## BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION


VOLUME 23 .
Pages 2635 through 2683

PROCEEDINGS:
BEFORE:

DATE:
TIN:
LOCATION:

REPORTED BY:

HEARING
CHAIRMAN JULIA A. JOHNSON COMMISSIONER J. TERRY DEASON COMMISSIONER SUSAN F. CLARK COMMISSIONER JOE GARCIA COMMISSIONER E. LEON JACOBS

Thursday, October 15, 1998
Concluded at 6:45 p.m.
Betty Easley Conference Center Box 148 4075 Esplanade Way Tallahassee, Florida

JANE FAUROT, RPR
(APPEARANCES: As heretofore noted.)

## BUREAU OF REPORTING

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## I N DEX <br> WITNESSES

NAMEPAGE NO.
JAMES WELLS
Continued Cross Examination by Mr. Fons ..... 2638
Cross Examination by Mr. Mitchell ..... 2642
Cross Examination by Mr . Cox ..... 2677
Redirect Examination by Mr. Henry ..... 2681NUMBER85

## 86

## 87

88
I.D. ADMTD.

2682

2682
$2676 \quad 2682$
$2677 \quad 2682$

PROCEEDINGS
(Transcript follows in sequences from Volume 22.) JAMES WELLS

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continues his testimony under oath from Volume 22:
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    CONTINUED CROSS EXAMINATION
    BY MR. FONS:
Q Were these contractors contractors that typically do work for telephone companies?

A As far as I know, without knowing the names of the contractors. But given the items that they responded to, one could readily conclude that they do work for phone companies.

Q And could you define for me what you mean by large scale jobs?

A Sure. The criteria of the model is the scorched node concept, therefore you would be rebuilding the entire network. You would get economies of scale. So what you dor't want is somebody is to give you a ccst to set one pole, because it would be higher. You don't want the cost to bury 50 feet of cable; you want the cost .-

Q I didn't ask you what you would not ask for, I asked you what do you -. how do you define a large scale job?

A I'm just trying to describe it. It's where the contractor has enough quantity of work to where they get
economies of scales that they give you lower costs. For instance, the cost from a contractor to bury 5,000 feet of cable is less than the contractor is going to quote you to bury 50 feet of cable. And under a scorched node concept, you are going to be getting the economies of scale. That's why it is very important that for purposes of developing contractor costs that the ILECs not use their master contracts for doing onesies and twosies and small jobs. You want to get to large scale projects, because that's the cost efficiencies that would be obtained from a scorched node concept. And that's what we asked for in this request.

Q Was the contractor that responded with the $\$ 6$ per foot bid, was that for a large scale contract?

A He should have been given the same request as anyone else.

Q And so was the 4.93 , the 4.50 , et cetera, isn't th correct?

A They should have been all given the same request.
Q So they were all bidding on a large scale contract, right?

A Let me be clear. It was not a project, it was not a quote, it was not a real job, it was a request for their cost for doing things. And it was done for the purpose of validation of input values that had already been developed.

Q And the $\$ 6$ quote, or the $\$ 6$ price that was reported by a contractor, that was not for a small job, that was for a large scale job?

A Okay. No disagreement.
Q And the number that you were validatirg, that is set forth on Page 21 of 25 of your direct testimony, isn't it?

A Is there a particular line number?
Q Well, that's what I'm trying to find out. Where on this list on Page 21 of 25 is normal touching and dirt with backfill, rural?

A Look at Line 22.
Q All right. And the number that - the default number that is used in the Hatfield is $\$ 2.89$ ?

A Yes. And the range of Fassett data was the $\$ 1.50$ to $\$ 6$, and the 45 percent says that the default value of 2.89 was 45 percent lower than the lowball number. The whole purpose of this document is to show that we didn't lowball a number, and that 2.89 is a reasonably attainable number.

Q But wouldn't you also agree that 15 of the 21 responses are higher than the default number?

A Oh, I will agree with your math, but the point is this is a least cost model. If you are going to do something on least cost, you are going to get a bunch of
bids and you are going to take what is a reasonable number that is the least cost. You are not going to take the average. You're certainly not going to take the highest one. And all we did was say that -- in this case, 2.89 is a reasonable number, because Dean was able to get five or six quotes here that were less than 2.89.

Q But there were 15 quotes that were above 2.89?
A So what?
Q Well --
A It doesn't mean the 2.89 is not an invalid number; in fact, it validates the number. It says it's a .this is a least cost model. You would take the low bid. All we proved was we didn't always take the lowball bid. We took a reasonable number that could be obtained.

Q Is the $\$ 1.50$ a lowball bid?
A In this case, when you had 21 quotes, and a $\$ 1.50$, which is substantially lower than the second lowest, that wnuld have been a lowball number, and we didn't take it. We took 2.89.

Q There is no 2.89 on this list, is there?
A Because the input value was developed before this data was gathered. All this does is validute that 2.89 is a good number.

Q That's your opinion.
A Yes, it is.

MR. FONS: I have no further questions. CROSS EXAMINATION

BY MR. MITCHELL:
Q Good afternoon, Mr. Wells. Tom Mitchell representing MCI.

A I'm aorry, I didn't catch your name.
Q Tom Mitchell.
A Tom?
Q Yes.
A Thank you.
Q I want to just clarify a few points that have already been made by my colleagues. I promise I won't plow ground over again.

It is my understanding that when you joined the -- or when this outside plant engineering team was formed, that there was already an existing set of inputs into the Hatfield model, is that right?

A The answer is yes, but let me add some clarity to that, aid this is before my time. This model evolved out of something else, okay. So something else existed that had input values. It was pretty quickly realized in the regulatory environment under criticism that there was a lot of room for improvement, and so the need to bring in outside plant expertise was pretty quickly realized, and, therefore, the HAI -- Hatfield Associates went out and brought in Mr.

Donovan as an outside plant expert to work on the model on the input values for outside plant. Mr. Donovan then brought in some additional colleagues, and out of that grew the engineering team of which I am a member. If that puts it in perspective.

Q And Mr. Donovan was a member of the team as far as you understand it, that came up with the original input values, right?

A No, to the best of my knowledge whatever preceded Hatfield, and it's in the model description, it came out of something else. It came out of something else, okay. That there existed a model and there existed input values before Donovan came on the scene. But they were not developed by outside plant experienced people.

Q And my understanding is that you were an employee of AT\&T when you joined the team, right?

A Yea.
Q And has there always been an ATKT employee on the team?

A Not before I joined it.
Q But while you were on the team you were an AT\&T employee, right?

A Up until I took retirement at the end of June.
Q And when was that?
A The end of June.

Q Excuse me?
A I'm sorry. I took retirement at the end of June.
Q End of June this year?
A Yes. The end of June this year, yes. Juna the 30th, 1998.

Q Now, I want to cover something that was discussed with Mr. Wood yesterday. Mr. Wood -- let me ask it this way. Would you agree that it would be inappropriate for you as an outside plant engineer to arrive at a conclusion about an input value and then try to find empirical support for that value after you have already reached your conclusion? A No.

Q You think that is appropriate?
A Well, I think it's appropriate because the engineering team would not have had access to all the data that was needed, so the engineering team would have to come up with the values based on its experience and so forth, which we id. The validation was done to show that the numbers were reascnable.

Now, would it have been more appropriate if we had access to all the ILEC data and could use it in a public forum to develop a model, which I have aigned agreements that we can't do, that would have been more appropriate. That was not reasonably attainable. So what we did was appropriate, and it's the best that could have been done by
the group that we had.
Q But you will agree with me, Mr. Wells, that you could have done the process the other way around, couldn't you?

A No.
Q That is you could have gathered your validation data first, and then based on that data reached a conclusion about the input values?

A Not in the time frames that were required to roll out this model, no. There wasn't enough resources nor time to do what you suggested, nor could we as a group of .well, at that time a group of contractors working for AT\&T and MCI, go to a supplier of copper cable or fiber cable and say, uh, we are working on a model that we are going to use in public forums to testify against BellSouth and GTE and so forth and so on, would you help us by giving us the price data that you would give them so we can have apples-to-apples comparisons? That ain't going to happen. So I agree conceptually that it vould have been more appropriate to do what you are suggesting. What I'm telling you is it was not possible to do because there were no resources to do it, there was no time to do it, and you just can't walk into a vendor and get a BellSouth price. As Mr. Dickerson testified, even Sprint can't get a BellSouth price.

Q So if I understand you right, if you did have sufficient time to gather that kind of data you would have gone about the process differently, is that right?

A Time, resources, and it's not feasible. No independent contractor is going to go into Lucent Technologies and say, by the way, I would like the BellScuth price, because that's what I need to go before the Florida Public Service Commission and input to my model. It's not going to happen.

Now, we can get in this forum and based on the fact that we have nondisclosure, I can see the BellSouth price. I can compare it to what the engineering team came up with, and say, you know, our numbers are reasonable. But to have done that prior to that, it wasn't feasible. Even if we had had the time and resources, you couldn't go into Lucent and get a Bellsouth price. It's not going to happen.

Q Would you agree with me, Mr. Wells, that a reasonable starting point for all of this input analysis would be the current costs that the ILECs are paying for current technology?

A Yes.
Q Now, there has been some discussion about this AT\&T handbook. You mentioned that in developing the input values, you and other members of the team referenced or looked at technical references, do you remamber saying that?

A Yes, that is correct.
Q To what are you referring when you say that?
A I don't know in this particular docket, but we have provided under discovery a list of about 30 or 40 documents that we have looked at. There are a number of them referenced in the inputs portfolio. Examples that have come up today would be the outside plant engineering handbook, the BOC notes on the network, in discussion the other day about labor, RS Means and so forth. So those are the types of documents I'm talking about.

Q Would you agree, then, since you have referred to the ATET handbook in this preliminary work that you did, that it is an authoritative source with respect to the construction of outside plant?

A Only to the extent that it has not been superseded by technology since it was published.

Q And it's my understanding that you and the team are mating these decisions about what parts of the handbook have been superseded, is that fair to say?

A Well, that's fair to say, but I also point out that BCPM modelers know this stuff, too.

Q I didn't ask you about BCPM.
A Well, I'm trying to say is it wasn't just us in a vacuum.

Q My question had nothing to do with BCPM, Mr.

Wells. It had to do with who determines that portions of ATET handbook had been superseded. And it'a my understanding from your testimony that you and members of the team made those decisions, is that right or wrong?

A That is right. And it wasn't just us that did it. Anybody that was doing a least cost most efficient based on currently available technology would look at any reference as a starting point, but would then apply the guidelines for these models and the currently available technology. For instance, if you are trying to get least cost, you wouldn't build the plant exactly like the handbook says for an ILEC to do it.

I will use growth as an example, okay. The old standards would say put in two pair per living unit. It was discussed earlier today. That's in the handbook. I'm telling you that in terms of a least cost most efficient model on current technology you wouldn't do it that way, because you don't need all of that spare capacity out there. In terms of trying to get at the efficient cost - the cost of an efficient carrier, that is the wrong standard to use. But it's in the book. I agree it's in the book.

Q Is it your opinion that in this field of outside plant construction that the carrier serving area standard referenced in the ATGT handbook has been superseded?

A Yes, I've said that several times, and both BCPM
and HAI superseded, but do not violate the standards for local limitations or dB loss.

Q Is it your underatanding that the ILECs have concluded that that carrier serving area standard in the handbook has been superseded?

A Yes, based on the fact that three ILECs are sponsoring BCPM in this docket. If they disagree, why would they be sponsoring BCPM? Because BCPM clearly exceeds the carrier serving area criteria for 9,000 feet on 26-gauge cable and for 12,000 feet limitations. I mean, they put range excensions out there, they've got 11,100 feet of 26-gauge cable. Both of those exceed the standards. I'm not saying it's wrong, because we do, too. I'm just saying we do it by design to be more efficient, they do it as an exception because of the way they put grids together.

Q Now, in developing and in validating $\cdot$ well, let's focus on developing the inputs. Was there any spertic effort made by the engineering team to make the inputs that they were using their judgment to determine, any effort to make them specific to Florida?

A Not the outside plant numbers. As I have said, they are national values and they work within the model to produce Florida-specific outputs. And to the extent that the Commission determines that they should be adjusted, as I said, the first step is to get the right model and then we
will work out the right inputs.
Q Now, we have touched on this validation effort, would you please tell me why there was a validation effort at all?

A Sure. So that we can .- in these types of forums we get a lot of criticism, and if you have nothing, then it's our opinion, the opinion of the engineering team versus $a 11$ the king's horses and all the king's men over here in terms of, in this case, three ILBCs. There are ten people that filed rebuttal testimony, okay.

Now, subsequent to that, where we now have docket after docket, ILEC information that we can compare to and validate against, there is no longer the need to go out and gather information. We don't do it anymore in terms of validation because we can validate against the ILEC data. But early on we didn't have that data. And so the challenge was made, well, it's just your opinion versus the LEC, and, you know, , just didn't -- it was difficult in any state to come in and say, the LECs are all wrong, the folks from New York have got this all figured out and so forth. So we had to get some validation data to show that our nutibers are reasonable.

Q Would it be fair to say that you didn't feel comfortable going to proceedings like this and sponsoring 1400 or so inputs based solely on the engineering judgment of the outside plant engineering team?

