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BEFORE THE IOWA UTILITIES BOARD

IN RE:	)	
	)	Docket No. HLP-2021-0001
SUMMIT CARBON SOLUTIONS LLC	)	

SIERRA CLUB'S POST-HEARING BRIEF

December 29, 2023

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INTRODUCTION

The Board is presented with a proposal by Summit Carbon Solutions LLC (Summit) to construct and operate a pipeline to carry carbon dioxide from ethanol plants in Iowa to a sequestration site in North Dakota. The pipeline would slice through 29 Iowa counties, impacting prime farmland, being constructed within several hundred feet of numerous occupied structures, and entering or coming close to the corporate limits of several cities. The scope of this project and the issues it presents are unprecedented. It is therefore incumbent on the Board to give this case special consideration and a thorough review of the facts and issues involved.

After more than two years of trying, Summit has only obtained contracts with 13 ethanol plants in Iowa and only for the carbon dioxide from the fermentation process. There is no evidence that the carbon emissions from the natural gas combustion that powers the ethanol plants will be captured. Nor, again after more than two years, has Summit been able to sign up any other industries that emit much more carbon dioxide than the fermentation process at the ethanol plants. So Summit is just after the low hanging fruit of the fermentation process in order to get the 45Q federal tax credit. Likewise, the ethanol plants will qualify for the 45Z tax credit allegedly be selling the ethanol after carbon capture to states with a low carbon fuel standard. It is those tax credits that are driving this project.

The 45Q tax credit, 26 U.S.C. § 45Q, grants a tax credit of $85/ton of carbon dioxide captured and sequestered. The credit is available only to the entity that owns the

capture equipment. So Summit can claim the 45Q credit because, according to its contracts with the ethanol plants, it will own the capture equipment, not because it is building and owning a pipeline. In any other arrangement where Summit would not own the capture equipment, Summit would not receive the tax credit. It is therefore questionable whether any arrangement, other than with the ethanol plants, would be economically viable for Summit.

The 45Z tax credit, 26 U.S.C. § 45Z, is available to any entity producing low carbon fuel. As a practical matter at the present time, that means ethanol plants. Other industrial emitters of carbon dioxide would not be eligible. So industries that contribute significant amounts of carbon dioxide to the atmosphere would not have any incentive through the 45Z credit to reduce their carbon emissions. And even the ethanol plants are just relying on capturing the carbon dioxide from the fermentation process, and ignoring the carbon emissions from the natural gas combustion for the plant's power source, which are much more difficult to capture as pure carbon dioxide.

At this point, the Public Service Commission in North Dakota and the Public Utility Commission in South Dakota have denied Summit's request for a permit to construct the pipeline in those states. At the time of the hearing in this case, Summit was requesting eminent domain authority over 892 parcels of property (Hrg. Tr. p. 2567-2568). The Board heard from many of those Exhibit H landowners. Sierra Club asserts that the interests of those landowners are paramount.

Also, as the Board surely knows, this case has garnered a great deal of public interest. There have been more public comments filed in this docket than for any other case that has ever come before the Board. The issues presented in this case are numerous, and in many instances, novel. Sierra Club trusts that the Board will diligently and seriously address the facts and issues as discussed in the following sections of this Brief.

LEGAL STANDARDS FOR PERMITTING HAZARDOUS LIQUID PIPELINES

The Board's actions in this case are governed by the Iowa Administrative Procedure Act, Iowa Code Chapter 17A. The Board's actions will be overturned on judicial review if the action is any of the following:

> *a.* Unconstitutional on its face or as applied or is based upon a provision of law that is unconstitutional on its face or as applied.
> *b.* Beyond the authority delegated to the agency by any provision of law or in violation of any provision of law.
> *c.* Based upon an erroneous interpretation of a provision of law whose interpretation has not clearly been vested by a provision of law in the discretion of the agency.
> *d.* Based upon a procedure or decision-making process prohibited by law or was taken without following the prescribed procedure or decision-making process.
> *e.* The product of decision making undertaken by persons who were improperly constituted as a decision-making body, were motivated by an improper purpose, or were subject to disqualification.
> *f.* Based upon a determination of fact clearly vested by a provision of law in the discretion of the agency that is not supported by substantial evidence in the record before the court when that record is viewed as a whole. For purposes of this paragraph, the following terms have the following meanings:
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> (1) *"Substantial evidence"* means the quantity and quality of evidence that would be deemed sufficient by a neutral, detached, and reasonable person, to establish the fact at issue when the consequences resulting from the establishment of that fact are understood to be serious and of great importance.
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> (2) *"Record before the court"* means the agency record for judicial review, as defined by this chapter, supplemented by any additional evidence received by the court under the provisions of this chapter.

> (3) *"When that record is viewed as a whole"* means that the adequacy of the evidence in the record before the court to support a particular finding of fact must be judged in light of all the relevant evidence in the record cited by any party that detracts from that finding as well as all of the relevant evidence in the record cited by any party that supports it, including any determinations of veracity by the presiding officer who personally observed the demeanor of the witnesses and the agency's explanation of why the relevant evidence in the record supports its material findings of fact.
>
> *g.* Action other than a rule that is inconsistent with a rule of the agency.
> *h.* Action other than a rule that is inconsistent with the agency's prior practice or precedents, unless the agency has justified that inconsistency by stating credible reasons sufficient to indicate a fair and rational basis for the inconsistency.
> *i.* The product of reasoning that is so illogical as to render it wholly irrational.
> *j.* The product of a decision-making process in which the agency did not consider a relevant and important matter relating to the propriety or desirability of the action in question that a rational decision maker in similar circumstances would have considered prior to taking that action.
> *k.* Not required by law and its negative impact on the private rights affected is so grossly disproportionate to the benefits accruing to the public interest from that action that it must necessarily be deemed to lack any foundation in rational agency policy.
> *l.* Based upon an irrational, illogical, or wholly unjustifiable interpretation of a provision of law whose interpretation has clearly been vested by a provision of law in the discretion of the agency.
> *m.* Based upon an irrational, illogical, or wholly unjustifiable application of law to fact that has clearly been vested by a provision of law in the discretion of the agency.
> *n.* Otherwise unreasonable, arbitrary, capricious, or an abuse of discretion.

Iowa Code § 17A.19(10).

The Board's authority in this case is governed by Chapter 479B of the Iowa Code and the Board's rules in Part 199 of the Iowa Administrative Code. Pursuant to Iowa Code § 479B.1, the Board's primary responsibility is to "protect landowners and tenants from environmental or economic damages which may result from the construction, operation,

or maintenance of a hazardous liquid pipeline." The Board also has the responsibility to approve the location and route of the pipeline. *Id*.

To carry out this authority, the Board can grant a permit to the pipeline company, but only if the company proves that the pipeline "will promote the public convenience and necessity." Iowa Code § 479B.9. The Iowa Supreme Court addressed the concept of public convenience and necessity in the context of a crude oil pipeline in *Puntenney v. IUB*, 928 N.W.2d 829 (Iowa 2019). The court held that a balancing of costs and benefits by the Board in that case was not irrational, illogical, or wholly unjustifiable. *Id*. at 842. But every case is different and must be judged on its own facts.

Unfortunately, the *Puntenney* court did not provide a clear definition of public convenience and necessity. But the court did focus on certain aspects of the Dakota Access project whereby the IUB was not "irrational, illogical, or wholly unjustifi[ed] in finding public convenience and necessity." *Puntenney*, 928 N.W.2d at 841-842. First, the court noted that the oil being transported in the pipeline would result in lower gasoline prices for members of the public. Second, the court found that there was a demand for the oil by the public which inured to the public benefit. Finally, the court found that there was evidence on which the Board could rely that transporting oil by pipeline was safer than transporting the oil by rail, and that the oil would be transported one way or the other. These factors will be discussed later in this brief in the context of the Summit pipeline.

The *Puntenney* court also addressed the issue of eminent domain. The court first addressed the statutory limits on eminent domain contained in Iowa Code §§ 6A.21 and

6A.22. The court noted that § 6A.21 prohibits eminent domain authority to private entities, except those under the jurisdiction of the IUB. The court held, in that case, that Dakota Access was a company under the jurisdiction of the IUB. In this case, as explained below, Sierra Club asserts that Summit is not a company under the jurisdiction of the IUB, because it is not transporting a hazardous liquid. The *Puntenney* court also observed that § 6A.22 granted the right of eminent domain to common carriers. As will be explained below, Summit is not a common carrier. Finally, based on the finding that Dakota Access was a common carrier, the *Puntenney* court held that there was a constitutional basis for eminent domain in that case. So, even if there was a statutory basis for eminent domain pursuant to §§ 6A.21 and 6A.22, there might still not be a constitutional basis for finding that the pipeline was a public use. But there is no constitutional basis in this case since Summit is not a common carrier.

THE SUMMIT PROJECT IS NOT UNDER THE JURISDICTION OF THE IUB

Landowner George Cummins filed a motion to dismiss Summit's application because Chapter 479B accords the IUB jurisdiction only over hazardous liquid pipelines. Because the supercritical phase carbon dioxide in the Summit pipeline is not a liquid, the Board has no jurisdiction. The Board denied that motion and the issue is now under judicial review in the Polk County District Court. Because Summit is not under the jurisdiction of the Board, the eminent domain authority granted in Iowa Code § 6A.21 does not apply in this case.

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Mr. Cummins presented expert testimony establishing that supercritical carbon dioxide is not a liquid. Subsequent to the Board's denial of Mr. Cummins' motion to dismiss, Sierra Club filed the direct written testimony of Dr. Mark Jacobson. Dr. Jacobson also confirmed that supercritical carbon dioxide is not a liquid (Jacobson Direct Testimony, p. 5).

Because the Board's jurisdiction is now being considered in court, the Board should not issue a permit or grant eminent domain until, if ever, the courts determine that the Board has jurisdiction of the Summit project. Deferring decision in this case would not cause an undue delay in Summit's plans to build a pipeline because the regulatory agencies in North Dakota and South Dakota have denied Summit a permit in those states. Summit cannot build its pipeline until those states would grant a permit.

The Board's jurisdiction is at the very heart of the Board's authority to make a decision on issuing a permit. That matter should be decided before the Board makes a decision in this case.

SUMMIT IS NOT A COMMON CARRIER

Based on the Iowa Supreme Court decision in *Puntenney*, Summit can be granted eminent domain authority under the Iowa and United States Constitutions only if it is a common carrier. The *Puntenney* court's position was based on Justice O'Connor's dissenting opinion in *Kelo v. City of New London*, 545 U.S. 469, 125 S.Ct. 2655 (2005). As the *Puntenney* court described Justice O'Connor's dissent:

> In her view, a secondary benefit alone was not enough for a governmental transfer of property from one private entity to another to qualify as a taking for a public

> purpose. . . . She reasoned that almost any lawful use of private property will generate some secondary benefit and, thus, if "positive side effects" are sufficient to classify a transfer from one private party to another as "for public use," those constitutional words would not "realistically exclude *any* takings."

Puntenney, 928 N.W.2d at 845. The *Puntenney* court went on to explain that it was accepting Justice O'Connor's position that one circumstance when eminent domain to benefit a private entity is justified is when that entity is a common carrier. But Summit has not proven that it is a common carrier. This is confirmed by a review of the Iowa cases.

In *State ex rel. Bd. of R.R. Comm'rs v. Carlson*, 251 N.W. 160 (Iowa 1933), the court said that in determining whether a company is a common carrier, the question is whether the company is engaged in the public transportation of freight. The court went on to say:

> [In determining common carrier status], the vital consideration is whether the [carrier] has so provided and used his facilities as to give others, than those under contract with him, the right to command the use of his transportation services. If under all facts and circumstances the situation is such that *others* have the right to use [the carrier's] transportation facilities, he is a common carrier. If, on the other hand, [the carrier] is under no duty to perform his services, except for those with whom *he* elects to contract, then he is not a common carrier.
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> The courts of last resort of practically every state have recognized that a right on the part of the public to demand service must exist before one engaged in transporting freight becomes a common carrier.

The *Carlson* court further emphasized that Carlson was not a common carrier because the delivery service was performed for the merchants who made the original sales, not for the persons to whom the delivery was made. In addition, the court noted that

Carlson never held himself out as being willing to perform his services for all merchants who might ask for it, but clearly reserved to himself the right to contract with whoever he chose. The Iowa Supreme Court has also made clear that if a carrier is carrying its own product, it is not a common carrier. *Mid-America Pipeline Co. v. ICC,* 114 N.W.2d 622 (Iowa 1962); *United Suppliers, Inc. v. Hanson*, 876 N.W.2d 765 (Iowa 2016). Since Summit will be owning the carbon dioxide from the ethanol plants, Summit is not a common carrier, irrespective of any other facts.

The *Puntenney* court relied on *Carlson*, noting that, unlike Carlson, Dakota Access was not limiting its service to only shippers under contract. Summit, on the other hand, relies entirely on shippers under contract, even allegedly uncommitted shippers (Pirolli Rebuttal Testimony, p. 6; Pirolli Depo. p. 53-57).

The *Puntenney* court also referred to the decision in *Wright v. Midwest Old Settlers & Threshers Ass'n.*, 556 N.W.2d 808, 810 (Iowa 1996), for the statement that a common carrier need not serve all the public all the time. Puntenney, 928 N.W.2d at 843. The court used the example of airlines taking advanced bookings. The court was apparently trying to support its determination that a common carrier need not completely rely on walk up business. But advanced bookings on an airline do not require individualized negotiated contracts, unlike Summit's business model.

These precedents describe Summit's status exactly. James Pirolli has testified that Summit has long-term offtake agreements with the participating ethanol plants in the five states where the pipeline would be constructed (Pirolli Direct Testimony p. 3). Mr. Pirolli

also testified that industries other than ethanol could use the pipeline, but only if they could satisfy Summit's requirements (Pirolli Rebuttal Testimony p. 5; Hrg. Tr. p. 1995). This latter statement corresponds to the language in *Carlson*, *supra*, that if the carrier reserves the right to choose its customers, it is not a common carrier. It is also significant, with respect to the offtake agreements Summit has with the ethanol plants, as described by Mr. Pirolli in his public testimony at the hearing, that the ethanol plants are not hiring Summit to transport the carbon dioxide. The ethanol plants are transferring title to the carbon dioxide to Summit, so Summit is carrying its own product and is not a common carrier (Hrg. Tr. p. 1999). See, *Mid-America Pipeline Co. a*nd *United Suppliers, Inc., supra.* Sierra Club also refers the Board to Mr. Pirolli's confidential hearing testimony on this point.

Even if Summit were able to contract for carbon dioxide transport with entities other than ethanol plants, Summit would still require what Mr. Pirolli described as a transportation service agreement (Hrg. Tr. p. 1964-1965). But those would still be negotiated contracts that would have to comply with Summit's requirements (Hrg. Tr. p. 1965-1966). The Board should also review Mr. Pirolli's confidential hearing testimony to further substantiate this argument. So, pursuant to the *Carlson* decision, Summit would still not be a common carrier in that circumstance.

Faced with all of this evidence that it is not a common carrier, Summit makes a feeble attempt to come within the language in *Puntenney* regarding decisions by the Federal Energy Regulatory Commission (FERC) describing common carriers.

