

November 11, 2003

Commissioners:

The A.R.R.L. test results show that BPL will likely raise the noise floor some 50 to 66 dB in its neighborhood for any hapless user of over the air spectrum (2 to 80 MHz). Published articles have indicated an ambition to implement BPL far and wide, not just in some isolated communities. The implications are that BPL will effectively supplant the over-the-air users of HF to low VHF. The FCC has promised to reign in interference, but to do so would make BPL noncompetitive which is not your goal either. Industry wants to proceed with *higher* Part 15 levels allowed. They claim no interference will result.

And the FCC seems to have trusted industry's assurances enough to start the ball rolling, but is that trust warranted?

KING¹ Thus ever did rebellion find rebuke.

Ill-spirited Worcester! did not we send grace,
Pardon and terms of love to all of you?
And wouldst thou turn our offers contrary?
Misuse the tenour of thy knisman's trust?
Three knights upon our party slain to-day,
A noble earl, and many a creature else,
Had been alive this hour,
If like a Christian thou hadst truly borne
Betwixt our armies true intelligence.

As I see it the FCC has extended "grace, pardon and terms of love to all of you" BPL competitors in that it has not imposed restrictions on them that would hurt their competitive advantage.

And what have they done in return? "Turn our offers contrary? Misuse the tenour of thy knisman's trust?" They have turned about and designed systems to send rf signals over radiating power lines that would swamp any nearby over-the-air user, rendering his licensed service unusable. Like the knights and earl that could have otherwise survived, our radios *already* receive interference from devices here and there operating within Part 15 limits, as has been noted already in comments you have received. Widespread BPL operating across the spectrum would make it wholesale slaughter. What the BPL companies failed to own up to is they have not "like a Christian ... truly borne betwixt our armies true intelligence." They hide their tests from interference studies, or try to, and have neglected negative results from other countries.

Perhaps I should try to find another analogy besides the deceit at the siege of Troy. Here is one ready made.

Achilles' mother, Thetis, was a sea nymph. She had been told by the Fates that he would die young and he was marked by destiny to disappear—like the Neanderthal. When he was a baby, Thetis dipped him in the River Styx, hoping its magical waters would protect him from all wounds. But she held him by the heel, which the water did not touch. ... When the Trojan war broke out, Achilles was a

¹William Shakespeare, Part 1, *King Henry the Fourth*, Act 5 Scene 5

great fighter, until he argued with King Agamemnon and refused to go into battle. He lent his armor to his friend Patroclus, who was killed by Hector. Achilles slew Hector, but then the poisoned arrow, guided by Paris, found its mark, his heel.²

I am looking for another myth to help us understand the dynamics, and the disappearance of Neanderthal man is ready made. It is a device useful to illustrate the potential extinction of over-the-air HF radio.

"Have you heard of the Khodzant Enigma?" Segei shook his head. "It's a pictograph. It turned up not far from here sometime in the last century. Part of it was missing, so no one could decipher its meaning. They didn't have the original so they didn't even know how old it was. If they did, they wouldn't have believed it. It would have been like finding the stone tablet of the Ten Commandments.

"Our first time in the cave, running away from those creatures, we saw it painted on one of the walls. Only of course it was complete. Later I went back to study it. It depicted a battle, or rather a series of battles, between two implacable foes. On one side was *Homo sapiens*, us. On the other, *Homo neanderthalensis*. At some point, the two sides come together. There's a peace council, weapons being thrown down. But on the way, *Homo sapiens* pulls a fast one. The soldiers rig pit traps to catch the Neanderthals, and it works. They're the victors, though not through a fair fight. It's a victory of cunning. With me so far?"

"So you mean to say there was one single battle? And one single trick wiped out all the Neanderthals?"

"No, not quite. There was probably an endless round of battles. They may have extended over years, scores of years, maybe centuries. But the outcome was usually the same: *Homo sapiens* won. In other words, the Enigma is not a single narrative out of the past, it's a visual metaphor, an explanation for the destruction— —or near destruction— —of an entire species. It's intended as the embodiment of a historical lesson. It's teaching something. It is telling the tiny relic bands that live through the ages, Don't forget; there is something you should know about *Homo sapiens*."