A No, that's not cos rect. I felt comfortable, but I have to convince other folks. And my opinion only carries so much weight up against, as I characterize, all the king's horses and all the king's men over there. It is a formidable task. And so the nore that you can show that what we are doing is indeed reasonable, the better case you can present.

Q So you would feel comfortable proposing these input values without having done any validation effort?

A The answer is yes, but I'm more comfortable the more data we have. And particularly when I can compare nowadays with the actual values that the ILECs say they use, and indeed conclude, as I have in my analysis and so forth, that our numbers are indeed reasonable. In fact, in some cases are more reasonable.

Q Now, I read in the Hatfield Inputs Portfolio, a aection in the beginning talking about the difficulty that the engineering team had in getting information from third party vendors. Do you recall that section of the portfolio?

A Yes, it's up front. It's not only the $\cdots$ yes, the difficulty and the need to protect the sources.

Q Now, when you came onto the team, it'a my understanding that prior to that point you had had personal experience as an ATAT employee conting out the cost of
building a local network for AT\&T, am I right about that?
A Yes, you are right, but let me be specific. The networks we were looking at would have been point-to-point or ring fiber connecting businesses, not wire center to subscriber local loop, okay. So, in my assignment with AT\&T at the time we never did sit down and cost out a local loop, a full-blown local loop.

Q Why were you oaly looking at that kind of outside plant construction?

A At that time that was what we would have deployed for market entry.

Q That's how ATaT was planning to get into the local market?

A At that point in time.
Q It wasn't build local service everywhere, it was just these fiber rings as you call them?

A At that point in time -- I'm no longer an employee, and I was never in a policymaking decision, so take chis for what it's worth. But at that point in time the idea was that through unbundled network elements we would be able to serve consumers, if you will. But that for large businesses around the ATET wire center, we could bypass the LECs with fiber.

Q There would be things common to building that kind of network that are common to building the network we
are talking about here today, aren't there?
A Possibly a few.
Q And in the course of your work for ATET, did you solicit and try to estimate costs for things like digging trenches?

A Yes.
Q And did you and the people you work with maintain files and records about information you gathered on this, about this?

A At the time that the organization existed we lid.
Q And so when you joined the outside engineering team for this Hatfield model, did you tell those that you had worked with, that you were working with now as a member of this team that you had this prior experience?

A Yes.
Q And did you tell them there were documents somewhere at AT\&T that reflected the cost estimates that you were generating or had generated in the course of that work?

A I think that would have been common knowledge. I don't remember specifically telling them, but they knew what I had done and they knew that we would have had certain costing information for the types of networks that we were putting together for planning purposes.

Q Did anyone in any of these meetings that Mr. Carver described say, Mr. Wells, why don't we get that kind
of documentary information and let's use it in the course of our work here?

A No, because what they said was, Wells, would you look at what we've got, and based on your experience, would you tell us if this is reasonable or should be changed and so forth. There never was a side-by-side comparison of documents as you have depicted.

Q All right. But based on what you have said, you had this difficulty getting cost information, and yet ATET had this information already in their files, so my question to you is why didn't you, if no one asked you to do it, why didn't you go down and ask AT\&T for thise files about this cost information?

A Well, first of all, the characterization that we had extensive files and multiple vendor bids and this, that and the other is not correct. We were looking at a limited number of projects in a couple of cities, and we had some higr sevel costing information for budgetar" planning and proposal purposes. What I had was probably not near as good as what John Donovan and Joe Riolo (phonetic) and Joe Fassett had, because they had recently retired from NYNEX, and they had much better cost data than I did. So all I was was one additional sanity check, if you will. But the idea that I had this wealth of documentery information and could do a side-by-side comparison is not an accurate depiction at
all of what happened.
Q Do those documents exist today, Mr. Wells?
A No. That organization was shut down and all the documents were deatroyed.

Q When were they dentroyed?
A Well, it would have been around June of '97. I think there is an affidavit on that. It's somewhere around there.

Q All right. This validation effort that Mr. Fassett, as I understand from your testimony, took the lead on, you described these letters that he sent out. Prior to turning Mr. Fassett loose, was there any discussion among the team members about a procedure or process he should follow with respect to, you know, whatever vendors he should contact, where they are located, things like that?

A I would surmise yes. I was not a member of the team at the time, but looking at the Fassett documents and seeing the letters he wrote and so forth, there was, I would say, a consensus of Dean, go contact, we need curtain information from contractors, and whatever you can get. And get it on a large scale project approach. But that would be the extent of the formality of $i t$. Dean then went and $\cdots$ we turned Dean, they turned Dean loose, to use your characterization.

Q Now, you were describing the information and
quotes reflected in these charts in JWW-3 a few minutes ago. Did I hear you say that it is your understanding that every quote in these charts reflects information on some kind of a letter or survey that these vendors sent back?

A That's my understanding without having gone through and spent the days that it would take to correlate every one of these. But if you go to the Fassett documents, and this being an example of one, and this one is Concractor $p$, it's a random. And then within here you have a number of quotes, and that if you then go to this chart for these types of costs you will see an entry with a P beside it. That's what this reflects, okay. These are the source documents. This is a spreadsheet that summarizes these, and then back on I think it was Page 21, is a selection of 30 of those to prove another point. So that's how all the data ties together.

Q And the letter that you held up, is that what contains the communication from Mr. Fassett to the vendor?
d. Actually this is the response from the vendor. This particular one doesn't seem to have the letter that went out. I have seen a letter. I have seen a copy of it, but I would have to search through this pile to see if there is one in there.

Q Is it important to the information that you got back that each of these contractors was told it was a large
scale job, as you call it?
A Sure. Because if you are going to have a least cost model based on a scorched node approach where you are replacing the entire network, you don't want a price for putting in one NID, you want a price for putting in hundreds of NIDs. You want a price that reflects the economy of scale.

Q All right. So if we were to go through all of this backup documentation and not find letters to some of these vendors on this chart, we don't know that they were told that it was a large scale job, do we?

A Okay.
Q Would you agree with me then that the values represented on these charts from these vendors, that we don't know what they were told, could be disregarded for this analysis?

A No, absolutely not. Because if - let's put this in per"nective.

Q Well --
A No, no, please let me answer the question. If they didn't bid on a large scale, then they would have bid higher, right? They would have bid higher.

Q That's the assumption you make?
A Trust me. On economies of scale, you put in 1,000 poles, the cost per pole is less than if you put in
five poles, okay? Accept that, if you would. Now, it they had bid on five poles, they gave us a higher number. If that number then validated our pole cost, then that's even further evidence that our numbers are reasonable. So the answer to your question was no, for those reasons, even though I can't go and show you the cover letter.

Q Now, when Mr. Fassett first started this validation effort, isn't it true that it was the purpose of the validation effort to collect quotes that would then be averaged to come up with validating input data?

A Absolutely incorrect. There are no averages in here. The numbers were derived by the engineering team, this is simply to show that the numberg are reasonable.

Q Mr. Wells, that's not what I asked.
A I'm sorry. You used the term average, didn't you?

Q I asked in the beginning .-
A I'm sorry.
-- wasn't the purpose of the validation effort to obtain average values?

A And my answer is no. The purpose of the validation was to obtain a number of quotes -. or not quotes, but whatever you call these, but to obtain a number of them to show a range and to show that the values that has been derived by the engineering tean fell within that range,
and for the most part would fall towards the least cost end of that range. There was no averaging at all done here. In fact, if you are using average values you are not using a least cost model.

Q Okay. Mr. Wells, I don't know whether you have Doctor Tardiff's testimony in front of you, but I know you have been shown this document before, so I will presume you have it.

A Bear with me, I may.
Q Great.
A I have a copy.
Q If you look at Exhibit 9.
A I just seem to have Exhibit 2 for some reason.
Q Well, before I get into that exhibit, let me ask you this. Mr. Wells, in this proceeding it's not the first time you have seen all this Fassett charts and Fassett data, is it?

A That's correct.
Q You have been looking at this stuff for the past several months, haven't you?

A I believe the first extensive review was associated with the North Carolina docket. The first time I saw the information was in a deposition the end of January of this year.

Q Right, January. And so since January you have
had these Fassett documents, you have had the ability to get behind them, so to speak, but you already testified here, I think, that you just haven't done that yet, have you?

A I think what I testified was I haven't done it. It's not a question of just having done it, it's a question of why would I do it. And to give you an example, I drove a couple of thousand miles in Georgia to do a validation study. Would you expect Dean Fassett to go out and drive the same amount of mileage and verify that what I did was okay? It's not reasonable for me to spend my time double checking in great detail what Dean did.

Q Well, I mentioned Exhibit 9 to Doctor Tardiff's testimony a few minutes ago. You were aware, I think it's a printout of an E-mail in January of 1997 from Dean Fassett to Mr. Donovan, and let me read the first sentence of it. You can tell me, I think, based on that whether you are familiar with it. It says, "John, when I initially contacted the contractors for cost estimates, I explained that t.e purpose was to obtain an average cos': of constructing local loop facilities to provide dial tone." Based on my reading that, do you recall this document?

A Could I see that, please?
Q Sure.
A Could you direct me to a specific paragraph? Mr. Mitchell, could you direct me to a specific paragraph? This
is a copy of a fax or something.
Q That is my only copy, but I just read the ..
A Oh, it's the first sentence, okay.
Q Do you see there that Mr. Fassett talks about the purpose of the collection of data is to obtain an average cost of building a local loop? Is it fair to assume based on that, that that is what he was doing in this validation effort, at least in January 1997?

A The letter uses the word average, and it may be that in going to the contractors he used the word average so as to get their average cost. But in terms of how the data was used for the purpose of validating that our numbers are reasonable, there definitely is not an average. You will see no average. And for the reasons I have explained, it is a least cost model.

You look at the range and you look at particularly how many bids are .- how many quotes are lower than wh.at we used. We went back to the previous example of 2.89 for the plant. We had five quotes lower than that. So that's how the data was used. The fact that back in January of '97 that Dean used the word average in an E-mail to John is for what it's worth.

Q That's my point. Now, you are aware that in the early worksheets of the Hatfield model, and specifically those that pertain to Version 3.1 , there are these bar
charts, I think, are in the current HIPs, with calculations of average values based on the information gathered by Mr . Fassett, are you not?

A Could you show me an example. Or just tell me, I've got the HIP, would you just give me an example?

Q I seem to have not brought it. Is it your recollection that averages weren't computed in the bar charts attached to the Hatfield model Version 3.1?

A You say were?
Q Were not?
A They should not. To the best of my recollection they were not, and certainly in 5.0 they are not, because the average is not relevant. What you are looking at is the range, and in particular if the issue is is it least cost, you are looking at the bottom end of the scale. And the point is is our value within the range, and where does it compare to the bottom of the range. That's the purpose of this.

Q I won't do the math with you, Mr. Fassett (sic), but you wouldn't dispute that if you calculated averages from all of these values in your charts, most of them are higher than the Hatfield model default values?

A I would certainly hope so, because in a least cost model if we were using the average we would not be doing what the guidelines of the model said. So, I'm glad
to hear that they are less than the average, because they should be.

Q I would like to talk to you about poles for a few minutes, Mr. Fassett -- excuse me, Mr. Wells. You reference for a couple of pages FCC data relating to poles as validating the inputs in the Hatfield model, right?

A They serve a couple of purposes. In the direct testimony, though, I'm focusing on the HAI input values, and so the purpose there is to demonstrate that the number that we used, the 417 is indeed a reasonable number based on the FCC data because it varies from much less than that to considerably more than that.

I also used a reference to it in the rebuttal testimony to illustrate also a second point, and that is when you go ask the ILEC what the cost is, don't expect that there is an absolute number that is going to come back, and they have this knowledge that says it is this. Because it varies all over. And I think the evidence shows that, and some of the testimony here today shows that there is no single ILEC number because they don't have it, or they can't figure it out. And this just demonstrates that the ILECs don't have superior knowledge in all of these areas.

Q Now, you are aware before you prepared your testimony in this case that the information that GTE provided in response to the FCC request excluded a number of
items from their responses with respect to material costs and labor costs installing a pole, were you not?

A From reading Mr. Tucek's rebuttal, I certainly was made aware of that.

Q Well, you had seen his testimony to that effect in other states, had you not?

A Yes, I am aware of that, but as I said there are multiple purposes here, and there is also the issue of scale. And as I think came out earlier today, they reported to the FCC somewhere in the neighborhood of 400 -odd, and then they are saying that the right irput value back to the FCC was \$400-something, and - wait a second. Let me be precise, if I may.

Okay. I'm referencing Exhibit JWW-2 to my direct. GTE filed with the FCC, $\$ 134$ material and $\$ 306.04$ labor, for a total of $\$ 440.04$. Now, in this particular docket, based on my analysis, they filed a value of 801.11, okay, which is considerably more. Now, if the only difference is miscellaneous material for the pole, and freight, or even engineering, or whatever, it will not explain the $\$ 300$ difference at all. It won't come close to it.

And the other point is that, you know, for this docket Bellsouth, for comparison purposes, filed with the FCC $\$ 410.46$; Sprint filed 270. Now, those are all
apples-to-apples comparisons. They all got the same reguest and they all filed information on the same request. So disregarding the HAI input, that comparison alone would lead one to some conclusions that if they told the FCC that their cost in Florida was this, and then BellSouth filed elightly less, 406.77 , Sprint filed considerably more, but still only 596.14, GTE is still up around 800, or David says 758 or something, whatever that number is, we would have to reconcile that, but the point is they are considerably above what everybody else says.

