The following matrix compares existing and proposed regulations for electric utilities. A brief explanation of the proposed changes precedes each table.

While some changes to the proposed rules are designed to streamline utility reporting and discontinue the filing of unnecessary information, Staff also proposes new outage reporting rules to improve the depth and consistency of information we receive. One of the consistent questions posed of the technical conference from participating utilities was, "what goal is the Commission seeking to accomplish by requesting this information"? Staff believes the goals are: (1) to create a rule by which electric utilities provide appropriate Commission notification of significant outages; and (2) to improve the quality and consistency of reliability reporting among electric utilities.

Staff's proposed revisions address many of the comments from the two technical conferences.

3 AAC 52.460 - Quality of Service

The changes to this rule remove a requirement for utilities to file a plan for notifying customers of scheduled outages with the Commission (currently required by 3 AAC 52.490(a)(2)). However, the revision requires the utility to develop a plan for scheduled outages and specifies the circumstances under which public notification should occur. For the purposes of this rule, public notification means the use of broadcast or print media, public postings, or other means deemed appropriate to effectively notify customers of a scheduled outage. A proposed definition of "public notification" is included in the proposed revisions to 3 AAC 52.500.

There are also two terms introduced in this rule which are used throughout Staff's proposed revisions: (1) aggregate system refers to the entirety of the utility's service area; and (2) reliability reporting area means either any non-interconnected independent electric system within the utility's certificated service area or a geographic subdivision of a utility's certificated area that is a distinct area for administration, operation, or data collection. Both terms are defined in proposed revisions to 3 AAC 52.500.

Comments received from electric utilities.

3 AAC 52.460(e) - Existing	3 AAC 52.460(e) – Proposed on Feb 12, 2017	Staff Recommendation
(e) If planned outages are necessary, a	(e) If planned outages are necessary, a utility shall make a good faith effort	(e) If [PLANNED] scheduled outages are necessary, a
utility shall make a good faith effort to	to do the work at a time that will cause minimal inconvenience to	utility shall make a good faith effort to do the work at
do the work at a time that will cause	customers, and to notify customers in advance of the interruption. [, IN	a time that will cause minimal inconvenience to
minimal inconvenience to customers,	CONFORMITY WITH THE UTILITY'S PLAN REQUIRED BY 3 AAC 52.490(A)(2)]	customers, and to notify customers in advance of the
and to notify customers in advance of	A utility shall develop and maintain a plan for notifying customers of a	interruption. [, IN CONFORMITY WITH THE UTILITY'S
the interruption, in conformity with	scheduled outage that is appropriate to the utility's available personnel	PLAN REQUIRED BY 3 AAC 52.490(A)(2)] <u>A utility</u>
the utility's plan required by 3 AAC	levels and geographic location. The utility's plan shall include public	shall develop and maintain a plan for notifying
52.490(a)(2).	notification when 5% or more of a utility's customers in its certificated	customers of a scheduled outage that is appropriate
		to the utility's available personnel levels and

service area or all customers within a reliability reporting area are	geographic location. The utility's plan shall include
affected.	public notification when 5% or more of a utility's
	customers in its certificated service area or all
	customers within a reliability reporting area are
	affected.

3 AAC 52.490 – Other general information to be furnished to the commission.

This section addresses general information to be furnished to the Commission by electric utilities. Currently, this section includes the requirement to maintain emergency contact information with the Commission and guidance for the filing of outage reports. Staff will address each section separately.

3 AAC 52.490(a) – <u>At the technical conference</u>: Staff proposed to modify this section to require the utility to publish emergency contact information in its tariff and on its website, as applicable. Staff also proposes to remove the requirement for the utility to file a plan for notifying customers of outages, as this is addressed in the proposed revisions to 3 AAC 52.490(a).

<u>Post technical conference</u>: Staff proposes to modify the section to remove the term "the phone number of emergency contacts" and replace it with "the telephone number to report service outages".

3 AAC 52.490(b) – <u>At the technical conference</u>: Staff proposed to revise the criteria under which a utility is required to provide notification of an outage to the Commission, and specify the information to be required and the timelines for filing. The requirement to notify the Commission of an outage that is an immediate threat to health and safety is removed because that is a standard which is difficult to define consistently. Instead, Staff proposed requiring utilities to notify the Commission of outages that affect more than 5% of customers within its aggregate service area or all customers within a reliability reporting area (e.g. the community of Hope served by Chugach Electric Association, Inc.).

Further, Staff proposed requiring utilities to email and call the Commission within eight hours of the beginning of the outage, provide basic information on the outage, and provide email updates every 12 hours thereafter until the outage is resolved. Staff proposed the creation of an electric outage email address that will allow the information to be automatically copied to every person within the Commission that is part of an internal listserv. A utility is then required to file a detailed report of the outage within 30 days

of its occurrence. This written report will include the calculation of three indices for the outage (SAIDI, SAIFI, and CAIDI) prescribed by a national standard (IEEE 1366), that will allow for some comparative analysis of outages.

