



Refuge Media Group

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Exhibit 12-1 Allocation Study for channel 218 FX

(Dolliver, IA Proposal 12/19/2006)

Channel: 218 (91.5 MHz)

Antenna: Non-directional Vertically Polarized

ERP: 0.110 kW

North Lat: 43° 32' 38"

West Long: 94° 43' 13"

HAAT (Max of 12 evenly spaced radials:) 26.6 m (60°)

Dist to: 60 dBu F(50,50) 5.8 km 40 dBu F(50,10) 19.1 km 54 dBu F(50,10) 8.2 km 100 dBu F(50,10) 0.7 km

| Call | Channel | Class | Frequency | Status | City | State | Country | File Number | Docket |
|------------|----------|---------|--------------------|--------|--------|-------|----------|-------------|----------|
| FacilityID | ERP | Service | DA? | HAAT | RCAMSL | RCAGL | Latitude | Longitude | ASRN |
| Dist(km) | Dist(mi) | Azimuth | Licensee/Permittee | | | | Req | Dist | Clear By |

| | | | | | | | | | | |
|--------------------------------------|----------|---------|---|----------|-----|------------|--------|---------|----------------------------|--------|
| KTPR | 216 | C | FM | 91.1 MHz | LIC | FORT DODGE | IA | US | BLED-19881123KB | - |
| 29066 | | | | 100. kW | | 321. m | 672. m | 320. m | N 42 49 3.00 W 94 24 41.00 | - |
| 82.5 km | 51.24 mi | 168.09° | IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY | | | | | | | |
| Distance to 60 dBu F(50,50) Contour: | | | | | | | | 74.7 km | | 7.8 km |

| | | | | | | | | | | |
|--------------------------------------|----------|--------|------------------------|----------|-----|-----------|--------|---------|---------------------------|---------|
| KNGA | 218 | C2 | FM | 91.5 MHz | LIC | ST. PETER | MN | US | BLED-19920303KA | - |
| 42944 | | | | 8.5 kW | | 183. m | 471. m | 168. m | N 44 13 20.00 W 94 7 3.00 | - |
| 85.5 km | 53.14 mi | 27.94° | MINNESOTA PUBLIC RADIO | | | | | | | |
| Distance to 60 dBu F(50,50) Contour: | | | | | | | | 59.4 km | | 26.1 km |

| | | | | | | | | | | |
|--------------------------------------|---------|--------|--------------------------|----------|-----|----------|--------|--------|-----------------------------|---------|
| K220AQ | 220 | D | FX | 91.9 MHz | LIC | FAIRMONT | MN | US | BLFT-19840525MB | - |
| 39791 | | | | 0.013 kW | | 46. m | 432. m | 0. m | N 43 38 30.00 W 94 28 25.00 | - |
| 16.0 km | 9.99 mi | 47.32° | MANKATO STATE UNIVERSITY | | | | | | | |
| Distance to 60 dBu F(50,50) Contour: | | | | | | | | 4.9 km | | 11.1 km |

