JOINT MEETING OF THE INTEROPERABILITY NETWORK OF THE SOUTH BAY JOINT POWERS AUTHORITY TECHNICAL AND OPERATIONS COMMITTEES

TUESDAY, JANUARY 12, 2021, 10:00 AM

CONDUCTED VIA TELECONFERENCE

LINK: https://global.gotomeeting.com/join/929906069
Audio Only: +1 (786) 535-3211
Access Code: 929-906-069

1. **CALL TO ORDER**

2. **ROLL CALL - OPERATIONS COMMITTEE**

   - El Segundo
   - Gardena
   - Redondo Beach
   - Torrance
   - Hermosa Beach
   - Hawthorne
   - Manhattan Beach

3. **ROLL CALL - TECHNICAL COMMITTEE**

   - El Segundo
   - Gardena
   - Redondo Beach
   - Torrance
   - Hermosa Beach
   - Hawthorne
   - Manhattan Beach

4. **POSTING OF THE AGENDA**

5. **PUBLIC COMMENT**

   In the interest of maintaining appropriate social distancing, members of the INSB Technical and Operations' Committees and staff will participate in this meeting via teleconference. The Authority encourages the public to participate by using one of the following options for public comments:

   - Email your public comment to cchoi@rcc911.org by 7:30 AM, the day of the meeting and have your comment available to the INSB Technical and Operations' Committees and the public.
   - Call (310) 973-1802 ext.100 and leave a message by 7:30 AM, the day of the meeting.

6. **APPROVAL OF MINUTES**

   6a. Approval of Operations Committee Minutes – November 10, 2020

   6b. Approval of Technical Committee Minutes – November 10, 2020

7. **GENERAL BUSINESS OF OPERATIONS COMMITTEE**

   a. CLETS Encryption Requirement

   b. Portable/Vehicle Mounted Repeaters vs. BDA's

8. **GENERAL BUSINESS OF TECHNICAL COMMITTEE**

   a. Installation of Firewalls for INSB Wireless Ring
   b. Wireless INSB Ring
   c. Nomination for Vice Chair INSB Technical Committee Representative
   d. Nomination for ICI-S Alternate Technical Board Representative

9. **VENDOR PRESENTATION**

   Cellwatch Battery Monitoring Solution – Brian Hanking

10. COMMENTS FROM OPERATIONS COMMITTEE MEMBERS

11. COMMENTS FROM TECHNICAL COMMITTEE MEMBERS

12. COMMENTS FROM STAFF

13. ADJOURNMENT

1. **CALL TO ORDER**

   The Interoperability Network of the South Bay (INSB) Operations and Technical Committees convened in a special meeting at 10:05AM on. Tuesday, November 10, 2020 by teleconference.

2. **ROLL CALL - OPERATIONS COMMITTEE**

   Present: Captain Ryan Allee, El Segundo Fire Department
                         Lieutenant Landon Phillips, Hermosa Beach Police Department
                         Sergeant J. Korte, Redondo Beach Police Department
                         Lieutenant David Brock, Gardena Police Department
                         Sergeant Matt Slawson, Torrance Police Department

   Absent: City of Hawthorne
                         City of Manhattan Beach

3. **ROLL CALL - TECHNICAL COMMITTEE**

   Present: Captain Ryan Allee, El Segundo Fire Department
                         CFO Ray Beeman, City of Gardena
                         Lieutenant Landon Phillips, City of Hermosa Beach
                         Debra Kochheim, City of Redondo Beach
                         Dennis Faro, City of Torrance

   Absent: City of Manhattan Beach
                         City of Hawthorne

   Also Present: Jeff Fukasawa, Commline
                         Victor Bowers, Commline
                         Chevron Fire Department
                         Executive Director Ernest Gallo, City of Torrance
                         Jerry Edwards, City of Torrance
                         John Krok, Acting Executive Director of SBRPCA
                         Captain Paul Bellante, Santa Monica Fire Department

4. **POSTING OF THE AGENDA**

   Executive Assistant Choi confirmed posting of the agenda on the front window of the Authority's headquarters facility, website, and was distributed by email.