Staff proposed a revision to the annual outage report requirement to include the calculation of the three reliability indices for the entire year, both with and without the inclusion of the major outages reported to the Commission. This will allow for a better understanding of overall ongoing utility reliability and can allow a degree of comparison of the reliability of different utilities. The Commission will also be able to collect the calculated indices and compare them from year to year.

Finally, Staff proposed to require electric utilities to file a copy of the Environmental Protection Agency's (EPA) Greenhouse Gas Reporting Program report. This report is due by March 31 of each year. The EPA report is a web-based reporting system that allows the utility to print the report before it is filed with the EPA. Staff proposed that the utilities print the report and submit it to the Commission. Staff believed this additional step will not place an undue burden on the utility. The Alaska Department of Environmental Conservation, Division of Air Quality, does not require the reporting of greenhouse gases; therefore Staff only suggests requiring a copy of the EPA report.

<u>Post technical conference</u>: Staff has re-inserted the original language concerning notification for an outage that is an immediate threat to the health and safety of the customers. In section (b)(2), Staff revised the outage length threshold from 3 hours to 30 minutes. Staff believes the 30 minute threshold is reasonable and synchs the regulation with the proposed telecommunication outage threshold. Staff also identified the required information to be submitted in the notification. In section (3), the reliability report indices are only required for the 12-month report.

3 AAC 52.490 - Existing	3 AAC 52.490 – Proposed on February 12, 2017	Staff Recommendation
3 AAC 52.490. Other general information to be	3 AAC 52.490. Other general information to be	3 AAC 52.490. Other general information to be
furnished to the commission.	furnished to the commission.	furnished to the commission.
(a) A utility shall maintain with the commission	(a) A utility shall [MAINTAIN WITH THE COMMISSION]	(a) A utility shall [MAINTAIN WITH THE COMMISSION]
(1) the location and telephone number of each of	publish in its tariff and on its website as available,	publish in its tariff and on its website as available,
its business offices, an emergency telephone	[(1)]the location and telephone number of each of its	[(1)]the location and telephone number of each of its
number contact, and the normal hours of	business offices, [AN EMERGENCY TELEPHONE NUMBER	business offices, [AN EMERGENCY TELEPHONE
operation of each office; and	CONTACT,] the telephone number(s) to report service	NUMBER CONTACT,] the telephone number(s) to
(2) a plan for notifying customers of a scheduled	outages, and the normal hours of operation of each	report service outages, and the normal hours of
outage that is appropriate to the utility's available	office. [; AND (2) A PLAN FOR NOTIFYING CUSTOMERS	operation of each office. [; AND (2) A PLAN FOR
	OF A SCHEDULED OUTAGE THAT IS APPROPRIATE TO	NOTIFYING CUSTOMERS OF A SCHEDULED OUTAGE

personnel levels and geographic location, and that	THE UTILITY'S AVAILABLE PERSONNEL LEVELS AND	THAT IS APPROPRIATE TO THE UTILITY'S AVAILABLE
includes media notification, if applicable.	GEOGRAPHIC LOCATION, AND THAT INCLUDES MEDIA	PERSONNEL LEVELS AND GEOGRAPHIC LOCATION,
	NOTIFICATION, IF APPLICABLE.]	AND THAT INCLUDES MEDIA NOTIFICATION, IF
(b) A utility shall submit information to the commission		APPLICABLE.]
regarding service outages as follows:	(b) A utility shall submit information to the commission	
(1) for an outage that is an immediate threat to	regarding service outages as follows:	(b) A utility shall submit information to the commission
the health or safety of customers within the	(1) for an outage that is an immediate threat to	regarding service outages as follows:
utility's service territory, the commission must be	the health or safety of customers within the	(1) for an outage that is an immediate threat to
notified immediately by the most expedient	utility's [SERVICE TERRITORY] certificated service	the health or safety of customers within the
means available;	area, the commission must be notified	utility's [SERVICE TERRITORY] <u>certificated</u>
	[IMMEDIATELY BY THE MOST EXPEDIENT MEANS	service area, the commission must be notified
	-	
	AVAILABLE;] as soon as reasonably possible.	[IMMEDIATELY BY THE MOST EXPEDIENT MEANS
	The utility shall report the outage by preferably	AVAILABLE;] as soon as reasonably possible.
	emailing the commission at	The utility shall report the outage by preferably
	ElectricOutage@alaska.gov, or otherwise by	emailing the commission at
	telephone or in person, to the commission at	ElectricOutage@alaska.gov, or otherwise by
	the commission's office in Anchorage, Alaska.	<u>telephone or in person, to the commission at</u>
	The notification must include:	the commission's office in Anchorage, Alaska.
	(A) the location and time of the outage;	The notification must include:
	(B) the number of fatalities and personal	(A) the location and time of the outage;
	injuries reported to the utility, and	(B) the number of fatalities and personal
	(C) the individual(s) to be contacted by the	injuries reported to the utility, and
	commission for additional information.	(C) the individual(s) to be contacted by the
		commission for additional information.

