

1301 SYSTEM CONTROLLER SHIFT LOG

1. Purpose

To provide policies and identify requirements for the System Controller (SC) to aid in compiling a daily shift log.

2. Background

Important daily events that affect the real time operation of the AIES must be logged in the System Controller Shift Log. This includes transmission, generation, computer or market participant related issues and other day-to-day events on the AIES.

One intended result is the sharing of non-confidential information with the public. Another is to provide relevant information or a record for the ISO and market participants. Log entries need to have a clear description, a date and time, and must be made available to the proper audience.

The Shift Log, an electronic form located on the System Controller Main Menu of the DispatchXP program, is used to log events. The DispatchXP program is accessible through the ISO's computer system.

3. Policy

- The SC will log major events that occur on the AIES, the western interconnection, the ISO's computer or support systems and any other significant events that affect the operation of the electrical system. The time and nature of each occurrence and any facts related to the event will be recorded. It is important the content of log entries is correct and substantiated.
- Log entries may be selected for posting on the web or for internal use. On a daily basis, entries will be automatically added to an internal document called System Controller Morning Report.
- The SC will not post to the web any events that could offer market advantage or events that pertain only to the ISO. Information to be posted to the web must be neutral in effect or it must benefit all market participants equally.

4. Responsibilities

4.1 ISO

The ISO will:

- Maintain the confidentiality of confidential information.
- Revise and update this OPP as required.

System Controller

The SC will:

- Provide accurate records.
- Maintain confidentiality of confidential information.

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- Adhere to the guidelines in this OPP.

5. System Controller Procedures

5.1 General logging procedure

Shift log examples are included in [Table 1](#).

To make a log entry, the SC will:

1. Access DispatchXP using the shortcut on the System Controller's Desktop on Ranger PPOAMMI 1 or 2.
2. Access the System Controller Shift Log by clicking Shift Log in the top left hand corner of the page.
3. Select from the pick list in the Category column. Choose a description that best fits the situation being logged or choose Other if none of the descriptions fit. Some events may not fit exactly into the categories provided in the pick list. For example, it is often difficult to determine whether an event should be categorized as Generation or Transmission. Generation refers to events related to generating units and energy, and Transmission relates to the physical elements or the capacity of an element. It is helpful to understand this when dealing with interconnections.
4. Edit the time and date in the Date column. This column defaults to the current time and date when a new entry is opened. Use the displayed format, dd-mmm-yyyy hh:mm, and ensure the time is entered using the 24-hour clock. A column other than the date column must have data entered into it before editing the time and date or a database error will occur.
5. Enter events or information in the Web Comments column if the information is intended for web posting. The WEB checkbox must still be selected before this entry is posted to the web. Check the pick list for a suitable entry. Use of pick list entries provides a standard appearance and allows easier interrogation of data. Information, other than that included on the pick list, may be added. Any information entered must be factual, substantiated and not offer any market advantage.
6. Enter events or information that should not be posted on the web in the Internal Comments column. Check the pick list for a suitable entry. This is information that the ISO needs to be aware of but is not for public use. It may provide clarification or further explanation but may also contain market or private information.
7. If the log entry is intended for public use, select the box for WEB posting, one of the two checkboxes on the extreme right of the Shift Log. If the box is checked, entries in the Web Comments column will appear on the AIES Event Log on the ISO web page. Entries made in the Internal Comments column will not be posted to the web page.
8. If the event is a major event, as indicated in [Table 1](#), then refer to [OPP 1304](#) to prepare any required report.

5.2 Logging events

It is impossible to predict all the events the SC may need to log. The items and events listed in [Table 1](#), which must be logged in the System Controller Shift Log, will help guide the SC in determining what kind of items need to be logged.

If the SC can see a benefit, either by providing a record or providing information to the users of the log, then an event or an item will be logged. If the SC is uncertain whether or not an event should be logged, or how an event should be logged, objectively log the event with all the details and do not post it to the web.

6. Figures and Tables

Begin on next page.

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Table 1

Shift log examples

Note: Be sure to enter data in a column other than Date first or a database error will occur. Date is the first column in the log, but it is not shown in this table because it has the same format for all events. Log the date and time using the dd-mmm-yyyy hh:mm format and ensure the time is recorded using the 24-hour clock.

