

**MACKENZIE & ALBRITTON LLP**

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April 21, 2020

**VIA EMAIL**

Mayor Clyde Roberson  
Vice Mayor Alan Haffa  
Councilmembers Dan Albert,  
Ed Smith and Tyler Williamson  
City Council  
City of Monterey  
580 Pacific Street  
Monterey, California 93940

Re: Verizon Wireless Response to Appeal  
Collocated Telecommunications Facility, 23625 Holman Highway  
City Council Agenda, May 5, 2020

Dear Mayor Roberson, Vice Mayor Haffa and Councilmembers:

We write on behalf of Verizon Wireless to ask that you uphold the approval of the Planning Commission and deny the appeal filed by Nina Beety (“Appellant”) of a wireless facility collocated on the Community Hospital of the Monterey Peninsula (the “Approved Facility”). Verizon Wireless designed the Approved Facility to provide needed service with minimal impact to a building that already supports several wireless facilities. As confirmed by the Planning Commission, the Approved Facility meets all findings for approval under the Monterey City Code (the “Code”).<sup>1</sup> Appellant does not present any substantial evidence to warrant denial of the Approved Facility. Further, because the Approved Facility will fill a significant gap in Verizon Wireless service, and there is no less intrusive alternative, denial would violate the federal Telecommunications Act. We urge you to reject the appeal and approve the Approved Facility.

**I. The Project**

The Approved Facility has been thoughtfully designed to minimize any impact on the hospital building, where AT&T and T-Mobile already operate rooftop facilities.

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<sup>1</sup> Verizon Wireless continues to maintain that the facility qualifies as an eligible facilities request under federal law. 47 U.S.C. § 1455, 47 C.F.R. § 1.6100. As an eligible facilities request, the application should be approved administratively, and does not require the discretionary use permit findings made by the Planning Commission. Similarly, the eligible facilities request is not subject to the objections raised by Appellant. The appeal can be denied on this basis, and the facility approved as an eligible facilities request.

Verizon Wireless proposes to place eight panel antennas in four pairs on the southern wing of the building. One pair of antennas will be fully concealed behind the parapet facing northwest toward the front of the building. A 6.25-foot wide portion of that parapet will be replaced with a radio frequency-transparent panel of identical design. Two small radio units and a surge suppressor will be placed behind these antennas, also concealed. The other three pairs of antennas will be flush-mounted to an equipment penthouse in the middle of the roof, facing northeast, southeast and southwest. Beneath those pairs, Verizon Wireless will place two small radio units and a surge suppressor, with all of this equipment painted to match the building. Verizon Wireless will place network support equipment on a 9-by-15-foot platform on the south side of the penthouse roof, which will be fully screened by the parapet.

Photosimulations of the Approved Facility are attached as Exhibit A. Reports by Hammett & Edison, Inc., Consulting Engineers, attached as Exhibit B and C, confirm that noise will fall under the Code's limits, and that radio frequency ("RF") exposure from the Approved Facility will fully comply with Federal Communications Commission ("FCC") guidelines.

**II. The Approved Facility Satisfies All Findings for a Special Use Permit.**

As confirmed by the Planning Commission's approval, the Approved Facility meets all requirements for approval of a use permit, including special findings for wireless facilities. Code §§ 38-112.4(H)(2), 38-161(A). Notably, it will not be detrimental to public health, safety or welfare, because radio frequency emissions will fall well under FCC exposure guidelines, and the facility will not be accessible to the public. The Approved Facility satisfies all development standards, including the top design preference for collocation on a building with other wireless facilities. Code § 38-112.4(F)(1). Noise emissions will meet Code guidelines because the network support equipment will be screened behind the building parapet, far from neighboring property lines.

There will be no impact to views or vistas, as the new antennas facing the hospital's front entrance will be concealed behind the parapet. The other new antennas will be painted to match the rear of the building, like nearby existing antennas, and screened by ample tree cover on the south side of the property. The Approved Facility is necessary and desirable because it will improve wireless connectivity for residents, visitors and emergency personnel, with minimal impact on the hospital building and no need for a new tower.