(2) for an interruption of service, from whatever cause, which affects five percent or more of a utility's total customers or affects a discrete community of customers, and persists for three (2) for an [INTERRUPTION OF SERVICE], outage as hours or more, the written report must include a described in (b)(1) of this section or an outage from (2) for an [INTERRUPTION OF SERVICE], outage as description of the cause and extent of the outage, whatever cause, [WHICH AFFECTS FIVE PERCENT OR described in (b)(1) of this section or an outage from and must be filed within five working days after whatever cause, [WHICH AFFECTS FIVE PERCENT OR MORE OF A UTILITY'S TOTAL CUSTOMERS OR AFFECTS service is restored; and A DISCRETE COMMUNITY, AND PRESISTS FOR THREE MORE OF A UTILITY'S TOTAL CUSTOMERS OR AFFECTS HOURS OR MORE, THE] that persists for thirty minutes A DISCRETE COMMUNITY, AND PRESISTS FOR THREE HOURS OR MORE, THE] that persists for thirty or more, and affects five percent or more of a utility's customers within its certificated service area or all minutes or more, and affects five percent or more of customers within a reliability reporting area, a written a utility's customers within its certificated service report must [INLCUDE A DESCRIPTION OF THE CAUSE area or all customers within a reliability reporting AND EXTENT OF THE OUTAGE, AND MUST] be filed area, a written report must [INLCUDE A DESCRIPTION within five **business** [WORKING] days [AFTER SERVICE IS OF THE CAUSE AND EXTENT OF THE OUTAGE, AND RESTORED; AND] at the conclusion of the outage a MUST] be filed within five **business** [WORKING] days written report shall be filed with the commission and [AFTER SERVICE IS RESTORED; AND] at the conclusion of the outage a written report shall be filed with the include: commission and include: (3) a cumulative 12-month report of its service (A) the location and time of the outage; outages must be filed as a part of the utility's (B) the duration of the outage; (A) the location and time of the outage; annual report to the commission under AS (C) the total number of customers affected and (B) the duration of the outage; the number of customers without service at (C) the total number of customers affected and 42.05.451. periodic intervals; the number of customers without service at (D) cause of the outage, if known; periodic intervals; (E) the number of fatalities and personal injuries; (D) cause of the outage, if known; (E) the number of fatalities and personal and (F) the individual(s) to be contacted by the injuries; and (F) the individual(s) to be contacted by the commission for additional information. commission for additional information.

(3) a cumulative 12-month report of its service outages	(3) a cumulative 12-month report of its service outages
must be filed as a part of the utility's annual report to	must be filed as a part of the utility's annual report to
the commission under AS 42.05.451. This report shall	the commission under AS 42.05.451. This report shall
include:	<u>include:</u>
(A) The results of the calculated SAIDI, SAIFI,	(A) The results of the calculated SAIDI, SAIFI,
and CAIDI indices required by 3 AAC 52.495(f).	and CAIDI indices required by 3 AAC 52.495(f).
(B) A summary of the estimation methodologies	(B) A summary of the estimation
covered by 3 AAC 52.495(d) used for the	methodologies covered by 3 AAC 52.495(d)
calculation of reliability information.	used for the calculation of reliability
(C) A summary addressing any changes that the	information.
electric utility has made in the collection of data	(C) A summary addressing any changes that the
and the calculation, estimation, and reporting of	electric utility has made in the collection of
reliability information in comparison to the	data and the calculation, estimation, and
prior reporting period. The electric utility must	reporting of reliability information in
explain why the changes occurred and explain	comparison to the prior reporting period. The
how the change affects the comparison of	electric utility must explain why the changes
newer and older information.	occurred and explain how the change affects
(D) A map showing the reliability reporting	the comparison of newer and older
areas.	information.
	(D) A map showing the reliability reporting
(c) A utility shall file with the commission by March 31	areas.
of each year, a copy of the Environmental Protection	
Agency's Greenhouse Gas Reporting Program report	(c) A utility shall file with the commission by April 30
made in accordance with 40 C.F.R. 98, revised as of	of each year, a copy of the Environmental Protection
October 30, 2009.	Agency's Greenhouse Gas Reporting Program report
,	made in accordance with 40 C.F.R. 98, revised as of
	October 30, 2009.
	<u> </u>

3 AAC 52.495 – Electric service reliability rules.

3 AAC 52.495 is a new section of regulations specifically addressing electric service reliability. It provides clarity as to the intent of the Commission's reliability tracking addressed in the revisions to 3 AAC 52.490(b).