"And that is— —"

"That he is duplicitous. That he cheats. That he lies. And therefore he always wins."³

What I am reminding you of is that when you extend all that good favor to the people behind BPL, removing any obstruction to their progress you come across that you are able to, and they tell you, Oh no, there won't be any interference to radio spectrum users—not at current Part 15 levels or at the increased levels we are asking for—, you are not dealing with some benign creature passed over by the laws of natural selection in his evolution, but with *Homo sapiens* who prevailed over competing lines by an innate disposition to duplicity.

²John Darnton, Neanderthal (New York: Random House, 1996) p. 330.

³Ibid., pp. 355f.

As her mind floats like a bird, she looks down from above and watches the tribes in combat. They posture and bluster with clubs and spears. They run forward and fall back, shifting dots on the rocky plain. One side charges and the other side flees; then they change places. There is the pungent smell of musk and wet leaves, urine and smoke.

... Once more the tribes clash. With clubs flailing, they meet like two waves crashing into one another. Weapons smash onto spines and skulls. Some fall to their knees. Blood splashes onto the rocks. A head splits open and brains spill out. The sides fall apart with much yelling and more posturing. The dead are buried ... Then, with yells and feints, the combat starts again. They run at each other and clash, the two waves smacking together with the sound of clubs striking flesh and bone. From a distance, near the mount shaped like the back of a fist, the charges look strangely unreal and the sound is muffled. The two tribes join and break apart far down below for a third time, leaving bodies motionless on the ground, like waves that ride up on shore, shunting pebbles back and forth, then leaving them suddenly motionless on the beach.

Time passes, peace descends. Now two tribes approach each other warily, but not in combat. At opposite ends of the rocky plain they walk slowly toward each other, their weapons held outstretched. They glare nervously at each other as they come closer and closer. They stop some thirty feet apart and discard their weapons. Slowly they straighten up, their eyes fixed on one another, and show empty hands, palms upward. They step over the clubs and continue toward each other, with nervous gestures. Suddenly there is a swirl of movement, dust kicked up. The ground opens and swallows one side whole, dozens of them disappearing into pits below. With yelps of glee, the long lithe ones charge close, pouring down a rain of rocks and dirt to bury the enemy. Caught in the traps below, those with the jutting brows shriek but the earth rains down upon them until it deadens their screams and rises up around them like an avalanche. It covers all of them, slowly and inexorably, until only one pit remains, and in it the leader rants, his fist pounding the walls, his head thrown back. As the dirt falls around him, he stands firm, looking upward. Teeth bared, he opens his throat and pours out a long guttural howl of impotent rage and anguish at the betrayal carried out on him and his tribe by the pernicious thin-skulled enemy. His howl rises up the mountain and lingers, echoing in the valley and through the forest even after the grave is covered over.

... Origin and survival myths have an overarching purpose; they are history enshrined and recast as object lesson. The epic of Noah and the flood, an oral legend recounted in various forms throughout Eurasia, warns of godly retribution in reprisal for moral decadence. Adam and Eve is the story of the sin of overreaching that caused mankind's fall from grace. Cain and Abel tells of the first bloodletting and the price it extracted.

... So this had been the singular event in the prehistoric era of the hominids, the turning point that condemned them to a hardscrabble existence in the cold and desolate upper reaches of the roof of the world. It was the story not of how a battle was won but of how it was lost. It was lost not by inferior weapons, lesser numbers,

disorganization, or cowardice. It was lost by ignorance, by naiveté, by trust that was incapable of recognizing the depths of the enemy's treachery. Surely this was a communication worth tucking away in a time capsule for the future.⁴

BPL if implemented as the industry plans, and causing the level of interference it is capable of, could well annihilate the usefulness of the HF (and low VHF) spectrum for over-the-air users in our communities served by it. And it would not be so much that BPL won some kind of national policy debate that turned out in their favor, but that the over-the-air users lost out "by ignorance, by naiveté, by trust that was incapable of recognizing the depths of the enemy's treachery."

Let us look at it one step at a time: "By ignorance." One does not have to understand radio theory and public policy to make use of the radio spectrum. Short wave receivers with built-in whip antennas are proliferating in the marketplace, some of really good quality. Buy one in the store, plug it in, turn it on, and voilà, foreign broadcast stations. A CB'er learns how to set up a store-bought set and antenna, and he is in business. A government operator follows the manuals. Are they aware of the implications of BPL? Well, some of them would be, and some have representation by organizations, but face it, many are oblivious.