In sum, the Approved Facility satisfies all requirements for approval.

**III. There is Substantial Evidence for Approval, and Appellant Presents No Substantial Evidence to Warrant Denial.**

Under the federal Telecommunications Act, a local government's denial of a wireless facility application must be based on "substantial evidence." *See* 47 U.S.C. §

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332(c)(7)(B)(iii). As interpreted under controlling federal court decisions, this means that denial of an application must be based on requirements set forth in the local code and supported by evidence in the record. *See Metro PCS, Inc. v. City and County of San Francisco*, 400 F.3d 715, 725 (9th Cir. 2005) (denial of application must be “authorized by applicable local regulations and supported by a reasonable amount of evidence”). While a local government may regulate the placement of wireless facilities based on aesthetics, mere generalized concerns or opinions about aesthetics or compatibility with a neighborhood do not constitute substantial evidence upon which a local government could deny a permit. *See City of Rancho Palos Verdes v. Abrams*, 101 Cal. App. 4th 367, 381 (2002).

As set forth above, Verizon Wireless has provided substantial evidence to show that the Approved Facility complies with all requirements for approval under the Code. Among other evidence, photosimulations demonstrate the minimal impact of Verizon Wireless’s collocated antennas, either concealed behind the front parapet or on the rear of the building, painted to match. The Hammett & Edison reports confirm that radio frequency exposure will comply with FCC guidelines, and noise emissions will fall below the Code’s limits. Code § 38-111.

In contrast, Appellant has provided no evidence – let alone the substantial evidence required by federal law – to support denial of the Approved Facility. Appellant listed numerous objections, most of which are based on concern over radio frequency emissions, which cannot be a factor for denial according to federal law. Appellant also alleges deficiencies in the application submittals, the staff review process, and the CEQA exemption determination, but raises no evidence to contradict the Planning Commission’s findings for approval. We respond to Appellant’s various grounds for appeal below.

**1. The City May Not Consider Concern over Radio Frequency Emissions or Any Proxy Arguments.**

Appellant raises various concerns regarding radio frequency emissions from the Approved Facility. However, the federal Telecommunications Act preempts local jurisdictions from considering the environmental effects of radio frequency emissions if a wireless facility complies with FCC exposure guidelines. 47 U.S.C. § 332(c)(7)(B)(iv). For the Approved Facility, the Hammett & Edison exposure reports confirm that maximum combined exposure at ground level from the Verizon Wireless, AT&T and T-Mobile facilities will be 30 percent – or over three times below – the FCC’s public exposure limit. The maximum exposure at the second floor of any nearby building will be only 6.1 percent – or over 16 times below – the FCC’s public exposure limit.

Moreover, federal law also bars efforts to circumvent preemption of health concerns through proxy concerns. *See, e.g., AT&T Wireless Servs. of Cal. LLC v. City of Carlsbad*, 308 F. Supp. 2d 1148, 1159 (S.D. Cal. 2003) (“Thus, direct or indirect concerns over the health effects of RF emissions may not serve as substantial evidence to support the denial of an application”); *Calif. RSA No. 4, d/b/a Verizon Wireless v. Madera County*, 332 F. Supp. 2d 1291, 1311 (E.D. Cal. 2003) (“proxy for concerns about

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possible environmental effects of RFE's...cannot provide the basis to support a decision concerning the placement or construction of a facility.”)

Most of the Appellant's grounds for appeal are based on such preempted concerns over emissions. The alleged “inherent defect” in Verizon Wireless's “product” is merely a supposed effect on people who claim sensitivity to electromagnetic fields. Appellant's claims of a “taking of air rights,” “interference with the public right-of-way,” and “impact on open space and conservation easements” treat radio frequency emissions as a tangible object, which they are not, and imply an environmental effect from emissions, which is preempted from consideration.