Specifically, the *Puntenney* court determined that Dakota Access was a common carrier because "10% [of capacity] is required to be made available for walk-up business. That is all the Federal Energy Regulatory Commission requires of a common carrier." *Id*. at 843. It is significant to note, first of all, that Dakota Access was a crude oil pipeline governed by FERC under the Interstate Commerce Act. 49 U.S.C. app. 1. The Interstate Commerce Act defines oil pipelines as common carriers. 49 U.S.C. app. 1(4). So the initial observation is that Dakota Access was a common carrier by definition under the Interstate Commerce Act. It was not the 10% reservation of capacity for walk-up shippers that made Dakota Access a common carrier.

The 10% reservation concept is a requirement imposed by FERC on common carriers, and oil pipelines, as explained above, are common carriers. *Navigator BSG Transp. & Storage*, 152 FERC ¶ 61,026, at 61,127 (July 10, 2015). The *Puntenney* court stated the matter correctly, that FERC requires common carriers to reserve 10% of capacity for walk-up, or uncommitted, shippers. So, Summit's claim that it is a common carrier because it claims it will reserve 10% of capacity for uncommitted shippers has it backwards. The 10% reservation of capacity is not what makes a pipeline a common carrier. The 10% reservation is a requirement on a pipeline that is already, by definition, a common carrier. And since Summit is not an oil pipeline or otherwise regulated by FERC, it is not a common carrier by definition.

But even if the *Puntenney* decision could somehow be interpreted as making the 10% reservation provision a criterion for common carrier status, Summit has not carried

its burden of proof. Mr. Pirolli testified that Summit would hold an open season for potential shippers to bid on access to the pipeline and that 10% of capacity would be reserved for uncommitted shippers (Pirolli Rebuttal Testimony, p. 6). But the open season would only be for committed shippers (Hrg. Tr. p. 1915). So the open season has nothing to do with the 10% reservation concept regarding uncommitted shippers. Furthermore, Mr. Pirolli stated that a prospective shipper making a bid during the open season would have to qualify by meeting Summit's requirements (Hrg. Tr. p. 1912-1913). Pursuant to the *Carlson* decision, *supra*, since Summit would be reserving to itself the choice of whom to contract with, it is not a common carrier. With respect to uncommitted shippers, for whom 10% of capacity would be reserved, Mr. Pirolli was vague in trying to explain why an uncommitted shipper would spend millions of dollars for capture equipment and lateral pipelines to its facility for a short-term contract of uncertain volume (Hrg. Tr. p. 1972-1974). The discussion with Mr. Pirolli was as follows:

> Q. In your rebuttal testimony on page 6 starting at line 14, you say "Moreover, we will be conducting what is known as an open season to solicit interested shippers and that we will be reserving 10 percent of the pipeline capacity for walk-up shippers, those who are not shipping pursuant to a long-term commitment."
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> Define more specifically what you mean by "walk-up shippers."
>
> A. I'd consider a walk-up shipper or an uncommitted shipper, we hear some of those terms used interchangeably, as a shipper that does not have a long-term commitment on the pipeline. So they haven't committed to consistently shipping and we have not, therefore, reserved capacity for that shipper.
>
> Q. And you say that those would not be long-term contracts. What do you mean by "long-term"?

A. Well, some length of time that we deem is reasonable to reserve capacity for that shipper. And it could be a range of different things, but, as we discussed earlier, there's going to be -- there could be different classes of shippers. Those could generally be related to the amount of volume and the type of commitment that they're willing to make.

But the answer, Mr. Taylor, is years, not days or weeks or months.

Q. So what shipper is going to spend millions of dollars for capture equipment, for a pipeline lateral up to their industrial facility, for a week or a month or even a year contract?

A. What -- sorry, can I try and repeat that?

You asked me what shipper is going to spend the money to make the investment to ship CO2 on our line?

Q. To be a walk-up shipper like you've described. That it would be very short-term, no particular commitment on volume.

A. Well, I think, you know, there's trade-offs either way. So, generally, a committed shipper is very interested in securing volume capacity on the pipeline so that they know that we've reserved that for them and we also know that we're going to have – or any pipeline would know that they're going to have consistent revenue coming in from that shipper and there's requirements along with that.

There could be -- in the other case of an uncommitted shipper, it doesn't mean that it's not a -- that they're not going to be shipping for months or years into the future, it just means that they have not made that commitment and we have not reserved pipeline capacity for them. So as long as there is capacity on the pipeline that's not being used and they wish to ship, they can do so.

And there's uncommitted shipping arrangements that go on for years and years into the future perpetually. It depends on whether or not a shipper wishes to make that firm take-or-pay commitment.

So there's trade-offs either way.

Q. But my question was why would a walk-up shipper, as you've described it, very short-term, no commitment in volume, spend the millions of dollars it would take to buy the capture equipment, to build a lateral to their industrial facility?

> A. Well, maybe they -- maybe they feel that in their analysis that they're comfortable with that – whatever is the uncommitted capacity that's made available on the pipeline, whatever pipeline it is, natural gas or CO2 or anything else, that that capacity is going to be there and they don't wish to take the risk of a take-or-pay agreement. Which means that if their facility is not operating, they still have to pay the committed fees.
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> The commitments are bilateral. If they want the capacity on the pipeline, they have to pay whether they use it or not.

(Hrg. Tr. p. 1972-1974).

So let's unpack that testimony. First, Mr. Pirolli says that an uncommitted shipper has no long-term contract and no commitment to consistently ship product. Mr. Pirolli then confirmed that what he meant by a contract being long-term is a term of years, not weeks or months. So he was saying that an uncommitted shipper would have a contract for weeks or months not years. Then he says that an uncommitted shipper could still be shipping for years, but just not making the commitment to ship for years. Following that, Mr. Pirolli says that Summit has not reserved capacity on its pipeline for uncommitted shippers. But that contradicts Summit's mantra that it will reserve 10% of capacity for uncommitted shippers. Then, contradicting all of that testimony, Mr. Pirolli changes the distinction between committed and uncommitted shippers to the claim that committed shippers have take or pay contracts, but uncommitted shippers don't. Finally, when asked why an uncommitted shipper would spend millions of dollars for capture equipment and a lateral pipeline, Mr. Pirolli was not able to give an answer beyond a series of "maybe's." In other words, he could not give a sensible answer, because there is none.

[redacted]

It is obvious that Summit has no intention of reserving 10% of capacity for uncommitted shippers. That is just not a realistic scenario for this project. Summit just hopes the Board will blindly accept this attempt by Summit to claim it is a common carrier.

It must also be emphasized that the *Puntenney* court's reference to reserving capacity for uncommitted shippers is a FERC standard for oil pipelines. Dakota Access is an oil pipeline governed by FERC policy, so it made sense for the *Puntenny* court to refer to the FERC requirement. It is also important to understand that the designations of committed and uncommitted shippers is purely a construct of FERC regulations. It is not a feature of common carrier cases in general. The Summit pipeline is not an oil pipeline and is not subject to FERC regulations. Therefore, in this case, the Board must look to Iowa common law on common carriers. As explained above, the *Carlson* case provides a clear explanation of what is a common carrier. A review of subsequent cases follows.

Following *Carlson*, the Iowa Supreme Court decided *State v. Rosenstein*, 252 N.W.2d 251 (Iowa 1934). In that case, Rosenstein was delivering films to movie theaters. Rosenstein claimed he was not a common carrier subject to registration requirements applicable to common carriers. The question was whether Rosenstein was engaged in public transportation. The court concluded that he was because he was carrying films for customers who had not signed a contract. The court cited to a Pennsylvania case, *Bingaman v. Public Service Comm.*, 161 A. 892 (Pa. 1933), where the Pennsylvania court found that because the carrier made its service available to everyone who sought its services, it was a common carrier. Summit, to the contrary, will provide its pipeline only to entities that can satisfy Summit's requirements and with whom it negotiates specific individualized contracts, so it is not a common carrier.

In *Circle Express Co. v. ICC*, 86 N.W.2d 888 (Iowa 1957), the carrier hauled freight primarily throughout the northeast quadrant of Iowa. The Iowa Commerce Commission (ICC) found that:

> Circle Express, Inc. . . . is holding itself out to the public, or a substantial segment of the public, as ready, willing and able to transport property offered to it with but few insignificant and immaterial limitations and qualifications; that such transportation has been and is of the 'public' character contemplated by Chapter 325; that by greatly expanding the number of transportation contracts and the ease with which such contracts have been and are entered into, Circle Express, Inc. is, in fact, operating as a common carrier under the guise of a contract carrier.

Id. at 891. The court further found the following:

> There were no negotiations between the parties as to terms of the general contract used, the terms were the same for substantially all parties, and changes when made were effectuated without consultation or negotiation with the shippers. Charges were not negotiated or based on time and effort to render the service, but were the same for all regardless of distance depending on the weight alone. These were at least not the usual special contract cases of a private or contract carrier, ...

Id. at 892. The court finally concluded:

> We are satisfied there was in this record competent and substantial evidence of a holding out to the general public. Statements as well as the manner in which this business is conducted, including inferential invitations to the public to apply for service, indicate that the company will transport for hire the goods of all persons indifferently so long as it has room and the goods are of the type it assumes to carry. There is substantial evidence of much more than a mere undertaking by a special individual agreement in each particular instance to carry goods of another party.
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> [T]he distinctive characteristic of a common carrier is that he holds himself out as ready to engage in the transportation of goods for hire, as a public employment, and not as a casual occupation, and that he undertakes to carry for all persons indifferently, within limits of his capacity and the sphere of the business required of him. The dominant and controlling factor in determining the status of one as a common carrier is his public profession or holding out, by words or by course of conduct, as to the service offered or performed.

Id. at 893.

In contrast to the facts in *Circle*, Summit will transport only carbon dioxide and only for shippers who sign contracts and who satisfy Summit's conditions (Hrg. Tr. p. 1912-1913). And it is clear from James Pirolli's testimony that the contracts would be negotiated with the shippers, unlike the contracts in *Circle* (Hrg. Tr. p. 2164, 2181). Summit's services are very specialized and directed at a unique class of shippers, not, as in the *Circle* case, a broad range of shippers who may be shipping various types of cargo.

The facts in *Kvalheim v. Horace Mann Life Ins. Co.*, 219 N.W.2d 533 (Iowa 1974), were somewhat unique in the line of Iowa common carrier cases. The plaintiff's parents were killed in an automobile accident while vacationing in Mexico on a tour arranged by a travel company. The insurance company refused to pay benefits, alleging that benefits only applied to injury while on a common carrier. The insurance company claimed that the travel company was not a common carrier. The court relied extensively on the decision in *Circle Express, supra*, to support a finding that the travel company was a common carrier. The court further stated that if the carrier holds itself out as serving all indifferently, then the carrier must perform its duty to serve all contracting with them on demand. Again, this is not what Summit would do. It claims it will only contract with shippers of its choosing.

The cases confirm that Summit, even if it actually does what it claims it will do, is not a common carrier under Iowa law. But the fact is that Summit's claimed status as a common carrier is all hypothetical and speculative. The Iowa cases all deal with carriers

who had already undertaken to provide services, so the facts were not hypothetical or speculative. At this point, there is no evidence on which the Board can rely that Summit will conduct its business as a common carrier. It certainly has not so far, as explained above. It is clear that Summit is grasping for straws to claim it is a common carrier so, pursuant to the decision in *Puntenney*, it can exercise eminent domain. When the extreme and oppressive constitutional power of eminent domain is demanded, the Board must place a heavy burden on Summit to prove that it is entitled to such power.

THE SUMMIT PIPELINE WOULD NOT PROMOTE PUBLIC CONVENIENCE AND NECESSITY

In order for the Board to issue a permit to Summit to construct and operate its proposed pipeline Summit must prove that the pipeline would promote public convenience and necessity. Iowa Code § 479B.9. The *Puntenney* court briefly discussed the meaning of public convenience and necessity. *Puntenney,* 928 N.W.2d at 841. Focusing primarily on the term "necessity" the court referred with apparent approval to the Board's reliance in that case to the discussion in *Wabash, Chester & W. Ry. v. Commerce Comm'n.*, 141 N.E. 212, 215 (Ill. 1923), where the Illinois court said, "The meaning [of necessity] must be ascertained by reference to the context, and to the objects and purposes of the statute in which it is found."

Because the Dakota Access pipeline that was at issue in *Puntenney* was an oil pipeline that arguably provided a necessary service to the public, it was not unreasonable for the court to find that, in turn, the Board was not unreasonable in finding public convenience and necessity. But Summit's pipeline, which will not transport any product

that the public will use, directly or indirectly, presents a different context, in the words of the *Wabash* case. A further review of Iowa cases reveals that the Summit project does not fit with how public convenience and necessity has been interpreted.

In *Thomson v. Ia. State Commerce Comm.*, 235 Iowa 469, 15 N.W.2d 603 (1944), a railroad that had been in existence long before trucks were available to haul freight wanted to compete with the trucks offering coordinated rail and truck service. The Commerce Commission (predecessor to the IUB) applied the requirement of public convenience and necessity and denied the railroad's application on the basis that the railroad's proposal would simply duplicate service already provided. The district court and the Supreme Court reversed the Commission decision on the basis that the additional service proposed by the railroad would promote public convenience and necessity.

Even though the court in *Thomson* said that the terms "public convenience" and "necessity" were not absolute, the decision of the Commission was still reversed. The court quoted with approval the following language from *Application of Thomson*, 143 Neb. 52, 53, 8 N.W.2d 552, 554 (1943):

> The prime object and real purpose of Nebraska state railway commission control is to secure adequate, sustained service for the public at minimum cost and to protect and conserve investments already made for this purpose. In doing this, primary consideration must be given to the public rather than to individuals.

Thus, it is clear that the focus of public convenience and necessity is on service to the public.

The case of *Application of National Freight Lines*, 241 Iowa 179, 40 N.W.2d 612 (1950), was a dispute between two trucking companies regarding whether one or both

would have authority from the Iowa Commerce Commission to haul freight between Dubuque and Des Moines. The application for a certificate of public convenience and necessity was granted by the Commission and that decision was upheld by the court. Public convenience and necessity was determined on the basis of service to the public, just as in the *Thomson* case.

In *Appeal of Beasley Bros.*, 206 Iowa 229, 220 N.W. 306 (1928), a railroad company applied for a permit to operate a bus line between Newton and Des Moines, in addition to its existing railroad operation between those two cities. Beasley Brothers operated an existing bus line in the same area and objected to the railroad company's application. The Board of Railroad Commissioners granted the permit to the railroad company. On appeal, the Iowa Supreme Court discussed public convenience and necessity as follows:

> Public convenience and necessity are concerned in the operation and maintenance of existing electric railroads and in their ability to furnish the service for which they were constructed. Capital is invested in them, as well as in the equipment of motor carriers; valuable properties, such as warehouses, are built on the line of the electric railroad, in reliance upon its permanent operation.

Id., 206 Iowa at 237, 220 N.W. at 309-310. So, just as in the other cases, the court made it clear that public convenience and necessity focuses on the service to be provided by the proposed project.

