

**OHIO POWER COMPANY'S RESPONSE TO
OHIO POWER SITING BOARD STAFF'S
DATA REQUEST
OPSB CASE 22-0940-EL-BTX
FOURTH SET**

DATA REQUEST

DR-04-001 Does Ohio Power Company anticipate interference for nearby amateur radio operations?

RESPONSE

Radio interference can be experienced in the AM broadcast band (535-1605 kHz) and FM band (88-108 megahertz [MHz]), caused by transmission line gap-type discharge (1-1000 MHz). Dielectric discharge due to air ionization, known as corona, is not a concern with this Project. Gap-type discharge, such as that emitted by loose or defective transmission hardware, typically is localized and can be readily detected and corrected, or additional mitigation measures can be applied to eliminate the interference source. Although no gap-type discharge is presently anticipated for this Project, if detected, the affected hardware will be repaired or replaced and the interference source will be eliminated. Further, although radio frequency noise level of the transmission line during heavy rain is greater than the fair weather noise level, the quality of radio reception under typical heavy rain conditions is affected more by atmospheric conditions than by operation of transmission lines. Therefore, the construction of the Project is not expected to increase radio frequency noise levels.

Television interference also is not expected to occur as a result of this Project. Today's digital television signals react differently to interference than the pre-2009 analog signals. Common problems with analog television included ghosting of images, noise from weak signals, and other problems, which degraded the quality of the image and sound, although the programming was still watchable. With digital TV, reception of the signal must be very nearly complete. Otherwise, audio and video are not usable. Television signals, which are transmitted at frequencies above 50 MHz, can be affected by gap discharges if received from air broadcasts. These problems have largely been addressed with the use of cable television, and the Company does not expect that any television interference will occur as a result of this project.

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DATA REQUEST

DR-04-002

If radio or television interference is expected to occur, then identify the most severely impacted areas and discuss methods of mitigation.

RESPONSE

The Company does not expect any radio, television, or other communication system interference to occur from operation of the proposed Project, except as discussed above regarding possible gap-type discharge; it is not necessary to discuss mitigation methods beyond the repair and replacement of loose or defective transmission hardware described above.

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Summary: Response To Staff's 4th Set of Data Request electronically filed by
Hector Garcia-Santana on behalf of Ohio Power Company.