The claimed violation of the Fair Housing Act is another preempted proxy concern over radio frequency emissions within homes. Appellant's insinuation that the emissions would be trespassing and a home invasion, absent any actual harm, is also mistaken. See *San Diego Gas and Electric Co. v. Superior Court of Orange County* (1996) 13 Cal.4th 893, 936-937 (finding that homeowners failed to state cause of action for trespass against electric utility, arising from electric and magnetic fields emitted from electric power lines, absent allegations of property damage).

Despite Appellant's attempt to link radio frequency emissions with a disability protected under the Americans with Disabilities Act (the “ADA”), that federal statute does not apply to speculative claims or unproven disabilities. See *Hirmiz v. New Harrison Hotel Corp.*, 865 F.3d 4754 (7th Cir. 2017). While the ADA construes the definition of a disability broadly (42 U.S.C. § 12102), the definition is not limitless. The federal court of appeals acknowledged that there is “debate in the medical community over whether sensitivity to electromagnetic voltage is a physical disorder or a psychological one,” but declined to extend the protections of the ADA to a plaintiff's unproven disability related to electromagnetic voltage sensitivity. *Hirmiz, supra*, 865 F.3d 475. Likewise, the World Health Organization (the “WHO”) states that electrical hypersensitivity (“EHS”) “has no clear diagnostic criteria and there is no scientific basis to link EHS symptoms to EMF [electromagnetic field] exposure. Further, EHS is not a medical diagnosis, nor is it clear that it represents a single medical problem.”<sup>2</sup> The WHO further states that “no scientific basis currently exists for a connection between EHS and exposure to EMF.” *Ibid*. Consequently, Appellant's concerns regarding protection under the ADA are not supported by law.

The topic of Verizon's insurance for paying out claims of alleged harm from emissions relates to private actions against the company, not permits approved by the City. Appellant believes that Verizon's financial filings uncover an inability to maintain and monitor its facilities, but Conditions of Approval 6, 11, and 15 require construction and maintenance in accordance with approved plans and FCC guidelines. Conditions 2 and 13 require cooperation with City inspection procedures.

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<sup>2</sup> WHO *Electromagnetic Fields and Public Health*, available at: <https://www.who.int/peh-emf/publications/facts/fs296/en/>.

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In sum, Appellant's various grounds for appeal related to radio frequency emissions uncover no non-compliance with FCC exposure guidelines. Because the Approved Facility complies, those grounds for appeal are preempted from consideration by federal law, and they must be rejected.

**2. Verizon Wireless's Application Materials and Staff's Analysis Provided the Commission with All Information Required to Make Findings of Approval.**

Appellant alleges omissions in Verizon Wireless's application materials, but a hospital Vice President did in fact provide a notarized letter authorizing any applications to construct and operate a wireless facility. Verizon Wireless also provided clear photosimulations of the Approved Facility from four vantage points.

Appellant questions the accuracy of the initial Hammett & Edison RF exposure report dated January 24, 2020. Hammett & Edison provided a response letter dated April 1, 2020, attached as Exhibit D. Of note, Hammett & Edison confirmed that the exposure calculations were based on a "standard assumption that the radio equipment is operating at 100% capacity or at such lesser percentage as needed to stay within the FCC power limits applicable in each frequency band." Hammett & Edison letter, p. 2. Hammett & Edison also verified that calculations were conducted per the directions of FCC Office of Engineering Technology *Bulletin No. 65*, including considerations such as reflection factors. *Id.*, p. 3.

The City contracted CTC Technology & Energy to review the initial Hammett & Edison exposure report. Appellant's attempts to challenge CTC's conclusions are full of misinterpretations. For example, the 160-foot distance of maximum public exposure calculated by CTC is along a line projecting parallel to the antenna centerline outward into thin air, not into any publicly accessible areas. Exposure at any building beyond (e.g., 400 feet away) would of course be well below FCC limits. While the CTC report also confirms that the Approved Facility meets FCC guidelines, the City will rely on Hammett & Edison's recommendations for compliance measures to ensure maintenance worker safety, per Conditions of Approval 15 and 16.