The foregoing Iowa court decisions are also consistent with the history of the concept of public convenience and necessity. This history gives public convenience and necessity an independent legal definition. A certificate of public convenience and

necessity came into existence in the nineteenth century to ensure that public service companies provided reliable service to the public at fair prices. W. K. Jones, *Origins of the Certificate of Public Convenience and Necessity: Developments in the States, 1870-1920*, 79 Columbia L. Rev. 426 (1979)(Jones).

The primary focus was on preventing competition that would dilute the services offered to the public. So even if a public service company fulfilled all the requirements for a license or permit, the application could be denied if the proposed additional service was already available in the market. The essence of the certificate of public convenience and necessity, therefore, was the exclusion of otherwise qualified applicants from a market because, in the judgment of the regulatory commission, the addition of new or expanded services would have no beneficial consequences, or might actually have harmful consequences.

Jones describes five rationales that have been used to justify the purpose of a certificate of public convenience and necessity:

1. Prevention of "wasteful duplication" of physical facilities;
2. Prevention of "ruinous competition" among public service enterprises;
3. Preservation of service to marginal customers, so a new company entering the field would not skim off the most profitable customers;
4. Protection of investments and a favorable investment climate in public service industries;

5. Protection of the community against social costs (externalities), e.g., environmental damage or misuse of eminent domain.

Id. at 428.

Therefore, the history of public convenience and necessity is consistent with the application of the concept by the Iowa Supreme Court in the cases described above. It is certainly in the context of this history and precedent that the Iowa Legislature used the term in § 479B.9. Because Summit does not provide any service to the public, it does not promote public convenience and necessity.

It is also significant that 199 I.A.C. § 13.3(1)(f) requires Exhibit F in the petition for a permit to include a statement of the purpose of the project and a description of how the services rendered by the pipeline will promote the public convenience and necessity. This requirement fits in exactly with the judicial interpretation of public convenience and necessity as relating to the service to be provided by the carrier. But Summit's Exhibit F uses the word "service (or services)" only once, and then only in terms of the alleged service to industrial facility owners, not to the public.

In its application to the Board, Exhibit F, Summit primarily asserts three alleged benefits that it contends promote public convenience and necessity: benefits to the ethanol industry, economic benefits to Iowa, and greenhouse gas reductions. Summit has not carried its burden of proof on any of these claims. Furthermore, the Board must balance any alleged benefits against the costs and adverse impacts of the proposed pipeline. *Puntenney*, 928 N.W.2d at 841.

It is also worth noting that Summit is not claiming that its pipeline would reduce prices for anything or satisfy public demand for a product, as Dakota Access did. In fact, the public will not use, either directly or indirectly, the carbon dioxide carried in Summit's pipeline. Summit does make the claim that pipelines are safer than rail transport, but there was no evidence that carbon dioxide would ever be transported by rail in any event. So the pipeline v. rail argument is not even relevant.

1. Alleged Benefits to the Ethanol Industry

Summit claims that by capturing carbon dioxide from the fermentation process at ethanol plants in Iowa, those plants reduce their carbon intensity score and can sell their ethanol in states that have low carbon fuel standards. Summit application, Exhibit F. Summit further claims that without Summit's pipeline, Iowa ethanol plants would be at a disadvantage to ethanol plants in other states. *Id*. The direct testimony of James Powell and the direct and rebuttal testimony of James Pirolli make those same general allegations with no supporting evidence. Summit's only witness on the alleged impact on the ethanol industry was James Broghammer.

Mr. Broghammer is the CEO of Pine Lakes Corn Processors in Steamboat Rock. Mr. Broghammer's direct testimony was quite brief and, like Mr. Powell's and Mr. Pirolli's written testimony, light on supporting evidence. But Mr. Broghammer's deposition testimony did confirm several points:

● Iowa ethanol is currently being sold to low carbon fuel markets – Broghammer Depo. p. 12. So carbon capture and the Summit pipeline are not necessary for Iowa's ethanol industry to participate in the low carbon fuel market.

● Mr. Broghammer did not know of anything preventing Iowa ethanol from being sold to low carbon fuel markets – Broghammer Depo. p. 13-14. So, again, carbon capture and the Summit pipeline are not needed.

● When Mr. Broghammer was asked in his deposition if he had any evidence that without carbon pipelines ethanol plants in other states would expand at the expense of ethanol plants in Iowa, he admitted that he had no evidence of that – Broghammer Depo. p. 15-16.

● In a followup question, when Mr. Broghammer was asked why ethanol plants in South Dakota, one of the states that would allegedly benefit from Summit not having a pipeline in Iowa, were supporting the Summit pipeline, Mr. Broghammer did not know – Broghammer Depo. p. 16. Obviously, if South Dakota ethanol plants would benefit from no pipeline in Iowa, they would not be supporting the entire Summit project.

● Mr. Broghammer also said in his direct testimony, p. 3-4, that without the pipeline, corn producers would see lower prices for corn. But in his deposition, Mr. Broghammer admitted that lower corn prices are a function of the market and would have nothing to do with the presence or absence of a pipeline – Broghammer Depo. p. 16-17.

● Mr. Broghammer further testified in his deposition that his ethanol plant is already operating at maximum capacity and that even with a pipeline, he would not be

buying any more corn – Broghammer Depo. p. 25-26. So the pipeline would not benefit Iowa corn producers.

- Mr. Broghammer also confirmed that his ethanol plant has already undertaken projects that would qualify the ethanol from the plant for low carbon fuel markets and his plant is planning for further actions to lower its carbon intensity score – Broghammer Depo. p. 40-41. So carbon capture and Summit's pipeline are not needed to qualify for low carbon fuel markets. The only reason for carbon capture and the pipeline is to garner the federal 45Q and 45Z tax credits, which benefit no entity except Summit and the ethanol plants that have contracted with Summit.

- When asked whether Iowa corn producers would grow more corn as a result of the pipeline, Mr. Broghammer confirmed that the corn producers would not grow more corn as a result of the pipeline – Broghammer Depo. p. 73-74

- Ultimately, Mr. Broghammer's claim that without the pipeline, Iowa ethanol producers would leave the state assumes that there would be carbon capture and pipelines in surrounding states, without evidence to support that speculation – Broghammer Depo. p. 88.

In summary, Mr. Broghammer, Summit's only witness on the Summit project's impact on Iowa's ethanol industry, did not support Summit's argument.

In his rebuttal testimony James Pirolli refers to a report from Decision Innovation Solutions, commissioned by the Iowa Renewable Fuels Association. Pirolli Rebuttal Ex. 1. That report purports to show that the ethanol industry would leave Iowa if carbon

dioxide pipelines are not constructed in Iowa. A review of this report seriously challenges its reliability.

To begin with, the report presents at the outset a disclaimer, warning against reliance on the report. The disclaimer says:

> Decision Innovation Solutions LLC ("DIS") has prepared this analysis (the "Project") for review and use. The Project consists of analysis of the comparative economics of ethanol plants that are expected to have access to carbon capture and sequestration via pipelines to those that are at risk of not having access to carbon capture sequestration via pipeline.
>
> While DIS has made every attempt to obtain the most accurate data and include the most critical factors in preparing the Project, DIS makes no representation as to the accuracy or completeness of the data and factors used or in the interpretation of such data and factors included in the Project. The responsibility for the decisions made by you based on the Project, and the risk resulting from such responsibility remains solely with you; therefore, you should review and use the Project with that in mind.
>
> While the Project does include certain estimates and possible explanations for ethanol plant operating margins and the impacts of tax credit changes on ethanol plant operating margins, it cannot be ascertained with certainty the extent to which these estimates are entirely accurate. The following factors, among others, may prevent complete accuracy of the estimation of ethanol plant operating margins and the impacts of tax credit changes on ethanol plant operating margins, estimates of potential dislocations of future ethanol production and explanations for the same: Inadvertent errors and omissions related to data collection, data summarization, and visual display of data.

(DIS Report, p. v). So the Board is forewarned about relying on the report.

Caution is also advised about relying on the report because it was commissioned by the Iowa Renewable Fuels Association, which has vigorously and vocally supported the carbon dioxide pipelines. That fact alone is not sufficient cause by itself to reject the

report, but it does add another note of caution concerning the Board's reliance on the report.

Regarding the contents of the report, it does not support its ultimate conclusion that if the pipelines are not constructed, Iowa' ethanol plants will lose out to ethanol plants in other states where pipelines would be built. First of all, it assumes that pipelines will be built in other states. But it provided absolutely no evidence that pipelines will be built in other states. In fact, the evidence in this case is that both North Dakota and South Dakota have denied a permit to Summit. And Illinois and South Dakota denied a permit to Navigator. It also appears that Illinois will deny a permit to Wolf. So the report begins with false assumptions.

The report appears to rely on the assumption that the 45Q and 45Z tax credits will incentivize ethanol plants in other states. But that does not mean that ethanol plants will be built in other states and lead to the closure of ethanol plants in Iowa. As pointed out above, even if the ethanol industry wants to expand in other states to get the tax credits, that does not mean that state regulators will permit the pipelines. Nor is there any evidence that even without pipelines in Iowa, the Iowa ethanol industry would leave the state. James Broghammer, Summit's ethanol witness, in his deposition, p. 15-16, admitted that he had no evidence to support the speculation that if there were no pipeline in Iowa that the ethanol industry would expand in other states.

Most of the report discusses the alleged economics of ethanol production and the impact of the 45Z tax credit. There is no doubt that the 45Z tax credit would be a

temporary economic benefit to the ethanol industry. But that does not substantiate the report's ultimate conclusion that Iowa's ethanol industry would cease if pipelines are not built in Iowa. The 45Z tax credit is temporary, only available for three years. So what happens to the ethanol industry after the tax credit expires? The report does not answer that question. Nor does the report address the fact that California, where the report assumes the ethanol would be sold, is phasing out combustion engines, eliminating the market for the ethanol.

The report contains the following statement:

> If states neighboring Iowa facilitate the construction of CO2 pipelines, but Iowa regulations are considered sufficiently burdensome that CO2 pipelines are not built in Iowa, the incentives created by 45Z and 45Q tax credits **could** result in expansion of ethanol production in locations with pipeline access through new construction or expansion of existing ethanol plants with access and abandonment of plants without access. If that occurs, then it is **likely** that production of ethanol at some existing plants that do not achieve CCUS capabilities **may** operate at a disadvantage and **may** ultimately become uncompetitive. (emphasis added).

(DIS Report, p. 8). The words "could," "likely," and "may" in the above passage from the report, show how shakey the entire report, and especially its conclusion, is.

Furthermore, the ethanol industry is unlikely to leave Iowa in any event. The abundance and availability of the corn crop in Iowa makes it economically beneficial for the ethanol industry to be in Iowa (Hrg Tr. p. 2022). In addition, support from the State of Iowa and the demand for ethanol byproducts by the Iowa livestock industry also creates an economically beneficial situation for the ethanol industry (Hrg. Tr. p. 2022-2023). The DIS report does not address this fact.

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On page 14 of the DIS report, it states that carbon capture at ethanol plants **has the potential** to reduce the carbon intensity of ethanol production by **upwards** of 55 percent. Aside from the obvious speculative language in the previous sentence, the report cites absolutely no authority for the statement. The report's argument seems to be that the 45Z tax credit will make ethanol production so profitable by lowering an ethanol plant's carbon intensity score, that the plant would leave Iowa absent a pipeline. But the report admits, on page 18, that the IRS has not yet issued guidance on how the credit will be allocated. So the report assumes the allocation will be calculated on a sliding scale. So this is another unsupported assumption.

The report next says, on page 20, that "Ethanol plants that do not have access to either direct injection of CO2 or carbon capture and sequestration via a pipeline may have an opportunity to participate in the 45Q tax credits for carbon capture and utilization." But the 45Q tax credit can only be claimed by the entity that owns the capture equipment. But if the ethanol plant has no access to direct injection or CCS, why would it have any capture equipment? It would be capturing carbon dioxide but could not do anything with it. So the report has made an absurd statement. Furthermore, Summit's business model is that Summit will own the carbon capture equipment, so it would get the 45Q credit, not the ethanol plant. Then, based only on the 45Q and 45Z tax credits, the report claims that the estimated amount of the credits, without considering any other factors that would keep ethanol plants in Iowa, would incentivize the Iowa plants to close and for the ethanol industry to move to states that would have carbon capture opportunities. It is clear that the

DIS report and the assertion that without the pipelines, ethanol production in Iowa would move to other states, is based on speculation and unsupported assumptions, rather than relevant data or real-world experience.

Finally, the DIS report was offered into evidence as an exhibit to James Pirolli's rebuttal testimony. Mr. Pirolli did not participate in preparing the report or contributing any information that was used in the report. As to Mr. Pirolli, the report was hearsay without any foundation to admit it through his testimony. Summit should have had the author of the report as a witness so he could have been cross-examined about it. This is another reason the Board should give this report no weight. Iowa Code § 17A.14(1) states that an administrative agency must base its decision on the kind of evidence on which a reasonably prudent person would rely for the conduct of serious affairs. The DIS report does not meet that standard.

Apart from the DIS report, the only evidence Summit presented regarding ethanol was the testimony of James Broghammer. But Mr. Broghammer's testimony does not establish that the public will benefit from the Summit pipeline as it pertains to the ethanol industry. Mr. Broghammer admitted in his deposition that Iowa ethanol producers are already selling ethanol to low carbon fuel markets and there is nothing to prevent Iowa ethanol producers from selling all of their ethanol in the low carbon fuel market (Broghammer Depo. p. 13-14). And when Mr. Broghammer was confronted in his deposition with statements he made in his written testimony, he could not support those statements (Broghammer Depo. p. 16-19). In addition, when Mr. Broghammer was asked

in his deposition if he thought the Summit project would move forward in other states if the IUB does not grant a permit, he said he was not sure (Broghammer Depo. p. 22). Mr. Broghammer also confirmed that his ethanol plant would not be producing any more ethanol if the Summit pipeline were built (Broghammer Depo. p. 25-26). And Mr. Broghammer also said that his ethanol plant already has projects that will reduce its carbon intensity score (Broghammer Depo. p. 40-41). In other words, a pipeline is not needed for Iowa ethanol plants to take advantage of low carbon fuel markets. The carbon capture and 45Z tax credit is just a way for ethanol plants to make more money with no benefit to the public. Mr. Broghammer did not claim that Iowa farmers would grow more corn if the pipeline were built (Broghammer Depo. p. 74). So the pipeline would not produce any benefit to Iowa corn farmers.

Therefore, the DIS report is just a puff piece to justify carbon pipelines which, as stated above, only benefit the ethanol industry and the pipeline companies.

Sierra Club witness, Dr. Silvia Secchi, testified that she has studied the ethanol industry for years (Secchi Direct Testimony, p. 7). Dr. Secchi described the various negative aspects of ethanol production (Secchi Direct Testimony, p. 6-7). Dr. Secchi concludes that the ethanol market is shrinking and carbon capture and the Summit pipeline will not keep the ethanol industry viable (Secchi Direct Testimony p. 7-8). Dr. Secchi also noted that the national Renewable Fuels Association determined that carbon capture and storage ranks fifth in reducing greenhouse gases from ethanol production (Hrg Tr., p. 3672).