And the point is that, first of all, our 417 appears to be a reasonable number based on the data that is available. And, secondly, GTE's number appears to be quite high. And there is no explanation, no attempt to explain it other than that's what the GTE engineer says.

Q You mentioned this 417 figure that the Hatfield model uses. Is it your testimony here today on behalf of the outside engineering team that the 417 was the result of engiv aring judgment only?

A Yes.
Q And the inputa portfolio says the 417 is made up of pole cost, material cost of 201 and labor cost of 216 ?

A Correct.
Q Now, if Mr. Donovan, the leader of the outaide plant engineering team, testified under oath in Washington
that the 417 value was derived by averaging vendor quotes that the team received, would he be in error?

A That is inconsistent with try understanding.
Q Okay. So he has a different understanding than you do as to how the 417 was arrived?

A Yes. And I would also say that Mr. Donovan would have better firsthand knowledge than I would on that.

Q So he might be right about it coming from an average and you might be wrong?

A If there is an inconsistency, then Kr . Donovan you should .- he would be more right. I'm telling you what I understand. Now, as has been established earlier, these were determined prior to my joining the team, so I was not present when it was done. So I have not .- I have not told you anything differently than what I knew, but my understanding was that that number was developed on their experience and knowledge and --

Q Okay. Whether he is right or $\cdot$
? It may have been an average of their experience and knowledge, as opposed .- did it say quoces? Is that what hin testimony says, quotes?

Q Well, let me move on, Mr. Wells.
A Well, I want to know; does it say quotes?
Q Well, it says an average.
A I'll read the transcript.

Q It says an average, yes, Mr. Wells.
A I will read the transcript.
Q Let's move on to the 417. Do you deny that the 417 was arrived at by pulling a $\$ 201$ quote from one vendor and a $\$ 216$ labor quote from another vendor and adding them together to get 417?

A As I have testified --
Q Do you deny that or is that .-
A You asked me do I know that that is true?
Q I asked you whether you deny that, that that is how the 417 was arrived at?

A Since I was not there when it was done, and since my understanding of how it was done was different, I don't know how I could deny it. And now you raise a question of whether I can confirm it, so I guess the truthful answer is I don't know.

Q Would it have been proper to get the .- to arrive at the value that way?

A $\quad y$ what?
Q By pulling a material quote of 201 from one vendor response, and a $\$ 216$ labor quote from another vendor and adding them together?

A My answer would be, yes, because when I was a member -- when I was part of BellSouth, or South Central Bell at the time, and when I was a representative to

BellSouth, the process was that - and I $^{\text {I know of no reeson }}$ why it would change - BellSouth bids poles as a material item on large scale contracts. They don't go to a vendor and say give me a combined price for a pole and to set it. Contractors who set poles generally don't procure poles to South Central or BellSouth's specifications in large quantities. So the efficient thing for any ILEC to do is to set its standards for its poles and go out and negotiate for all the poles that it is going to use in a geographic area, have those poles shipped to a pole yard, and then have a contractor who does the labor go and get the pole and set it. So, my answer would be that in a most efficient manner you would bid poles saparately than you would bid the labor to set the pole. And I would be surprised if the ILEC is not doing that.

Q So, that would be a reasonable way to go about costing out outside plant items?

A It would be reasonable because that should be the least cost practice is to bid ..

Q I'm sorry.
A That would be -- now I've lost the question.
Q Now, if it's okay to pull the $\$ 201$ material .excuse me, $\$ 216$ laboz quote from a vendor .- strike that. Let's talk for a few minutes about trenching costs, Mr. Wells. It is my understanding that the Hatfield model has
these surface texture multipliers in the model, is that right?

A Yes.
Q And the purpose of those is what?
A The U.S. Geological Survey provides surface texture characterizations by census block group. There are certain surface textures that could cause higher cost for trenching, either for buried cable or conduit. And so to the extent that that information is available, we then have a multiplier that would increase the cost if the surface texture was a higher cost. It's trying to be more realistic. And also, as I said earlier, it's a way that we take a national default value and get Florida-specific outputs, because we look at the surface texture by census block group in Florida, and to the extent that it is a higher cost surface, the model takes care of it.

Q Okay. You are aware that at some point during the early work of the outside plant engineering team, Mr. Donovan, the leader of the team, asked Mr. Fassett to make some values up for these surface texture multipliers, are you not?

A I have .- yes, I have seen a copy of that E-mail. The understanding, and I have talked to them, is that it was In the process of developing these as an addition to a release of the model, probably 3, based on the time frame.

And so you develop a methodology and the code to do that, and now you have this table of values, and so for purposes of, if you will, testing the model, we needed inputs. And so John is telling Dean we need some inputs, give us some inputs to start the process here.

Q The words he used was make some up?
A Okay. I don't disagree with that. All I'm trying to put it is in the context that you've got to have something to start with, and as I also described the consensus process is that those, quote, make up numbers, unquote, would later on have to reach consensus of the team before they became the values that we adopted. So it's just part of the - you know, any model deve? opment, you start out with test data. So, yes, you make it up. When you develop a model you make up some test data.

Q And the memo talks about making them up and changing them later, if need be. Do you recall that?

A I think that's a ... when you develop a model, you start out with something, you know, an algoritim, formulas, you've yot to have some data to run into it. When you start out you make that up. Later on you then come back, given the time and so forth, and getting the team together, and .what was the quote, make changes? That's the process.

Q Okay. For the record, this memo is Exhibit 10 to Doctor Tardiff's Exhibit 2, and it has a chart on there
attached. Mr. Wells, if you looked at this chart that is attached to the E-mail that we have been talking about, it reflects the made up values by Mr. Fassett for the multipliers. If you compare that to the values that are in the Hatfield model, do you know whether any of them have changed?

A No, I have not reviewed the 300 -odd pages of Mr . Tardiff's filing, so I don't know.

Q No, I'm talking about if you compare this memo that has these made up values from Mr. Fassett to the values in the Hatfield model, do you know whether any of them have been changed since he made them up?

A Do I know?
Q Yes.
A No, I don't know.
Q You have never checked that?
A Checked it against what?
Q What is in the Hatfield model?
A I mean .- well, first of all, would I have had the original, and I think not. I was not part of the team when the original numbers were developed, so .-

Q I'm talking about .-
A So, when I came on we were getting ready to roll out 3. What I would have seen would have been part of the process. I have a vague recollection of the team sitting
around and going through the values and making minor adjustments, but I can't cite a change. It seems if you have got the original list and we now have the current list, we could eatablish that fact. But I can't sit here and credibly aay yes, and then point out an example.

Q I want to talk about structure sharing for a few minutes and a related concept is this scorched node that we have already talked about a little bit. But it's my understanding that in a scorched node environment you don't assume that any existing houses are scorched, do you?

A You do not. The scorched node concept is that all of the wire center locations remain the same and all the customer locations remain the same.

Q And you don't assume that any existing utility plant is scorched, is that right?

A Only the telecommunications utilities. You do not assume that the power company and the cable TV company and all of that is scorched.

Q So if the power company has lines on a pole, you don't assume that that pole is gone, do you?

A No. What the model does is assume that you can achieve sharing of the poles. And the ILEC input data reflects that currently they achieve a significant amount of pole sharing.

Q With the power company?

A It has got to be just about all power company. I'm not saying somebody else couldn't set a pole, but for the most part I think there are agreements, and the reality is the power company always goes in and sets the poles first.

Q Right. The power company has a line on an existing pole, and you assume that they want to hang a power line on another pole, right?

A Say that again.
Q I thought we alread covered the fact that the existing poles having power lines on them are not scorched, right?

A The power company is not sccrched, that's correct. And what we are saying is that if a new telecommunications company went out there in a scorched node environment, that their pole coit would be about half or in some cases 25 percent of what we model of what it would be if they had to set all the poles themselves, because the powe company has got a bunch of poles out there, and the ILEC input data says indeed they do, and indeed they attach to them.

Q Let me cover just one last area with you, Mr. Wells. Let's talk about plant mix. I am correct, aren't I, that in the two highest density zones, the Hatfield model assumes that for distribution plant, for aerial distribution
plant there are no poles, is that right?
A That is correct.
Q Is it fair to assume that in the second highest density zone, that is between 5,000 and 10,000 lines per square mile, there could be areas that have single-family homes?

A Okay.
Q And in those areas you are modeling aerial distribution plant with no poles?

A Yes, that's correct. The assumption we have made is in the two highest density zones thet a lot of the cable will be inside of or attached to buildings.

Q To the houses?
A No, to buildings. You generally don't attach to a house.

Q
Well, there could be -- I thought we just covered the fact that there could be houses in the second highest denaity zor?

A And I'm agreeing with you, I'm just trying to physically describe what happens.

Q I'm just trying to understand how we get this wire to and from the houses if there are no poles?

A And I will try to explain. The assumption, the modeling assumption that we have made is in the two highest density zones that most of the cable, particularly in the
highest density zone, would be inside of or attached to buildings, okay. Now, I will accept your exception that, yes, you are going to find some single-unit dwellings or single businesses that would be served off of aerial cable with drops, that's how you get there, okay.

Now, on the assumption that most of the cable is inside of or attached to buildings, how do you model it? What we have done is we have said that for modeling purposes that you would not put a pole inside of the building. Nor would you put buried cable inside of these buildings, because if you put buried cable you incur the cost of a trench. So you are not going to put a trench inside the building. If you say, well, we will call it underground cable, well, then you've got the conduit and the manholes, and that's not appropriate.

So what we have done is going back to the FCC accounts, which classifies cable that is inside of or attached to building as, quote, aerial cable. It's field reporting code 12 C . We have adopted that, and said that for purfuses of costing the structure in those density zones, that the cost associated with the cable, which includes the material and installation, is sufficient in and of itself. And that to model additional structure costs, such as poles, or conduit, or trenches, when most of the cable is inside of or attached to the building would overcost the model.

So, if you are trying to say would there ever be a need for a pole in those density zones, I would have to agree. If you had to make a choice between putting poles in and not putting poles in, I would say that if you put poles in, which the BCPM does, then you've got a lot of poles inside of a lot of buildings, and you've got a lot of cost that shouldn't be there.

So, we are probably .- going back to Mr. Carver's analogy, we are probably a little bit wrong on the low side, and BCPM is probably a big wrong on the high side in regard to poles in buildings.

MR. MITCHELL: Thank you. That's all I have. CHAIRMAN JOHNSON: Staff.

MR. CoX: Good evening, Mr. Wells. I really just have one question for you. But before I start, Chairman Johnson, I have two exhibits I would like to have marked as exhibits at this time. The first is one that has been discussed through the various company counsel here, the Fasse tocuments, which is ATaT's supplemental response to staff's Second Request for Production of Documents Number 3 , and that would be a confidential exhibit. And we do have copies of that if the Commissioners would like to see it. The short title would be Fassett documents.

Chairman johnson: We will mark that as 87 . (Exhibit 87 marked for identification).

MR. COX: The second exhibit is identified as JWW-7, and that was the deposition transcript and Late-filed Deposition Exhibits 1 through 3 of Mr. Wells. I do have one question for MCI Counsel. Has Late-filed Exhibit Number 2 been provided at this time?

MR. MELSON: No, it has not. We are still in the process of getting that.

MR. COX: Okay. I guess we might need an
additional exhibit for that late-filed exhibit, so this exhibit would contain -- this is Number 88 -- it would contain the deposition transcript and Late-filed Deposition Exhibits 1 and 3.

CHAIRMAN JOHNSON: Uh-huh.
MR. Cox: And then I would need another exhibit marked for identification, and that would be the Late-filed Deposition Exhibit Number 2 to Mr. Wells' deposition.

CHAIRMAN JOHNSON: Okay.
MR. Cox: And that's all I have for the exhibits.
(Exhibit 88 marked for identification.) Cross examination BY MR. cox:

Q Mr. Wells, I believe earlier in your discussion with GTE's counsel you discussed something that you also discuss in your rebuttal testimony, and in your rebuttal testimony you recomended that the BCPM 3.1 input values for
distribution per residential housing unit for the ILECs should be reduced to 1.5 ?

A Okay.
Q And I believe in this proceeding the ILECs have recommended two or $2-1 / 2$ pairs per housing unit. Is that your understanding?

A Yes.
Q And earlier in your discussion, you said that it should be reduced to 1.5 , and I thought I heard you say because of inefficiency, is that correct?

A What I basically said is that they have modeled an exorbitant amount of spare capacity in the distribution and so that it would be an inefficiency, yes.

Q And what is the basis of your conclusion that they have modeled this exorbitant amount of unused facility?

A Okay. First of all, in my understanding, and the economists would have to address this, these models should not be providing for any signiricant amounts of growth. So all of these arguments about second line growth is going to come and you've got to have all of this capacity out there, I think from a standpoint of developing the cost for this model, that is not a valid argument. But I'm not the expert, somebody else will have to address that.

But to start off with, do you model for the ultimate capacity for ultimate growth, and my answer is no,
you don't do that. So that's a starting point. The seccnd is that we do model spare capacity in the cable through the process of our fill factors. And in distribution, as I use the example, when you take our fill factors and run them down to utilization, and there is a difference there, we come out with about - and I will use a round number -. 60 percent utilization of the distribution plant. So, for every 60 Iines, we have got 40 spare pairs.