Appellant also attempts to discredit the Hammett & Edison noise report, but herself misconstrues the applicable standards. For example, the City's noise limits do not apply upon the hospital property where noise is produced, but on any properties receiving the noise. Code § 38-111. The Hammett & Edison report calculated that maximum noise at the closest neighboring property line 200 feet south would be 37.1 dBA—well below the City's most restrictive limit of 55 dBA.

Appellant claims there are wireless and other telecommunication services available in the hospital building, obviating the need for Verizon Wireless's facility. However, the Montage Health Director of Facilities Planning, Bret Silvestri, testified to the Planning Commission that the company asked Verizon Wireless to install a facility "at the request of doctors, staff, patients and visitors who have had very poor if any

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reception for Verizon inside the hospital.”<sup>3</sup> Verizon Wireless engineers have confirmed this lack of reliable service, determining there is a significant gap in Verizon Wireless’s LTE service coverage in the area, as described below.

Appellant is concerned that staff did not describe the 2017 use permits for AT&T and T-Mobile as “equipment upgrades,” but offers no reason why those approved permits impact findings of approval for Verizon Wireless’s collocation. In fact, the 2017 permits confirm that the existing wireless facilities on the hospital were legally constructed and modified over time.

As to location preferences, the City’s wireless code does not address Planned Community zones, such as the hospital’s zone. The Approved Facility is not in a discouraged open space, residential or overlay zone, and it meets the City’s top design preference for collocation on a building.

Ultimately, Verizon Wireless and City staff ensured that the Planning Commission received all information relevant to the findings for approval, and Appellant’s charges regarding the application process must be rejected.

### **3. The Planning Commission Properly Determined that the Approved Facility Is Exempt from CEQA.**

Appellant challenges the exemption from the California Environmental Quality Act (“CEQA”) granted by the Planning Commission. The Approved Facility qualifies for a Class 3 categorical exemption, which applies to new construction of small facilities or structures. Courts have consistently upheld the application of the Class 3 exemption to a wide variety of wireless and telecommunications projects. *See Don’t Cell Our Parks v. City of San Diego* (2018) 21 Cal.App.4th 338 (faux tree telecommunications pole in public park); *Aptos Residents Ass’n v. County of Santa Cruz* (2018) 20 Cal.App.5th 1039 (10 microcell transmitter units on existing utility poles); *Robinson v. City and County of San Francisco* (2012) 208 Cal.App.4th 950 (40 wireless equipment cabinets on existing utility poles); *San Francisco Beautiful v. City and County of San Francisco* (2014) 226 Cal.App.4th 1012 (726 new utility cabinets on public sidewalks).

The CEQA Guidelines provide examples of the Class 3 exemption, including multi-family residential structures; a store, motel, office, restaurant or similar structure not exceeding 2,500 square feet in floor area; and in urbanized areas, up to four commercial buildings, not exceeding 10,000 square feet in floor area. 14 Cal. Code Regs. § 15303. The Approved Facility has a much smaller footprint than these examples, with only a 135 square foot equipment platform, four small antenna lease areas and cable connections on the roof of an existing building. Appellant claims the Approved Facility

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<sup>3</sup> Planning Commission Video, March 10, 2020, available at [https://videoplayer.telvue.com/player/m\\_3HX6961GRMsvkqSCdwmGeJ8rwpRZrR/media/548250?autostart=true&showtabssearch=true](https://videoplayer.telvue.com/player/m_3HX6961GRMsvkqSCdwmGeJ8rwpRZrR/media/548250?autostart=true&showtabssearch=true)

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is not small because of its radiation coverage (a preempted reference to its radio frequency emissions), but emissions are irrelevant to the Approved Facility's physical footprint.

