


Work Instruction - Operations	
SCADA FAILURES	

Work description: This work instruction describes the handling of SCADA server failures.		
Scope: This work instruction is written specifically for the OCC operating staff of Honolulu Rail Transit.		
References: Nil		
PPE and precautions	Competencies or qualifications	Licenses or permits required
Nil	OCC Supervisor, Train Controller, Yard Controller, Information Controller, Engineering and Fault Controller, Station Attendant	Nil
Tools and equipment required		
Nil		

1. Failure of 1, 2 or 3 SCADA servers	
<i>Information Controller</i>	<p>You must:</p> <ul style="list-style-type: none"> inform the Engineering and Fault Controller of the failure inform the OCC Supervisor of the failure
<i>Engineering and Fault Controller</i>	<p>You must:</p> <ul style="list-style-type: none"> inform the maintainer to arrange immediate maintenance intervention keep an eye on the SCADA server repair progress inform the OCC Supervisor and the Information Controller about the latest ATS repair progress
<i>OCC Supervisor</i>	<p>You must:</p> <ul style="list-style-type: none"> follow the fault rectifying progress closely

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Document Code	HNL-09423 - SCADA Failures	Effective Date:	
File Name	-e	Rev No.	Page 1 of 3

2. Failure of all SCADA servers

Engineering and Fault Controller

You must:

- inform the maintainer to arrange immediate maintenance intervention
- keep an eye on the SCADA repair progress
- inform the OCC Supervisor the latest SCADA repair progress
- on instructions from the OCC Supervisor to fall back the SCADA central controls to local controls:
prepare to grant/deny Station Attendant's request to intervene TPSS/GBS traction power/emergency trip stations
prepare to grant/deny Station Attendant's request to intervene TCCR station E&M equipment
if SCADA servers recover, take back SCADA controls from TCCRs/TPSSs/GBSs
log the event in the Engineering and Fault Controller Log

OCC Supervisor

You must:

- find out the extent of failures and the estimated recovery time from the Engineering and Fault Controller
dispatch the Yard Controller to the YCB immediately
inform the Information Controller to broadcast all stations to take over SCADA controls locally at TCCRs/TPSSs/GBSs
inform the Information Controller to make regular public announcements on service delays to trains and stations
follow the fault rectifying progress closely
if SCADA servers recover, inform Information Controller to:
broadcast all TCCRs/TPSSs/GBSs to relinquish controls
make public announcements on resumption of normal train service to trains and stations
log the event in the OCC Supervisor Daily Report

Information Controller

You must:

- on instructions from the OCC Supervisor to fall back SCADA controls, broadcast each station:
to take over SCADA controls locally to monitor traction power/emergency trip stations at each TPSS/GBS
to take over SCADA controls locally to monitor passenger station E&M equipment at each TCCR
seek Engineering and Fault Controller's permission before intervene anything
- make public broadcast announcements on service delays to trains and stations
- make regular public broadcast announcements to update trains and stations affected
- on instructions from the OCC Supervisor to take back SCADA controls, broadcast each TCCR/TPSS/GBS to relinquish SCADA controls
- log the event in the Information Controller Log

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Document Code	HNL-09423 - SCADA Failures	Effective Date:	
File Name	-e	Rev No.	Page 2 of 3

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<i>Yard Controller</i>	You must: <ul style="list-style-type: none"> • stop all train movements in the yard immediately • log off from Workstations on your desk • bring your handheld radio, important phone numbers and controller logbooks with you • leave OCC and proceed to the YCB • on arrival at YCB, log on to the LATS console and SCADA local panel to resume duties • if ATS servers recover, return to the OCC to resume duties • log the event in the Yard Controller Log
<i>Station Attendants at TCCR</i>	You must: <ul style="list-style-type: none"> • log on to the SCADA local panel and monitor station E&M equipment within your control territory • if you have any queries call the Engineering and Fault Controller on what to do next • on instructions from OCC to relinquish the SCADA controls, "local enable cancel" and log off from the SCADA local panel • log the event in the Station Attendant Log
<i>Station Attendants manning the TPSS/GBS SCADA local panels</i>	You must: <ul style="list-style-type: none"> • log on to the TPSS/GBS SCADA local panel and monitor traction power/emergency trip stations within your control territory • if you have any queries call the Engineering and Fault Controller on what to do next • on instructions from OCC to relinquish the SCADA controls, "local enable cancel" and log off from the TPSS/GBS SCADA local panel • log the event in the Station Attendant Log

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Document Code	HNL-09423 - SCADA Failures	Effective Date:	
File Name	-e	Rev No.	Page 3 of 3