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Sierra Club witness Mark Jacobson also explained why Iowa ethanol may not meet low carbon fuel standards. Using California as the primary example, Dr Jacobson pointed out that California's low carbon fuel standards continuously make the thresholds for meeting the standards more strict (Jacobson Direct Testimony, p. 18-19). Therefore, he concludes that "E85 with carbon capture may still not meet the standard." (Jacobson Direct Testimony, p. 19). Beyond that, California has set new regulations requiring all new passenger vehicles to be zero emission by 2035 (Jacobson Direct Testimony, p. 19). That will preclude the use of ethanol. So even if there were some advantage to the ethanol industry from the low carbon fuel standard, it would be extremely short lived. What will happen to Summit's carbon capture equipment and pipeline after that? Summit has not answered that question. The obvious conclusion is that Summit is simply after quick money from the 45Q tax credit, and then when there is no market for the ethanol from the carbon capture process, the ethanol plants and Summit will walk away and Iowans will be left with the remains. And the Board will have issued a permit for a project that provides no long term benefits to Iowans.

In addition, landowners who are corn farmers also questioned the public benefit of the pipeline project increasing ethanol industry profits. One statement made by landowners was that the Summit project would only benefit Summit and the ethanol plants, not farmers (Hrg. Tr. p. 329, 374, 402, 4446, 4534, 5673, 6487). Landowners also recognized that the future of ethanol is limited due to the advent of electric vehicles (Hrg. Tr. p. 294, 951, 1306, 4668, 4673, 4848, 5672, 5714, 6371-72. Landowners further

observed that Iowa farmers were farming before there was ethanol and are farming now without carbon capture and pipelines (Hrg. Tr. p. 951, 6150, 6916).

Furthermore, Summit has presented no evidence that the ethanol industry benefits the public generally. The only economist presented as a witness by Summit was Andrew Phillips from Ernst and Young. His testimony will be discussed in more detail later, but he said nothing about the ethanol industry and its alleged benefit to the public. As noted above, even the landowners who are corn farmers recognize that ethanol does not even benefit them to the extent that Summit contends and that the Summit project is just for the benefit of the ethanol industry, not the public. And Summit did not present any farmers as witnesses in support of the project to claim how it would benefit farmers or the public.

James Pirolli, in his direct testimony, was asked how the pipeline would support the ethanol industry (Pirolli Direct Testimony, p. 3). He was not asked how the pipeline would benefit the public. He goes on to claim that the pipeline will support Iowa's agriculture industry and farmers (Pirolli Testimony, p. 4). But that still does not mean there is a benefit to the general public. And, as mentioned above, the farmer landowners who testified recognize that there is no benefit to farmers from this project. Also, Mr. Pirolli presented no authority for his statements. Mr. Pirolli claims that the pipeline's alleged benefit to the ethanol industry will benefit farmers because it will allegedly keep the ethanol industry in Iowa. But, as explained above, that is a baseless argument. And, again, Mr. Pirolli offers no supporting evidence for that statement. Finally, Mr. Pirolli claims that Summit will somehow "play a crucial role in decarbonizing the agricultural

supply chain (Pirolli Direct Testimony, p. 5). But he does not explain how the pipeline project would do that. It is just more corporate PR.

Even if it is assumed that carbon capture at ethanol plants would increase the price of corn (Pirolli Rebuttal Testimony, p. 5) (which has not been proven), that would increase the price of feed for livestock producers. And livestock production is an important part of Iowa's farm economy. Also, if the Summit project would lead to higher prices for farmland (Pirolli Rebuttal Testimony, p. 5), that would make it harder for young farmers to buy land and get started in the farming business. So there is no clear public benefit.

In summary, Summit has not shown that ethanol must have carbon capture and the Summit pipeline to survive, nor that the ethanol industry provides a public benefit to Iowa. Without that showing, Summit cannot claim that its pipeline's impact on the Iowa ethanol industry promotes public convenience and necessity.

2. Impact on Climate Change

Summit's application, Exhibit F, states that the project will "play an important role in reducing greenhouse gas emissions in the effort to combat climate change. . . . Once operational, the Project will provide the largest and single most meaningful technology-based reduction of carbon emissions in the world." This is nothing but corporate public relations language. In fact, Summit presented no evidence to support those grandiose statements.

It is significant that Summit presented no expert witness to support its claims regarding the pipeline's impact on climate change. The direct testimony of James Powell and James Pirolli reiterated the unsupported claims made in Exhibit F, with no supporting evidence. James Powell's direct testimony, p. 4, mentions that carbon dioxide will be captured and prevented from going into the atmosphere, but he mentions this only in the context of reducing the carbon intensity score of ethanol, not in the context of mitigating climate change. James Pirolli's direct testimony, p. 6, claims that the Summit project is capable of capturing "up to" 18 million metric tons of carbon dioxide per year, which he claims is the equivalent of removing emissions from approximately 3.9 million cars. But he offered no evidence to support that statement. In fact, even if Mr. Pirolli's statement were correct, 18 million metric tons of carbon dioxide captured per year is miniscule in the context of mitigating climate change.

Then, in contrast to the hype in Exhibit F, Mr. Powell testified at the hearing:

> Q. That begs the question then let's leave the alleged benefit to maybe a handful of ethanol companies in Iowa. Is one of your also -- I guess the pitch here, one of the purposes of the project, is to help with global warming and climate change?
>
> A. Summit doesn't take a position on climate change. Our primary drivers are to help the ethanol plants reduce their carbon intensity and help them be competitive in low-carbon fuel markets. Which, in turn, as you just said, drives demand for corn and keeps land values high. And the fact that those emissions are being removed from the process before they're being emitted into the atmosphere. And so, peak capacity, if you have 18 million tons of greenhouse gas emissions that aren't emitted, that's probably a benefit.
>
> Q. And so I need to pin you down, sir. Are you or are you not proposing to this Board that an environmental benefit is one of the reasons you think they should approve this project? That you're somehow affecting for the better climate change or global warming on this planet.

A. As I just stated, there is an environmental benefit.

Q. Okay. And are you wanting this Board in their decision-making process to include that in one of the factors that they consider? That you believe your project will produce an environmental benefit.

A. I'm not going to recommend what the Board does or does not consider. As I said, there is an environmental benefit, in my opinion, of removing those greenhouse gases from the process before they're emitted into the atmosphere.

(Hrg Tr. p. 1624-1625). So Mr. Powell was significantly downplaying the allegation that the Summit project will "play an important role in reducing greenhouse gas emissions in the effort to combat climate change," as claimed in Exhibit F. It is clear that his focus is on the alleged benefit of the project to the ethanol industry.

In contrast to Summit's failure to present any expert testimony or other credible or authoritative evidence to support its claims about mitigating climate change, Sierra Club presented the testimony of Dr. Mark Jacobson, a recognized expert in the field of energy solutions and climate change. Dr. Jacobson considered and calculated the total net benefit of Summit's carbon capture proposal, both by itself and in comparison with alternative methods of reducing carbon dioxide in the atmosphere.

Dr. Jacobson first notes that electricity is needed to capture and prepare the carbon dioxide for transport in the pipeline (Jacobson Direct Testimony, p. 6). The production of this electricity will result in carbon dioxide emissions that offset about 15% of the captured carbon dioxide (Jacobson Direct Testimony, p. 6). That is because about 25% of Iowa's electricity is produced by coal (Jacobson Direct Testimony, p. 6). There are additional factors that reduce the net carbon dioxide captured by the ethanol plants, such

as air pollution, land use, and jobs (Jacobson Direct Testimony, p. 5). A full and accurate picture of the actual net reduction of carbon dioxide from the carbon capture process must be considered in order to determine if the Summit project actually does mitigate climate change.

Dr. Jacobson further evaluates the Summit project as an opportunity cost (Jacobson Direct Testimony, p. 7). An opportunity cost is the cost of choosing one alternative over another alternative that would provide more and better benefits. In this case, the same money spent on the Summit project instead spent on renewable energy would produce more financial benefit. Dr. Jacobson analyzed various alternatives and reached the same result – carbon capture and storage is not a credible strategy for mitigating climate change.

Dr. Jacobson concludes that using renewable energy to produce electricity for electric vehicles (EVs) would cost less and have a greater impact on mitigating climate change than Summit's carbon capture and storage project. This scenario is not speculation. Automobile manufacturers are promising to build more EVs, and California, and certainly other states, have or will have requirements that all vehicles will be EVs. On the other end, renewable energy keeps growing. As the Board surely knows from cases on its docket, wind and solar energy projects are increasing rapidly. What that means for Summit is that its project has a very short and uncertain future. The Board should not grant a permit for a project that is doomed from the start, especially in light of all of the negative aspects, as discussed below.

In the face of Dr. Jacobson's evidence, Summit did not present any rebuttal testimony. So his testimony and analysis stand unchallenged. And based on the facts of the Summit project, Dr. Jacobson performed further analysis, published in the peer-reviewed journal, Environmental Science and Technology. M.Z. Jacobson, *Should Transportation Be Transitioned to Ethanol with Carbon Capture and Pipelines or Electricity? A Case Study*, Environmental Science and Technology (October 2023), found at https://pubs.acs.org/doi/abs/10.1021/acs.est.3c05054. Dr. Jacobson noted that a previous study he had done, which is also cited in his direct testimony, found that electric vehicles powered by all sources reduced carbon dioxide significantly more than using either corn or cellulosic ethanol for E85 fuel. M.Z. Jacobson, *Review of Solutions to Global Warming, Air Pollution, and Energy Security*, Energy and Environmental Science (2009). That study also found that electric vehicles reduced air pollution mortality, land requirements, and water needs versus E85.

So, to follow up on that study and put a finer point on the impact of Summit's project, Dr. Jacobson performed a new study based on Summit's proposed project. He compared the opportunity cost of Summit's project, which relies on the production of ethanol for flex-fuel vehicles, to investing the same funds in wind turbines for powering electric vehicles or for replacing coal plants directly. Dr. Jacobson calculated the electricity needed to dehydrate and compress the carbon dioxide to a supercritical state to be placed in the pipeline. This electricity will be provided by coal or natural gas. Even if renewable energy were used to provide the electricity to dehydrate and compress the

carbon dioxide, that would require coal or gas to provide other electricity needs. And the pipeline itself, in the construction, installation and decommissioning of the pipeline, emits carbon dioxide. Although wind energy, in its life cycle, emits some carbon dioxide, Dr. Jacobson found that it is much less than the overall net emissions from Summit's carbon capture and pipeline project.

The point of Dr. Jacobson's testimony and his considerable research and study of energy issues is that in order to accurately and completely assess a certain technology's impact on climate change, it is necessary to examine the net reduction, if any, on the amount of greenhouse gases emitted during the life cycle of the process and the opportunity costs of using that technology rather than an alternative technology. Summit has not presented any such evidence.

The Board can also consider Jorde Landowner Hrg. Ex. 654, which was admitted into evidence. That document reviews the experience of other carbon capture and pipeline projects. The results show that the net reductions in carbon dioxide that were promised did not materialize. As the report concludes, "Findings include a litany of missed carbon capture targets, cost overruns, and billions of dollars of costs to taxpayers in the form of subsidies." Although there are some differences between the projects described in the exhibit and Summit's project, the findings do not bode well for Summit.

While most of the projects highlighted in the report used the carbon dioxide for enhanced oil recovery, and Summit claims its carbon dioxide will simply be sequestered, two of the projects were not used for enhanced oil recovery.

● The Sleipner and Snohvit projects were Norwegian projects to capture carbon dioxide from natural gas production for sequestration in the North Sea. As the report says, "Studies suggest the project's CO2 storage modeling is faulty, underscoring concerns that CO2 behavior remains highly unpredictable."

● The Gorgon project was another offshore gas drilling project where carbon dioxide would be sequestered under the ocean. The report states that the project was "plagued by technical problems that meant it captured less than a quarter of what was promised."

Even the projects that were used for enhanced oil recovery may be relevant. James Powell, in his deposition, when asked about enhanced oil recovery gave the following testimony:

> Q. So can you say unequivocally that the CO2 that Summit will be storing or sequestering will never be used for enhanced oil recovery?
>
> A. I can say that currently there is no plan to use the CO2 that we will transport for enhanced oil recovery?
>
> Q. That's not unequivocally, is it?
>
> A. That's my response.

(Powell Depo. p. 15). Mr. Powell's hedging on the point speaks volumes. And as the projects profiled in Exhibit 654 show, using the carbon dioxide for enhanced oil recovery does nothing meaningful to reduce greenhouse gases and address climate change.

Summit will, of course, argue that the experience of these projects is not relevant to evaluating Summit's climate mitigation benefits. But Summit has not presented any evidence to the contrary.

So Summit's claims of mitigating climate change fail, especially when balanced against the adverse impacts of the Summit project as discussed below.

3. Jobs and Economic Benefit

The third alleged benefit claimed by Summit in Exhibit F is jobs and the economic benefits allegedly created by those jobs. Summit's attempt to support this claim is a report by Ernst and Young and the testimony of Ernst and Young employee Andrew Phillips. The Ernst and Young report is based on an economic modeling tool called IMPLAN. Mr. Phillips, in his hearing testimony, admitted that IMPLAN only considers economic contributions from the Summit project, but not the costs and adverse impacts (Hrg Tr. p. 2355, 2359-2360). So this type of economic model does not give a full and accurate picture of the economic implications of the Summit project.

Mr. Phillips also admitted that he relied for much of the inputs on information provided by Summit, and he did not verify the accuracy of that information (Hrg. Tr. p. 2355-2356). Because of this, Mr. Phillips admitted that this report would not provide a basis for an investment decision (Hrg. Tr. p. 2356). In fact, the report contains a disclaimer which says (emphasis added):

> The services performed by Ernst & Young LLP (EY US) in preparing this report for the Summit Carbon Solutions were advisory in nature. Neither the report nor any of our work constitutes a legal opinion or advice. No representation is made relating to matters of a legal nature. Our scope of work was determined by

> Summit and agreed to by EY US pursuant to the terms of our engagement agreement. **Certain analyses and findings in this report are based on estimates and/or assumptions about the cost of construction and operation of the Summit Carbon Solutions' pipeline project.** The findings and analyses contained in the report are based on data and information made available to EY US through date hereof. Should additional relevant data or information become available after the date of the report, such data or information may have a material impact on the findings in the report. EY US has no future obligation to update the report.
>
> The report is intended solely for use by Summit Carbon Solutions. While we believe the work performed is responsive to Summit's request pursuant to the scope of work in the SOW, **we make no representation as to the sufficiency of the report and our work for any other purposes. Any third parties reading the report should be aware that the report is subject to limitations, and the scope of the report as not designed for use or reliance by third parties for investment purposes or any other purpose, We assume no duty, obligation, or responsibility whatsoever to any third parties that may obtain access to the report.**

And Mr. Phillips admitted that the report was not designed for use or reliance by third parties for any purpose (Hrg. Tr. p. 2359). Those third parties would certainly include this Board. So, just as with the DIS ethanol report discussed above, the Board must be cautious about relying on this report.