Finally, Appellant claims that exceptions to the Class 3 exemption preclude its use. 14 Cal. Code Regs. § 15300.2(b). Specifically, Appellant references a "sensitive pine forest" and "cumulative exposure," alluding to environmental effects of radio frequency emissions. The City's consideration of radio frequency emissions is preempted by federal law, as described above. Appellant also cites "unusual circumstances such as a cybersecurity event," a vague, speculative claim lacking substantial evidence. In contrast, when recommending the Class 3 exemption, staff listed six possible exceptions in the Planning Commission resolution of approval and described why they do not apply.

Additionally, contrary to Appellant's assertion, Government Code Section 65850.6 does not apply to the Approved Facility. Verizon Wireless did not seek approval pursuant to that state law, which establishes an optional, not mandatory, collocation permit process.

Appellant also misconstrues the California Building Code to claim that the Approved Facility violates accessibility requirements. Because it is machinery space frequented only by maintenance personnel, the hospital rooftop is not publicly accessible, and therefore exempt from accessibility requirements. California Building Code § 11B-203.5.

In sum, Appellant raises no grounds for appeal that constitute substantial evidence to deny the Approved Facility. In contrast, Verizon Wireless has provided ample evidence that the Approved Facility complies with all City requirements. The appeal must be rejected.

#### **IV. Approval is Required To Avoid an Unlawful Prohibition of Service.**

A local government's denial of a permit for a wireless facility violates the "effective prohibition" clause of the federal Telecommunications Act if the wireless provider can show two things: (1) that it has a "significant gap" in service; and (2) that the proposed facility is the "least intrusive means," in relation to the land use values embodied in local regulations, to address the gap. *See T-Mobile USA, Inc. v. City of Anacortes*, 572 F.3d 987 (9<sup>th</sup> Cir. 2009).

If a provider proves both elements, the local government *must* approve the facility, even if there is substantial evidence to deny the permit under local land use provisions (which there is not in this case). This is because the provider has met the requirements for federal preemption; i.e., denial of the permit would "have the effect of prohibiting the provision of personal wireless services." 47 U.S.C. § 332(c)(7)(B)(1)(ii); *T-Mobile v. Anacortes*, 572 F.3d at 999. To avoid such preemption, the local government

must show that another alternative is available, technologically feasible, and less intrusive than the proposed facility. *T-Mobile v. Anacortes*, 572 F.3d at 998-999.

**A. Verizon Wireless Has Demonstrated a Significant Gap in Service.**

Verizon Wireless has identified a significant gap in service in the south Monterey area. The significant gap is described in the *Engineering Necessity Case* prepared by Verizon Wireless engineer Dewayne Bonham, attached as Exhibit E. As shown through the coverage maps, there is a significant gap in Verizon Wireless LTE service coverage at the hospital and in surrounding areas that will be served by the Approved Facility. According to the Verizon Wireless engineers, the Approved Facility will provide reliable LTE service to an area of 1.9 square miles. This will include 1.3 square miles of reliable in-vehicle service, notably where lacking along a 0.5 mile stretch of Highway 1 with 52,000 vehicle trips per day,<sup>4</sup> as well as along portions of Holman Highway. The Approved Facility also will provide new in-building service in the vicinity of the hospital.

The best server maps in the *Necessity Case* show a lack of dominant signal near the hospital and areas south and west. This is because the facility to the south currently serving the area, Verizon Wireless's Lobos Ridge facility, is five miles distant, above Point Lobos. Its dominant signal, shown in yellow, red and purple on the best server map, is weak in the gap area due to that great distance, and intermixed with signal from nearby facilities. This compromises performance for customer handsets, including those in transit. The Approved Facility, shown in shades of green, will provide strong new dominant signal to the gap area and relieve the distant Lobos Ridge facility, improving network performance in a greater area.

