

**Pioneers' Homes Fire and Life Safety Repairs**

**FY2001 Request: \$350,000**  
**Reference No: 32528**

**AP/AL:** Appropriation

**Project Type:** Health and Safety

**Category:** Housing/Social Services

**Location:** Statewide

**Contact:** Dan Spencer

**House District:** Statewide (HD 1-40)

**Contact Phone:** (907)465-5655

**Estimated Project Dates:** 07/01/2000 - 06/30/2004

**Brief Summary and Statement of Need:**

Funding is necessary to provide for replacement, repair, and upgrade relating to ten separate emergency, electrical, and other building systems problems which, due to deferred maintenance, continue to place residents and staff at risk. This funding may be used for more urgent repairs if they become necessary.

<b>Funding:</b>	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>	<u>FY2006</u>	<u>Total</u>
AHFC Div	\$350,000						\$350,000
<b>Total:</b>	\$350,000	\$0	\$0	\$0	\$0	\$0	\$350,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

**Operating & Maintenance Costs:**

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
<b>Totals:</b>	<b>0</b>	<b>0</b>

**Additional Information / Prior Funding History:**

Pioneers' Homes Fire & Life Safety Repairs funding is an annual request. There currently exists a backlog of approximately \$20 million of unfunded maintenance and repair projects. The FY2000 appropriation is \$250,000 General Funds

**Project Description/Justification:**

**Category #1: Fire & Life Safety: Problems listed in Category #1 directly relate to failures in the integrity of emergency, electrical and other building systems which without resolution place residents or staff at risk.**

**Project: Sitka Pioneers' Home (SPH) Wireless Call System Replacement-\$60.0**

**Problem:**

Existing wireless emergency call system is not responsive to emergency calls from residents (2-3 minutes from resident signal of trouble to staff), gives phantom signals, and fails to reset properly upon power failure.

**Solution:**

Replace existing call system and components.

**Benefit:**

Reduce emergency response time to immediate signal reception by staff, reducing possible life threatening situations. Ensures that system maintains identification and location of residents upon reset from power failure. Eliminate phantom signals.

**What Are We Buying:**

Wireless emergency call system to include transmitters, signal repeaters, central processing unit, monitor, and staff pagers for facility-wide operation.

**Project: Anchorage Pioneers' Home (APH) Sidewalk Railing Installation-\$39.8**

**Problem:**

There is no handrail on sidewalk at main entrance. Infirm residents have difficulty traversing sidewalk. Problem is compounded by winter conditions.

**Solution:**

Install hand railing on the sidewalk to reduce hazard.

**Benefit:**

Create more independence by seniors and reduce risk of falls.

**What Are We Buying:**

Hand rails, posts, and installation at front of building.

**Project: Anchorage Pioneers' Home (APH) Electrical/Mechanical Upgrades-\$93.0**

**Problem:**

Battery operated exit signs only exist in some locations. Some exit signage does not give clear, understandable message for exiting areas. Emergency lights are inadequate in event of power failure or disaster. 125 KW generator's exhaust is connected with the exhaust of the hot water generator. 175 KW gas-fired generator is used as an emergency generator but does not have on-site emergency fuel storage. Seven main electrical disconnects are located in the main switchgear where only six are permitted. Existing heating, piping, fire protection and other services are run over electrical panelboards. Electrical conduits terminate in panelboards and enclosures without proper grounding bushing and jumpers. Track lighting is supported from lay-in ceiling support system without structural support from building.

**Solution:**

Install units at missing locations. Relocate some existing exit signage. Install emergency battery operated lights in corridors and key areas where lacking. Provide separate exhaust for hot water generator. Provide an on-site propane fuel storage tank for back up to natural gas. Remove seventh circuit breaker and install a new enclosed circuit breaker adjacent to main switchgear. Relocate existing piping and other systems outside of required 3' clearances in front of panelboards for emergency access. Install grounding bushings and jumpers. Provide independent supports for track lighting with bracing to structural ceiling.

**Benefit:**

Provides exit identification during power failure to ensure safe exiting in emergencies. Emergency lights ensure exiting paths and key areas are lighted during evacuations or internal life safety procedures. Separate exhaust will provide total emergency generator separation from other non-essential equipment for life safety and resolve code violation. In event of loss of natural gas supply, a back up on-site tank will ensure resident needs are met until supply is restored, which will resolve code violation. Seventh breaker causes overcrowding of large electrical devices resulting in overheating and potential fire hazard and shortened equipment life. Emergency access to electrical panels is a rigidly enforced National Electric Code requirement and aimed at ensuring ready access. Proper electrical grounding is necessary to protect both workers and equipment. Properly mounted track lighting reduces inherent risk of electrical shorts and fire due to inappropriate handling of ceiling materials or from natural disaster.