Now, in my opinion, that's more than sufficient to handle any administrative, defective, churn, and even some growth, okay. Now, on the other hand, the ILECs would tell you that historically they have used 40 percent distribution and, therefore, that's what they should model here. So, in other words, for every 40 customers they have got 60 spare pairs. Which, in my opinion, is far in excess of any cost basis that there should be for developing a universal service fund. What, in essence, they are saying is current ratepayers and CLECs should fund the spare capacity for future growth. And I don't th'nk that's correct. But I'm not the economist in this proceeding. We model two pair drops aerial, three pair drops buried. We model NIDs that will handle additional station protectors. The scare tactic that has been used about digging up the lawn, the sidewalk, the street, and the shrubs, and I forget the rest of the list, is a scare
tactic. We've got plenty of capacity in ours.
And, furthermore, the last point is that there is currently available technology called two channel digital subscriber carrier that is described quite extensively in GTE's documents, and I'm referring specifically to PAR 074. And just to give you an example of how this technology can be used, in reference to .- this is Bates stamped 0000052 , it says that when two channel digital subscriber carrier is utilized, a typical feeder relief trigger for qualifying facility area cross connects should routinely range between 105 percent to 110 percent of the assigned cable count. So the point is that not that you should deploy this as an initial deployment, but if you run into a situation where you've got growth, this technology will allow you to actually exceed 100 percent utilization of the copper pairs using this technology. Therefore, my contention is that there is no justification for them continuing to have 40 percent utilization in the distribution plant or 60 percent spare capacity. It's gold plating the network, and it's asking CLECs and subscribers to pay for their ability at very, very little incremental cost to add additional customers. Not that that is not a good business practice, it's just not appropriate for a cost proxy model.

Q Now, if the Commission were to choose the two or

2-1/2 pairs per housing unit, would that increase the overall cost of basic service?

A Yes, because traditionally they have modeled two pair per living unit. So if you go to $2-1 / 2$, you are going to have even more larger cables and more spare capacity.

Q What kind of impact is that? Do you have any quantification of the impact?

A I don't run the models, so I can't answer that. MR. COX: Thank you, Mr. Wells.

WITNESS WELLS: Sure.
CHAIRMAN JOHNSON: I think we are prepared for
redirect. How much will you have?
MR. HENRY: One question.
CHAIRMAN JOHNSON: Okay.
REDIRECT EXAMINATION
BY MR. HENRY:
Q Mr. Wells, Mr. Mitchell was - I think it was rig* when he started his conversation with you, he asked you whether you agreed that it was appropriate to use the current costs of the ILECs in these models and you agreed?

A As a starting point.
Q Okay.
A As a starting point.
Q So are you talking about the current books of account of the ILECs?

A My understanding of his question was current costs for current technology, and that's how I answered the question. As a starting point. In other words, if you can look at what they pay for copper cable tiday, that is a good starting point. I'm not disputing that. I wish we had that data and could use it publicly.

But you've got to apply the criteria to their other costs, and I will use a contractor cost as an example. Don't use a cost for setting, you know, one to five poles. Use a cost for setting, say, 100 poles where you get the economies of scale. It has to be, you know -. I'll just stop there.

MR. HENRY: Madam Chairman, I think I just have some exhibits to move.

CHAIRMAN JOHNSON: Okay.
MR. HENRY; I would move Composite Exhibita Number 85 and 86.

CHAIRMAN JOHNSON: Show those admitted without objection.
(Composite Exhibits 85 and 86 received into evidence.)

MR. COX: Staff moves Exhibits 87 and 88.
CHAIRMAN JOHNSON: Show those admitted without objection.
(Exhibits 87 and 88 received into evidence.)

5 24.) excused. We are going to go ahead and adjourn for this evening, and reconvene tomorrow at 9:00.
(Transcript continues in sequence with Volume



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above［1］2541：7；2565：0
abselvte［リ］2es3：18
abeolutaly［2］2057：17；2064：11
accept［玵 2550：1；2075 5
accese［2］2544：15， 21
account［1］2631．25
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alone［1］2065：3
alroady［1］2635：26；2542：12，18；
2644：11；2634：10；20602；2072：3；
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argument［1］2870：22
arguments［1］2e78：10
around［4］26453；2882－22；265558，7；
2505：7；2472：1
errive［2］2044：3；2067：17
arrived［ग］2500．5，2067；4， 11 ask［7 203421；2644．7；25C7 22；
2034：12；2050：14；2063：15
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2050：14，17；2097：3，10；2503：10；

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2050：2；2016：1k，2051：5．2，10，15， 12, 14，21；2042：2，12，24；2043：1；2006．2．

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hasis［2］2c7e：14；2076：15
batee［1］2600：7
bcpen［10］2ec7：21，22，25，2648：25；
 bear［1］2859：8
became［1］2070：12
because［20］203tits 2t9etc 2641：5， 2t；2544：14；2045：31；2640：77 2406：1t；2003：3，12，18；2850：15；
2054：2，21；26572， $77,2682: 12,21 ;$ 2063：1，11，17，20；2007 as 2065：15； 2000：14；2672：18；2578：11；2076：15； 2541.2
been［3才］2892：14，13，24；2641：15； 2802：12；2542：t5；284420，22，25； 2045：1t；254022；2507it5，15；2648：2， 24；2448：5；26tas；2853：19；265854； $2054.25 ; 2050: 7,18 ; 2006: 12,18$ $2087: 17 ; 267 t 2,12,24 ; 2678: 17$ 2世77条2＊7023
before［12］2035ct，14；204121；
26C2：18；2se3：12，20；2546：7；2500：7， 14；205323；2670：12；2076：18 beginning［2］2051iftic 2t5E－17
bahalf［1］206s：17
behind［1］2000：2
boling ty $2050: 8$
bellove［ग 2650．21；2077 22；2076：4 bell［1］2067 25
bellsouth［11］2645：15，23，25；204t：18， 11，18；264 24；2608：5；2647．24； 256e：1， 2
bellsouth＇s［1］2ees：4
beelde［y］acsert1

better［7］2651：7）265422；2060．7
betty［1］2035：70
between［3］2874：4；2570：3；2600：10
Id［11］2030：13；2641：12，12，15；
$2657: 21,22 ; 265 a 2 ; 2605: 12,14,19$
bidding［t］2030：19
bide［17 2641：t；2054：15；2041：17？
20852
big［1］ 2076.10

block［13 2005：4， 15
bec［1］2ectia
book［2 284821
books［1］2591：24
boer masetaty 2065．12
bothom［0］26ezis， 17
bex［1］2ass：t0
bring［1］20ez：23
brought［y］asea：36；2649i9；2082：4 budgetury［1］2834：10
build［2］2046：15：2082：15
bullding 所 $2053: 1,24,25$ 2001：t；
$25783,12,18,25$
bulidinge in 2874：12，14：287：32， 7 ， 15：2474： 11
bunch［2 $2040 \times 5$ 2072：10 buried $19120503: 2875: 10,14 ; 2072 \cdot 22$ bury［ग］20se：20；2530：2， 4 buslnese โ1］25seas bupleeveve［3］20s3）4，23；2075：4 bypess［才］2053：23
－C
e ！ 10283 s ：
eabie［2］2830．20；2630：2，4；2546：73； 2060：10，12：2060：1，2072：17；2074：15， $25 ; 2 \pi 764,8,12,11,14,17,18,21$ ， $24 ; 26722 ; 2090: 11 ; 20524$ cathes［1］2etis calculated［I］2532：20
calculatione［1］20e2：1
call（4）20ta：1t；28977；2850．23；
257513
called［7］ 26893
came［1］2543：7，10，11，13；2506－12； 2001：25；205e：＊ 2571 ：23
cen＇l［3］2444a3；234523，24；2585： 25032nt 2672．2，4；20015
eaptoly fof 2pen：13；2076：12，20，25 2072．2，1tc 2005ri，15；2601：s cars［7］2562：15
carollina［1］2050．22 evrier［5］25en：20，23；2542：4，\％i 200054， 8
camles［1］ $2451: 3$
carver［1］2essas
carver＇s［才］2t7e
case［5］2541；4，10；2050：3；26517？ $2035: 24$
cases［2］2851：15；2572：17
eatch［1］2eazs
cauee［1］2evas
cenews 所 ateen， 14 center［1］2s3stec 2452：4，22；2072：1 central［2］ 209724 2000：0 evrtain［ม 2053．21；2055：13．2006c 7 eertainly［4］254t：2；2062：12，25； 20343
cetera［1］ $2539-10$ ehalman［13j 2635：14：207e：t3， 18 ， 24：2677it3，17；2231：14，14：2302：12， 15，18，22；2021：1 ehallange［1］ $2050: 16$
change［17 2003：2：2072－2
changed［3］2054：5；2571t8． 12
changes［1］ $2650: 23$
changing［1］2070：17
channel［ 2 2000：2， 0
charsctiertastion［13 2054：14：2555：34
charsctertantions［1］2000：0
charecterte［1］ 2051 s4
ehart［4］2050：10；2057 it0；2070：25； $2071: 1$
charte［7 2050：1，2；2057：14；2058：10；
$2062: 1,5,21$
sheck［1］2054：23
checked［2］ 267 t：14，17
shecking［1］ $2030: 11$
eholce［1］ 26709
choope［7］2ese．2s
chum［1］2876：10
clle［1］ $3072: 2$
cilles［1］2054：17
clarlfy［1］25e：$: 11$
clarty［1］2502：18
cherk［1］2095：15
claselfes［1］2078：47
clear［1］2031 a1
clearly［1］2045．8
clece［ग］2\＄7p：18；2300．20
close［1］2eesal
code 球2076：1；2078：18
celbagove［2］28cz：12；2843／3
colfect［1］2053：9
cellection［1］2004：5
cemblned［1］200a：4
come［｜F 2044：15；204777；2460：15；
2tge：t0；2083：16；25e4：21；2070：24；
2075：20；2873：4
cemfortable $[4]$ 2tse．24；2651：2， 0,11 coming［1］2ate：
commisaion［4］2535：5；2040：3； $2405: 24 ; 200035$
cemmbetioner［4］2435：14，15， 14 comnslealoners［1］2876：22 commen［3］2062：24，2k，2ts3：10 cemmuntcaten［リ］256e：18 componites［2］2530：3， 12 company［t1］2s72：17，10，25；2573：1， 4，8，12，15，10；2e76：18 esmpers f01 2404：12；2490：12； 2651：12；2062：17；207154， 8 comperion［4］2534：4，24，208424； 20069

compontle［र］26ez：1e，20 compuled［］］2sea：7
cencept fol 2030：1t，20354，11；

## 28727， 11

coeseptually［1］2345：10
conclude D2 $^{2634: 15: 265: 54}$ ceecluded 12 2535：15；2543：4 eonclualon［ff 2444．4，12；2645：4；

## $2875: 14$

## conclusiens［1］2008：4

condult［3］2500 A；2076：14， 24 cenference［1］2691：5t cenfidental［1］257e：31
conflim［1］2067：is
connecting $172582 ; 4$
cennects［1］2000：10
consensus［3 2058：1tc 2870：10， 11
conalderably［9］2043：12；2006：15；
20e5：4， 0
constructing［1］ 2080.20
conatruction［3］2047：14；2845：23；
$2482: 9$
ceneumers［1］2852：21
concect［1］2555：15， 15
contacted［才］2500：14
contain［2］ 2017710,11
contains［1］2585：18
contention［1］2000：17
contest［1］2470：A
contlinued［27 2630：5；2835：5
conimane［2］2438：4；2853．4
continuing $\{1] 2800: 18$
centract（ 12 2 2538：13， 20
contractor ftel 263025 26302，2，7， 12；2500：2；2640：5；2050：t；256e：11； 2582：3
centraction［1］2628：7， $10 ; 2645: 12 ;$
2058：20；2058：25；2060：13；2001：10；
2003：5
contracta $[21263013 ; 2065: 3$
comversatlon［1］26t1：18
comince［1］285T：a
soples［1］2s7eaz
eopper［1］2045：15；2000：10；2082．4


## $280 \vee 12$

correct［t2］2esart7；2567； $1 ; 25151$ ； 2594：15；2050：15；2505．22；2673：14， 22；2574：2，10；2078：10；2870：20 correlete［7］2650s
cost［50］2035：5；2035： $14,18,20$ ；
$2430: 2,8,22 ; 2600.24,25 ; 20412,12 ;$ 2568：5，11，16，15；2051：25；2852：1；
$2053: 17 ;$ 2054：8，13，27；2457：2，25；
$2559: 2 ; 2509: 1,4 ; 2060 \cdot 15,16,2501: 4$,
11，15；2052：14，24；2043：1＊2065：5，
$22 ; 2008: 16 ; 20007,10,11,16$ ；
2073：16；2076：t1，26；287e：4；
28T5：21；2876：1t；2500．22，23；
2001管，2062：4， 0,10
couting［5］2051．25 2053：22；2034：18；
2805：17； 287520
conta［tz］2635：1， $7 ; 2046: 15,24534 ;$ 2056：11；2064：1；2468：24；2075：23； 203120；2632：2， 1
could［2］2s3s：1t，12：2041：14； $264421,25,25452,4,11,2452 \cdot 22 ;$ 2454．24；2057．18；2000．22，24，25 26ez；4；2087 i4：2600．7；2872：4； 2574：8，18，17；2512：5 couldnT［p 2445：2；2446：15，2573：2 counsal［ग 2v74：18；2877；4， 23 count［1］1se9：11 couple $[4]$ 2054：17，2006： 7 ；2062： 5,7 course［P］2563：2，15；2004： cover［3］2044：0；2054：4，2072：22 covered［7］2873：10；2874：14 cen［｜］2534：7；2074：14；2477it，2，14， 18．21；2051析 2082：．27
crodialy t1］2072：s