**B. The Approved Facility is the Least Intrusive Means To Fill the Significant Gap in Service.**

In an effort to address the significant gap, Verizon Wireless followed the Code's top preference for wireless facility placement by collocating on a building with other wireless facilities. Code § 38-112.4(F)(1). As noted, the Approved Facility is not in a discouraged location. Code § 38-112.4(F)(3). Other collocation options in the vicinity are infeasible to serve the gap. According to the City's wireless facilities map, the closest in the City is at 1425 Munras Avenue, but not only is that site is too distant at 0.7 miles northeast, it is directly across Soledad Drive from Verizon Wireless's existing Munras & Via Arboles facility and would duplicate its coverage. Another facility at 620 Devisadero Street is even further, 1.8 miles north, and beyond Verizon Wireless's existing Huckleberry Hill facility 0.75 miles northwest in the County.

Consideration of an internal "DAS" antenna system for the building was determined to be infeasible based on hospital requirements, interruptions to hospital's primary care objectives and ongoing maintenance issues. A DAS system could not

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<sup>4</sup> CalTrans 2017 Traffic Volumes, Route 1.



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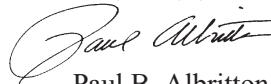
provide service beyond the hospital building to the broad area that lacks Verizon Wireless service, described above.

In short, Verizon Wireless has identified a significant gap in coverage and has shown that the Approved Facility is the least intrusive means to address it, based on the values expressed in City regulations. Under these circumstances, Verizon Wireless has established that denial of the Approved Facility would constitute an unlawful prohibition of service.

**Conclusion**

Verizon Wireless has worked diligently to identify the ideal location and design for a new facility to serve the south Monterey area. As confirmed by the Planning Commission, the Approved Facility meets all findings for approval under the Code. Appellant raises no substantial evidence to contradict this approval. Ensuring reliable Verizon Wireless service in Monterey is critical to residents and visitors as well as emergency service personnel. We strongly encourage you to affirm the Planning Commission's approval, and to deny the appeal.

Very truly yours,



Paul B. Albritton

cc: Christine Davi, Esq.  
Kimberly Cole

**Schedule of Exhibits**

- Exhibit A: Photosimulations
- Exhibit B: Noise Report by Hammett & Edison, Inc., December 11, 2019
- Exhibit C: Radio Frequency Exposure Report by Hammett & Edison, Inc., January 24, 2020
- Exhibit D: Letter from Hammett & Edison, Inc. Responding to Appellant Inquiries,  
April 1, 2020
- Exhibit E: Engineering Necessity Case



**HAMMETT & EDISON, INC.**  
 CONSULTING ENGINEERS  
 BROADCAST & WIRELESS

**Exhibit D**

WILLIAM F. HAMMETT, P.E.  
 RAJAT MATHUR, P.E.  
 ROBERT P. SMITH, JR.  
 ANDREA L. BRIGHT, P.E.  
 NEIL J. OLIJ, P.E.  
 MANAS REDDY, P.E.  
 BRIAN F. PALMER  
 M. DANIEL RO

ROBERT L. HAMMETT, P.E.  
 1920-2002  
 EDWARD EDISON, P.E.  
 1920-2009

DANE E. ERICKSEN, P.E.  
 CONSULTANT

BY EMAIL BEN.HACKSTEDDE@SEQUOIA-DS.COM

April 1, 2020

Mr. Ben Hackstedde  
 Sequoia Deployment Services, Inc.  
 22471 Aspan Street, Suite 290  
 Lake Forest, California 92630

Re: Appeal against approval of Verizon proposal at 23625 Holman Highway, Monterey

Dear Ben:

As requested, we have reviewed the Appeal filed March 13, 2020, against the approval by the Monterey City Planning Commission for a new Verizon Wireless base station, to be located at 23625 Holman Highway, Monterey. The Appellant raises several questions about our two reports submitted as part of the application and this letter provides responses to those issues, separated by topic: Radio Frequency (“RF”) Exposure Conditions, and Acoustic Noise.

