Tacoma Lutheran Retirement Community

Electrical Crossover of New Generator

Method of Procedure Version 1

2013

	PRIOR TO OUTAGE
	Generator is started and completely tested. 12 hours of run time is completed and generator is refueled.
	Review MOP with all parties involved. All parties sign off on Procedure. KBE, TLRC, TPU and Barry's.
	Inventory materials and equipment on site. See attached list.
	DURING OUTAGE
	All parties meet and attend safety meeting.
	TPU turns off power to Transformer. Existing TLRC generators allowed to start. New generator is disabled at this point.
	KBE #1 turns off and locks out disconnect outside feeding from generator. Lock off 125 amp circuit breaker inside switchgear being used for feed out to generator.
	TPU starts demo on existing transformer. After TPU starts cutting cable at transformer into building switchgear KBE #1 starts removing and insulating switchgear bussing inside. Existing incoming cables from transformer are cut off inside switchgear.
	KBE #2 inside new ATS changes temporary infeed (from temp disconnect) into generator from "normal" power to "generator" power connections at back of switchgear.
	KBE, TPU & TLRC confirm and review set up for temporary feed to building
	Turn new generator on. Test voltage at temporary disconnect outside. Turn on power at disconnect. Test voltage at 125 amp circuit breaker inside. Turn power on at circuit breaker. At this point TLRC checks loads connected. Building is now on temporary power from new generator. Existing generators stop running.
	TPU relocates transformer to new pad, removes old primary switch and starts their primary work.
	KBE (all) pulls out existing feeders from old transformer pad with extended forklift. First set has true tape connected verify existing conduit length. Confirm enough cable on site.
	Barry Civil removes old transformer pad and exposes existing and new conduits. Completes trenching. KBE #1 connects conduits together. Barry Civil continues as needed removing old primary switch pad and backfilling.
	KBE #2 crew sets up masonite, reel jacks and cable inside building by electrical room.
	KBE (all) start pulling in new cables. 4 sets 500 MCM AL feeders and
	KBE #1 starts terminating cable inside. KBE #2 removes masonite, reels, reel jacks etc from building.
	KBE #2 starts terminating cable at ATS.
	TPU and KBE have all work completed.
	TPU energizes transformer and tests power at ATS "Normal" section.
	Lockout "Normal" power in off position at ATS
	New generator is turned off and disabled, existing generators restart.
	KBE #1 removes temporary power feed inside existing switchgear. KBE #2 removes temporary tap into Generator at outside ATS. Close up all sections of switchgear.

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	KBE #1 reinstalls splice bars remove insulating blankets. Turn off all “main” circuit breakers in existing switch gear.
	Remove lockout on “Normal” power at ATS, turn power on into building, test power at existing switchgear. If OK turn on normal power to “main” circuit breakers.
	Enable generator.

REQUIRED MATERIAL & EQUIPMENT

	Insulating blanket, socket sets, wrenches for existing inside switchgear bussing
	500 MCM AL 4 x 1000’
	250 MCM AL 1 x 1000’
	3/0 CU 1 x 250’
	Alum wire “pins” for terminations, crimp set, phase tape
	Large pull rope, pulling end, wire lube, rags, two cable cutters
	2 sets large reel jacks, reel bars, masonite
	4 radios, charged
	Forklift with extender
	80’ 3” PVC, 16 each 3” PVC couplings with inside shoulder removed, PVC glue, rags, sawzall with three charged batteries. Larger PVC conduit bender.
	Vacuum, jet line, mouses.

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