 $207720 ; 2000: 10$
currant（10］2040：18，20；284t：17；
2002：1；2072：3；2076：14；2051：25，24； 2642：1， 2
currontly［4］24439，0；207222；
2600：3
customer［1］2072：13
customers［13 2078：14；25B9．22

## －D．


data［raj 2040ct5：2041：22；2044：15， $21 ; 24497,77 ; 26 e 4 ; 2060 ; 18,18$ ， 21；2651；t2；2554：22，2654：15； 2055：10；2530．15 2041：5， 11,205 2063：5，15；2005：12；2076：14，18，20； 2ตア2：27；2873：20；262324
date［1］ $2638: 17$
david［T］ 250897
day［1］2ear 3
deye［1］2ase：s
©［1］2645：2
dean［10］2041：5；2684：10，22，23；
2060：3，14，14；2001225；207054
deason［1］2s35：ct4
decision［1］255：10 decheions［和2047：1t；2343；4 detault［8 $2860: 13,18,22 ; 2002: 21 ;$ 2000：12
defective［1］267e．t0
deffine［1］2538：13， 22
definitaly［1］2001：53
demonatrate［1］2063：
demonatrates［1］26E1aI
denaity（10）2073：24；2674：4，11，18，285； 2675ct，20：2trica
deny $[4] 2007: 3,8,10,14$
deploted IT1 2054：7
depletion［1］2054as
deploy［7］2000：12
depleyed［1］2562：10
deployment［1］2500：13

10
derfved［1］2053．－12，255 2000：1
descrlbe［国263s：24； 207420
described（f）205325：2t51：1t：
2050：＊2640；4
deserthing［1］ 205825
devertplion［1］2063：10
design $[1] 2646 \mathrm{ta}$
deatroped［2］2058 4， 5
detail［1］2060：11
detarmination［1］ 2835 －5
determine［1］2540：58
detarmined［1］2060rts
determises f2］2040：5；2642：24
develop［4］2644：22；2070．1，18， 18 devoloped［5］262vanc 2041｜27； 2043：13；2008：45；2671：31 devaloping［T］2t30；t；2050：23；

2440：18，17）2609－24；2572．21；

## 2672：58

divalopenent［1］2876：13
Stal［1］200030
Alcharson［7］ $2940: 24$
©idn＇t［t3］2834：24；2540：15；2641：12，
 2＊S4：11，12；2057 21；2050：15


 dieflowtt［1］2050：18 ciffeuly［P 2051：13，27；2354：3 dipglog［x］2053：\＄2076．24

 2004.15
dirt tJ 2640：50

diasgreement［1］2640：4
Cleoovery［1］2097；4
diacues［1］2er7：24
dhecuseed 19 2544；2346：15
2475：tif：26T7：23

2059：tz 2strizi 267B：
dispote［1］2＊ea20
diepuling［J］ $2023: 5$
diertgarded［ग］ 2857 i5
disragerting［1］2008．3
distrbettion 所 $2473: 25,2074: 8 ;$
207e：1，12；257b：3，7，13；26t9：5
 $2650: 11,12 ; 2654-22 ; 2564: 17,24$ doctor［p］2030：5；2000：12；2070．25 document［ग 2040．10；2058：7． 2060.21
documsentery（X2 2594：1， 24 documentation［1］25：77／9
 2054：7；2605：2，4，17；2s04：7，13； 2040：4；2476：18，20，23：2403：5 doetn＇投 2641：16；245820 doing［T］2e25．5，22；2643：4；2651：7 206sifi 25e2．21；2064：T5
 2045：15；2450：15；2052：20，25；2057，4，

 15：2072：8，14，20；207 $2: 14$ 2078：1．供 25s1本 2tias
dene［19］242ban；2540．18，25； $2545: 2 ; 2040: 14 ; 2051: 10 ; 208321$ ；
 15：2athat，is dompan ftof 2543：1，2，8，13；245430； 20evin 200534；2504－4，10；20eacis douhla［y 2eserfo
down［0］2582：2084：12；21903； 287es
drive［1］2we0：4
drops［ग 2v7BN 2sTeat
drove［5］ 20004
durleg 51 j 204 c 17
devellinge［1］ 28759

## － E ．

－［4］2038cte；2essect；2038：1
e－mall 19 2000：14；2601：21；2000：22； 28712
each［1］2050：25

2005：12；2477 22；2575．3
early［2；2050；70；205124；2008：18
eavioy［1］ 2838.10

2457：34；2062：11
ecenomist［1］2970 20
ocenomists［1］2878：17
ecenony［1］ 2657 ；
effect［1］2044：5
efficiencles［1］2030：10
sefficient［7］2854：8，18，18，20；
2543：14：2604：7， 13
effort［10］26e8：16，20；2050－2，2；
$2851 ; 15 ; 2858: 5 ; 2654: 8,8,18 ; 20413$ elthar［1］ 2 2e5．．
elementa［1］204z：20
elee 阿 2030：15 2642：20；2043：11；
2085：10；2673：2；2078：23
empirlcal［1］2844：10
employee［5］2503：18，th，22；2051：35．

## 2532：14

end［国204322，25；26442，3，4；
2450：1，23；2062：15
engineer［1］ $2544 *$ ，2045， 15

2544：18，75；2860：12；2547：7：
2065：1t；2550：7，255 2851：1，15；
2653：1t；2065：12，25：2064：25；
2004：15，53，25；2000：18
onough［利2034：25 2545：16

sntry 12 2＊s2：1t；2504：11
enfleonment［1 2se2：22；2872：8；
2072：10
erroe［T］2bes：a
eaplanade［1］ $2535 \cdot 20$
eseence t1］257e：17
establish［1］2072：4
evtablahed［1］2005：12 ectlenate［1］ 2003 4 se6mates［2］2053：17 $2000: 10$ 6 โ［1］2030：14
oven［7］2845．24；2046：14；25se 2， 5
206420；28F9：10；254ts
evening［1］2676itc；26e3a
wer［1］2075：1

everytody［1］ 2055 ：10
everywhere โ！ 2052.15
evidence 14］255ex；26s3：15；26e：21，
25
evolved［1］26en：19
exacty［1］2sets i
examinabon 閉2535．5，6，7，3；2038：6．
$26432 ; 2077$ 20，2681515
example fte］2seatis；2050－1；2000：5；
205tits：20624，© 2672：k 2675：4； 20064；20a3：3
examples［1］2647：3
sxeetd［2 240：12；2506：15
exceeds โ1］2640
exception［2］2640：15，28752
excese［1］257：15
encluded［1］25en as
escuse［1］2046：1；2063：4，2068：23
excused［1］ 26832
exhbit［17］2sse：12，13，14：2000：12；
268： $14 \times 2570.24,25 ; 257021,25 ;$
$2 \in \neq 7: 1,4,8,10,14,16,10$
entitha［15］2837：1；2976：18，17；
24772，12，18，2382：14，14，20，22， 25 exiet［1］2455：2
exieted［4］2ecza0；2843：12；2853：10
exioting［阿 2092：14；2072：10，14；
26727,11

expect［2］2030：3；2063：15
experlence［可 254： 77 ；2651：25
2883：14；25545t 2004： 17 ， 10
experleneed $\lceil 1\rceil$ 2063：14
expert［2］2e43：1；2678．2］ expertise［1］2ea：24
explain［ग］2064：2t；2003：1\％；2874：23

sxplanation $\lceil 1\rceil 2680: 14$
extenaions［1］2640：11
extenalve［们 2054：15：2080：21
extenalvely［1］2080．4
exlent［5］2047i15：2640－23；265322：
2000．8．is
－F．

## ［1］2838：18

faclishes［1］24e0．20
fackity 球 2978：18；2000：10
fact f0｜2641：11；2464：11；2643－5；
2051：15；2064：3；2601：20；2072）
2572：10；2074：17
factors［2］2072，3， 4
fair［5］2647：18，20；250023；2501柬 2974.3
fall［1］2000：1
famillar［1］2006：17
for［1］2038．4；2scist 247ens
feseatt［z2 2049：15；203421；2058：10，
12．17；205e 7 ，15；2582：7；2065：5\％；
$2000 \cdot 1,8,14 ; 206134 ; 2662: 2,14 ;$
2063；4；2060：10；2071：3，10；2878：18．
23
Gaven ty 2ens：25
fax［1］2061：4
foc［p］ $2583: 5,11,25 ; 2654: 10,12,18$ ，
25；2065：4；2875：10
foesilile［2］2504：4， 14
beeder［1］2080：
foel［1］2050：23；26013
Foet［0］2s3a：30；2430 2，4；2043：3，10，
11
foll［f］2508 25
（5）［1］20012
few［7］260： $14 ;$ 20s3：$: 2054: 1$ ；
2600：13；2e63：3；2004：24；26r25
niber $142848: 12 ; 246254,14,23$ field［2］286：22；207： 18
Hgus 0 ［17 258324；2545．16
flgurse［1］ $2850: 20$
Wed 们2530cte；2034：15， $17,24,25$
$2005 \mathrm{a}_{2} 8,8$

nilling［1］ 2671 ：
到（2）2070：2， 4
Find 19 2040：t，2046：10；20577：
20783
firat［14］2s45ct；2500：25；203：14；
205acT；2006ct5，21，2t：2te0ct5；
 2678：17，2076：18
fruthand［1］20ee：7

$2682=2$
Forlds［ 7 2s30：1，7，20；2646：7；
2065：205 2058：fls 26etris

focue［1］2542：T7
foounling［1］2083：
folla［2 2seerttc 2851：3
folluw［1］2058ct4
follows［1］2asa：

foot［प］2620．13
forget ty］2mieas
formainy［1］2ssaca
formed［1］2sck：15
formidatie［1］2051s
formulas［1］ $2570 \cdot 10$
forth［1］2646：5；264Nr17；2845：10；
260720；2050．20；2651：14；2554：4；
2050：13；2470．22


frame［t］2006as
frames［1］ 24650
frelght［1］200420
from［2T］ 20382,4 ，20902，10；
 2450：10，20；2004：15，15；2057； $44 ;$ 2060：14；2062：21；2543：15；2604：1，2； 20005；2007，4，8，20，21；2088：23； 2871：10；287422；257535
front（2）2651：214 2080 8
fillolown fil 2est：？
fund［ग］2078．17， 14
Arther［2］25e2：1；2650：4
Aurthermere［1］2650．a
there［1］2s70：10
． 0.

0［1］2839：1
garcia 11 203ctis
gather 同 2540 本；2850：14
gethered［4］2641：22；2045：t；2062：4； $2062: 2$
geve［1］2054：
yenorally 北2003：5；2076：14
penerated［1］2563：10
penerating［1］2053：v！

2eopruphic โ1］2064：50 peological［1］2eep：5 georgla［f］25e0：7
 2676：2土：267123；2677：7
 2000．5；2062；18；20e5：4；2070：4； 2050：
given［4］2838：10；2630：14，16； 257021
plVing［1］ $2045 \cdot 14$
glad［1］2053：25
－90es［1］2072．4
poing［25］2839：3，0；2540．24，2k $264151,2,2 ; 2645 \cdot 14,48 ; 26445,8$ ， 16；209024；2097；2051：70； 2062：15；260t＊；2072：1；26782，12，
 gold［1］2000：17 gone［2］2560：3；2004；f；2872：20 good［0］ 2341 23；2042； 4 2054：10； 2075：14；2500：22；2022：4 got［20 2840：15；2050：25；2534：4； 2556a4；2062：5；2001：1；2076：8，20； 2572：3；2072：1，18；2675：14；2576：8， 8，2076：20；2s70：5，15，2000：1，14； $2053: 7$
grast［P 2050：18；2000：11
grew［1］2843：3
gids t112sests
ground［1］2eek：13
group［苛 $2645 \mathrm{c}, 11,12 ; 2609: 4$ ，is growth［7］20caits；2078：18，18，2k 2078：11，1＊2000：44
 26457， 15
gtole（2）2046：13；2er7 23；2600：0
goevs［2］2087its $20 \cdot T$ ；
guldelines［x 28ces，2sez：25

## －H

hal［4］25ct：25；2602：7，2＊93：4；2005： 3 half［1］2＂72：10
hand［1］2are：11
hantbeek tpl 2046：32；26073．12，18；
$24232,51,45,24,2465$
handle［1］2076．50， 22
hang［1］ $2072: 7$
happen［ग］2043rfec 26eten， 18
happened［9］2estit
happene t0］207tas
haifiell ftill 2000：14； 2042.17 ，25；

 $207155,15,56 ; 207224$ haven［p］20seate 2000：2， 4
 2873：11
hate［1］20sens 2043：1
hased［J］ 2876
kesring tu 203s：13
bola［1］2056－t7
help［y asestis