It is the amateur radio operators who have the technical savvy to see the real threat—not just to their own frequencies, with their relatively low power levels—to the radio spectrum users. Maybe the A.R.R.L. test results and the comments from many amateurs will make a difference, along with technical input from other sources. I am sure the BPL companies would like the hard technical data to go away.

"By naiveté." Here we want to look at the reaction of the FCC to the BPL promoters. Without any encouraging hard data on the compatibility of ultrawideband BPL strung all over the country with the many radio spectrum users on the same turf, we have heard nothing but unbridled praise of BPL from the FCC. Although we have been told over-the-air users will be protected from interference, the implementation of BPL is a given, sans compatibility studies. We are told not to hold irrational fears regarding interference from it, this without the scientific study to prove its compatibility in the first place. We are reminded of the FCC's mandate to promote new technologies, with the unproven assumption that the new interference will be manageable. After comments of caution have poured in by the droves, along with worrisome test results with respect to interference potential, one of the commissioners gave a speech touting BPL as a "competitive BPL nirvana." Think about it a moment. Does not that strike you as a bit naive?

And "by trust that was incapable of recognizing the depths of the enemy's treachery." Ah, this is the killer. BPL industry has downplayed their service's interference potential to vanishingly insignificant. "Trust us," they seem to be saying. How can we even imagine "the depths of their treachery?" Let us try a

⁴Ibid., pp. 320-2.

"survival myth [with] an overarching purpose; ... as object lesson."

Please note that I am using a *secular* application of a religious myth, taking it from the obscure book of Jasher which is not even in the Bible, and have included the Bible version as a separate submission for comparison purposes only.

(Jasher 33:1-11)

1 And in some time after Jacob went away from the borders of the land, and he came to the land of Shalem, that is the city of Shechem, which is in the land of Canaan, and he rested in front of the city.

2 And he bought a parcel of the field which was there, from the children of Hamor the people of the land, for five shekels.

3 And Jacob there built himself a house, and he pitched his tent there, and he made booths for his cattle, therefore he called the name of that place Succoth.

4 And Jacob remained in Succoth a year and six months.

5 At that time some of the women of the inhabitants of the land went to the city of Shechem to dance and rejoice with the daughters of the people of the city, and when they went forth then Rachel and Leah the wives of Jacob with their families also went to behold the rejoicing of the daughters of the city.

6 And Dinah the daughter of Jacob also went along with them and saw the daughters of the city, and they remained there before these daughters whilst all the people of the city were standing by them to behold their rejoicings, and all the great people of the city were there.

7 And Shechem the son of Hamor, the prince of the land was *also* standing there to see *them*.

8 And Shechem beheld Dinah the daughter of Jacob sitting with her mother before the daughters of the city, and the damsel pleased him greatly, and he there asked his friends and his people, saying, Whose daughter is that sitting amongst the women, whom I do not know in this city?

9 And they said unto him, Surely this is the daughter of Jacob the son of Isaac the Hebrew, who has dwelt in this city for some time, and when it was reported that the daughters of the land were going forth to rejoice she went with her mother and maid servants to sit amongst them as thou seest. 10 And Shechem beheld Dinah the daughter of Jacob, and when he looked at her his soul became fixed upon Dinah.

11 And he sent and had her taken by force, and Dinah came to the house of Shechem and he seized her forcibly and lay with her and humbled her, and he loved her exceedingly and placed her in his house.

For the purposes of metaphor Shechem's love of Dinah will represent the amateur radio operator loving his hobby, doing it not for money. In trying to understand the depths of enemy treachery we are taking his viewpoint as on the internet, quoting from Intellon (May, 2003):

This principle is equally useful for avoiding in-band continuous wave jammers. A very real example of this kind of interference is the coupling of amateur radio signals to the power line. These narrowband jammers can have substantially greater amplitude than the OFDM information signal. The subcarrier overlapped by the jammer is simply turned off to improve BER. ... Tone allocation provides an important regulatory benefit. Frequencies can be masked to meet current and future international regulations for power line communication systems.

In their literature they referred to "amateur radio signals" as "these narrowband jammers." A "jammer" has a specific meaning.