**Assessment of RF Exposure Conditions**

Summary Response: The applicant must comply with the Federal RF exposure limits (Condition of Approval #1), must comply with our recommended compliance measures (Condition of Approval #15), and must confirm by survey measurements before regular operation commences that the facility complies (Condition of Approval #16).

Here are responses in turn to the particular arguments made by the Appellant:

- Health statements he’s not qualified to make as an engineer and that are false:
  - p. 1 “prudent margin of safety for all persons”
  - p. 4 “need not for this reason cause a significant impact on the environment”
  - Figure 1 statements include “intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health”.

He hasn’t provided any evidence for his claim of “safety for all persons”. “All” equals 100%. I’m told the engineering paradigm works in tolerances and never deals in 100%

The language at Page 1 and Figure 1 are echoed on the FCC Website:\* “The exposure guidelines are based on thresholds for known adverse effects, and they incorporate prudent margins of safety.” On Page 4, the statement simply acknowledges the Congressional pre-emption of local jurisdictions’ authority to regulate RF exposure levels; that is, if a facility meets the Federal standards, then it is not causing a significant impact on the environment due to RF exposure conditions.

\* <https://www.fcc.gov/engineering-technology/electromagnetic-compatibility-division/radio-frequency-safety/faq/ef-safety>

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- AT&T and T-Mobile antennas are 'assumed to be' certain makes and models. This is inadequate for the purposes of accurate required assessment of cumulative effects.

The current operating specifications for the other carriers' facilities are not known to us, so (quoting from our report) "For the limited purpose of this study," we assumed typical operating conditions that the carriers have utilized at other sites. As noted in the Summary Response above, the exposure level measurements required before the Verizon facility begins regular operation are cumulative, including the contributions all nearby sources; it is the total, cumulative exposure levels that must comply with the Federal limits.

- p. 3, #3 He did not provide as required "A clear identification of areas, both vertically and horizontally, where exposure levels will exceed FCC standards for general public and occupational exposure" (from Checklist). Figure 3 has only limited horizontal information. The city's consultant CTC provided a model of emissions but only the pattern, not the radiation levels or distance at which radiation exceeds FCC limits.

Our report at Item 3 states maximum calculated horizontal distances of 145 and 60 feet to the public and occupational limits, respectively. Figure 3 provides a clear indication of those distances as they apply vertically for persons who may be working in different areas on the roof. As noted in the Summary Response above, the recommended compliance measures must be implemented prior to regular operation of the new facility.

- It doesn't appear that he actually measured current onsite outdoor or indoor RF exposure levels to provide current cumulative levels or to demonstrate that there is 'no service' in the hospital or 'poor service' on the ground.

We made no measurements of signal levels and therefore made no statement regarding the quality of service presently provided or proposed to be provided. As noted in the Summary Response above, the exposure level measurements required before the Verizon facility begins operation will include all nearby sources; it is the total exposure levels that must comply with the Federal limits.

- He doesn't include hospital Wi-Fi, other wireless technology on site, and emergency communication antennas in his non-measured calculations.

Due to the low power characteristics and localized nature of the sources listed, they do not contribute significantly to RF exposure levels at ground, buildings nearby, or on the roof, in terms of compliance with the Federal standard. As noted in the Summary Response above, the exposure level measurements required before the Verizon facility begins regular operation will include all nearby sources; it is the total, cumulative exposure levels that must comply with the Federal limits.

- He gave maximum RF exposure of 0.16 mW/cm<sup>2</sup>, or 29% of public exposure limit for proposed operation, but he did not state whether this proposed operation is 100% of capacity of the radio and antenna units. When asked at the PC hearing, the applicant asserted it was. For another Sequoia Deployment Services/Verizon project in Pacific Grove, he did not disclose in the RF report that the exposure calculations for "proposed" operation were based on operating at 50% capacity nor did the applicant disclose this until the hearing.