16
here โ197 254t：4；2050：1；2052．1；
2054：2；2550：t；2654：12；2650：2；
2000：～2063：1t；2004：3；2040：c7；
2070：4；2072：4；2076：ts；207：14
heretolore［1］203s：23
Mgh［ग］2054：15；2505c44；2876：10
Migher［时 2035；18；2020．22；2057：22；
208e2；2062．22；2006．7，11， 18
highest［7］2041：2；207324；2074：3，
51，17，24：2575：1
hlp［1］26enz： 5
Mep ITJ 2052：1
he［59 2s3at：2004 5；2000：21； 2501：15：2023：1
Mistorically［1］ 2676.12
homes［17 2874
hope［I］2862：23
horset 和 2050：5；2854：5
hovite［1］2074：15
houbee［4］2872：10；2674：13，17， 22
hovaing［ग 2072：1，\＆；2381：1
hundreds［1］2as7：s

## －1．



2543：254020；2847ite，23；
2843：75；2560：12，12；2551：15；
2452：17；2454：15，15；2562：25； 2063：2564：14；200 it1；2060：25；
25707 ；2671t，22；2673：2；2074：78．
21；2673：22；2070．20；2880．5；2082．5
「ve［1］2649：3k 2042：sc 2064．21 Men［71 2052：30；285423
identilleatlen［3 2876：21；2077：15，is Idenshed［t］207T：I
Hec［10］204421；2648：12；2050：12，
15；2503：18，25；26es：7，15；2572．22；
287320
Hece［12］2830：7；2804：18；2648：2，5； 2050：3；2051：15；2062：21；2076：1，4；
2472：11；2681：20， 25
Eivetrate［1］20e5：14
linpact［2］2081／． 7
Important［2］2892：4；2858：24
Improvesment［1］2sala3
inappropriate［1］28443
Includes til 2 v7isat incenslatiency［1］2050：10 inconaliplent［1］2000：3 insocrect［1］2035：1t
 incrumental［1］2560：11 Incur［才］2073：15
Indeed［0］2451：7，14，is，2063：10；

### 2873.20

independent［1］2660．s
inefficlency［1］2078：10， 13
information［pej 2580：12，14；2054：16；
2583：2，23：2034－4，8，10，12，14，24；
2505：20，2k 2505：2，24；2560．21；
2562：3；2063a4；2005 $; 23003$
invtal［1］2000： 13

Initually［1］26e0．r7
Input f19 2038：24；2541：25；2542：25；

18，23；2051：10；255e：10；2043：3；
2004：11；2005：2；2072：22；2072：20；

## 24773

Inputa［12］2502：15；2047；4；2840：17，
15：2050，1，25，2651：t7；2042：4；
2085：21；2570：3，4， 5
Inside 可 2074：12；2s72：1，7，8，10， 12 ，
$17,24,28764$
instaltation［1］2075：22
Installing［1］ 20842
Inatance 同 2s3： $2 ; 2545: 10$
into［tej 2542：16；2043．23；2064－5，15
2682：12；2050：14；2678：20；2006：12；
2023：30， 25
imvald［1］ $2841: 10$

lesue［2］2562：14；2384：4
Them［1］2804：3
Heme［ग］2030：10；2564：1；2008：17
itself［1］2675caz

## ． 2.

Jty 2ase：－74
Jecebe［1］2632：15
james［7］2s3054；2038：2
jane［1］2635．21
jenuary 同 258923，25，2000：14；
20015is， 20
jot［0；2030 23：2030：22；26002，2；
2647：t， 11
jube 屏2835：14；2439：4
joe［阴 2835：15； 2584.20
John［4］2654：20；2030：17；2041：21；
2670：4
johnoen［t2］2435：14；207：12，14，24；
2877：13，17；251：11，14；2582：18，18，
25；2083：1
Joined 19 2562：14；2643．14，20；
2053：14
joining［7］2000：t3
judgment［3］2640：15；2050：2k
$2505: 18$
Julis ty $2635: 14$
June［7］2543：22，25；24442，2，4；

## 2005：4

Juet［27 2030：24；26e9：11：2045：21；
2647 23；2842 5\％20e3： 13 ；26se：17，
18；2562：18；20tact1；2000 2，条
2001． 2 20e2 2,5 20e3．21；2070．12；
$2073: 1,22 ; 2576: 18, ~ 18,21 ; 2576: 14 ;$
2000：8，23；26a3：11， 13
／vatificution［1］2600：47
funw［［1］2064：14
$\mathrm{J}=\mathrm{w}-3$［1］2658：1
Juw－7［1］2erta
－K．
aind 107 2040：2；2052：8，28；2053．25； 2060：x 25015

Wing＇e［19 2850：4；2091：4， 5
knew［P1 2053 20，21；2065：15 knowtng［1］2sses？
 2tezit，22；2060：7，17， 20
－L．
labor［91 2047：5；20442，10；2006a2： 2007 is，is 2005：11，14， 23 lerge［13］2t30：14，22；2835：2，12，165 264012；2852：22；205621；2050．25 2057：11，21；2004：2， 7 Lerger［1］ $2891: 5$ leat［12 2073：22；2600：2 late－Find［5］2em772，4， 2,11 ，15 later［3］2070：11，17， 21 Lewn โ才 247224 lose［2］2058：10；2066：3 leader［x 250824；2060：t5 feent［19］2000：24，2＊）2041：2， $12 ;$
 2001：2，1t；2662：14，23；2003：10 lee［1］2a00：17 lece［1］2850：18；2012：23 leon［1］2035： 16
 2043．1，11；2085：
 $2052=2 ; 255720 ; 2050: 14 ; 2600 \cdot 15$ 2＊64：12；2＊e823；2072a3
 2087 2；2065：24；2072：23 iether［5］ $2054 ; 4,57,20,21 ; 28530 \%$ 20015
letters［1］2050：11，15；2097） level［t］2484：10
Whe fil 2ses：4；29et：15；2060：24； 2653：4；2055：15；2653：3；2674：16， 22 Ilmitations［1］2860：2， 10 Amited［1］20serts
 IInes［4］2072：10；2673：11；2874：4； 2475：4
list［0］ $2665 ; 10 ; 2541: 20 ; 2067 / 4$ 2072：5；2073：25
 Iiving［2］2set：14；2telis local（10）2835：\＆26432；2652， $1,8,8$ ， 7，12，15；2000．20；2501： located ti］ 2555 is
location［1］2s35：15
locations［2］2572：12， 13
Honger［财2050：13；2052：17
Ioon［0］2040； $12 ; 2048: 7 ; 20544 ;$
2051：12；2601：56；2660．14；2032．4
locked［य］204e：25；2047 in 2071：1
looking［7］2csa：1，5；2054：10； 2556：17；2050：15，2562：13，is
loop［5］2652：5，8，7；250020；2001， 0
loese［1］2855：12， 23
toes $โ 1] 2369.2$
lost［1］20eseat
lot［8］20cz：22；2050：＊5：2574：11； 2473：5， 8

Wow［17 204i：t2；2074．
Iewhall［5］2506：17，10；2641：12，15，12
lower［8］2w90：t；2seb：17；2＊41：17；
201517， 53
loweet［1］2045157
hucent［2］2645－5， 18
－M

madam［才］2032：13
made［11］2012：12；26etet；2645：18；
 12：2574：10， 24 malatain［1］2653： make［11］2543：10，29；2857：23； 2500：15：2870－8，10，14，15，21，23； 2076
making［3］2097；15；2870：14；2872：1 menhole［1］2075：14
manner［1］2504：13
many［192051．f7
merk［1］ 2476.24
marked f9 2876：16，25，2877：18，18
marlat［0］ $2582: 11,13$
master［1］203e：7
materlal foil 2084：1．is，1ts 2005：22：
2057 20；24852，23：2575：27
 matter［1］2838：4
 2008 （1）
mel［y 2042：5 2645ct3；2077 ； 4
mean［4］2035：13；264t：10；2040：10； 28715

meabinge［才］ 2 E63：34
melese［1］ $26 \pi 7$ ；s
member［7 $2863: 4$ ，$\leqslant$ 2053：13；
$2434: 15 ; 204724$ members［1］26atas；2selia；2055．11 meme［31 2570：10，24；207：13 men pu 2500．t；2551：5 mentioned［3］204423：2000：tz： 2565：10
methodology［1］28T0．1
 mille t1］ $2874: 5$ milieage［リ］26e9e
malies［7］2606／7
minor［才］2erz： 1
 20enas 2972：？
misceltanpoes［1］2504－10

 mbly



 24，2062：5，22，24，255 25e3：65 $2003: 77 ; 2065.25 ; 2060 \cdot 1,26,25 ;$
 2472：24，2473：51，24，2stict，23，26，

2073：32，24，28762，12，21，22； $25+0.24$
modeled［1F 2e7E：1t，t\％，2641：2
modalers［1］ 2647.14
modeling［1］2874：4，24；2875：4
models［4］2045：5；207t： 17 ；2sat 20
menthe［1］2450：20
more［54］204420，23；2045：20；
2060：14；20015，15，12，10，2053：12；
2064；t5；2005：5；2500：11；2505：15；
2076．t，2681：5
moet［5］2648：4，16；2650：1；2052：24；
2065：12；2973：2；2074315；20753， 24
 neves โ1］2862：22
much 1912051）：2054：22；2803．11； 261512
multigle［沶 2034：15：2064：4 multiplier［1］2000：10 multipliers（31 2000：1，20；2077：4 пуy（27］2062：12，14，18，2543：2，15； 2646 1；2367：17，25；23ce：2；2651：2， 14．23；2852：1；2654：10；2850：5 2050121；2600： 10,$21 ; 26012,23 ;$ 2002：11；2064：14，17；2568：3，13，15； $2067: 13,23,2065: 12,23,2672: 4 ;$ 2676．18，25；2570．0，18；2609．18； 2022：1
-N －
n［ 2 2634：1；2830：1
name［2］2530：3；260：8
names［1］2s3s：a
national［2］2543：23；2060：13
near［y］2054：te
need［15］20eq：23；2545：7；286t：15；
2050：12；265122；2055：18；2070：4，
17，2576：2； 2677 体， 14
needed［］284：10；2670：3
nepoteste［1］20es：2
nalghborheed［1］2064：10 netuork［1］2438．17；2647 ；；2052：1，
20,$25 ; 2697,4,2506: 20$
networka［2］2052：3；2053：22

 nid［1］2597：

node［1］2030； 10 ；2430：4，10；2657 ；2；
2672：7，8，15：2673：45
nondiecloesurs $\{7]$ 2840：17
nor［ग］2848：10，17；2675．9
normal［7］2069：te
nerth［1］2650． 22
noted［1］2t35：23
netes［1］2007：3
nothing［1］2ser 25，2850：4 newaday โ1］2485：t3
number［20］2s：7：2；2440：5，8，13，14， 17， $13,20,22 ; 2541 \cdot 1,6,14,14,48$ ，
 2，22，23；2003：8，18，18．20，21k 2065：8，12，13；2060：16；2575．20； 2577 4，10，18；20765；2032：17
numbers f1门2444：18；2040：13；
$254021 ; 265021 ; 2651 ; 15 ; 2055 / 4,12$ ． 15；2001：12；2870：10；2871：21 mpenes［1］2054．21

```
.0.
```

－［1］2538：1 eath f1 2832＜200525 objection［2 25e2：10， 24 obtaln［7 2054：20，22，23；2060：10； 2051：5
obtelned［1］2530：10；2041：14 october［f］243s：17
off［2 $2075: 4,2876: 24$
oh［2］2640 22；2001：3

2455；13； $2450: 10 ; 2452: 4 ; 2650: 12$ ；


2008：22；2006：17；207097，24；2074．7；

2579：11；2581：14，22；2052：15 old［1］25ee：13 one［20］2038：11，15；2641：2；2634：11， 23；2600：7， $5,20,21 ; 2057-5 ; 2045 \cdot 4$
2607；20；267322；2476：15，17；
2877 3；2081；13；2632：0
onevies［1］2s30．a
 26612；2004：15；2045：5，10；2072：10 onto［1］255123 eplinlon［x］2441：34，2545：27；2650：7， 17，20514，20785，is
oppoeed โ1］ $265 e 20$
 orleinal $[4]$ 2643：7；2671：20，21；2672：3
 2051：3；2554．74；25844，23；2505：15 2s7e：11，14；2602：2， 8
our［12］2540：12；2650：7，21；2051；1斯 20542；2050：3，4；2601：12；2062：16； 2005：11；2070．2， 4
ours［1］ 2609.1
out［21］2640：＊；2542：13，25，2e63：3， 10，11；2445：15，2047 20；2845：1t； 24e0：11；2050：1，12，25；265125
20625；2055：11；245421；2000：

10．21：287 $1: 24,2672: 5 \mathrm{c} 2072: 15,15 ;$ 2075：20；25TE4
ovtputs 们2649a3；2600：14
evtedide［17］2542：18，23；2543：1，2，14：
2044：4；2647 1, 14；2643：22；2640．21；
2651：1；25s2：4；2053：11；2508：15．24；
2500：17，2500：14
over｜4］2562：13；2580 n；2351：5；
2043：18
overall［1］20e1．2
everceat［1］217\％25