Medium Wave Interference, by Steve Whitt, ©2002

Jamming:

This is a deliberate attempt to interfere with reception and is usually a transmission of man-made noise intended to blanket another programme to make it unintelligible. The amount of jamming present tends to reflect the degree of political unrest in the world and today there is relatively little to bother the MW listener. The extensive jamming associated with Eastern Europe and the former USSR is now consigned to history, but jammers are still active in the Middle East and Korea.

We are saying that for sake of analogy the amateur-as-jammer would be represented by a rapist Shechem, not that amateurs operating lawfully are in fact jamming, but we are taking the industry's perspective.

(Jasher 33:12-22)

12 And they came and told the thing unto Jacob, and when Jacob heard that Shechem had defiled his daughter Dinah, Jacob sent twelve of his servants to fetch Dinah from the house of Shechem, and they went and came to the house of Shechem to take away Dinah from there.

13 And when they came Shechem went out to them with his men and drove them from his house, and he would not suffer them to come before Dinah, but Shechem was sitting with Dinah kissing and embracing her before their eyes.

14 And the servants of Jacob came back and told him, saying, When we came, he and his men drove us away, and thus did Shechem do unto Dinah before our eyes.

15 And Jacob knew moreover that Shechem had defiled his daughter, but he said nothing, and his sons were feeding his cattle in the field, and Jacob remained silent till their return.

16 And before his sons came home Jacob sent two maidens from his servants' daughters to take care of Dinah in the house of Shechem, and to remain with her, and Shechem sent three of his friends to his father Hamor the son of Chiddekem, the son of Pered, saying, Get me this damsel for a wife.

17 And Hamor the son of Chiddekem the Hivite came to the house of Shechem his son, and he sat before him, and Hamor said unto his son, Shechem, Is there then no woman amongst the daughters of thy people that thou wilt take an Hebrew woman who is not of thy people?

18 And Shechem said to him, Her *only* must thou get for me, for she is delightful in my sight; and Hamor did according to the word of his son, for he was greatly beloved by him.

19 And Hamor went forth to Jacob to commune with him concerning this matter, and when he had gone from the house of his son Shechem, before he came to Jacob to speak unto him, behold the sons of Jacob had come from the field, as soon as they heard the thing that Shechem the son of Hamor had done.

20 And the men were very much grieved concerning their sister, and they all came home fired with anger, before the time of gathering in their cattle.

21 And they came and sat before their father and they spoke unto him kindled with

wrath, saying, Surely death is due to this man and to his household, because the Lord God of the whole earth commanded Noah and his children that man shall never rob, nor commit adultery; now behold Shechem has *both* ravaged and committed fornication with our sister, and not one of all the people of the city spoke a word to him.

22 Surely thou knowest and understandest that the judgment of death is due to Shechem, and to his father, and to the whole city on account of the thing which he has done.

Okay, to further the analogy, not only is the amateur's lawful use of his assigned frequencies a rape, but a rape of BPL's sister as they consider the frequencies to belong to them. Remember when the FCC was petitioned for amateur allocations in the 5 MHz band? Some BPL sources submitted comments opposing the allocation because they might have less usable frequencies if amateurs were assigned them. You responded that the frequencies belong primarily to the over-the-air users (amateurs in this case) not to the power companies. Since they seemed to think otherwise, we will let Dinah represent their sister, and they feeling a divine right to use the frequencies they require. Okay, on with the analogy.

(Jasher 33:23-28)

23 And whilst they were speaking before their father in this matter, behold Hamor the father of Shechem came to speak to Jacob the words of his son concerning Dinah, and he sat before Jacob and before his sons. 24 And Hamor spoke unto them, saying, The soul of my son Shechem longeth for your daughter; I pray you give her unto him for a wife and intermarry with us; give us your daughters and we will give you *our daughters*, and you shall dwell with us in our land and we will be as one people in the land. 25 For our land is very extensive, so dwell ye and trade therein and get possessions in it, and do therein as you desire, and no one shall *prevent you* by saying a word to you.

26 And Hamor ceased speaking unto Jacob and his sons, and behold Shechem his son had come after him, and he sat before them.

27 And Shechem spoke before Jacob and his sons, saying, May I find favor in your sight that you will give me your daughter, and whatever you say unto me that will I do for her.

28 Ask me for abundance of dowry and gift, and I will give it, and whatever you shall say unto me that will I do, and whoever he be that will rebel against your orders, he shall die; only give me the damsel for a wife.

