

1 SHEEHAN: No founded research that shows a direct correlation
2 between those buildings?

3 CARNEY: Oh no, no. These studies are hard to...it takes a lot
4 of work to do the studies and we do commend the Colorado Department of
5 Health for the work that they have done for us.

6 HUTFLESS: Okay. If Ijust a friendly reminder. I know I stated
7 this earlier. If you agree that you have any documentation that you want to
8 submit to the and this goes to you know both sides, make sure that we get it for
9 the record.

10 CARNEY: Yes, sir. Thank you.

11 HOLLOWAY: Do they just need to state their name when they get
12 to the microphone or...

13 HUTFLESS: Yeah. If they're signed up and you know you've got
14 their address.

15 HOLLOWAY: Okay. If you could state your name so we know who
16 is speaking. That would be nice.

17 POLAK: Sure. My name is Paul Polak, P-O-L-A-K.
18 I live at 24 South Lookout Mountain Circle. And for the past 40 years I've lived
19 in Jefferson County. That's not Jefferson County, Alabama, but Jefferson
20 County, Colorado.

21 HOLLOWAY: Well. You might want to visit.

22 POLAK: That would be interesting. I graduated from Medical
23 School I think it was 1816. And I have a background in medical research and

1 preventive medicine. For example I was the principle investigator on a three
2 year study of preventive medicine in Colorado and for four years I've served on
3 the committee in Washington that reviewed most of the research grants on
4 alcoholism in the country. I got involved in this whole issue very innocently. I
5 walked into a homeowner's meeting into the middle of a talk being given by Deb
6 Carney and Al Hislop on the antennas. And I didn't know anything about it. But
7 I felt with my background the responsible thing to do was to look into it and to
8 review the literature and I did that as objectively as I could. So what I want to do
9 tonight is just tell you a little in summary what I concluded from reviewing the
10 literature. But first I'd like to comment briefly on some of the things that have
11 been said already. First of all Mr. Cohen gave us a very interesting and detailed
12 account about the process by which the standard was set. And I found that very
13 interesting but my comment based on the review of the literature, my major
14 comment is, you blew it. I think the standard, I don't agree with the standard. I
15 don't think the evidence supports the standard and I think it's set too high. Then
16 Dr. Bushberg talked at great length about the process of consensus and who
17 was involved and how the consensus process was very important to coming up
18 with the proper standards. I think right about the time that I graduated from
19 medical school there was another consensus of all the top scientists in the world
20 which was that the world was flat. And that consensus didn't hold up. But there
21 were some others things that Dr. Bushberg said. For example, there is no
22 evidence of adverse effects of levels of radiation, of non-ionizing radiation. I
23 think that's flat wrong and I'll tell you why when I describe the literature.

1 Because it's late I don't want to go into too much detail about what everybody
2 said. Dr. Cole finished by saying that he felt Dr. Goldsmith's review of the
3 literature was biased. The funny thing is I had exactly the same opinion of Dr.
4 Cole. I think what he presented to you this evening was a fairly biased account.
5 I'll just give a couple of examples. He said that there was no dose relationship
6 in the literature between cancer and the amount of exposure. In the study here
7 on Lookout Mountain I went over to Al Hislop's this morning. Al is an engineer
8 and I trust his data very much. Now, Al has made some measurements of
9 actual radiation levels at different points on Lookout Mountain. And I reviewed
10 with him what his findings were in Block Group 3 which is where the brain
11 cancer the increased incidence of brain cancer was observed. And that is as
12 Deb said probably the highest observed radiation level in Lookout Mountain in
13 that Block Group. I think one of the problems as you review the literature is that
14 when everybody focuses, including Dr. Cole, on the cancers that have been
15 found in the literature to be associated with radio and TV transmissions, those
16 cancers are cancers like brain cancer, childhood leukemia and adult leukemia.
17 Those cancers are very infrequent. It's a totally different situation than lung
18 cancer and smoking. Lung cancer is a very high frequency illness compared
19 with these other cancers. And smoking is a very high frequency activity. So you
20 can get statistically significant findings. Finally, I want to commend Dr.
21 Hoffman's account and I think he gave a very objective and balanced review of
22 both his own findings and the other findings and I for the most part agree with
23 what he said. Let me tell you in very brief form my conclusions from the review