## －P．

P14 203s：74；2034：5；2054：8，11
pege［4］2s3e：5；2549：4，10；2056：14
 pair［4］2645：14；2879．21；2531；4
 $2541: 1$
par［1］2080：5
parsgraph［7］2000．24， 25
 2071：20，24；28739
pertloular［10 2600：＊；2067：2；2050：20；
2052：14；2506：15
parthoularl／［1］2851：t24 2001：17？ 207425
parta til 2 sch 5
party［1］ 285120
past［1］2050．te
pay［2］2000．2t；26e2：4
paying［1］26etite
people［J 254：14；2050：tc 28539
per［1］2830：12；28e8：74：265725
2574；4；2876：1，5\％2531：1， 4
 2675：7，12：2000：11，14，18，15 personal［才］ 205124
perspective［2］20cs 5 2087 its
pertala［1］ 2001 as
phooe［1］2536．11
phonetic［t］2054as
phyaically［1］ $2674: 20$
plle［1］2688：22
plancing［1］2062：13：285323；2554：15 plant［24］26e2：15，2k 2562：1，2，15： 24447；25477，14；2643if1，23；

 2873：23，25；2674：1，0；2870：7 $2809: 18$
plating［t］2580：26
please 〔ア 2000：3；2657 ant 2000：22 plenty［1］2506：1
plow［1］25ecz：12
point［10 $2440: 23 ; 2600-15 ; 209720 ;$ 2405： $265124 ; 2062: 14,77,15$ 2054：15；2051：23；2002：15；2043：14； 2404：23；2005：0，17；2060；17；2072：5； 2078：1；2450：2，12；254121，23； 2002：2， 5
point－40－peint［1］28saza
polnts［1］20ez：11
pole［f0］2030：75；2057 ant 2000：25 $20042,15,2505: 2 \mathrm{z}, 2005 \times 4,10,12$. 14；2072：18，20，24；20732，7，2，16； 2075cts 2575：2
poles［20］2097：25；2054：1，2；2063：3， $5 ; 2000.2,5,4,8,8,10,12 ; 2072: 2 z ;$ $2673: 4,41,16,14,2814: 1,8,23$ 2078：23；20763，4，8，11；2032：3，10 pollcymaking［1］20ta，18
portlote［4］2se7： 2085.21
portione［1］2645：1
peesalbie［1］ $2845: 21$
posellty［1］ 26532
power［10］ $2872=17,18,25,2872: 1,4$, 6．7，11，12， 18 practice［2］2560：15，2600．23
proceded［1］25c3：3
proclea［yI 203：13
pratiminary［1］25077：12
properse 险 250323；2051：11
present［1］2051： previme［1］2050：7
prolty［1］240221，24
prectove［1］2505：14
price［15］2800：1；2045：18，23，26；
$28489,12,16 ; 2007 ; 4,4,6 ; 2003 ; 4$ printevt ty］ $200 b_{i} 14$ prior［5］2068：14；206124；2053：14； 2055：11；2005：13
 0． 10
procedure［1］2058．t3 proceeding［1］2000：15：287： 2073.20
proeetilinge［2］2430：13；250024
procese［11］2840：s 2045：3 2058：tz
$2005: 1 ; 2000 \cdot 24 ; 2070: 8,50,23 ;$
2075125；2077i7；2070．3
prowire ty 2564 s
produce［1］2sese：23
production［0］2576：30
propect［17 263025；20ssat
profects fin 203003，2054：17
promise fly $20{ }^{2} 12$
proper［1］ 206757
proposal［1］2454：10
prepesing $[1] 2054 ;$
probect［1］2051：22
protectors［1］ 207023
prove［1］2065：18
proved โ！ 204153
provide［f］26ed：20
provided［P 2ectidn 2se3：2t，2677：
providee［1］26ens
providing［1］2e7tita
proxy［1］2400．24
puble（19）2035：1；204421；2045：15 24040
publidy［1］ $2082: 1$
publiahed［1］2ectite
pull［ 1$]$ 2bed：2a
puling［7］2087 4,20
purpoee ft1］263924；2605：tis
 2013．17：2563．k 200p4

2054：t5；26e3ch：20642，2k；2070：2； 2078：3， 20
pravant t0 $2538: 5$
put［12］2648ct4；2540；10， $15 ; 2857$ ；17， 24,$25 ; 20703 ; 26759,10,11,12$ 2074.4
pute［1］ 2543.4
puthing［8 2083：32；2087 its 20763， 4

## ． 0 ．

Q $[150]$ 2531：7， 13,$21 ; 2835: 12,18,10 ;$ $2300: 1,8,8,13,21 ; 2641: 7,0,18,20$ ， $24 ; 2 \cos , 7,0,15 ; 28434,18,12,21$ ， $24 ; 264: 1,3,6,13 ; 2402,0 ; 2640 ; 1$ ，

17，22；2047－2，11，17，22，25；2645：22； 26e22，18；20502，22；20813，17，23； 2esais，12，18，24；2653：2，7，11，14，
24；2064；；2054，2，5，1，25；2050：17，
$25 ; 205723,12,18,25 ; 20609,14,17$ ，
$10 ; 2030-5,10,12,14,18,25,2800 \cdot 12$ ．
$23 ; 20012,4,22 ; 2062: 8,10,18 ;$
25431,$23 ; 2584: 5 ; 2585 \cdot 18,21,24 ;$
$2004: 4,8,18,22,24 ; 2597: 1,2,8,10$ ，
17，20；2065：16，20，22；2009：4，17；
$26764,18,24 ; 20715,14,18,18,22 ;$
$2672-5,14,10,25 ; 2672.5,10,22 ;$
26743，3，18，18，21；2677：22；2078：4，
4，14：2tas 21；25815，17，22， 24
equalijying［1］ $2850: 8$
quantification［1］2001：7
quanthes II 2065：T
quantly t才 $2830: 25$
¢̧uetion［13］2647 25；2654：10；
2657 20；2656：1，2060－5；2667；14；
 2062：1
questlons IU 2562：1
¢ukehly 没 2eez：21， 24

quete f12 2630：2，22；2660：1；2050：2；
$2057 ; 4,5,20,21 ; 2543: 23 ; 2870 ; 10$ ，
23；2976：14
quotes［14］20414，7，15；2054．1，10；
$2054: 3,2 z, 22 ; 2601: 17,18 ; 2006: 1$ ， $20,21,23$
－ $\boldsymbol{H}$－
r［1］2030：1
relse［1］2597；14
random［1］2050：9
range fiof $2640: 15 ; 2448: 11 ;$ 2＊52：24，
$25 ; 20502 ; 2061 ; 10 ; 2062: 14,18,17$ ； 2800：10
rutapayera［1］2076：10
raach［1］2570：11
rasched［1 2544：11；2645：T
read［9］2851：57；2000：15；260t：2；
2858：25；2067：2
readiy［1］263s：11
reafing［ग 2600．21；2654：3
reaty［1］ 2075 （23
real［ग］ 253522
realletic［f］2een：12
really［1］2072：3
realland［2］20c5：21， 24
really［1］2676：14
reasen［］208ev．13；2000：1
reasenahie［10；2041：1，5，14；2644：18
$2546: 13,18 ; 265923 ; 2651: 7,15,15$ $20545 ; 2654 ; 4,93 ; 2660: 10 ; 2061: 13 ;$ 2063：15；2045：12；2nes：18，is
 reapena［1］2050：59 2001：54 ratoiting $[1]$ 2s30：to rebuttal［0］2610：10；2582：13；2004：3； 207724
Fexell［1］2051 20；2000：25；2070：17 recelved［3］2000．2；2602：20， 25
reventy［1］2054：21
recoliection［1］2062：7，11；2671：25

reconclle［1］ $2005: 2$
recomvene $[1] 20313$
recerd［1］ 2070.24
recorde［1］2053：1
redirect［3］2030：：2001：12， 15
reduced［2］26732，\％
reforence［4］2e40：3；2043：4，13； 200e：7
reforenced［习1 2868．2N 2647）
$2468: 24$
relorances［1］2646：25
reforsneing［1］20ee：14
reforred［t］ 2647 If1
relerring 防 25c7 3 ；2000：3
refiected［2］2453：17；2054：T


## $2072: 23$

regard $\mid 1 \mathrm{y}$ 2 $575: 10$
ragulatory［1］2802：22
related［1］2512：7
ralating t1］26e2：5
release［1］ $2000-25$
relevant［1］20e2：13
rablef［1］2：mes 2
remain［阿 2072：12， 13
remember［1］254025，2653：20
replacing［1］ $2457 / 4$
reported［ग］2635：21；2440：2；2604：8
reperting［1］2575：18
representative［1］ 2067 ：25
represented［1］ 2057 ：14
representing［1］2642－s
request［1］2s30：11，14，14，22；
2083：21；2660：1，2，2076：30
required［1］2545s
mendontlal［1］267E：t
reseurcss［9］2543：10，22；20452e， 15
respet［1 2007；12；2050：14；2004：1
responded［2］2038：10；2035：12
respense［4］205e：18；2053：25；
2067 21；2576：18
responses［2］2049 22；20ek：
rest［1］267eas
result［1］20es－78
retired［1］ 205421
refirement［x］264323；25442
revien โ1］ 263021
reviewed［1］2471：7
right［31］2030：30；2040：13；2062：17；
2543：2，18，22，2548：1，3，2543．4，5；
2505：25；2050：1；2682：1，2；24set；
2058．t，2587 2,$22 ; 2050: 21,2043: 4 ;$
2004：11；2504：5，11，15；2500．2；
2472：15，24724，4，12；2074：1；
2001：10
ring f1］2088 4
ringe［1］2682：10
rlobe［1］2804：20
roll ² 2eest 2cria3 $^{2}$
roen［f］2502：23
round IT］287： 4
rowlingly［才］2ate：－10
rpe［t］2essat
rs［1］2t17
run if $2950: 20 ; 2076: 4 ; 2000: 15 ;$ 20013
rural［1］2003：11
． 5 －

 2te2－25；2064：7；2vevit2；25738，15； 2075：8， 11
seme［r］2636：14，18；2000：if；2006：1，
2：2872：12， 13
sanity［1］2454id3

 2047．2，18，20，25；2046：162006：18． 23；2601：13；2053at 2056：t3；
 206054；2572：＊；25730；2076．13； 2076：1，4；2076：＊；2682．10
soying［7］2040：25；2046if）2006：14； 20732，14；2076：17
says［19］5040：10；2641：11；2060：12； 2060．17；2063：77；2005：7，10，15，21； 200621，26；2067：1；2073at；24305

 21，26；2062：t5；2004： 2012：11
scales［1］2030：1
ocere ${ }^{12}$ 2070．23， 25
scene［1］2643：12
scorched［13］2630：15，26304，10；
2557：2；2072：7，0，10，15，48，15：
2073：15，12， 15
search ！ 1 2500．22

 2070.1
ascondly［1］2005：43 suction［ग］2635，© 2604if8， 20 se5［7］2048：1t；2050：11，22；200032； 20018，16；2675．22
seoling［1］2056： 18
 seems ！［172872：2

2000：22；2071：24
salection［П 205e：14
sent｜x 2050：11；2050：4
sentence 刚2000：15；2001．5
separatoly［1］2006：13
sequence［1］2553） 4
＊equences［1］2638：2
sueve［1］2862：31；2063．7
served t］2875：4
service（10）203s：
2078．37；2041a

set［10］263：10；2840．t；26ca：t6；
2006＊ 4, ， $8,8,12,14,2$ 2maa， 14
sots［1］2872：4
setting 阿2enas， 50
sevoral 刉254625 260630
aharing［P］20724，22， 24 ahloped［1］206etio atort［1］2074as ahould［50］2650：14，25；2600：24；
 2006：17；2006：15；2w7e2，8，17；
 ahoukinา［0 zurect ahow［t1］2000：1t；2046：13；205021； 255t： 2862：75， 23
shown［T］2059．7
shows［｜2063：ts，to
shrube to zereas
shut［T］2006： 3
alc fy $2063: 10$
 subebyalde p 20064， 25 sidewalk［！2s7024 sloned［1］ 20442 aignificant（x）2072：33；2872：15 aimply［1］2050：43 since IV 2047：15，15；2060．25， 2007：12；2077142 single 则 2003at；20724 single－fundy［0］2674： sloglesuat［1］2s75a ate ty 2053 ：
 antho ty 2ertas altuabon［リ 2600：14 asx tijaches siliohtly［1］2006：5
 solety t1 2000．as solet fll 2053：4 tame［p3 2062：14；2067：2；2040：22；
 2597\％2050－13；2063：15；20064； $2002 \cdot 17,205,207654,8,15,20$ ， 2＂72：17；2675：267614；2602：14 somebody 阿 2sseitui 2e73a： 2673：33
something f11］2600：2n 2042：20； 2563：1t；2644：5；2601：7；2605：5； 20703，th；2umas
somenhore［1］2053：17；2058CT： 2006：10
 2008：20
source 国 2067tac 2050：12 sources［1］ 200123

spare 间2sestis；2etert2；267e：2， 8 ， 45，2t；2006．ts 200tis
＊ppak tr 20002
 200024,25 ＊peovifonly［P 2053：20；2001：26： 2000.4
specificalione ty 2006s
epend［1］20werte
apont［1］2450s
sponsorteg［P 25487，0；2450：24
spreadeheet ful 2050 © 13

square［1］2074： 8
stan（1）2076：13；2002：23
statrs（1） $2070: 20$
atamped f11 2000：7
standard［1］2503：20，25；2840：4
standerds｜c｜2048：14：2869：1，12：