Category	Web Comments	Internal Comments	WEB	Major Event
Generation	≥100 MW generator outage. Select unit ID and action from pick list.	Log whether or not the outage was planned, if the unit tripped or came off in a controlled fashion, the reason for the outage and length of the outage if known, if the unit is supplying ancillary services, and any other pertinent information regarding the outage. Only log hydro units if they are forced off line or are going off for an extended period of unavailability.	✓	✓ If unplanned and unit is outputting >150MW
Generation	≥100 MW generator on line. Select unit ID and action from pick list.	Indicate the reason the unit has come on line if known, e.g., economics, directive, TMR. Do not log hydro units coming on line unless they are returning from an extended outage or turnaround.	✓	
Generation		Bilateral inadvertent energy exchanges. Log start and end times. Enter the name of the other party involved in the exchange, the time period of the exchange, and the amount of the exchange.		
Generation		Contingency Reserve Obligation (CRO) events. Enter the start and end times. Log if we are providing or requesting, the MW amount, duration, and the initiating factor.		✓
Generation		SaskPower Emergency Energy. Enter the start and end times. Log if we are providing or requesting, the MW amount, duration, and the initiating factor(s).		✓
Transmission		Forced outages and return to service of transmission equipment previously forced out of service rated at ≥138 kV. Describe the outage and the equipment designation and location. Includes transmission lines, major tie transformers, voltage control equipment, SVCs, reactive equipment. Include designation and location. State the outage was forced. Detail the impact to system reliability, the amount of load lost and any equipment failure.		

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Category	Web Comments	Internal Comments	WEB	Major Event
Transmission	Outages and return to service of transmission equipment rated at ≥ 138 kV, either planned or forced , that affect the capabilities, performance or availability of adjacent equipment or otherwise impact system reliability or the BC or SP interconnections.		✓	
Transmission		Maintenance or repair outages of transmission equipment rated at ≥ 138 kV not in the daily operations plan produced by the outage coordination group. Log the event, the parties and facility involved and the reason the event isn't in the operational plan if known.		
Transmission	Select McNeill Converter Station unavailable for service or McNeill Converter Station available for service from pick list when the station is unavailable due to a forced or planned outage.	Log the causes and expected return to service dates and any other pertinent information. Log the return to service.	✓	
Transmission		Select McNeill Converter Station to standby or McNeill Converter Station return from standby from pick list, when McNeill is switched out for economics.		
Transmission		Schedule curtailments on the BC or Saskatchewan interconnections. Describe the reason for the curtailment, MW volumes, and the affected market participants.		
Transmission	Under-frequency load shedding.	Detail the factors leading to the event, the areas involved, the MW volumes and affected market participants. Also log the load restoration.	✓	✓
Transmission		Continued operation beyond system reliability guidelines. Includes equipment emergency limits, inadequate operating or MVAR reserves or maximum voltage limits. Detail the factors leading to the event, the equipment affected, and the corrective measures.		✓
Transmission	Interconnected system separation or system islanding.	Detail the factors leading up to the event, the extent of the separation or islanding, the affected market participants, and the restoration activities.	✓	✓
Transmission		Sustained voltage excursion $\geq 10\%$. Detail the factors leading up to the event, the area affected and the corrective action.		✓

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Category	Web Comments	Internal Comments	WEB	Major Event
Transmission	Log the equipment as out of service or returning to service.	System operation or operator action resulting in major damage to power system components. Detail the factors leading to the event, and the extent of the damage.	✓	✓
Transmission		Failure, degradation or near miss of system protection, RAS or other operating system associated with facilities operated at ≥138kV. Give details of the event including the equipment affected, the resulting situation, and any corrective action taken.		✓
Transmission	Unintentional system demand losses ≥50 MW.	Detail the nature and extent of the event and any other pertinent information. A blackout or widespread outage will likely require logging of restoration/deterioration of the system as the event progresses.	✓	✓ if demand loss ≥100MW
Transmission		Operation of special protection schemes including 1201L RAS, Calgary area undervoltage scheme and any thermal protection scheme. Detail the effect of the operation, load lost, generation affected, important times, whether schemes are out of/returned to service or have been withdrawn/reinstated, and any other pertinent information.		✓
SC termination, cancellation or postponement	If outage is terminated ahead of schedule, log the return to service of the equipment.	A decision by the SC to terminate ahead of schedule, postpone or cancel a planned outage. Detail the reasons for the cancellation, postponement or termination, any issues that arise and any other pertinent information. The information is important if the TFO has any financial claims related to the event.	✓	
Generation		Deviations from the energy market merit order. Describe the event, the entity involved, the reason for deviation from the merit order, and the expected duration of deviation, if known. Include dispatches that are not complied with, generator tests that require a change in output when the energy is not restated, McNeill ramp tests or any other reason energy is produced differently than it is dispatched.		
Generation		Generator testing or commissioning. Log start and end times, describe the event, the entity involved, the reason for testing or commissioning, any reason for canceling or postponing, and the nature of any unexpected effects on the system.		
AGC Control		AGC control events. Describe the event, any reasons or causes, the expected duration of the condition, and any other pertinent information. Include any change to AGC mode, a change in controlling entity (i.e., ISO or AltaLink) and any problem providers may have in supplying AGC when dispatched.		