3 AAC 52.495(a) requires electric utilities to comply with the national standards for electric power distribution reliability indices (IEEE 1366) to the extent necessary to comply with Commission regulations.

3 AAC 52.495(b) clarifies to utilities that they are required to collect information on both "distribution system" outages and "interruptions caused by events outside of the distribution system" as defined by IEEE 1366, when reporting outages to the Commission.

3 AAC 52.495(c) specifies the information a utility must collect for each outage that affects five or more customers. While many utilities likely track this information already, this rule provides a clear standard to which regulated electric utilities must be held.

3 AAC 52.495 - Existing	3 AAC 52.495 – Proposed on February 12, 2017	Staff Recommendation
None	 3 AAC 52.495. Electric service reliability rules. (a) An electric utility must comply with IEEE 1366 to the extent necessary to calculate and report reliability indices as required by 3 AAC 52.490 – 3 AAC 52.495. If there is a conflict between any 	No revision to the February 12, 2017 proposal.
	provision in IEEE 1366 and 3 AAC 52.490 – 3 AAC 52.495, commission regulations govern.	
	(b) An electric utility must include both "distribution system" outages and "interruptions caused by events outside of the distribution system" as defined in IEEE 1366 in the electric utility's record keeping, calculations, reporting, and filing as required in this section, effective beginning (<i>date to be determined</i>).	
	(c) Except as provided in section (d) of this section, an electric utility must keep an accurate record of each outage that affects one or	

3 AAC 52.495(d)-(i) provide specific guidance for the utility regarding allowances for making estimates of outage information when it is not available, retaining outage records, when to calculate reliability indices, and when this regulation takes effect.

more customers. Each record must contain at least the following information:	
 (1) The date and time the outage occurred (if the exact time is unknown, the beginning of an outage is recorded as the earlier of an automatic alarm or the reported initiation time); (2) The date and time service was restored; (3) The number of customers affected by the outage; and (4) The cause of the outage, if known; 	
(d) For outages after which an electric utility cannot obtain accurate data, the electric utility must make reasonable estimates.	
(e) An electric utility must retain for at least five full calendar years the records associated with section (c) of this section.	
(f) Using records collected per (c) and (d) of this section, after December 31 of each year an electric utility must calculate the SAIDI, SAIFI, and CAIDI indices for the previous reporting period. These indices are to be calculated for:	
(1) For the certificated service area; and(2) For each reliability reporting area.	
(g) This section is effective beginning (date to be determined).	
(h) When accurate data is not available, an electric utility may use estimates in calculating actual SAIDI, SAIFI, or CAIDI indices required by section (f) of this section.	

(i) This section is effective beginning (<i>date to be determined</i>).	
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3 AAC 52.500 – Definitions

Staff proposes adding definitions (32)-(42) to provide clarity to both existing regulations and the proposed revisions to the regulations.

3 AAC 52.500(33)-(42) - Existing	3 AAC 52.500 – Proposed on February 12, 2017	Staff recommendation
None.	(33) "business day" means a day other than Saturday, Sunday, or a	No revision to the February 12, 2017 proposal.
	state holiday;	
	(34) "business hours" means the hours of 8:00 A.M to 5:00 P.M. on	
	a business day;	
	(35) "CAIDI" means customer average interruption duration index	
	as defined in IEEE 1366;	
	(36) "IEEE 1366" means the Institute of Electrical Electronic	
	Engineers (IEEE) Standard 1366 entitled "IEEE Guide for Electric	
	Power Distribution Reliability Indices" (the 2012 edition), approved	
	on May 14, 2012 by IEEE-SA Standards Board;	
	(37) "immediate threat" means a situation which urgent corrective	
	action is necessary;	
	(38) "major outage" means an outage meeting the threshold	
	described in 3 AAC 52.490(b)(2);	
	(39) "public notification" means the use of broadcast, print media,	
	or public postings, or other means appropriate to effectively notify	
	customers of a scheduled outage;	
	(40) "reliability reporting area" means either an non-	
	interconnected independent electric system within the utility's	
	certificated service area or a geographic subdivision of a utility's	
	certificated service area that is a distinct area for administration,	
	operation, or data collection within the utility's certificated service	
	area;	

	 (41) "reporting period" means the 12-month period, based on a calendar year, for which the electric utility is reporting reliability performance; (42) "SAIDI" means system average interruption duration index as defined in IEEE 1366; and (43) "SAIFI" means system average interruption frequency index as defined in IEEE 1366. 	
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