1 of the literature. First of all there are three things, epidemiological studies,
2 studies at the cell membrane and cellular level and studies of non-cancer types
3 of illness. My review of the literature, epidemiological studies these neither
4 conclude that there are troubling patterns of association between exposure to
5 radio and TV transmissions at the levels that we are experiencing in Lookout
6 Mountain. And those raise a red flag. I have to say that there isn't proof of
7 causation but in such low frequency events you cannot get proof of causation
8 through epidemiological studies. So to criticize the study of Lookout Mountain
9 that there isn't proof of causation; there isn't proof of causation; there isn't proof
10 that there is no causation. The events being studied are too infrequent to make
11 conclusions about causation. Those troubling red flag associations I would be
12 somewhat reassured if there's no evidence of changes at the cellular level or the
13 cell membrane level. But the review of the literature by the World Health
14 Organization found that there is indeed a whole variety of changes at the cellular
15 and the cell membrane level that are associated with the same levels of
16 radiation that are observed in Lookout Mountain. Finally I want to mention the
17 study. The other thing I want to say is many of the studies that I reviewed are
18 methodologically flawed. You have to control for a number of things,
19 socioeconomic status, exposure to other things, age and so on. One of the
20 shortcomings is that there is a general assumption that the closer you are to a
21 radio antenna the more exposed you are. And this is a false assumption. It may
22 be overall but if you live close to an antenna and there's a big house between
23 you and the source of the transmission you're going to have a low reading. And

1 if you live further away and you have a clear shot to the antenna you may have
2 a high reading and the only way to really tell is to do actual measurements at the
3 bedroom and in the house. Now there is a study in the literature by Altpeter and
4 that was a study published in 1995 and it was a study in Berne, Switzerland.
5 And that was a well controlled study. I think it's the study that I'm most
6 impressed with in the literature. That study took measurements of actual
7 radiation in the bedrooms of the homes being studied. This was in the vicinity of
8 a short wave antenna and the people were divided into three groups based on
9 actual exposure, a high-exposure group, a middle-exposure group and a low-
10 exposure group. And one of the things that they studied...they studied a wide
11 range of things and one of the most striking findings is the results on sleep
12 patterns. They found that the people in the high-exposure group had very
13 significant disturbances in sleep patterns, trouble getting to sleep, trouble
14 staying asleep, patterns of nervousness, fatigue, difficulty in concentration, all of
15 that follows. And there are a lot of other serious things that are associated with
16 sleep disturbances. The degree of sleep disturbance was directly related to the
17 level of exposure. But the most telling finding is that by accident the transmitter
18 broke down for three days and the people in the community didn't know that it
19 broke down and the measurements continued. And these adverse effects
20 centered around trouble sleeping decreased significantly for the three days that
21 the transmitter was down. And when the transmitter came on again the
22 symptoms came back. Now these are statistically very significant findings not at
23 the .05 level but most of them at the .02 level. I think that these kind of findings

1 with very well...with a very well controlled study combined with the red flag from
2 the results of other studies that show an association between exposure can only
3 be to the conclusion that the least possible harm is done and if it is at all
4 possible this new antenna should be located outside, away from Lookout
5 Mountain. There is one other thing that I want to mention about this study by
6 Altpeter. The high-exposure group in the Altpeter study had a lower level of
7 exposure than the average exposure on Lookout Mountain. I think I'll just wrap
8 it up there.

9 HOLLOWAY: Doctor, what is your specialty again?

10 POLAK: I'm a psychiatrist but I also have been involved in a
11 variety of medical research studies.

12 HOLLOWAY: Thank you.

13 KELLY: My name's Cindy Kelly, K-E-L-L-Y. And my address
14 is 1513 Copper Rose Drive in Golden. (Let's see if I can get the slides to work
15 here.) I'm an orthopedic oncologist. I did my training in orthopedic surgery at
16 Harvard UCLA Medical Center in Los Angeles and a fellowship in orthopedic
17 oncology at UCLA in Los Angeles. So I speak to you tonight as a concerned
18 citizen and a physician who takes care of patients with cancer, but not a
19 computer guru. Sometimes the old way is the best way. So, tonight I wanted to
20 talk about and examine the health risks associated with the exposure to
21 electromagnetic radiation. Radiation is a funny thing because you can't touch it,
22 you can't feel it, smell it or taste it. But we know it does have effects. If there
23 are high doses it can cause immediate cell death. At low doses it can cause