Now, amateurs are on a whole very accommodating. We share some of our bands with other services, sometimes as a primary user, sometimes as a secondary. We have to get along with our neighbors, to mitigate interference in either direction. We have to get our wives to tolerate our antennas. We prove our worthiness as a public service to the FCC. Come another technology that wants to use amateur frequencies to send high speed digital signals along the power lines (de facto antennas), we will try to find a way to accommodate the new service, just as Shechem would have given ever so large a dowry for Dinah.

(Jasher 33:29-45)

29 And Simeon and Levi answered Hamor and Shechem his son deceitfully, saying, All you have spoken unto us we will do for you.

30 And behold our sister is in your house, but keep away from her until we send to our father Isaac concerning this matter, for we can do nothing without his consent.

31 For he knoweth the ways of our father Abraham, and whatever he sayeth unto us we will tell you, we will conceal nothing from you.

32 And Simeon and Levi spoke this unto Shechem and his father in order to find a pretext, and to seek counsel what was to be done to Shechem and to his city in this matter.

33 And when Shechem and his father heard the words of Simeon and Levi, it seemed good in their sight, and Shechem and his father came forth to go home.

34 And when they had gone, the sons of Jacob said unto their father, saying, Behold, we know that death is due to these wicked ones and to their city, because they transgressed that which God had commanded unto Noah and his children and his seed after them.

35 And also because Shechem did this thing to our sister Dinah in defiling her, for such vileness shall never be done amongst us.

36 Now therefore know and see what you will do, and seek counsel and pretext what is to be done to them, in order to kill all the inhabitants of this city.

37 And Simeon said to them, Here is a proper advice for you: tell them to circumcise every male *amongst them* as we are circumcised, and if they do not wish to do this, we shall take our daughter from them and go away.

38 And if they consent to do this and will do it, then when they are *sunk down* with pain, we will attack them with our swords, as upon one who is quiet and peaceable, and we will slay every male person amongst them.

39 And Simeon's advice pleased them, and Simeon and Levi resolved to do unto them as it was proposed.

40 And on the next morning Shechem and Hamor his father came again unto Jacob and his sons, to speak concerning Dinah, and to hear what answer the sons of Jacob would give to their words.

41 And the sons of Jacob spoke deceitfully to them, saying, We told our father Isaac all your words, and your words pleased him.

42 But he spoke unto us, saying, Thus did Abraham his father command him from God the Lord of the whole earth, that any man who is not of his descendants that should wish to take one of his daughters, shall cause every male belonging to him to be circumcised, as we are circumcised, and then we may give him our daughter for a wife.

43 Now we have made known to you all our ways that our father spoke unto us, for we cannot do this of which you spoke unto us, to give our daughter to an uncircumcised man, for it is a disgrace to us.

44 But herein will we consent to you, to give you our daughter, and we will *also* take unto ourselves your daughters, and will dwell amongst you and be one people as you have spoken, if you will hearken to us, and consent to be like us, to circumcise every male belonging to you, as we are circumcised.

45 And if you will not hearken unto us, to have every male circumcised as we are

circumcised, as we have commanded, then we will come to you, and take our daughter from you and go away.

So the BPL companies have come up with a solution that they know full well will not work—they do have engineers who are aware of such things if they read even the most basic handbook—called Part 15. Part 15 will allow amateurs (and other users) to dwell in peace in the same communities with BPL service. That is the solution.

Well, take circumcision. Traditionally done at eight days after birth, relatively painless to the still forming infant, and as not all the babies get born on the same day of the year, it gets spread out in time. Take Part 15. It has been applied to radiators that use limited frequency spectrum, can in some cases be isolated from the (radiating) power lines, and at any event the sources are scattered here and there geographically so only some of them are near susceptible receivers. We can handle Part 15 that way, and traditional circumcision.

But take those unintentional radiators and make them operate across the *whole* spectrum, feed them intentionally into the power line (antennas), and lay them down over the whole community, and the amateur operator will be overwhelmed (and any other over-the-air spectrum user). It is like circumcising all the adult males on the same day. Ouch, they will be sore and vulnerable. So Part 15 and circumcision used this way is anything but a protection; it is a threat. It is such a small cut, a small rf signal, but our adult bodies and superhet receivers are sure susceptible to it.