## 2008：

standpoint［1］2076：21
 247534
started 国2050：7；2051：7
starting（T）2046：15；2048：8；2670：1；
2534124，23；2632：3， 5
state t1］2sse：18
states［1］2004：
2tation f1 2070：22
statutes［1］ 2035 ：9
tap［1］2seasas
still［p 20es．s．7；29774
ativp［1］2083：12
strest［T］2078：24
stillefll $2008: 23$
atructure［3］2072：0；2975：30，23
study［1］2000．0．

subecrlber［1］205z－k；2600：4， 8
oubecrbers［1］ 205020
＊uberequent f1］2550：11
avbetunthlly 711 2sev： 77
such（1）2 277：23
sumbient［3］26062；2075：22；2676．3
supenstad［1］2040：19
＊upgesting［1］ 2 ess：20
summartses［才］2650：43
ovperier fljavesaz
superseded fol 2sect：44 14，2564．2．
26：2045：－1， 8
eupplemental［1］2076：19
suppler ty 2545：13
suppert［1］2046：10

2000．23；2001：10
surtace［T］2000：1，8，7，10，14，10， 20
surmise［1］2506：18
ourprieed［1］206e：is
survey（ （ 205604；2000：s
susan ！1］243s：－75
－T
［［i7］2043：18，18，21；2545：12；
2543ax；2647：12；2648：2，24；
2501 a5；2652：1，5，12，22；2459：3，17；
2004．8， 12
rety 2876
tuble［1］2070 a
tacte 囘207632；2040：1
taka［t0］204t：1，2，2，12，12，16．
2642：15；2050：0；2006：13，2075．4

## twhes［7 2006：10

twilk（4）2063：3；2064：26；2872：4；

## 267323

tallad（2）2000：23；2072．0
talaing（T）26e7rit；2651：18；2053：4；
20712，8，23；2061：24
talka（2）20evis；2070：10
tullahasees tJ 2095：30
tardirfe 14 2860．6；7600：12；2470．25； 2075：
tank［1］2055：0
 21；2446：55，15；2646．22，24；2697．57；

23；2062：12，15；2450：12，17；2050：12，
25；2005：70，25；20062，13；2000－78，
18；2070：11，25；297120， 23
technical［1］2ene2s
technelogiss［f］2040：s
technology［10］2004：20；2067，16：
23asi，10，17；2800：3，14，18；2603：2 telecomumuntcations［P］2838：5；
2072：56：2573：45
talephone［1］ $2638: 3$



2006：11；2070：4
ten［1］2000：0
tarm［1］2050：75
 2002：15
tery ty 2eas：－14
teet［1 2070：14，is

2005ak；2607\％
tesuly［才］20es：－15

2050：20；2655：10；2050：5：2000：13；
20633，14，18，24；20045；2005：77；
2006．21；2677：24， 25
teving［1］ 24703
textive［17 20enci，5，11，14， 20
terthres［1］20es？
Shank 14 2062－10；2876：12；2081：3； $2083: 1$

2641 14；2506．7；264720；2666：14：
250112：2082：12；2050．．．12，15；
2057 22；2058：3，14；2550－18；2061；20， 23；2662： 77 ； $2065: 15 ; 2676: 18,23 ;$
2972：12；2576：10；2875：5，15\％
 2002：2

2001：1t；2006：1；2005：＜2006：76，ts；
2872：10；2550．21；26829 themsative［1］2072：18
there［6e9）2040：3；2641：7，20；2042：16， 22；2443：12，13；2440：40，21，22；
2646．22；2567－5，2564：45；2648：34，
17；2050：2，2，12；2001：大k；2062．26；




2070：2k；20723，15，14；2874：1，5，18， 17，22；2675：5；2676：1；2678：20；
2078：8，16；20000．，17；2082：12
therelore 1c9 2690：10；2062：24；
2076：12；2040－70
therve［1］2ses：11

Riling［1］20es：7
thinge f4］262023；268R．24；265354； 2450.15
thinh［20］2044：13，14：2053：15； $20537 ; 2064: 14 ; 20069,4,52,15 ;$ 2002：1；2043：15；2064．t5 2070 fit； 2871：20；2072：2；2076：21；2870．13； 2501：15，Th 20at：13
Hind［1］2051：5
 2653：t2；2405a；2056：15；2638：t5 25e1：25；258425；2508：10；204054； 2870：10；2074：5；2075：30；2076：2； 2sez：18， 23
though 们 248sin 26e2：
thought［J］2072：10；2574：76；267tis thoosand［才］2040：7
thres［1］2senat；206e：t；2872．21
 22；2067： $2076: 2$
thursday［1］2tss：57
thes［1］2450：10
time［24 263s：1t，284：10；2540：3， 10.
12，22：2506：2，4，15；2502： $6,10,14$,
17，15；2053：10；2659：17；2550：14， 22 ； $2600: 10 ; 2607: 25 ; 2600: 25 ; 2070 \cdot 22 ;$
2575：17； 2677 ： 5
times［1］ $2848: 25$
505［1］ 2074.23
today（10）2647：7；2045：15；2853：1；
20582；26e3：15；2084t；2065：17；
2602.4
together［9］25eb－it；205323；
2058：10；2607： 5,$22 ; 207022$
 258e：14
tam［ग］25C24，7， 0
tomorrow［1］2643：3
tone［1］250020
took［阿2041：14，15；2643：23；20442；
2458：10
Sotal［1］2064：10
touched［1］28302
touching［1］2040：10
towards［1］2650：1
treditionally［1］2001：3
 28772,$14 ; 2883: 4$
trench［ $2,2075: 12$
trenches［2］2653：5）2075：24
tranching［1］2ese：24；2000．a
trigger［1］2600：2

Iruat［1］ $2857: 24$
truthtul［1］2067：15
try 幵 264N：10；255306207423

246： 10,$18 ; 2062: 14 ; 2870$ in 2074：18．
21；2s7e：1
tucel＇e［1］2056：3
turned［1］ 205823
turning［1］2050：12
tv［1］2672：77
Beo［t1］26ctit4；2072．24；2674iti， 24；2578：15；237B：

```
4, 2% 204%3
twoshe [1] 2atact
```



```
2064.1!
#vical [\12000:0
typleally (1] 243ea
```

-U *

4 ［1］2008：5
जh［1］2046：14
，hhuh f17 2877 ：13 utfimate［21 287325 unbundfed［t］25s2：20
 28474200535
tundoryround［1］2073：13 undorstand［5］2643：7；2046：1； 2505：10；2505：12；2574：21 underatanding［18］2442：14；2643：15； 2567：T7 2564：2；2609：3；2401245 $2800,2,5 ; 2060: 2,4,16 ; 2057143 ;$
 2032：1
unlt［P 25ck：1s 2t76：1，5，2051：1，4 universal［1］207e：17 unepote［1］2s70：11 untin［1］2643：23 unneed［11 2476：15 up［22］2543：7，25；2044：17；2540：13； 26977；2051；4，21；2054：17；2056：10； 2035c7， $21 ; 286029 ; 2970-4,10,14$ 18，18，21；28712，10，12；2076－24 use［10］2850．7；2844．21；2545：14； 206t：13，20；20tifit 20si：1； 205323；2060－3；29703，0；2601：10； $2 \operatorname{sen} 25,8,8,10$ used［13］ $2640: 14 ; 2054: 15$ 2001：T0， 12，18，20，21；2681．76，12；2070； 2e7e： 12,$23 ; 2030: 7$
 using［5 2040：15；2053：3；26e2－24； 2480．78
uthliles［1］2072：16
utility［1］ $2872: 14$
 utilieed［1］ $2060: 3$
－ V ．
vecuen II 204T24
vapue［1］ 2671 25
vala［1］ $2973: 22$
valldate［ग 264123；2050：13，15 valhdated［1］2senas
validetse［1］2541：11 vallilating 何 2546 sk 20elith 2050：T0；204t：f2 2063：
 2545：b；20502，2，18，24 255tit9；
 25017\％
valoe［10］2049ctic：264tar；264t：10， 15；200215；203eit1，17；2006：1；

2667：15；2000：13
values［20］2030：24；2042：21；2041：2，
8，12；2844：17；2645：3；2444：24；
2540：22；2601：10，13；2057：13；
205620，24；2550：3；2062：2，21，22；
2653：3；2004：20；2570：2，12；2671：2，4，
10；2672：1； 2877 25
varies fج 2062：15， 18
varlous 111 2674：18
vงndor［11］2545：23；2054：15：2050：18
15；2006：1；2047 4，5，21；2002：3， 23
vendors it！2051 20；2054：14；20t3：4；
$2557: 10,14$
verlly［1］2000：
version［2］26e1 25；2042：7
vernus［1］2800：7， 17
very［3］2030：3；2800．21
violate f1］2043：1
volume［0］2635：10；2637：1；2s3s：2，4； 28334
－W ．
walt［1］2464：12
walk［1］ 204523
want（t2 2 2638：18，10，20；2530：＊；

2000：23；2572：1；2473：7
washington［1］2＊esas
wasn＇t［0］2545：10；2840：14；2047：23；
2665：5；2832：15；265E：18
way［8］2035an；2844：3；2645ct；
2004：＊2385：17；2645：15；2087； 15 ； 2003：7e：2005：12

walth［1］2594：24
welght［1］205194
welle［Ref 2036：4；2630：3；25ct：4； 26452；2640：17；2646：1；2653：25； 2A54； $3 ; 25052 ; 2054 \cdot 14 ; 205058,16$ $2543 \times 1 ; 200422 ; 2667 ; 1 ; 2064: 35 ;$ 2471：t；2672a3；2876：16，2477；2，22； 260118，10， 17
wella＇［1］ $2877: 10$
womt［5］26es：25；2653：22；2050．21； 2545：75；2473．15
vers［130］2038：7；2639：15；2840：0； 2641：5，7；2643：13，15，25；2644：76； 26453，21；2645：18；2652：2，ह； 2053：12，18，18，22；2554：10；2005：4． 6，25；2687造，10，18；2655：12； 2006：15；2062：8， $18,12,24 ; 2064: 2 ;$ 266s：12；24Ti这，23；2650：25 warent［1］20ez：7 whatever［0］2ect in；2655：14，20； 2053：23；20ee20；25es：3 when［ 27 ］204t：15；2642：14， 16 ； 2643：14，24；25ct 2；25s4 raz，23； 2583：11；2053：5 205a： $7_{;}$2600：17； 2083：15：2506：14；2087：12，22，24，24， 2070：14，18，20；267121，23；207324； 257B：4 2040 ⿻上丨；2541：18 where fol 2tsacac， 25 ； 2800.6 $2050: 14 ; 2061 / 15 ; 2057 / 2 ; 2012: 16$ $2000: 14,2082: 10$

Whather［i］20se：ty 2009：18；2500：12； 2047：10，15；2571迢，11；2681：19 while［1］ 284221 whole［1］2540：50
 mbh［1］2303：5
whin［4］2650：22；2050：＊；2568：25； 2082：14
whout［5］ $2038: 3 ; 2651 ; 10 ; 2006: 5 ;$ 2802：18， 23
wlthese［1］2681：10
mitheeses［1］2s3e．
won＇［3］26e：12；2502：10；2004．21
mood pi 26447
word［3］20013，10， 21 words［习］2s70：＊；2s7：14；2saz？ work［12］2e38：8，15，25；2063：1； 2567：12；2561 22；2556：1；2653： 7 ， 15；2054：2；2603：13
worked［1］25s2：13
working［1］2645：12，14；2653：13
workaheets［1］ 260124
worth［2］2482：15；2001：2 woold［100］2sse：18， $17,18,21$ ； 2030：10；2641：12，13；2044：4，15， 10 ， 20,$22 ; 2848-18,17,14,26452,8,17$ ． 18；2547：7，11；2044：7， 8,$14 ; 2049: 7$ ； 2500．2，22；205ts；2602：1， $10,21,24$ $2453: 18,21 ; 2434: 2,4 ; 2435: 5,18,18$, 21；2060 3，22；2057：12，21，22；
 22,$24 ; 2053: 25052,3 ; 20042, ~ 5,7$ ， 15；2587：17，23；2040：2，12，12，14，12， 14，21；2660：10；2070．11；2575：78，24； 2573：16，17；2573：1，4，8，10，25； $2576: 1,2,4,16,24,22,23 ; 2877: 16$, 14，15 2076：12，17；2s72：14；2041：1； 2082：10
wovidan（fif 2s40：21；2546：15，17） 206220
wreng［T］2043：4，20；2eek：11；
$2050: 10 ; 2050: 8 ; 2078: 3,10$
wrote［1］ $2838: 18$

## －X．

：［1］2830．1
．$Y$ ．
youd［1］20et． 10
year［ग］2844：2，4；2850．24
yenterdiey［1］20467
yet［2］2454：＊2000：3
yon［1］2050．20
you＇ve［1］2870：8，20；2073：14；2075：8． 4；2e7e．20；20ter1＊2ena：7

## $-2$.

zene［17 2074：4，18；2875：1
a mes［澵 2873：24；2474：11，25；
267190；2876a

1 cuirmour someciti mank you, air. Tou are 2 coposed. We are going to ge aheed and atjourn for this evening, and rabetwahe toeprrev at ore0. (Tranoeript oontinaet in aeguoboe with Volume