5. **PUBLIC COMMENT**

   None.

6. **APPROVAL OF MINUTES**

   6a. Approval of Operations Committee Minutes – October 13, 2020

   MOTION: Sergeant Korte moved to approve the minutes from October 13, 2020. The motion was seconded by Captain Allee and passed by voice vote.

   6b. Approval of Technical Committee Minutes – October 13, 2020

   MOTION: Member Kochheim moved to approve the minutes from October 13, 2020.   The motion was seconded by Member Beeman and passed by voice vote.

7. **GENERAL BUSINESS OF OPERATIONS COMMITTEE**

   a.   CLETS Encryption Requirement

Lt. Phillips reported the State requirement to encrypt Personal Identifiable information. Executive Director Gallo indicated that AES Encryption is fully compliant beyond minimum requirements. The committee wasn't certain if this extended to Fire.

b. Portable/Vehicle Mounted Repeaters vs. BDA's

Mr. Bowers reported that depending on the scenarios and different applications for both, he would need Captain Facer to confirm what is the end goal. Mr. Fukasawa specified the BDA placement has typically low signals. Vehicle Repeaters have different application than BDAs. The committee decided to add this item back to the agenda at the next month.

c. SCHIMO Drill in December

The committee was approached for interest in hosting a drill in December possibly. Executive Director Chief Racowschi should reach out to Chief Donovan for more details.

8. **GENERAL BUSINESS OF TECHNICAL COMMITTEE**

a. Installation of Firewalls for INSB Wireless Ring
This item would be tabled until the next meeting.

b. Wireless INSB Ring
After speaking with Gordon, ICI Administrator, there are many ways to get back to DSR. Having a straight shot from Prime to Montebello provides a direct link without relying on other backups. Cost is not in the current budget for Montebello. If we seriously considered, INSB would need to front the cost. The difference is 18 miles Montebello to Prime site compared to 26 miles. El Segundo has 1 connection and having another microwave path would create redundancy for El Segundo. INSB microwave links were deployed in 2014, build out microwave 100 mb, reaching 7 years which is out of warranty. Executive Director Gallo wanted to find out what is the cost for replacement plans. Chair Faro will gatherer information on inventory and cost and put together documents for review. Jeff Fukasawa will forward some build information to Chair Faro.

c. ICI-S Technical Update
ICI are doing updates for consoles into site trunking. Aside from normal maintenance, no reported updates for this month.

d. Technical Issues

ESPD had one issue. The online reporting feature emailed out and notified Chair Faro. The issue was the trunking ID wasn't on, was able to transmit out and ended up swapping out antenna. Manhattan Beach's issues were gaps in the area that were already defined and identified due to site down. The information was shared with Lt. Harrod.

9. **COMMENTS FROM OPERATIONS COMMITTEE MEMBERS**

Any of the discussed issues with radios are at least under warranty.

10. **COMMENTS FROM TECHNICAL COMMITTEE MEMBERS**

Chair Faro created a dropbox to share with the members. The next INSB Technical meeting is scheduled for January 12, 2021.

Executive Director Gallo indicated no agenda for November Board Meeting and probably no meeting in December. No governance board meeting.

11. **ADJOURNMENT**
The meeting adjourned at 10:53AM.

Item 9 - Vendor Presentation

Automated daily battery monitoring for telecom

Cellwatch Frontier^TM is the most effective battery monitoring system for remote sites available on the market today. The system provides daily testing and monitoring of all batteries at distributed sites like cell towers. It can monitor multiple battery strings including backup for communications equipment, generator start, and switchgear. Cellwatch Frontier is the only solution that can monitor 2-16 volt batteries for short and long duration loads with a single system.

Eliminate unplanned outages due to battery failure

Increasingly, mobile carriers and tower operators rely on automated battery monitoring to ensure that backup power systems will carry the load when the primary electrical power is interrupted. Cellwatch Frontier is designed to integrate with existing network management systems (OAM&P) and building/site management systems to easily centralize monitoring of battery health and integrate battery monitoring into existing maintenance procedures. This ensures maximum efficiency and effectiveness for the system administrator, while reducing cost and effort for maintenance and support teams.