(Jasher 33:46-52)

46 And Shechem and his father Hamor heard the words of the sons of Jacob, and the thing pleased them exceedingly, and Shechem and his father Hamor hastened to do the wishes of the sons of Jacob, for Shechem was very fond of Dinah, and his soul was riveted to her.

47 And Shechem and his father Hamor hastened to the gate of the city, and they assembled all the men of their city and spoke unto them the words of the sons of Jacob, saying,

48 We came to these men, the sons of Jacob, and we spoke unto them concerning their daughter, and these men will consent to do according to our wishes, and behold our land is of great extent for them, and they will dwell in it, and trade in it, and we shall be one people; we will take their daughters, and our daughters we will give unto them for wives.

49 But only on this *condition* will these men consent to do this thing, that every male amongst us be circumcised as they are circumcised, as their God commanded them, and when we shall have done according to their instructions to be circumcised, then will they dwell amongst us, together with their cattle and possessions, and we shall be as one people with them.

50 And when all the men of the city heard the words of Shechem and his father Hamor, then all the men of their city were agreeable to this proposal, and they obeyed to be circumcised, for Shechem and his father Hamor were greatly esteemed by them, being the princes of the land.

51 And on the next day, Shechem and Hamor his father rose up early in the morning, and they assembled all the men of their city into the middle of the city, and they called for the sons of Jacob, who circumcised every male belonging to them on that day and the next.

52 And they circumcised Shechem and Hamor his father, and the five brothers of Shechem, and then every one rose up and went home, for this thing was from the Lord against the city of Shechem, and from the Lord was Simeon's counsel in this matter, in order that the Lord might deliver the city of Shechem into the hands of Jacob's two sons.

That is the exact response the BPL interests want from us amateurs. Oh joy, Part 15 will protect us! Feed your BPL signals into the power grid that runs right by our homes with our big antennas in the yard, no problem. We have Part 15. We can all be one happy community.

(Jasher 34:1-21)

1 And the number of all the males that were circumcised, were six hundred and forty-five men, and two hundred and forty-six children. 2 But Chiddekem, son of Pered, the father of Hamor, and his six brothers, would not listen unto Shechem and his father Hamor, and they would not be circumcised, for the proposal of the sons of Jacob was loathsome in their sight, and their anger was greatly roused at this, that the people of the city had not hearkened to them.

3 And in the evening of the second day, they found eight small children who had not been circumcised, for their mothers had concealed them from Shechem and his father Hamor, and from the men of the city.

4 And Shechem and his father Hamor sent to have them brought before them to be circumcised, when Chiddekem and his six brothers sprang at them with their swords, and sought to slay them.

5 And they sought to slay also Shechem and his father Hamor and they sought to slay Dinah with them on account of this matter.

6 And they said unto them, What is this thing that you have done? are there no women amongst the daughters of your brethren the Canaanites, that you wish to take unto yourselves daughters of the Hebrews, whom ye knew not before, and will do this act which your fathers never commanded you?

7 Do you imagine that you will succeed through this act which you have done? and what will you answer in this affair to your brethren the Canaanites, who will come tomorrow and ask you concerning this thing?

8 And if your act shall not appear just and good in their sight, what will you do for your lives, and me for our lives, in your not having hearkened to our voices?

9 And if the inhabitants of the land and all your brethren the children of Ham, shall hear of your act, saying,

10 On account of a Hebrew woman did Shechem and Hamor his father, and all the inhabitants of their city, do that with which they had been unacquainted and which their ancestors never commanded them, where then will you fly or where conceal your shame, all your days before your brethren, the inhabitants of the land of Canaan?

11 Now therefore we cannot bear up against this thing which you have done,

neither can we be burdened with this yoke upon us, which our ancestors did not command us.

12 Behold tomorrow we will go and assemble all our brethren, the Canaanitish brethren who dwell in the land, and we will all come and smite you and all those who trust in you, that there shall not be a remnant left from you or them.

13 And when Hamor and his son Shechem and all the people of the city heard the words of Chiddekem and his brothers, they were terribly afraid of their lives at their words, and they repented of what they had done.

14 And Shechem and his father Hamor answered their father Chiddekem and his brethren, and they said unto them, All the words which you spoke unto us are true.

15 Now do not say, nor imagine in your hearts that on account of the love of the Hebrews we did this thing that our ancestors did not command us. 16 But because we saw that it was not their intention and desire to accede to our wishes concerning their daughter as to *our* taking her, except on this condition, so we hearkened to their voices and did this act which you saw, in order to obtain our desire from them.

