	Substation/H&H	Yearly	6B		3/9/09
AC Circuit Breakers/H&H	Substation/H&H	Yearly/Cycle	7		7/23/09
AC Circuit Breakers/NHL Single Pole OCB	Substations/NHL	Yearly/Cycle	8A		3/9/09
AC Circuit Breakers/NHL 3 Pole OCB	Substations/NHL	Yearly/Cycle	8B		3/9/09
AC Circuit Breakers/NHL Single Pole VCB	Substations/NHL	Yearly/Cycle	8C		3/9/09
Transformers, Substation High Voltage	Substation/H&H and NHL	Yearly	9		3/9/09
Batteries, Charging Systems	Substation/H&H and NHL	Monthly	10		4/28/09
Relays, 1 <sup>st</sup> Line Protection/H&H	Test / Substation/NHL	Yearly	11		4/28/09

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APPARATUS/EQUIPMENT	DEPARTMENT	FREQUENCY	PROCEDURE NO.	START DATE	COMPLETION DATE
Traction Rectifier	Substation/H&H	Yearly	12		3/9/09
Signal Power Generator Stations	Substation/H&H and NHL	Twice a year	13		6/18/09
Substation Auxiliaries, Fans, Lights, Heat, Alarms, Drains	Substation/H&H and NHL	Yearly or as needed	14		6/18/09
3 <sup>rd</sup> Rail Sectionalizing Switches	Test	Yearly	15		7/23/09
Park Avenue Tunnel/Alarm	Traction Distribution	Monthly	16		6/4/09
Park Avenue Tunnel/Lighting	Traction Distribution	Monthly	17		7/23/09
AC Network/Transformer Houses	Substation	Yearly/Cycle	18		7/23/09
High Voltage Gloves	All	90 Days	19		7/23/09
Station Platform Lighting	Electrical	Weekly	20		3/9/09
Drawbridge Electrical Systems	Electrical	Monthly	21 (Note 2)		4/28/09
Sump/Sewage Pumps	Electrical	Monthly	22		6/18/09
Heat Trace Manifolds	Electrical	Weekly/November - March	23		4/28/09
Yard Lighting	Transmission/Electrical	Monthly	24		3/9/09

**Note 2:** *Drawbridge electrical operations are inspected at each bridge opening as well as once a month as part of the monthly bridge inspection by the C&S, Track & Structures and Power Departments.*

**Note 3:** *Very low risk/no plan to implement at time.*

**Procedure Number 1A**  
**Third Rail Main Line/ Park Avenue Tunnel**

Component

Segment

1. **Item Description**

The 3<sup>rd</sup> Rail System on the Harlem & Hudson Main Lines consists of 150 lb contact rail, insulators, brackets, channels, hook-bolts, covering, split joints, power bonds, rail bonds, pot heads and all associated hardware.

2. **Frequency**

Main Line tracks are inspected annually and PAT tracks are inspected bi-annually.

3. **Procedure**

- a. Visually check all the system's components, i.e., brackets channels, splice plates, insulators, power bonds, pot heads, and negative cables.
- b. Covering integrity, i.e., missing, cracked, loose, etc.
- c. All bonding connections within the interlocking, i.e., web bond, fouling bonds, etc.
- d. Replacing power bonds according to the expansion and contraction chart considering temperatures between 25°C and  $\geq 100^{\circ}\text{C}$ .

4. **Stimulus/Tracking**

- a. Track Charts of System on the Wall
- b. Work Reports, Inspection Reports
- c. Train Inspections By Qualified 3<sup>rd</sup> Railmen
- d. Level I, II & III Inspections with Reports
  - 1) Level I – Ride Trains
  - 2) Level II – Hi-Rail Inspections
  - 3) Level III – Patrolling Each Section of 3<sup>rd</sup> Rail

## Procedure Number 1A (Cont.)

### 5. Documentation (Inspection records)

- a. Incident Reports
- b. Inspection Reports
- c. Power Director Log Report
- d. RTC Log Report

### 6. Files Stored (Electronic, Paper)

- a. Computerized Program
  - b. Wall Chart of 3<sup>rd</sup> Rail System
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### 7. Audit Frequency

- a. Manager and Supervisors check and audit inspection report samples on a quarterly basis.
- b. Insure compliance with 3<sup>rd</sup> Rail procedures on a quarterly basis.
- c. Check Chu's Program on which section has been inspected and which section has not been inspected.