The IMPLAN model does not consider environmental benefits or adverse impacts (Hrg. Tr. p. 2360). Nor is the IMPLAN model a cost-benefit analysis (Hrg Tr. p. 2360). Mr. Phillips also acknowledged that the report was merely a prediction, and that instead of saying that things "will" happen if the pipeline is built, it might be more accurate to say those things are "expected to" or are "projected to" or are "estimated to" (Hrg. Tr. p. 2361). Also, the report did not look at the impact of the price of corn as a result of the project, which might benefit corn producers but increase the price of feed for livestock

producers (Hrg. Tr. p. 2361). Nor does the report factor in the 45Q and 45Z tax credits, which Summit's other evidence cite as important economic factors related to the pipeline project (Hrg. Tr. p. 2362). Mr. Phillips also explained that indirect and induced jobs were part of his analysis, but he did not distinguish full-time jobs from part-time jobs (Hrg. Tr. p. 2363). He admitted that full-time jobs would be more economically beneficial than part-time jobs if there are the same number of them (Hrg. Tr. p. 2363). The report also does not analyze the impact of the project on the ethanol industry, so the Board does not have the benefit of an analysis regarding the ethanol industry (Hrg. Tr. p. 2364). Given Summit's reliance on the alleged impact of the pipeline on the ethanol industry, the failure to consider that in this report is a serious omission. Nor does the report consider the economic impact to landowners due to damage to their farmland and reduced crop yield (Hrg. Tr. p. 2365).

Mr. Phillips also said that due to the increased length of the project, average annual jobs have decreased 42 percent (Hrg. Tr. p. 2365). Mr. Phillips admitted that 42% of the workers would therefore be out of a job, but that was apparently acceptable as long as the employment income, and thus the economic impact, remained the same (Hrg. Tr. p. 2365-2366). Mr. Phillips expressed no consideration for the workers who would lose their jobs. Furthermore, Mr. Phillips confirmed that the jobs predicted by the IMPLAN model are gross new jobs, not net new jobs (Hrg. Tr. p. 2377). So the Board is not being given an accurate estimate of the actual employment benefit of the Summit project. And in terms

of the largest economic contribution from Summit's capital expenditures, Iowa is third, behind North Dakota and South Dakota (Hrg. Tr. p. 2367).

In response to Mr. Phillips and the Ernst and Young report, Sierra Club presented the testimony of Dr. Silvia Secchi. Dr. Secchi stated that the Ernst and Young report overestimates the economic benefits of the Summit project because the alleged benefits are transitory and limited to the construction period, and also depend heavily on out-of-state inputs and labor (Secchi Direct Testimony, p. 4). Instead of the benefits assumed by the Ernst and Young report for labor and materials, the materials for constructing the pipeline and most of the labor will not come from Iowa (Secchi Direct Testimony, p. 4). Dr. Secchi also pointed out that the Ernst and Young report used the concept of worker years to determine the impact of the Summit project on employment instead of assessing the employment effect every year. Using the annual employment would show how little long-term effects the project would have on employment in Iowa (Secchi Direct Testimony, p. 4). Dr. Secchi also explained that the use of a national model by Ernst and Young inflates the indirect and induced economic activity effects (Secchi Direct Testimony, p. 5). And, as admitted by Mr. Phillips in his hearing testimony, the IMPLAN model failed to consider the economic costs of the Summit project in relation to its alleged benefits (Secchi Direct Testimony, p. 6). And the Board is required in its balancing test to consider the costs and adverse impacts.

In that regard, it is significant that the Ernst & Young report did not consider the impact of the 45Q and 45Z tax credits. Those are a cost to the public. The total amount of

carbon dioxide presently signed up on the pipeline in the 5 states through which it would traverse is 9.5 million metric tons (Powell Direct Testimony, p. 4). About a third of that amount, or approximately 3 million metric tons, would come from Iowa ethanol plants (Powell Depo. p. 48-49). With the 45Q tax credit at $85 per metric ton of carbon dioxide, the cost to Iowa taxpayers for the 3 million metric tons placed on Summit's pipeline would be $95 million. A cost that massive must surely be considered in the economic analysis.

Although the *Puntenney* court said in that case that the Board could factor in economic benefits in its balancing test for public convenience and necessity, it was not the only factor. Obviously, those alleged benefits have to be evaluated on their own merits and in consideration of other elements of the balancing test. In this case, it is clear that there are many other considerations that outweigh any alleged economic benefits. The *Puntenney* court made clear that economic benefits are only one small consideration in the public convenience and necessity analysis. *Puntenney v. IUB*, 928 N.W.2d at 841. In fact, the court's mention of the economic benefits was almost an afterthought. The primary basis for public convenience and necessity in that case was the claim that the product being transported in the pipeline, crude oil, was a product that was a benefit to the consuming public. In this case, the public will not use the carbon dioxide.

Apart from the impact of jobs and their alleged ripple effect, Summit presented no evidence that the public would benefit from the product being transported by the pipeline. Regarding the Dakota Access pipeline, as considered in *Puntenney v. IUB*, 928 N.W.2d at

841, the public benefit from allegedly lower prices and availability of products used by the public derived from the oil carried in the pipeline constituted public convenience and necessity. In this case, members of the public will not use the carbon dioxide or any derivative of it.

So, in summary, Summit's evidence of alleged economic benefits falls flat.

ADVERSE IMPACTS FROM THE SUMMIT PROJECT

Based on the above discussion, Summit has failed to prove that its project will promote public convenience and necessity. But even if we assume that the project has some public benefit, the Iowa Supreme Court has said that the Board can conduct a balancing test to weigh the adverse impacts of the project against its alleged benefits. In fact, most of the evidence presented to the Board in this case addressed the impacts of the project, so it is necessary to discuss those impacts.

1. Safety

Although Summit has argued throughout these proceedings that safety is preempted by federal law, most of its evidence was about safety. And safety was certainly a primary concern of the landowners impacted by the pipeline. The parties extensively briefed the preemption issue a year ago and Sierra Club will not repeat those arguments. We expect that the Board will review those arguments and determine that safety, in terms of routing and other issues not related to the "design, installation, inspection, emergency plans and procedures, testing, construction, extension, operation, replacement, and maintenance of pipeline facilities" are not preempted by federal law. 49 U.S.C. §

60101(a)(2). Sierra Club also refers the Board to the letter submitted by the Pipeline and Hazardous Materials Safety Administration (PHMSA)(Jorde Landowner Ex. 622).

Summit's first witness at the hearing was James Powell. In his direct testimony he briefly discussed how the pipeline route was chosen (Powell Direct Testimony, p. 6). But he did not mention safety as one of the factors used in determining a route. Mr. Powell did discuss monitoring of the pipeline by the operations control center. It is clear that the operations control center will be relying on remote automated equipment to detect leaks and other safety issues with the pipeline (Powell Direct Testimony, p. 10). Although there will be personnel at the control center, they will be dependent on the remote equipment. The personnel will simply respond after being made aware of an incident. There is no indication in Mr. Powell's testimony how long it would take for first responders and other personnel to reach the scene of an incident.

In his rebuttal testimony Mr. Powell refers to Summit's dispersion modeling (Powell Rebuttal Testimony, p. 4). But he does not indicate that that dispersion modeling informed the route of the pipeline. In fact, other Summit witnesses make it clear that the dispersion modeling had no impact on route selection (Hrg. Tr. p. 2065-2066). So a pipeline carrying a substance that is an asphyxiant and is toxic (Schettler Direct Testimony, p. 4) is routed by Summit with no consideration for the distance over which the carbon dioxide would disperse in the event of a rupture and the proximity of occupied structures. Mr. Powell said in his deposition that the pipeline route had not been changed based on the dispersion modeling (Powell Depo. p. 23). He further testified as follows:

> Q. If the dispersion modeling says your pipeline will disperse significant concentration of CO_2 in an area where people or livestock are, why wouldn't you want to change the route?
>
> A. Generally, as Mr. Louque testified, you use this information to inform where you need to mitigate the risk, and there are many, many things you can do to mitigate the risk.
>
> You can put your pipeline deeper. You can add valves. You can add other measures. You can put in a robust leak detection system like we planned to do.
>
> It's very important that you integrate the risk associated with your pipeline with your integrity management program. So that's what we will do.
>
> Q. Is it fair to say, though, that before the pipeline is actually in the ground, you could change the route?
>
> A. We have limited opportunity to change the route in this state within the current application.
>
> Q. But you could change the route?
>
> A. We can change the route.

(Powell Depo. p. 24-25).

Erik Schovanec testified in his deposition that Summit used an initial setback distance from occupied structures of 400 feet in determining a preliminary route for the pipeline (Schovanec Depo. p. 14). He further testified that the 400-foot distance was just a baseline distance that was used on previous projects in Iowa. But none of those previous projects were carbon dioxide pipelines (Schovanec Depo. p. 14-15). Using that preliminary 400-foot distance, Summit identified 112 houses, 4 trailers, 7 businesses, 18 industrial buildings, 36 animal feeding operations, 119 barns, 131 sheds, 3 greenhouses, 19 garages, and 33 ethanol plants within that area (Iowa Farm Bureau Hrg. Ex. 4). Sierra

Club directs the Board to Bryan Louque's confidential testimony to determine whether the 400-foot distance is an adequate measure for determining the safety of the pipeline.

Landowner testimony revealed many occupied structures near enough to the pipeline to be concerned about safety in the event of a pipeline rupture. The testimony is summarized as follows:

- Marcia Langner – Hrg. Tr. p. 118 – calving barn is within 500 feet of the pipeline
- Marcia Langner – Hrg. Tr. p. 170 – son lives 1,320 feet from the pipeline, and Ms. Langner lives 2,640 feet from the pipeline
- Timothy Fox – Hrg. Tr. p. 238 – entrance to Avenue of the Saints Park in Charles City in 600 feet from the pipeline
- Timothy Fox – Hrg. Tr. p. 243 – Cedar Valley Transportation Center is 354 feet from the pipeline
- Hollis Oelmann – Hrg. Tr. p. 366 – hog building 908 feet from the pipeline
- Tamera Snyder – Hrg. Tr. p. 417 – residence is 1,500 feet from the pipeline
- David Wildin – Hrg. Tr. p. 450 – residence is 600 feet from the pipeline- neighbor's residence is 1,000 feet from the pipeline- two businesses are 100-150 feet from the pipeline
- Kathryn Byars – Hrg. Tr. p. 688 – neighbors' residence is 1,000 feet from pipeline

- Kathryn Byars – Hrg. Tr. p. 700 – playground in Earling is 200 feet from the pipeline
- Tom Konz – Hrg. Tr. p. 838 – shop is 1,100 feet from the pipeline
- Ladonna Hoffmann – Hrg. Tr. p. 881 – residence is 2,297 feet from the pipeline
- Merle Shay – Hrg. Tr. p. 958 – residence is 363 feet from the pipeline
- Elizabeth Ellis – Hrg. Tr. p. 993 – son's residence is 2,000 feet from the pipeline – neighbor's residence is 600 feet from the pipeline
- Verle Tate – Hrg. Tr. p. 1022 – son's house is 800 feet from the pipeline
- Robert Ritter – Hrg. Tr. p. 1112 - livestock barn is 487 feet from the pipelines
- Joan Wirtz – Hrg. Tr. p. 1401 - two residences are 2,059 feet from the pipeline
- David Skilling – Hrg. Tr. p. 3720 – tenant lives 1,500 feet from the pipeline
- Gregory Kracht – Hrg. Tr. p. 3737 – residence is 500-750 feet from the pipeline
- Kerry Hirth – Hrg. Tr. p. 4058 – residence and barn is 1,000 feet from the pipeline
- Jean Kohles – Hrg. Tr. p. 4075 – neighbor's residence is a few hundred feet from the pipeline
- Rick Chipman – Hrg. Tr. p. 4118 – neighbor's residence is 550 feet from the pipeline – son lives 1,550 feet from the pipeline
- Rick Chipman - Hrg. Tr. p. 4127 – hog buildings are 800 hundred feet from the pipeline
- Rick Chipman – Hrg. Tr. p. 4134 - residence is 501 feet from the pipeline

- Julie Glade – Hrg. Tr. p. 4243 – residence is 650 feet from the pipeline
- Julie Glade – Hrg. Tr. p. 4256 – neighbor's residence is 1,000 feet from the pipeline
- Barbara Harre – Hrg. Tr. p. 4333 – neighbor's residence is 450 feet from the pipeline
- Dennis King – Hrg Tr. p. 4384 – residence is 2,194 feet from the pipeline
- Debra LaValle – Hrg. Tr. p. 4413 – residence is 400 feet from the pipeline
- Timothy Baughman – Hrg. Tr. p. 4533 – neighbor's residence is 600 feet from the pipeline
- John Taecker – Hrg. Tr. p. 4564 – residence is 1,723 feet from the pipeline
- Robert Van Diest – Hrg. Tr. p. 4722 – neighbor's residence is 502 feet from the pipeline
- Robert Van Diest – Hrg. Tr. p. 4730 – neighbor's residence is 547 feet from the pipeline
- Robert Van Diest – Hrg. Tr. p. 4731 – neighbors' residences are 1146 feet and 1164 feet from the pipeline
- Henry Schnakenberg – Hrg. Tr. p. 4765 – neighbor's residence is 309 feet from the pipeline
- Henry Schnakenberg – Hrg. Tr. p. 4770 – hog building is 307 feet from the pipeline
- Teresa Thoms – Hrg. Tr. p. 4861 – residence is 1,113 feet from the pipeline

- Dennis Jackson – Hrg. Tr. p. 4915 – residence is 937 feet from the pipeline
- Lori Goth – Hrg. Tr. p. 4970 – neighbor's residence is 1,120 feet from the pipeline
- Martin Maher – Hrg. Tr. p. 4999 – residence is 300 feet from the pipeline
- Thomas McDonald – Hrg. Tr. p. 5110 – neighbor's residence is 300 feet from the pipeline
- Cornelius Schelling – Hrg. Tr. p. 5189 – neighbor's residence is 697 feet from the pipeline
- Nancy Erickson – Hrg. Tr. p. 5205 – residence is 1,500 feet from the pipeline – neighbor's residence is 750 feet from the pipeline
- Nancy Erickson – Hrg. Tr. p. 5216 – neighbor's residence is 1,325 feet from the pipeline – hog building is 190 feet from the pipeline
- David Gerber – Hrg. Tr. p. 5242 – neighbors' residences are 612 feet and 432 feet from the pipeline
- Casey Schomaker – Hrg. Tr. p. 5257 – residence is 303 feet from the pipeline – neighbor's residence is 400 feet from the pipeline
- Casey Schomaker – Hrg. Tr. p. 5269 - neighbor's residence is 718 feet from the pipeline
- Kathy Carter – Hrg. Tr. p. 5333 – neighbor's residence is 550 feet from the pipeline

