City of Bend

Fire & Rescue

Section 1 - Individual Performance Standards

Section 2.1 Aerial Operations

Task 2.1.1 – Use of Emergency Power Unit (EPU)

STANDARD:

- 1. Engineer will set up the aerial ladder as per BF&R standard.
- 2. Raise, rotate and extend ladder
- 3. Move Aerial PTO switch into off position to simulate hydraulic system failure
- 4. Engineer will use the EPU (emergency power unit) to stow aerial and/or outriggers

RESOURCES:

- 1. Aerial apparatus and Aerial operations manual
- 2. Crew of two to three
- 3. Full Personal Protective Equipment

PROCEDURE:

- 1. Spot and set up aerial as per department standards
- 2. Disengage main hydraulic pump PTO
- 3. Operate applicable controls and stow aerial and/or outriggers.
- 4. Simultaneously actuate EPU switch to on position and hold during aerial, jack or outrigger stowing operations.
- 5. Release EPU switch.
- 6. Use a time keeper.

Note:

The Emergency Power Unit consists of an electric motor and a small hydraulic pump which allows the operator to move the aerial or outriggers in the event of a main system failure. (engine,

transmission, aerial electric or hydraulics). Use is under a no load condition and short use time. The EPU can be used up to 2.3 minutes on with 10 minutes off. Total continuous run time not to exceed 7.7 minutes. The pump will over heat and it will fail.

The EPU should be run every 10 hours of aerial use to circulate the oil.

Use override switches in the event of loss of green "jacks" down indicators.

Safety Considerations:

- 1. Beware power lines
- 2. Wear full PPE
- 3. Wear ladder belt
- 4. Operator stays on turntable when ladder is elevated