# TESTIMONY BY NYCHA DEPUTY GENERAL MANAGER AVI DUVDEVANI CITY COUNCIL HEARING ON BROADBAND OVER POWER LINES AT NYCHA COMMITTEE ON TECHNOLOGY IN GOVERNMENT AND SUB-COMMITTEE ON PUBLIC HOUSING

MONDAY, DECEMBER 15, 2008, 1:00 PM 250 BROADWAY – 14<sup>th</sup> FL. HEARING ROOM

CHAIR BREWER, CHAIR MENDEZ AND MEMBERS OF THE CITY COUNCIL — GOOD AFTERNOON. I AM AVI DUVDEVANI, DEPUTY GENERAL MANAGER FOR INFORMATION TECHNOLOGY AT THE NEW YORK CITY HOUSING AUTHORITY. I APPRECIATE THIS OPPORTUNITY TO DISCUSS THE BROADBAND OVER POWER LINE TECHNOLOGY DEMONSTRATION PROJECT AT NYCHA.

### NYCHA'S MISSION

AS YOU KNOW, NYCHA MANAGES OVER 178,000 APARTMENTS IN 343 DEVELOPMENTS THROUGHOUT THE FIVE BOROUGHS. WE PROVIDE HOUSING AND SERVICES FOR OVER 403,000 LOW- AND MODERATE-INCOME NEW YORKERS.

GIVEN THE AGE AND VAST EXTENT OF NYCHA'S 343 DEVELOPMENTS THROUGHOUT THE FIVE BOROUGHS, OUR PRIORITY IS TO PRESERVE AND MODERNIZE OUR HOUSING STOCK. WE ARE ALSO TAKING ADVANTAGE OF OPPORTUNITIES TO LOOK AT "SMART BUILDING" TECHNOLOGY TO IMPROVE AND ENHANCE SERVICES TO NYCHA RESIDENTS.

### **BROADBAND OVER POWERLINES (BPL)**

NYCHA IS CURRENTLY TESTING AN EMERGING TECHNOLOGY, KNOWN AS BROADBAND OVER POWERLINES OR BPL THAT COULD POTENTIALLY ALLOW US TO ADDRESS THE NEED FOR MORE COST EFFECTIVE INTERCOM SERVICE FOR OUR RESIDENTS AND TO EXPLORE THE POSSIBILITIES OF OTHER SMART BULIDING OPPORTUNITIES

BPL MAPS AN IP (INTERNET PROTOCOL) SIGNAL ONTO A BUILDING'S EXISTING ELECTRICAL INFRASTRUCTURE THROUGH ITS ELECTRICAL RISERS ALLOWING IT TO READILY REACH INDIVIDUAL APARTMENTS. THIS MAKES ORDINARY ELECTRICAL OUTLETS IN AN APARTMENT CAPABLE OF IP COMMUNICATIONS

### **BPL DEMONSTRATION PROJECT**

NYCHA HAS DEVELOPED AND IMPLEMENTED A DEMONSTRATION PROJECT TO EVALUATE BPL TECHNOLOGY. THE SCOPE OF THE DEMONSTRATION PROJECT WAS TWO-FOLD: TO DETERMINE IF BPL IS A VIABLE SOLUTION TO REPLACE LEGACY INTERCOMS AND TO DETERMINE ITS VIABILITY TO SUPPORT A TYPICAL CCTV DEPLOYMENT IN A NYCHA DEVELOPMENT.

UNDER THE DEMONSTRATION PROJECT, NYCHA INSTALLED BPL AT A SINGLE 15 STORY BUILDING CONTAINING 115 DWELLING UNITS AT ROOSEVELT HOUSES IN BEDFORD STYVESANT IN BROOKLYN IN THE SUMMER OF 2008.