- Anne Gray – Hrg. Tr. p. 5389 – neighbor's residence is 354 feet from the pipeline
- Dana Arndorfer – Hrg. Tr. p. 5408 – residence is 290 feet from the pipeline
- Sandra Laubenthal – Hrg. Tr. p. 5533 – residence is 514 feet from the pipeline
- Patricia Beyer – Hrg. Tr. p. 5601 – neighbors' residences are 473 feet and 700 feet from the pipeline
- Donald Johannsen – Hrg. Tr. p. 5665 – neighbor's residence is 500 feet from the pipeline
- Jody Wilson – Hrg. Tr. p. 5743 – neighbor's residence is 410 feet from the pipeline
- Jody Wilson – Hrg. Tr. p. 5747 – neighbor's residence is 980 feet from the pipeline
- Jeffrey Colvin – Hrg. Tr. p. 5765 – neighbor's residence is 1,300 feet from the pipeline
- Vicki Koeppe – Hrg. Tr. p. 5909 – neighbor's residence is 351 feet from the pipeline
- Katherine Stockdale – Hrg. Tr. p. 6010 – residence is 707 feet from the pipeline
- David Weber – Hrg. Tr. p. 6065 – neighbor's residence is 600 feet from the pipeline
- Daniel Tranchetti – Hrg. Tr. p. 6086 – residence is 1,151 feet from the pipeline
- Bonnie Peters – Hrg. Tr. p. 6243 – hog building is 350 feet from the pipeline

- Bonnie Peters – Hrg. Tr. p. 6273 – hog building is 687 feet from the pipeline
- Winston Gadsby – Hrg. Tr. p. 6384 – neighbor's residence is 550 feet from the pipeline
- Alan Laubenthal – Hrg. Tr. p. 6456 – residence is 450 feet from the pipeline
- Debra Wheeler – Hrg. Tr. p. 6527 – neighbor's residence is 787 feet from the pipeline
- Lance Kleckner – Hrg. Tr. p. 6580 – neighbor's residence is 100 feet from the pipeline
- Sue Carter – Hrg. Tr. p. 6610 – neighbor's residence is 1,200 feet from the pipeline
- Dwight Doughan – Hrg. Tr. p. 6718 – hog building is a few hundred feet from the pipeline
- Craig Byer – Hrg. Tr. p. 6749 – neighbor's residence is 500 feet from the pipeline
- Craig Byer – Hrg. Tr. p. 6756 – neighbors' residences are 473 feet, 699 feet and 485 feet from the pipeline
- Bradley Franken – Hrg. Tr. p. 6791 – neighbor's residence is 300 feet from the pipeline
- Alvin Sandbulte – Hrg. Tr. p. 6821 – residence is 330 feet from the pipeline
- Vicki Sonne – Hrg. Tr. p. 6860 – neighbor's residence is 514 feet from the pipeline

- Larry Christensen – Hrg. Tr. p. 6860 – neighbor's residence is 514 feet from the pipeline
- Neil Dahlquist – Hrg. Tr. p. 7162 – hog building is 200 feet from the pipeline
- Eric Sidner – Hrg. Tr. p. 7227 – neighbors' residences are 342 feet and 673 feet from the pipeline
- Brenda Jairell – Hrg. Tr. p. 7295 – residence is 750 feet from the pipeline and cattle lot is 500 feet from the pipeline
- Eric Palmquist – Hrg. Tr. p. 7392 – residence is a few hundred feet from the pipeline

Summit's own dispersion modeling proves that the above landowners are in jeopardy. In addition, dispersion modeling placed in evidence in South Dakota by the Navigator pipeline established that property owned within 1,825 feet of an 8" pipeline and 1,240 feet of a 6" pipeline may be impacted in the event of a rupture (Jorde Landowner Hrg. Ex. 645). Navigator's dispersion modeling is set out in the following table:

Nominal Pipe Diameter	Hazard Level 4	Hazard Level 3	Hazard Level 2	Hazard Level 1
6"	321'	[redacted]	1,240'	1,971'
8"	417'	[redacted]	1,855'	2,753'
12"	[redacted]	[redacted]	[redacted]	3,291'
16"	[redacted]	[redacted]	[redacted]	3,644'
20"	1,029'	[redacted]	2,920'	4,250'

To interpret this table the Navigator dispersion modeling report explains Hazard Level 1 is a carbon dioxide concentration of 30,000 ppm; Hazard Level 2 is a concentration of 40,000 ppm; Hazard Level 3 is a concentration of 63,000 ppm; and Hazard Level 4 is a concentration of 105,000 ppm.

Sierra Club witness Dr. Ted Schettler explained that a 4% (40,000 ppm or Level 2) carbon dioxide concentration is immediately dangerous to life and health (Schettler Direct Testimony, p. 4). Based on the Navigator table above, the dispersion of carbon dioxide to that level would range from 1,240 feet for a 6" pipeline to 2,920 feet for a 20" pipeline. So the landowner testimony listed above clearly shows that a significant number of occupied structures will be well within the hazard zone.

[redacted]

In addition, Dr. John Abraham, a recognized expert in dispersion modeling, testified in the Summit proceeding in South Dakota before the Public Utility Commission regarding two scenarios for a carbon dioxide pipeline rupture (Jorde Landowner Ex. 641, p. 28-30). He said that in the first scenario, if it were an 8 inch diameter pipe, buried 5 feet deep, the dispersion distance at 30,000 ppm would be 2,600 feet, and the dispersion distance at 40,000 ppm would be 1,850 feet. For a 20 inch diameter pipe buried 5 feet, the dispersion distance at 30,000 ppm would be 4,000 feet, and the dispersion distance at 40,000 ppm would be 2,800 feet.

In the face of this overwhelming evidence that the pipeline would be in precarious proximity to numerous occupied structures, Summit has presented several witnesses who claim that the pipeline will be perfectly safe. The testimony is not reassuring. James Powell and James Pirolli talked in generalities and platitudes, but did not provide any specific facts to explain exactly why the pipeline would be safe. Erik Schovanec mentioned PHMSA regulations regarding high consequence areas (HCAs) and how Summit would be complying with PHMSA regulations regarding HCAs. But HCAs are populated areas. The occupied structures described above by the landowner witnesses are not in high consequence areas. So the PHMSA regulations would not necessarily protect them.

Kent Muhlbauer offered very brief testimony about risk assessment and risk management. Although he says that Summit will utilize a quantitative risk assessment, no such risk assessment has been provided to the Board or the parties. So the parties, and

more importantly, the Board, do not know the results of that risk assessment. Mr. Muhlbauer's direct testimony (Muhlbauer Direct Testimony, p. 6) claims that Summit's preliminary risk assessment shows a failure rate lower than 0.0003 failures per mile. But we do not know what inputs went into that assessment, how the calculations were made, or any other pertinent information to determine if the assessment is accurate. Without that information, Mr. Muhlbauer's testimony is unhelpful in determining the risk of damage to people and structures along the pipeline route. It is also worth pointing out that Mr. Muhlbauer's hearing testimony focused on the risk to the pipeline itself and the amount of economic damage to Summit of a pipeline failure event, not the risk to people and structures.

John Godfrey primarily testified about PHMSA regulations. But PHMSA regulations don't prevent pipeline failures. In fact, Mr. Godfrey's direct testimony (Godfrey Direct Testimony, p. 8) states that in 22 years over only 5,339 miles of CO_2 pipelines, there have been 39 leaks on pipeline right-of-ways, and 103 leaks or releases over all CO_2 pipeline facilities in that time period. That demonstrates a much more significant risk than Mr. Muhlbauer claimed. The following table summarizes the implications of Mr. Godfrey's numbers. These results are based on the number of miles of pipeline in Iowa – 685 miles. For the pipeline itself, there would be between 2 and 3 releases in the first 10 years of operation; between 4 and 5 releases in the first 20 years of operation; and almost 7 releases in the first 30 years of operation. For all pipeline facilities, there would be about 6 releases during the first 10 years of operation; about 12

releases during the first 20 years of operation; and about 18 releases during the first 30 years of operation.

In 22 years in the US, there were 39 leaks on pipeline right of ways, with 5339 miles of pipe			
In Iowa, there will be 685 miles of pipe			
Over 22 years, the expected number of accidents/leaks in Iowa will be	5.00		
the number of years between accidents/leaks in Iowa will be	4.40		
There were 103 leaks or releases over all CO2 facilities over the 22 year time frame			
the expected number of leaks/releases in Iowa over 22 years from all pipeline facilities will be	13.22		
the number of years between leaks/releases in Iowa will be	1.66		
Life of the pipeline in years	10	20	30
number of expected accidents/leaks in Iowa	2.27	4.55	6.82
expected number of releases in Iowa	6.01	12.01	18.02

Further, regarding Mr. Godfrey's testimony, his opinions are based on what Summit has told him it intends to do. Neither he, nor the Board, have any way to verify those statements or to rely on them.

Brigham McCown, like Mr. Godfrey, simply described PHMSA's regulatory regime. His testimony contained no specific reference to how Summit will construct and operate its pipeline, only the general statement that Summit will be subject to the limited regulation by PHMSA. In his direct testimony at footnotes 5 and 6 (McCown Direct Testimony, p. 6), Mr. McCown refers to two internet sites. Footnote 5 is a cite to the

PHMSA website, but it does not appear that the data presented there has any data specific to carbon dioxide pipelines. And Footnote 6 refers to oil pipelines, not carbon dioxide pipelines. So Mr. McCown's testimony does nothing to support Summit's case.

An important aspect of safety regarding the pipeline is emergency response. Many, or most, of the landowners who testified stated that the closest emergency response personnel to their property were from small towns with volunteer organizations with no training to confront a carbon dioxide release. Moreover, Rod Dillon, Summit's emergency response witness, stated that:

> The primary activity of first responders in such a hypothetical situation will include isolating roads around the breach site to protect the public from entry and notifying residents downwind of the breach that may be affected. If necessary, first responders and/or Summit contractors will also conduct air monitoring for public safety.

(Dillon Direct Testimony, p. 6). It is significant that Mr. Dillon did not attribute to the local first responders any effort to rescue any persons in the impacted area. Even Summit's Emergency Response Plan (Dillon Rebuttal Ex. 2) does not mention any role for local first responders. It only addresses activities of Summit employees, but gives no indication as to how long after the pipeline breach it would take for the Summit employees to arrive on the scene. A prompt response is crucial. Exposure to a carbon dioxide concentration of 40,000 ppm is "immediately dangerous to life and health." (Schettler Direct Testimony, p. 4).

The hearing testimony of Thomas Craighton, Hardin County Emergency Response Coordinator, was extremely illuminating. He explained the problems with volunteer

emergency departments (Craighton Hrg. Tr. p. 3622-3625). In a volunteer department not everyone can show up for an emergency on a moment's notice. Mr. Craighton even described an event where no one from the New Providence department was able to respond and personnel from cities farther away were called, obviously creating a delay in responding. And if responders cannot get to the scene quickly, some victims may be what Mr. Craighton termed "unsalvageable." (Hrg. Tr. p. 3624). He also talked about evacuating victims, but was not sure how that would be done in responding to a carbon dioxide pipeline rupture. And Mr. Dillon said rescuing or evacuating victims would not be the responsibility of local first responders. So the evidence reveals a very distressing scenario in responding to a pipeline rupture.

Summit has made the inference that carbon dioxide pipelines are no more dangerous than other pipelines, e.g., natural gas. The inference further is that because other types of pipelines are in close proximity to people and property, people who will be near Summit's pipeline are being hysterical about the carbon dioxide pipeline. That inference is rebutted by the testimony of Jack Willingham. Mr. Willingham is the Emergency Management Director for Yazoo County, Mississippi. He and his team responded to the carbon dioxide pipeline rupture in Satartia, Mississippi in 2020. Mr. Willingham described the symptoms of the victims as follows:

> Q. Were you able to determine what sort of symptoms these people had who were exposed?
>
> A. Shortness of breath, couldn't breathe, disoriented, altered states of consciousness. We had people that evacuated their bowels all the way to the brink of death.

> Q. By "brink of death," what do you mean?
>
> A. I mean, like, they were going to die. Their respirations had dropped down to nothing. If it wasn't for my responders throwing them on a UTV and getting them out of the area, they would have died in their car. That's correct.

(Willingham Hrg. Tr. p. 3557-3558). Summit has not presented any evidence that natural gas or any other substance that is transported in pipelines will cause that kind of injury. In fact, Jorde Landowner witness Gerald Briggs testified that he was an emergency responder to the incident in Satartia, Mississippi, and that he is familiar with ruptures of oil and natural gas pipelines. Mr. Briggs testified as follows:

> All hazardous pipelines are dangerous but the one difference is the weight of the product with CO2 that is not going to go straight up in the atmosphere it's going to sink. And it's going to sink in your lower line areas and remain invisible and odorless. You can smell natural gas and it will dissipate faster. Oil is obvious when you see it and it is more localized and predicable once out of the pipeline as it is not affected by the changing air streams like CO2 is. I am not aware of a natural gas rupture directly affecting persons three or more miles away from the leak or rupture site as the CO2 did in Satartia.

(Briggs Direct Testimony, p. 21). So Summit is creating a distraction in trying to equate the danger of a carbon dioxide rupture with a rupture of a natural gas or oil pipeline.

Because of the unique features of carbon dioxide, consideration of safety is critical to evaluating Summit's proposal.

2. Impact to Farmland

As noted above, the Board's primary responsibility pursuant to Iowa Code § 479B.1 is to "protect landowners and tenants from environmental or economic damages."

Virtually all of the land impacted by the Summit project is farmland. The evidence established overwhelmingly that the Summit project would damage that farmland.

a. Soil Compaction and Restoration

In any pipeline case in Iowa a major issue is the damage to farmland from the construction of the pipeline. In fact, the Board has an entire chapter in its regulations, Chapter 9, related to this issue. The landowner testimony in this case is replete with concerns about the impact to their farmland if Summit is allowed to construct its pipeline. One aspect of this concern is the impact on the soil and the fertility of the land after construction of the pipeline.

The Counties' witness, Matt Liebman, a well-qualified agronomist, testified that the primary impact to soil from installation of a pipeline like Summit's is soil compaction due to construction when the soil is wet (Liebman Direct Testimony, p. 7-8). He further explained that compaction of subsoil is more of a concern than compaction of topsoil because it may be nearly impossible to remediate compaction of subsoil (Hrg. Tr. p. 3522). So construction of the pipeline should not proceed when the soil is subject to wet conditions. As Dr. Liebman explained in his direct testimony:

> Trafficking soon after a rainfall event can create irreversible soil compaction and long-term crop yield depression. The appropriate number of days to wait after rainfall should be determined by a soil ball test, described above, or other means of assessing soil physical conditions with regard to plasticity and friability. Topsoil should be separated from subsoil during removal and the two strata should be replaced carefully to prevent mixing.
>
> Soil moisture status is a function of soil texture, which affects water retention, evaporation, drainage, and plasticity. Soil moisture is also affected by previous and current precipitation inputs. Thus, the effects of a single type of rain event are

> context dependent. Assessment of soil moisture status and plasticity should take place after any rainfall event and before possible commencement of any equipment operations.
>
> The level of soil moisture that defines a soil's plastic limit is strongly affected by soil texture and other factors. Construction activities should be conducted when soil tests indicate that a soil is friable, not plastic.

(Liebman Direct Testimony, p. 9-10).