As noted in our report, the calculations are based on several conservative factors, including the standard assumption that the radio equipment is operating at 100% capacity or at such lesser percentage as needed to stay within the FCC power limits applicable in each frequency band.

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- Are the maximum exposure levels calculated as an average or as maximum peak levels?

The maximum calculated exposure levels are spatially-averaged, in accordance with the Federal limits, as detailed in the FCC Office of Engineering Technology (“OET”) Bulletin No. 65.

- He calculated maximum ground level exposure at 29% of FCC limit for just Verizon and 30% of FCC limit for all three carriers cumulatively. That’s not logical.

The antennas for the three carriers are not mounted at the same physical location, nor are they all operating in the same bands at the same power levels. These factors mean that the individual maximum levels do not necessarily occur at the same locations. At the highest cumulative level for all three together, Verizon is the main contributor and the others have lower contributions. As noted in the Summary Response above, the exposure level measurements required before the Verizon facility begins regular operation will include the other carriers and other nearby sources; it is the total, cumulative exposure levels that must comply with the Federal limits.

- He said “power level from an energy source decreases with square of the distance”. There are other factors as well that complicate that calculation which he did not mention including metal surfaces, reflection, and hotspots, and these antennas will be adjacent a great of metal ductwork, conduits, and structural components. It is also unclear if he is talking about wattage or emissions levels.

The “inverse square law” is a principle from basis physics. The Appellant is indeed correct that other factors can be involved, which is why our calculations follow the FCC OET Bulletin No. 65 inclusion of a conservative reflection factor. The units for assessment of RF exposure conditions against the Federal standard is power density in milliwatts per square centimeter, that is, power passing through a unit area.

- This engineer has provided reports for past projects with omissions and false statements as well. He has violated his engineering professional code of ethics, spoken outside his area of expertise in his official capacity, misrepresented IEEE C.95 standards, and has a known bias and a conflict of interest as evidenced by documents in the public record.

I think the above comments demonstrate that there are no “omissions and false statements.” I take great exception to the Appellant’s allegations regarding “known bias” and “conflict of interest.” I represent the facts as I know them, and I hold dear the first tenet in the California State Code of Professional Conduct for Professional Engineers (16 CCR §475): “To protect and safeguard the health, safety, welfare, and property of the public.”

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### **Assessment of Acoustic Noise**

Summary Response: The applicant must comply with the City's noise limits (Condition of Approval #1).

Here are responses to the particular arguments made by the Appellant:

- He didn't base his study on actual fans but on ones he "assumed to be" the correct ones.

The carrier's drawings did not specify the make/model of the proposed equipment cabinets, so (quoting from our report) "For the limited purpose of this study," we assumed typical equipment that the carriers have utilized at other sites. Since the calculations showed a compliance margin of 17.9 dB (60 times!), use of other make/model assumptions, or the actual make/model noise ratings when known, would also show compliance.

- He didn't note that the fans are located near rooms and will have vibration as well as noise operating at maximum of Monterey limit. 65 dB is the day and night limit outside residential zone. Nighttime noise is different than daytime noise, and carries much further in the quiet.

1) The Appellant is correct that ambient noise levels are quieter at night, which is why Monterey, like most cities, sets tighter limits on noise at night. Our calculations are assessed against the tightest City limit of 55 dBA, which is for nighttime noise in residential areas.

2) The equipment should be securely installed, creating no "vibration" or noise beyond the measured levels reported by the manufacturer.

3) The City limits noise at the property line, not at locations on the property itself. Presumably, that is a matter between the applicant and the property owner.

- He didn't note that this is in proximity to a nursing home.

The calculations are performed at the nearest property lines, where the City's noise limits apply. Since the noise is well below the City's limit (by 60 times) at the property line, noise would be even lower on surrounding properties.

We appreciate the opportunity to provide these comments. Please let us know if any further questions arise.

Sincerely yours,



William F. Hammett, P.E.

ms