NYCHA INSTALLED AN INTERCOM SYSTEM UTILIZING AN IP PHONE MOUNTED TO A BPL "i-BRIDGE" AT EACH OF THE 115 APARTMENTS AT THE ROOSEVELT HOUSES BUILDING #5. THE "i-BRIDGE" PLUGS INTO AN ORDINARY ELECTRICAL OUTLET, WHICH IN TURN, OPERATES THE MAGNETIC DOOR LOCKS ON THE LOBBY ENTRANCE. RESIDENTS RECEIVED TRAINING ON HOW TO UTILIZE THE BPL INTERCOM COMPONENT IN THEIR APARTMENT

FOR THE CCTV COMPONENT, TEN SECURITY CAMERAS WERE STRATEGICALLY PLACED IN SELECT AREAS OF THE BUILDING INCLUDING THE LOBBY, ELEVATORS, AND IN AND AROUND THE BUILDING ENTRANCES, EXITS AND PATHS. BPL CARRIES THE SIGNAL FOR THE DEVICES.

## PROJECT EVALUATION

NYCHA WILL SPEND THE NEXT SEVERAL MONTHS EVALUATING RESIDENTS AND STAFF EXPERIENCES WITH THE INTERCOM AND CCTV ENHANCEMENTS PROVIDED BY THESE TWO APPLICATIONS SUPPORTED ON THE BPL TECHNOLOGY.

WE WILL LOOK AT SEVERAL FACTORS AS WE EVALUATE THE DEMONSTRATION PROJECT INCLUDING RELIABILITY; LEVEL OF FUNCTIONALITY; COST EFFECTIVENESS; EASE OF USE; AND EASE OF MAINTENANCE OF THE COMPONENTS.

### CONCLUSION

NYCHA HAS DEVELOPED AND IMPLEMENTED A CREATIVE DEMONSTRATION PROJECT IN RESPONSE TO THE DEMANDS TO MAINTAIN HIGH QUALITY INTERCOMS AND CCTV SECURITY FOR RESIDENTS.

I AM PLEASED TO REPORT THAT THE PUBLIC TECHNOLOGY INSTITUTE (PTI), A NATIONAL NOT-FOR-PROFIT THAT WORKS WITH GOVERNMENT TO IDENTIFY OPPORTUNITIES FOR TECHNOLOGY RESEARCH, HAS RECOGNIZED THE NEW YORK CITY HOUSING AUTHORITY AS AN "INNOVATION LAB" FOR OUR BROADBAND OVER POWER LINE (BPL) IN-BUILDING DEMONSTRATION PROJECT.

AS AN INNOVATION LAB, NYCHA WILL SHARE INFORMATION ON THE PROJECT AND SERVE AS A RESOURCE FOR OTHER GOVERNMENT OFFICIALS INTERESTED IN EXPLORING BUILDING POWER LINE INFRASTRUCTURE TO ENABLE ENHANCED INTERCOMS, CCTV/VIDEO SURVEILLANCE AND ADDITIONAL SERVICES THAT BPL TECHNOLOGY CAN PROVIDE INCLUDING VOIP PHONE SERVICE AND HIGH SPEED INTERNET SERVICE.

AS I MENTIONED PREVIOUSLY, NYCHA WILL SPEND THE NEXT SEVERAL MONTHS EVALUATING THE PROJECT AND OBTAINING RESIDENT AND STAFF FEEDBACK. AND DESPITE DIFFICULT FISCAL CHALLENGES, NYCHA WILL CONTINUE TO SEEK LOW-COST, "SMART" SOLUTIONS, SUCH AS BPL, TO IMPROVE SERVICES FOR RESIDENTS.

LET ME CONCLUDE MY REMARKS HERE AND THANK THE CITY COUNCIL AND THIS COMMITTEE FOR YOUR SUPPORT OF THE NEW YORK CITY HOUSING AUTHORITY. I AM PLEASED TO ANSWER ANY QUESTIONS YOU MAY HAVE.

## THE COUNCIL THE CITY OF NEW YORK

	Appearance Card
I intend to appe	ear and speak on Int. No Res. No
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./\≈	(PLEASE PRINT)
Name: HU	Durderan
Address:	250 BRIADWAY 12 FZ
I represent:	NYCHA
Address:	1200 BROADING at1
	complete this card and return to the Sergeant-at-Arms