Summit has claimed that it will restore the land after construction. But Dr. Liebman was clear that avoidance is better than remediation. As he put it:

> Everything I've learned from my personal experience and from reading scientific literature would indicate that avoiding the problem is better than trying to remediate the problem, and the single most important way to avoid soil compaction is to not allow heavy traffic on excessively wet soil.
>
> Those are -- You know, a high load on soil that's too wet leads to the increase in both density, the loss of porosity and difficulties with root penetration. So the single most important thing to do is not get yourself into that situation to begin with.
>
> (Hrg. Tr. p. 3529).

The Board has historically in pipeline cases relied on remediation, rather than avoidance. In furtherance of this position, the Board has adopted Chapter 9 of the Board's regulations and has required a pipeline company to submit an Agricultural Impact Mitigation Plan. The efficacy of this strategy relies to a great extent on the ability of the county inspectors to enforce the requirements. The Counties' witness, Cole Kruizinga, who is a county inspector, expressed concern that there is no clear definition of "wet conditions," so that minimizes the inspector's authority and power to stop construction if

the inspector believes wet conditions are present (Kruizinga Direct Testimony, p. 5-6). As he stated it:

> My greatest concern is that determining whether "wet conditions" exist is often a point of dispute between county inspectors and the pipeline company. The administrative rules for the restoration of agricultural lands contain a definition of "wet conditions," but in my view, the definition is inadequate because it does not contain an objective or quantitative standard that both the county inspectors and the pipeline company can agree has been met. A clearer, less subjective standard would better prevent disputes during the construction and inspection process. If such a standard was set correctly, it would also prevent unnecessary damage to the land and the tile, which should be the primary goal.
>
> My primary concern is that even when a county inspector believes construction should be halted, the Board's administrative rules do not provide clear criteria to the county inspector to halt construction. In my view, only the mixing of topsoil and subsoil provides a clear basis for a county inspector to halt construction. However, as I noted above, it is working in wet conditions that causes crushing and other damage to the tile. When the inspector and the pipeline company disagree about the existence of wet conditions because of the lack of objective criteria, a dispute results. Such disputes can be difficult to resolve quickly, so construction is rarely halted. Because construction is rarely halted, work frequently occurs in wet conditions, and land and tile are damaged unnecessarily. In addition to clarifying the meaning of "wet conditions," county inspectors need clear authority to halt construction before land and tile damage occurs.

(Kruizinga Direct Testimony, p. 5-6).

Hardin County inspector, Lee Gallentine, who is also a county inspector, explained the problem a county inspector has in stopping construction in wet conditions:

> Q. When the county inspector goes out and sees something being done in terms of construction, that would lead to the construction being stopped or something being modified, is it the experience of county inspectors that the construction workers don't want to stop; they want to just keep going?
>
> A. I would say in general construction workers never want to stop.
>
> Q. And so does that make it difficult for the county inspectors to do their job?

> A. Yes, because then the county inspector becomes the obstacle to them completing the work, at least in their minds.
>
> Q. Even if, as Mr. Kruizenga said, there was a firm definition of "wet conditions," would that really solve the problem of the construction workers not wanting to stop?
>
> A. It wouldn't solve the problem of construction workers not wanting to stop, but it would transfer from the inspector being the obstacle to the rule being an obstacle.
>
> Q. Even if you had a good, firm definition of the wet conditions and the construction workers didn't want to stop, what would be the outcome of that?
>
> A. Well, my understanding is the inspector has, per Code, the authority to temporarily stop construction. It would be hoped that any contractors or construction workers would respect that authority and stop work.

(Hrg. Tr. p. 3600-3601).

The evidence is clear, therefore, that any existing protections for the condition and fertility of the soil during and after construction of the Summit pipeline are inadequate. The only solution is to deny Summit a permit, when this damage to valuable farmland outweighs any alleged benefit of the project.

b. Drainage Tile

The Board has heard extensive evidence regarding the impact to drainage tile from pipeline construction. It is certainly true that drainage tile is an important factor in optimum crop production on many fields and is an expensive proposition for the landowner. There is no question that the tile is at risk from construction of the pipeline. As the Counties' witness Cole Kruizinga explained:

> In my experience, it is difficult to detect crushing and other damage to tile and other drainage infrastructure during construction because the location of the tile is

> not always precisely known. On prior projects, such damage was not detected until after initial construction and only when large pools of standing water appeared after rains. Such pooling means the tile isn't functioning properly after construction, generally because of crushing or other damage caused during construction.
>
> Crushing of tile is often directly related to working in wet conditions. If pipeline construction during wet conditions can be prevented, then such damage could be greatly reduced. Additionally, if crushing can be prevented, it eliminates the need to repair or re-repair sections of tile along the pipeline easement later, after the damage is detected.

(Kruizinga Direct Testimony, p. 5). So, just as with soil compaction, it makes more sense to prevent tile damage during construction than to attempt to repair any damaged tile later.

Various landowners also explained why pipeline construction would damage the tile and why it would be difficult, if not impossible, to adequately repair the damage.

Verle Tate (Hrg. Tr. p. 1023, 1034-1035, 1051-1052) testified that it is impossible to repair drain tile to as-installed specifications. The tile is installed with precision GPS-controlled equipment for a very accurate grade, one inch of fall per 100 feet. If repair is attempted, either the ground settles near the repair or dirt in the area of the repair is left too high. If the ground settles, a low spot is created in the tile and silting occurs. If the ground is too high, silting occurs upstream of the repair. Either situation reduces the capacity of the drainage system.

Cornelius Schelling (Hrg. Tr. p. 5174) testified that some tile systems are 30-40 years old. They are made of different materials (clay, concrete, plastic) and the different kinds of tile can't be hooked together.

Sherri Webb (Hrg. Tr. p. 6149-6150) testified that around an existing tile system, water has formed paths to the tile. When those paths are interrupted during repair, the soil is also interrupted. So the water paths can't be maintained when trying to tie into the tile during repair,

Craig Huntoon (Hrg. Tr. p. 6482) testified that a tiling contractor explained to him that the tile will never be the same once the ground and tile are disrupted after repair.

Vivki Sonne (Hrg. Tr. p. 6871) testified that after tile repair the ground will settle. The tile will have bows in it and the water won't be able to flow. As a result, there will be wet spots in the field. Further complicating the matter, if a few years pass before the damage is revealed, Summit may claim it is not the fault of the pipeline construction and refuse to repair.

Matthew Valen (Hrg. Tr. p. 7344) testified that when there is excavation beneath tile, the tile will never be the same. That is why when tile is installed, the contractor never goes below grade.

Robert Watts (Hrg. Tr. p. 7374) testified that if the pipeline is installed below the tile, there would have to be fill placed below the tile so the tile does not settle.

Eric Palmquist (Hrg. Tr. p. 7390) testified that he talked to a tiling contractor who said any soil disturbance around the tile will render the tile potentially ineffective. This could not be repaired, but would require installation of an entirely new tiling system.

Dennis Valen (Hrg. Tr. p. 7419-7420) testified that tile of different ages are made from different materials. The older tiles are clay or cement and do not have holes for the

water to enter. So they are installed to have one-eighth inch clearance to allow the water to enter. So the installation of the older tile had to be done very carefully because a larger clearance would allow the tile to fill up with dirt. Trying to repair that kind of tile would be a very delicate undertaking. Furthermore, it would be extremely difficult to match the existing tile with new tile if repair was attempted. There is also the concern that if there are problems with the repair no one will take responsibility.

Summit presented Jeremy Ellingson as its expert witness on drainage tile. He filed rebuttal testimony, but it is not clear what evidence he is attempting to rebut. His rebuttal testimony does not mention that. With supreme confidence, Mr. Ellingson claims there will be no problems with drain tile along the Summit route (Ellingson, Direct Testimony, p. 9-10). But Mr. Ellingson's track record is not good. Several landowners testified from personal experience that the Ellingson firm was hired by Dakota Access to repair damaged tile and did a very poor job (Hrg. Tr. p. 196-197, 1060, 1088-90, 5240, 7002-7003, 7006, 7040-7041). So Summit has not provided any assurance that drain tile will not be damaged or will be properly repaired.

c. Avoidance Versus Repair

The evidence set out above clearly establishes that the Board should make a decision that would prevent damage to soil and drain tile, rather than assume that any damage can be repaired later. The best way to avoid that damage, in light of all the evidence, is to deny Summit's request for a permit. There is no evidence that there are any benefits to the project that would outweigh avoiding damage to the farmland. And it bears

repeating, the Board's primary responsibility is to protect the landowners from economic and environmental damage. Iowa Code § 479B.1.

OTHER CONSIDERATIONS

1. Easements and Tactics of Summit's Land Agents

Ever since the end of the public informational meetings Summit has been struggling to obtain easements from landowners. Summit brags that it has over 70% of the easements it needs. But it still has almost 900 parcels still unsigned. And this is over two years after the informational meetings when Summit was able to begin to obtain easements. It is obvious that, for the most part, Summit has not been negotiating with willing landowners. It is significant that Summit has not presented as witnesses, either in direct testimony or rebuttal testimony, any landowners who have signed easements to testify about how great Summit's project is or why they signed easements. Summit certainly knew that the tactics used by Summit's land agents would be an issue. But landowners who did testify did address this issue:

- Kathryn Byars (Hrg. Tr. p. 715) testified that her father had made it clear to Summit's agents that he did not want to talk to them, but they would continue to call him several times a week. So he would have to use voice mail and block the calls.

- Tom Konz (Hrg. Tr. p. 857-858) testified that he has been negotiating with Summit, but would rather not have the pipeline on the property at all. But with the threat of eminent domain he feels he has no choice but to deal with Summit.

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- Richard Davis (Hrg. Tr. p. 914-915) testified that Summit's land agents told him if he didn't agree to sign an easement the land would be taken by eminent domain and he would get less money than what Summit was offering.

- Lisa Stuck (Hrg. Tr. p. 3904) testified that she tried to block the land agent's number on her phone, but he used his wife's phone to call her. Another time the land agent came to her home and cornered Ms. Stuck's husband. When Mr. Stuck said they were not interested in talking to the agent, the agent went over to the Stuck's two sons and tried to talk to them. Another time, the Stuck's saw the land agent peering in their window. The Stucks hollered at the agent to leave. Ms. Stuck said she has a friend who is a land agent in Texas. The friend said that land agents are told to get easements signed, no matter what.

- Allen Hayek (Hrg. Tr. p. 3996) testified that he received repeated phone calls from Summit agents, as often as every few hours, on both his phone and his wife's phone. The phone calls kept coming, even after the agents were told that the Hayek's did not want the pipeline and did not want to talk to the agents.

- Kerry Hirth (Hrg. Tr. p. 4044) testified that her father, who is the owner of the property, received phone calls from Summit agents at least three times a week for a lengthy period of time.

- Randall Bobolz (Hrg. Tr. p. 4164-4165) testified that he received constant phone calls and personal approaches from land agents. When Mr. Bobolz insisted that he was

not interested in signing an easement, the agent said the pipeline was coming through Mr. Bobolz' property anyway and Summit would use eminent domain.

● John Taecker (Hrg. Tr. p. 4584-4585) testified that he does not want the pipeline, but with the threat of eminent domain, he feels he has no choice. He feels that the political power behind Summit is too much to fight. A land agent told him there was so much money behind the Summit project that it would definitely be built and that eminent domain would be used.

● Marta Berkgren (Hrg. Tr. p. 4659-4661) testified that she received numerous calls and e-mails from land agents, even though she made it clear she was not interested. A land agent told him there was so much money behind the Summit project that it would definitely be built and that eminent domain would be used.

● Martin Maher (Hrg. Tr. p. 5012) testified that he feels he has no choice because of the threat of eminent domain, and that the land agents have made that clear to him.

● Kathy Carter (Hrg. Tr. p. 5348) testified that if she didn't sign and easement eminent domain would be used and that the Board was sure to grant a permit.

● Anne Gray (Hrg. Tr. p. 5365, 5368) testified that while she was battling cancer, land agents would come to her door repeatedly. And even after she and her father made it clear that they would not sign an easement, the agents kept trying to convince her to sign and threatened eminent domain if she did not.

● Dana Arndorfer (Hrg. Tr. p. 5399-5400, 5406) testified that he told Summit's land agent that he was not interested, so the land agent began following Mr. Arndorfer

and his brother. The agent told Mr. Arndorfer that he needed to get going on signing an easement. When Mr. Arndorfer made it clear that he would not sign an easement, the agent threatened eminent domain.

● Dillon Baines (Hrg. Tr. p. 5419) testified that the land agents were adamant and pushy, trying to get him to sign and easement. And they threatened eminent domain.

● Gail Todd (Hrg. Tr. p. 5584) testified that when he told the agent he was not interested in signing an easement, the agent said the pipeline was going to come through the property whether Mr. Todd liked it or not.

● Craig Woodward (Hrg. Tr. p. 5704) testified that land agents repeatedly tried to contact him. Finally, when he made it clear that he did not want to sign an easement, the agent said well, the pipeline is going to happen.

● Kathleen Hunt (Hrg. Tr. p. 5784) testified that the agents would say that she might as well sign an easement because the pipeline is a done deal, Summit would use eminent domain, and Ms. Hunt had no choice.

● Marjorie Swan (Hrg. Tr. p. 5857-5858) testified that she had received numerous phone calls and text messages from land agents. One time, three agents came to her residence, apparently thinking that that would intimidate her.

● Vicki Koeppe (Hrg. Tr. p. 5882) testified that a land agent threatened eminent domain.

● Cynthia Kruthoff (Hrg. Tr. p. 6016-6017) testified that when land agents came to her property, the agents were told not to come back. But they did anyway. They would keep coming and pound on the door.

● Sherri Webb (Hrg. Tr. p. 6123) testified that a land agent came to her house unannounced. The land agent threatened eminent domain if an easement was not signed.

● Bonnie Peters (Hrg. Tr. p. 6247) testified that agents would come to her home unannounced and also phone numerous times, even after being told that Ms. Peters would not sign an easement.

● Dan Wahl (Hrg. Tr. p. 6284) testified that land agents told Mr. Wahl's daughter that Summit would dismiss a lawsuit Summit had filed against Mr. Wahl if he would sign an easement.

● Elizabeth Tribble (Hrg. Tr. p. 6426) testified that when she talked to the land agent and said she did not want the pipeline on her property, he said the pipeline was a done deal and that Ms. Tribblel had no choice in the matter. If she said something to the agent, she was shut down in a bullying manner. That left her crying.

● Debra Wheeler (Hrg. Tr. p. 6502-6504) testified that land agents would call her at work even after being asked not to call her at work. The agents also came to her house. They would tell her that carbon dioxide is not hazardous, so her concerns were unjustified. She felt very intimidated.

● Kent Pickrell (Hrg. Tr. p. 7043) testified that land agents told him that the topsoil would be separated during construction. But based on the experience of other

pipelines, Mr. Pickrell determined that that was not necessarily true. He felt that the agents had lied to him in order to get him to sign an easement.

- Neil Dahlquist (Hrg. Tr. p. 7150) testified that the land agents told him the pipeline was a done deal, that the IUB would rubber stamp the project. The agents also told him he had better sign and easement because he would get a less favorable deal if Summit exercised eminent domain.