**What Are We Buying:**

Provides and installs 24 battery operated exit signs and wiring and relocates 6 existing units and associated wiring, 8 2-head battery operated emergency lights and wiring. Disconnect generator exhaust and provide new generator exhaust piping (40 lf of 8" exhaust piping). Provides and installs 200 gallon back-up tank with piping, valves, etc. Install new 200 Amp/3 pole enclosed circuit breaker with subfeed lugs, wiring and conduit. Four locations with heating and fire sprinkler piping will be relocated and three similar locations where branch ducts will be relocated. Install 100 3/4" or less bushings and jumpers for conduits at existing enclosures and panelboards. Install 16 8-12' tracks with 3' ceiling supports.

**Project: Palmer Pioneers' Homes (PPH) Electrical Upgrades-\$72.1**

**Problem:**

State of Alaska Capital Project Summary  
Governors 2001 Capital w/amend  
1/10/11 10:31:26 AM

Department of Administration  
Reference No: 32528  
Released April 13, 1999

## Pioneers' Homes Fire and Life Safety Repairs

**FY2001 Request: \$350,000**  
**Reference No: 32528**

Facility does not have adequate emergency lights in the event of power failure or disaster, placing residents and staff at risk. Battery operated exit signage currently do not exist in facility. Some large electrical distribution centers have unapproved conductor chases installed to permit large volumes of wires not in raceways to exit and transition to below floor creating fire hazard. Electric motors are not within sight of their controllers, and controllers not within sight of disconnects placing repairman and operators at risk.

### Solution:

Install emergency battery operated lights in corridors and key areas. Install battery operated exit signage at all building exits. Provide UL approved wireways for existing conductors. Provide handle locks at disconnects and label "Do not operate switch without verifying equipment status."

### Benefit:

Ensures exiting paths and key areas are lighted during power failures. Lighted exit signage provides exit identification during power failures to ensure safe exiting in emergencies. UL listed wireways reduce risk of fire and meet National Electric Code requirements. Handle locks, etc. will ensure motors and equipment will not be operated when being repaired or out of service for repairs, removing employee risk of harm.

### What Are We Buying:

Provides and installs 40 2-head battery operated emergency light units and associated wiring. Provides and installs 20 battery operated exit signs and associated wiring. Remove existing unapproved chases and install approximately 20' of 12" square UL approved wireway with screw covers. Install handle locks and placards at ten locations.

## **Project: Fairbanks Pioneers' Home (FPH) Electrical Upgrades-\$85.1**

### Problem:

The "custom" automatic transfer switch, which engages emergency generator power during electrical failure does not meet National Electric Code (NEC) safety standards and is a fire hazard. Fire proofing material has been removed in the main fan room for installation of raceways, compromising fire rating of structural members. There is no overcurrent protection for some tap conductors. Under-floor space has open wiring, open terminations, and improperly supported conduits. No panic shutdown of kitchen equipment is provided. Battery operated emergency lighting coverage is inadequate.

### Solution:

Replace with UL listed transfer switch. Repair fire proofing and install standoff brackets for all raceways and junction boxes to avoid damage to fireproofing materials. Install correctly sized circuit breakers. Properly terminate existing conductors in crawlspace and install open wiring in cable trays. Provide panic shutdown of kitchen equipment. Add additional battery operated emergency lights in key areas.

### Benefit:

Emergency power system is at risk of failure during power outages, which places residents at risk in this extreme winter climate. In the event of a fire in the fan room, without proper fire proofing, structural members would be subject to failure. Circuits without proper overcurrent protection are at serious risk of fire if there is an overload condition placing the Home and residents at risk. Proper terminations and cable in approved cable trays reduce risk of fires in difficult to access spaces and meet NEC requirements. Proper shutdown of equipment in an emergency, e.g. fire, provides employee and resident safety. Adequate battery operated emergency lighting will guide residents and staff to exit routes in event of power failure.

### What Are We Buying:

Replace the transfer switch with a 600 Amp 3 pole UL labeled switch. Repair all fire proofing and install stand-off brackets for raceways and junction boxes (200' of conduit and boxes). Provide and install properly sized circuit breakers to resolve lack of overcurrent protection. Provide and install approximately 50 wire terminations and install approximately 500' of existing wiring in 12x4" cable trays. Install manual panic station and shunt-trip breaker to ensure proper panic shutdown. Provide 10 2-head battery operated emergency light units and associated electrical wiring.