The Cellwatch battery monitoring technology is used today by telecommunications companies, major banks, military installations, hospitals, and universities throughout the world where mission critical power protection is essential. It is field proven in over 2,000 locations around the world. Built for large scale, a single Cellwatch installation is monitoring over 16,000 batteries.

Increase uptime during power outages

Network operators can decrease the risk of outages by eliminating the risk of battery failure. By ensuring remote batteries will work when needed, operators can improve their response to unplanned outages due to weather or power grid failures.

Reduce site visits and maintenance costs

With the Cellwatch Frontier system, there is no longer a need to go on-site to conduct tests or to measure the battery. There is significant cost savings by eliminating a large number of service visits to perform maintenance operations. Your field support team will know when and where to go so they can be much more efficient and effective.

Lower battery replacement costs

Extend the life of your battery and eliminate indiscriminate replacement practices by knowing when a battery needs to be replaced with daily monitoring.

Increase reliability of battery backup system

Cellwatch Frontier integrates into existing network and site management systems and condition-based maintenance can be supported within existing operations procedures. This enables centralized monitoring of the entire network of remote cell sites.

Improve workplace safety

Automated battery monitoring decreases the need for personnel to come into contact with and handle batteries. The monitoring technology is optically isolated thus reducing exposure to high battery voltages.

Slash fuel and vehicle expenses

A huge amount of battery maintenance time is simply traveling to and from sites. Utilizing Cellwatch Frontier reduces truck rolls decreasing fuel consumption and reducing a provider's footprint

Cell Level Battery Monitoring

Cellwatch Frontier measures voltage and ohmic value for each jar or cell as well as temperature and DC current to provide a complete picture of battery health.

Cell Level Alarms

Frontier triggers alarms when any value is beyond its acceptable range, indicating an issue with a battery or cell. Alarm conditions are indicated on device LEDs, site web pages and centralized network management systems.

Flexible and Scalable

With its modular architecture, Cellwatch Frontier is designed for easy installation supporting essentially any combination of 2 to 16 volt cells configured for short or long duration discharge. Installers can customize the setup to reflect the variation from site to site accommodating deployment deviations as they arise.
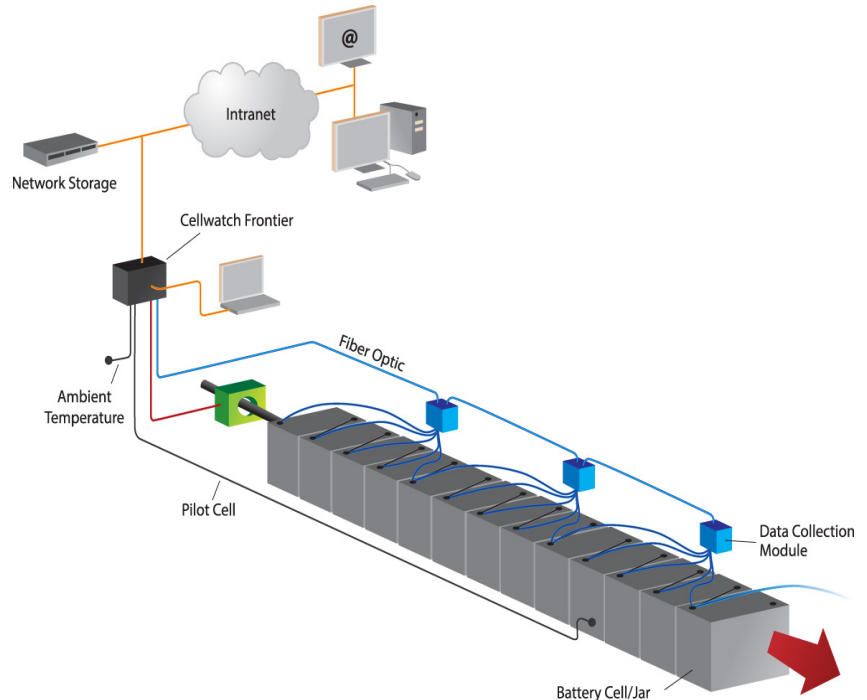
Reliable and Economical

The Cellwatch Frontier components were designed to have an extremely long life and the major components of the solution have a mean time between failures (MTBF) of almost 30 years. The Cellwatch Frontier system is highly reliable and provides an extremely high return on investment.