17 And when we shall have obtained our request from them, we will then return to them and do unto them that which you say unto us.

18 We beseech you *then* to wait and tarry until our flesh shall be healed and we *again* become strong, and we will then go together against them, and do unto them that which is in your hearts and in ours.

19 And Dinah the daughter of Jacob heard all these words which Chiddekem and his brothers had spoken, and what Hamor and his son Shechem and the people of their city had answered them.

20 And she hastened and sent one of her maidens, that her father had sent to take care of her in the house of Shechem, to Jacob her father and to her brethren, saying:

21 Thus did Chiddekem and his brothers advise concerning you, and thus did Hamor and Shechem and the people of the city answer them.

Okay, we have a contingent of amateurs that points out that Part 15 was *never* designed for such an application as BPL. BPL had not been conceived of when Part 15 was written for the kinds of carrier services limited in scope and frequency then in existence. What are we doing accepting it for BPL?

Our ready answer is that we can turn it to our favor. It provides for the cessation of operations that interfere with licensed services, once the FCC has been informed. As they plod along with BPL installations, we have plenty of time to sort out where the interference is coming from and get the FCC to tell them to stop. Right!

You think the BPL companies do not know about such a provision! You bet they do, and they want to proceed full speed ahead so that we will not have all the interference sources sorted out before a community becomes dependent on their service, and then try to get the FCC to shut it down. It would be like the CB boom in the 70's where communities experiencing interference from CB'ers found a way around federal preemption, or ignored it altogether.

(Jasher 34:22-34)

22 And when Jacob heard these words he was filled with wrath, and he was

indignant at them, and his anger was kindled against them. 23 And Simeon and Levi swore and said, As the Lord liveth, the God of the whole earth, by this time tomorrow, there shall not be a remnant left in the whole city.

24 And twenty young men had concealed themselves who were not circumcised, and these young men fought against Simeon and Levi, and Simeon and Levi killed eighteen of them, and two fled from them and escaped to some lime pits that were in the city, and Simeon and Levi sought for them, but could not find them.

25 And Simeon and Levi continued to go about in the city, and they killed all the people of the city at the edge of the sword, and they left none remaining.

26 And there was a great consternation in the midst of the city, and the cry of the people of the city ascended to heaven, and all the women and children cried aloud.

27 And Simeon and Levi slew all the city; they left not a male remaining in the whole city.

28 And they slew Hamor and Shechem his son at the edge of the sword, and they brought away Dinah from the house of Shechem and they went from there.

29 And the sons of Jacob went and returned, and came upon the slain, and spoiled all their property which was in the city and the field. 30 And whilst they were taking the spoil, three hundred men stood up and threw dust at them and struck them with stones, when Simeon turned to them and he slew them all with the edge of the sword, and Simeon turned before Levi, and came into the city.

31 And they took away their sheep and their oxen and their cattle, and also the remainder of the women and little ones, and they led all these away, and they opened a gate and went out and came unto their father Jacob with vigor.

32 And when Jacob saw all that they had done to the city, and saw the spoil that they took from them, Jacob was very angry at them, and Jacob said unto them, What is this that you have done to me? behold I obtained rest amongst the Canaanitish inhabitants of the land, and none of them meddled with me.

33 And now you have done to make me obnoxious to the inhabitants of the land, amongst the Canaanites and the Perizzites, and I am but of a small number, and they will all assemble against me and slay me when they hear of your work with their brethren, and I and my household will be destroyed.

34 And Simeon and Levi and all their brothers with them answered their father Jacob and said unto him, Behold we live in the land, and shall Shechem do this to our sister? why art thou silent at all that Shechem has done? and shall he deal with our sister as with a harlot in the streets?

To let BPL proceed as planned under Part 15—to say nothing of a *lax* Part 15—is to totally wipe out the over-the-air uses of the HF (and low VHF) radio spectrum. It would cause the FCC to be "obnoxious to the inhabitants of the land," and subject to censure by Congress, to say nothing of your place in the history books telling of bygone days when one could hear shortwave broadcasts.

I urge you to proceed in the direction that sound engineering theory and test results show to be in the best public interest rather than by a naive giddiness under the manipulation of a BPL industry out for number one.

Respectfully Submitted,
Earl S. Gosnell III