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Category	Web Comments	Internal Comments	WEB	Major Event
Frequency Excursion	Frequency deviations >0.3 Hz. Describe the event and the magnitude of the deviation, but don't identify specific units or locations.	Provide specific information, including unit names, locations and the nature of the event.	✓	✓
Alerts, Directives		Reliability directives. Enter the start and end times. Describe the directive, i.e.; load curtailed, generation increased or decreased, initiating factors, abnormal system factors, relevant weather conditions, equipment, market participants, generating units or load affected and special conditions invoked. If DOS loads curtailed include the customer name, the start and stop time and reason for curtailment, i.e., system reliability, energy shortfall. If generation or load was curtailed or increased, indicate MW volumes and market participant names		✓
Alerts, Directives	Energy emergency alerts. Enter the start and end times, select the level of alert from the pick list.	Provide details about the event including initiating factors, abnormal system factors, relevant weather conditions, equipment and market participants affected.	✓	✓
Alerts, Directives		Issuing an appeal for energy not offered into the energy market merit order. Log a brief description of the events leading to this point. This is related to a step in OPP 801 .		
Alerts, Directives		AESO VLCP loads are dispatched on or off. This is related to step a step in OPP 801 . Briefly describe the events leading to this point and the market participants dispatched.		
EMS related		Energy Management System (EMS) related problems. Log the start and end times. Includes problems related to Ranger, the Video Wall, ICCP links or any communication equipment in the field that provides information to the EMS. Also log problems related to the Lightning Location System or any other equipment the EMS group supports. Describe the nature of the failure, the equipment involved, the length of the service interruption and the action taken.		
IS related		Information System (IS) related problems. Log the start and end times. Include problems related to the Energy Trading System, the LAN and its associated equipment and the software on that equipment. Describe the nature of failure, the equipment involved, the length of service interruption, and the action taken.		

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Category	Web Comments	Internal Comments	WEB	Major Event
Building		AESO building or facilities. Log the start and end times of building problems. Describe the nature of the problem, its effects, the expected duration, and any temporary measures taken.		
Building		Building security. Describe the nature and impact of the event, actions taken, and any callouts made.		
Building	System Coordination Centre evacuation. From the pick list enter "The SCC is being evacuated. SCs are moving to the Backup Centre." Log this event as time permits or after arriving at the Backup Centre, because the reason for evacuating may inhibit logging the event in a timely manner.	Include circumstances leading to evacuation and any other pertinent information.	✓	
Building	Return to the System Coordination Centre after an evacuation. From the pick list enter "Normal operations have resumed at the AESO System Coordination Centre."		✓	
Weather	Real or potential weather threats to generation or transmission systems or control centres. Describe the nature of the threat and the information source, such as a weather office, another control centre's experience, lightning locator or personal experience. Include the effect on the transmission system, e.g., multiple trips and recloses.		✓	
Market Suspension	Energy market suspensions. Enter "Energy market operation is suspended until further notice."	Describe the circumstances leading to the suspension and any other pertinent information.	✓	
Market Suspension	Return to energy market operations. Enter "Energy Market operation is resumed."	Describe the circumstances leading to resumption and any other pertinent information.	✓	

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7. Revision History

Issued	Description
2007-09-27	Supersedes 2003-12-10
2003-12-10	Supersedes 2003-07-28
2003-07-28	Revised to ISO Operating Policies and Procedures