

8-F Interference Currents

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1.0 SCOPE

The purpose of this chapter is to describe the procedures for the analysis of Interference Currents (Stray Currents).

2.0 REGULATORY REFERENCES

49 CFR Part 192 § [192.473](#)

3.0 PROCEDURE [[192.473](#)]

[3.1 General](#)

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3.1 General

- (a) If stray currents are detected, interference bonds and/or supplemental cathodic protection systems *should* be installed to offset the detrimental effects of the stray current.
- (b) Each impressed current or galvanic anode system *must* be designed and installed so as to minimize any adverse effects on existing adjacent underground metallic structures.

3.2 Monitoring for CP Interference

- (a) AC Interference

- (1) Current test spans will be monitored for changes in magnitudes and direction (polarity). These values will be compared to *upstream* and *downstream* stations.
- (2) Transmission lines will receive a CIS survey from start to finish once every 7 years. In addition to looking for areas of pickup and discharge based on the P/S values, near and far readings will typically be taken at each reconnect point to look for significant current flow based on the metal IR reading (mir).
- (3) Further testing should be conducted at areas of concern.

(c) DC Interference on a Distribution *Main*

"On" P/S readings taken during the Annual Survey having a value more negative than -3.0v DC should prompt a review for excessive AC or DC interference.

4.0 TRAINING/QUALIFICATIONS

See the appropriate system Operator Qualification Program.

5.0 DOCUMENTATION/FORMS

System specific forms should be used where applicable.

State Specific: South Carolina

- [CP Deficiency Report \(DESC Form OM-405\)](#) (PDF file) *
- [Add/Modify Rectifier or Anode System Record \(DESC Form OM-501\)](#) (PDF file)
- [Add/Modify Test Station Record \(DESC Form OM-501\)](#) (PDF file)

* C.P. exceptions are documented either in the Essentials system or by the paper CP Deficiency Report.

Corrosion control documentation *shall* be maintained for the life of the *pipeline*.

6.0 RELATED DOCUMENTS

None at this time.

7.0 APPENDICES

None at this time.

(UNCONTROLLED IF PRINTED)

