Reviewer #1 Comments

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There are many references to "our" paper, or approach. Does that mean that there should be co-authors?

The paper needs a careful review to correct typos and grammatical errors. A few examples for section I

-- last paragraph: eights should be eighths

-- sections V should be section V

It is worth mentioning a drawback of a protection scheme using traveling waves is that the fault must occur near a voltage peak. Otherwise, the traveling waves have very small amplitudes.

A general comment on the approach: Please demonstrate that this method would be able to differentiate between a bus fault and fault just outside of the bus zone. That is the case where CT saturation is the worst. The fault can be close-in or at near a voltage zero, both situations where the traveling waves will not be clear. The examples described in the paper do not clearly show that this method can do that. The paper will be much stronger demonstrating this case.

Section III, first paragraph: The statement that the traveling wave will have many oscillating components isn't quite correct. The oscillating comments are not part of the initial response, but are secondary effects. Also Fourier analysis is not suitable when the waveforms are not integer multiples of the a base frequency

End of section III: When you are refer to two aerial modes for the bus voltage and two for any feeder current, what are you assuming for a modal transformation? Are you just using the Clarke transformation or the Karrenbauer?

Section IV: What do you mean by the lines are modeled with with no ground returns? The figure shows grounded transformer windings and grounded sources. The static wires on transmission lines are not ground return paths. They are used for to protect the phase conductors from direct lightning strikes. Most lightning caused faults are due to secondary effects of lightning.

Page 4, top left: "since buses are almost always inside housing..." --> this is not accurate for most transmission substation in North America. But nearly every substation I've been in has ground wires above the phase conductors

Page 5, first bullet: The references cited related to bus protection are pretty old, and do not reflect modern approaches to minimize impact of CT saturation.

Page 5, paragraph starting out "results show that..." --> You may have results that show this, but you didn't actually present them in the paper. So it is misleading to put this in the conclusion.

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Reviewer #2 Comments

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A feed-forward ANN is trained using the 3rd. level wavelet coefficients of the modal components of traveling waves of the bus voltage and line current of one line connected to the bus to detect bus fault, lightning surges and line switching.

Although the protection algorithm is based on traveling waves, not a single reference pertaining to traveling waves from the literature is cited. Traveling wave is not even mentioned in the Abstract or the Introduction.

ANN and wavelet transform are very well known in the literature and their elementary description belongs to an Appendix rather than in the main body. Why not also describe traveling waves?

Description at a number of places is unclear. There is one output layer. Then what is meant by "output layer has three layers"? The last paragraph is unclear. Are there two ANNS, one for event identification and one for identifying the line causing the transient. If so, what are the specifications of this ANN>

Second and fourth claims made in the Conclusions section are unsupported.

Why use different number of neurons in the hidden layer for each type of event? Ultimately only one ANN is to be used for event existence. The ANN is trained with all ,lines connected to the bus. Will that training still hold in case one of the lines is out of service and a fault or other event happens?

For a paper originating from an English speaking country, the level of English is way below standard.