Cellwatch Frontier systems are comprised of two major components: the Frontier device and a Data Collection Module (DCM). DCMs are connected to each cell and measure its voltage and ohmic value. DCMs are networked with the Frontier unit via fiber optic cable for electrical isolation and safety. The Frontier unit aggregates the data from the DCMs along with current and temperature information to provide a complete picture of the health of all the cells in the battery plant at a site. Cellwatch Frontier integrates with site or network management systems (NMS) to provide a unified view of the battery health across all the distributed sites.

Cellwatch's unique testing method has no impact on the cell's capacity and no impact on the cell's useful life.

Specifications

Monitors VLA, VRLA, or Ni-Cad cells
Supports 24v - 240v switchgear or telecom strings

Power Source:
Charger, Battery, AC or DC supply
Compact Metal Enclosure: 9.75"W x 2.5"H x 5.0"D

Connections:
4x Temperature probes
4x Current transducers
4x Digital Inputs
5x Hardware relays for wired alarm
RJ45 Ethernet port

Interfaces:
DNP3, Modbus for SCADA integration
USB port for on-site administration
Web pages for remote management

Frontier Specifications

Communications
Network (RJ 45) – IP 45 10/100 Ethernet
USB (Micro) – provides direct access to the Web UI
USB – Flash Drive interface for data retrieval or system updates
Serial – RS485

Processor and Storage
Atmel Sam9x25 400MHz Processor
Internal data storage 4GB SD card

Software
Updates via USB drive or over the network
Web based UI accessible via USB or network
Modbus over TCP/IP
DNP3 available September 2014
SNMP available October 2014

Power supply
AC Mains	100 - 240 volts AC
Frequency	50 - 60 Hz
DC Battery	60 - 250 volts DC
Power Dissipation	10 watts

Optional integrated power options
DC supply 1	36 - 72 volts DC
DC supply 2	18 - 30 volts DC

Environmental
Operating Temperature	0 - 65ºC
Relative humidity	5 - 95% non-condensing
Altitude	3,000 meter max

Temperature
4 Temperature Probe I/F	2 - 80ºC +/- 1 ºC
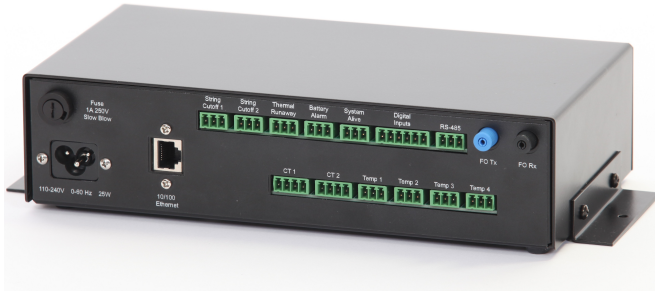
Current Transducers (split ring)

2 CTs for wall mount model & 4 CTs for rack mount model
Ranges available

5A
50A
+/-100A
+/-500A
+/-1000A

Fiber Optics

Optical cable	Acrylic
Outside diameter	2.2mm
Wavelength	400-700 nm
Range	Min150mm (6 in)
	Max 50m (150 ft)

Voltage, Ohmic Value & Jar Temperature

Max number of DCMs	64
Max number of measurement channels (jars)	256

Digital inputs

Isolated digital inputs for external alarms	4

Relay outputs dry contacts normally open or closed

Battery alarm	1 @ 30VDC 5amp
String disconnect if thermal runaway detected	2 @ 30VDC 5amp
System alive	1 @ 30VDC 5amp

Mounting options

Wall Mount model	9.75 in x 5 in x 2.5 in
Rack Mount model	1U x 19 in x 6.1 in

Weight

Wall Mount model	2 lbs
Rack Mount model	3 lbs