- Alan Boeck (Hrg. Tr. p. 7247) testified that his 91-year-old father was contacted many times by land agents, even though the agents were repeatedly told that an easement would not be signed. His father was told by the agents that he might as well sign an easement because Summit would get the easement anyway. All of this apparently affected Mr. Boeck's father's health.

This evidence shows that, although Summit claims it is negotiating with landowners, that is not the case. Negotiation requires two willing parties who want to reach an agreement, and they are just negotiating the terms of the agreement. In this case, at least with the Exhibit H landowners, the interplay between the landowners and the land agents was not a negotiation. These facts also strongly imply that many landowners who did sign easements likely did not want to sign, but like many of the landowners whose testimony is set out above, they felt they had no choice. The use of threats, lies, and harassment, as described by the landowner witnesses, is not negotiation. On May 13, 2022, Sierra Club filed a Motion to Protect Landowners, to protect them from just the kind of tactics described in the landowner testimony. But the Board denied the motion.

Unfortunately, that sends a message to the landowners and to the public that the Board will not protect the landowners and that the Board expects the landowners to sign easements.

Summit presented the direct testimony of Micah Rorie, its Senior Director of Land Services. In other words, he is responsible for obtaining easements. His testimony was apparently supposed to address the Board's duty to protect the landowners. Iowa Code § 479B.1. However, Mr. Rorie's testimony confirmed the landowners' testimony about the tactics used by the land agents. Although Mr. Rorie's testimony was typical corporate speak, he couldn't help but demonstrate Summit's arrogant attitude that landowners basically have no right to not sign an easement. He admitted that land agents are directed to make "assertive" efforts to obtain easements (Hrg. Tr. p. 2587). He further admitted that the assertive efforts by the land agents to obtain easements are dealings some people don't want to have, but the land agents cannot walk away when a landowner is not interested (Hrg. Tr. p. 2853). Mr. Rorie claimed that if a land agent didn't keep trying to get an easement, even if the landowner made it clear that he or she was not interested, the agent would not be making a "good-faith" effort to get an easement (Hrg. Tr. p. 2853).

Although Mr. Rorie testified that landowners who have signed easements are supporters of the project, it bears repeating that Summit did not call any of those alleged supporters to testify. The evidence shows that the tactics of the land agents placed heavy pressure on the landowners to sign easements. So the easements cannot realistically be called voluntary.

Mr. Rorie also made the claim that landowners would sign easements after the IUB hearing is over and Summit gets its permit (Hrg. Tr. p. 2599, 2854), in other words, after Summit has the power of eminent domain. Mr. Rorie encapsulated Summit's arrogant attitude that it is entitled to build its pipeline, when he said:

> We certainly can't have a minority of landowners holding up or stopping or canceling the installation of something this critical and this large.

(Hrg. Tr. p. 2855-56). It is the Board's obligation, however, to protect the landowners, not to do whatever it takes to give Summit a permit. Therefore, the Board should not grant Summit a permit, or the Board should at least deny Summit the power of eminent domain.

2. Eminent Domain

As explained previously, Summit is not a common carrier and not entitled to eminent domain. But Summit may still claim that it is entitled to eminent domain authority pursuant to Iowa Code § 6A.21, as a company under the jurisdiction of the IUB. As also explained previously, Summit is not under the jurisdiction of the IUB, but even if it were, it is not entitled to eminent domain.

The *Puntenney* court made it clear that even if a pipeline company might be able to exercise eminent domain on a statutory basis pursuant to Iowa Code §§ 6A.21 and 6A.22, it still might not be able to constitutionally exercise that power. *Puntenney,* 928 N.W.2d at 844-852. And the *Puntenney* court explained, in that regard, that a private company would have the constitutional right to eminent domain only if it is a common carrier. For the reasons explained previously, Summit is not a common carrier.

Even if Summit were a common carrier, the Board can statutorily grant eminent domain only "where necessary," and "to the extent necessary." Iowa Code §§ 479B.1, 479B.16(1). This use of the word "necessary" is obviously distinct from the term "necessity" in public convenience and necessity in Iowa Code § 479B.9. A pipeline company cannot even have eminent domain authority unless it establishes public convenience and necessity. So the company can establish public convenience and necessity, but still not have eminent domain authority unless it proves that eminent domain is necessary. If public convenience and necessity were the same as necessary, there would be no reason to include the term necessary in §§ 479B.1 and 479B.16(1). It is also obvious from this analysis that the term "necessary" related to eminent domain is a higher standard of need than the term "necessity." In fact, the *Puntenney* court said that the term "necessity" connotes something less than necessary. *Puntenney*, 928 N.W.2d at 841. Furthermore, necessity in public convenience and necessity relates to the public. Necessary as used with respect to eminent domain refers to the individual right of the landowner to his or her property rights.

Iowa Code § 6A.4 authorizes eminent domain to take property for "public use." The term "public use" means any of the following:

> (1) The possession, occupation, and enjoyment of property by the general public or governmental entities.
> (2) The acquisition of any interest in property necessary to the function of a public or private utility to the extent such purpose does not include construction of aboveground merchant lines, or necessary to the function of a common carrier or airport or airport system.

> (3) Private use that is incidental to the public use of the property, provided that no property shall be condemned solely for the purpose of facilitating such incidental private use.
> (4) The acquisition of property pursuant to chapter 455H.
> (5) The acquisition of property for redevelopment purposes and to eliminate slum or blighted conditions . . . .

Iowa Code § 6A.22(2)(a). So, assuming Summit is not a common carrier, none of the definitions of public use apply to the Summit project. But even if Summit were a common carrier, the use must still be necessary, pursuant to the above definition. And even as a general statement, only property necessary for public use may be taken by eminent domain. *Race v. Ia. Elec. Light & Power Co.*, 134 N.W.2d 335 (Iowa 1965).

The record in this case shows that Summit has not proven that eminent domain is necessary. First of all, as explained above, Summit has not proven that its project provides any public benefit or public use. So the pipeline is not necessary for a public use. In addition, the pipeline route was chosen without any input from landowners or adjacent property owners (Hrg. Tr. p. 2071). Nor was any dispersion modeling used to determine the route (Hrg. Tr. p. 2065). Now Summit claims that the route cannot be changed (Hrg. Tr. p. 2077), but if Summit had consulted with stakeholders early in the routing process, it may have avoided having to use eminent domain. In fact, Erik Schovanec, Summit's Director of Pipelines and Facilities, testified that some Exhibit H landowners were between landowners who had signed easements, so the route could not be changed (Hrg. Tr. p. 2075). What that means is that Summit had prejudiced the choice of the route. And even though Mr. Schovanec said that the route could not be changed, he contradicted himself and said that if the Board ordered the route to be changed, Summit could do that

(Hrg. Tr. p. 2077, 2104). The conclusion to be drawn is that if Summit had considered the stakeholders impacted by the pipeline, eminent domain might not be necessary.

The Iowa Supreme Court has been consistently clear that a taking by eminent domain must be necessary. The court said in *DePenning v. Iowa Power & Light Co.*, 33 N.W.2d 503, 507 (Iowa 1948):

> Under Iowa Code section 489.14, defendant is 'vested with the right of eminent domain to such extent as may be necessary . . . .' The principle upon which such companies are allowed to condemn is not that they may do what they please but that they may do what is reasonably necessary to carry out the public purpose for which the land is taken. Anything beyond this is not the taking of private property for public use but for private use.
>
> **********
>
> The law does not favor the taking of property for public use beyond the necessities of the case.

Iowa law imposes two requirements before the powers of eminent domain may be used: (1) the property must be taken for a public use; and (2) the taking must be reasonable and necessary. *Combs v. City of Atlantic*, 601 N.W.2d 93, 95-96 (Iowa 1999).

The burden is on Summit to prove that eminent domain is necessary, and Summit has not carried that burden. Therefore, the Board should not grant Summit the power of eminent domain.

3. Impact to Developments

A number of witnesses testified that their property was being developed or could be developed for uses other than agriculture. They further testified that those development

plans could be destroyed or severely compromised if the Summit pipeline is constructed on their property:

● Timothy Fox (Hrg. Tr. p. 231) testified that the Charles City Area Development Corporation owns property on the route of the pipeline for economic development. No businesses would want to locate there if the pipeline is constructed.

● David Wildin (Hrg. Tr. p. 447) testified that he is developing his property for residential acreages. He has already sold two lots that would be impacted by the pipeline and no one will buy the remaining lots if the pipeline is there.

● Mark Oehlerking (Hrg. Tr. p. 776) testified that his property is currently zoned industrial and is in a business park. So it will be developed for industrial use, but not if the pipeline is constructed.

● Merle Shay (Hrg. Tr. p. 939) testified the he has a housing development planned for his property. The pipeline would end those plans.

● Daniel Fehr (Hrg. Tr. p. 1182) testified that he wants to develop his property for livestock buildings and housing. But he cannot do that if the pipeline is constructed.

● Paul Wacker (Hrg. Tr. p. 1264) testified that his property is ripe for business development. But that won't occur if the pipeline is constructed.

● John Heminger (Hrg. Tr. p. 1318, 1325) testified that he was platting his property for residential development. Construction of the pipeline would end those efforts.

● Dennis Graham (Hrg. Tr. p. 5824) testified that he wants to develop solar projects on this land, but would not be able to do that if the pipeline is constructed.

● George Cummins (Hrg. Tr. p. 5921) testified that he want to develop his property for residential development, but would not be able to do that if the pipeline is constructed.

● Larry Christensen (Hrg. Tr. p. 7082, 7127) testified that his property is in an area in which the City of Sioux City is expanding. His property is ripe for either residential or commercial development, but that would not happen if the pipeline is constructed.

● Eric Sidner (Hrg. Tr. p. 7211) testified that his property is zoned industrial and would be ripe for industrial development, but that would not happen if the pipeline is constructed.

This evidence establishes that in order for the Board to carry out its duty to protect landowners from economic impacts, the Summit pipeline cannot be permitted to cross these landowners' properties. And Summit has presented no evidence that the landowners' concerns are invalid. It is clear that everyone except Summit and its self-interested supporters understand the dangers and impacts of a hazardous carbon dioxide pipeline to the use of the property in the pipeline path.

4. Relationship to Present and Future Land Use and Zoning Ordinances

Iowa Code § 479B.5(7) states that the petition for a permit for a hazardous liquid pipeline must state, "The relationship of the proposed project to the present and future

land use and zoning ordinances." As the Counties' witness, Professor Neil Hamilton, confirmed, Summit's petition, Exhibit F, does not discuss the relationship of the project to any county comprehensive land use plans nor any county zoning ordinances (Hamilton Direct Testimony, p. 16-17). Summit has claimed throughout this proceeding that local ordinances are preempted regarding issues of safety. Sierra Club and other intervenors have opposed that argument. But even assuming the issue of safety were preempted, that does not mean that all local zoning and land use regulations are preempted. As Professor Hamilton explained in his direct testimony, the purpose of land use and zoning regulations:

> is to ensure the orderly growth and development, to preserve the well-being of a community, and to minimize conflicts between adjacent landowners. This is accomplished by identifying different types of land uses, typically residential, industrial, commercial, and agricultural, and then dividing the community up geographically into various districts or "zones" in which regulations are used to restrict or control the way land is used within the community. By directing certain types of land uses into certain zones and by regulating the manner in which the land is used, local governments are able to minimize land use conflicts, foster growth and development, increase property values, preserve 1 local tax base, and generally promote the health, safety, and well-being of the community.

(Hamilton Direct Testimony, p. 5-6). This purpose comprehends much more than safety.

Professor Hamilton also explained that a pipeline would not be a permitted use in a district zoned as agricultural (Hamilton Direct Testimony, p. 12). It would therefore be appropriate and legal for the pipeline developer to obtain a conditional use permit (Hamilton Direct Testimony, p. 12-13). So even if a county has adopted a specific land use ordinance regulating carbon dioxide pipelines and that ordinance is invalid, a pipeline company must still comply with the general zoning ordinance and obtain a conditional

use permit in agricultural land. Professor Hamilton therefore recommended, and Sierra Club agrees, that any permit issued to Summit must require as a condition that Summit comply with any county zoning regulation (Hamilton Direct Testimony, p. 21). Even more appropriate, considering all of the other issues, the Board should deny Summit a permit.

On that point, Professor Hamilton noted that the Board, in the Dakota Access case, required the company to obtain "all other required permits and authorizations" as a "necessary precondition of the Board's permit." (Hamilton Direct Testimony, p. 21). Erik Schovanec, in his rebuttal testimony, claims that he spoke with representatives from Dakota Access who told him the company did not seek or obtain county zoning permits (Schovanec Rebuttal Testimony, p. 9). First of all, that is hearsay with no foundation as to what questions were asked or exactly what the answers were. Secondly, Mr. Schovanec mischaracterized Professor Hamilton's statement. Professor Hamilton's point was that the Board in that case did include a condition that county permits must be obtained. The Board can also do so in this case. If the Board did not have that authority, there would be no purpose in the requirement in Iowa Code § 479B.5(7) that a petition for a hazardous liquid pipeline permit describe the relationship of the project to local land use and zoning ordinances.

Professor Hamilton also discussed Summit's statements set forth in Hamilton Direct Exhibit 1 (Hamilton Direct Testimony, p. 17-20). First, he observes that Summit has not explained how the project impacts local land use priorities. More specifically,

with respect to Hamilton Direct Exhibit 1, Summit states, "Based on the initial review and discussions, SCS has ensured the proposed Project route and aboveground facilities are located away from population zones and identified future development." Professor Hamilton explains that this statement does not consider the land use impacts of use and development in and around the permanent easement that Summit is requesting.

Next, in Exhibit 1, Summit states, "The Project footprint in Iowa is zoned primarily as agricultural land use (approximately 94%) mainly cultivated crops, hay, and pastureland. As such, the majority of the Project route would have no future impact on that zoned land use." Professor Hamilton disagrees. The pipeline easement would permanently affect housing development, land use values, local tax base, tourism, and population. By claiming no future impact, Summit is evading local land use priorities.

Third, Professor Hamilton notes that Summit's response indicates that it believes it can make better local land use decisions than local officials can. Professor Hamilton goes on:

> For example, Summit stated it has moved the pipeline to address concerns of individual landowners, to avoid public areas and infrastructure, and to avoid wetlands. But all of these examples are the types of decisions normally made by county officials when applying their zoning rules. The difference is county officials make these decisions publicly and transparently, with the active participation of all members of the community.
>
> In contrast, as Summit witness Schovanec explains in his deposition, Summit makes routing decisions primarily through private negotiations with landowners and without providing notice to neighbors or county officials about changes in the route. Even though the outcome of those negotiations affects neighboring land uses, there is no requirement that Summit obtain agreement from or even consult with neighbors or county officials. This difference in public accountability and

> participation is another reason why local zoning ordinances should be applied to Summit.

Finally, Professor Hamilton takes issue with Summit's statement, "As the final design and routing is completed for the Project, SCS will continue to coordinate with each county to address regulations and ordinances that may apply to the Project, and if so, obtain the required authorizations prior to construction in that county." Professor Hamilton notes that this is just feel good language, and is not what Summit has actually done.

Professor Hamilton further notes that Summit has said it will comply with local permits. So there is no reason it cannot and should not comply with local land use and zoning ordinances (Hamilton Direct Testimony, p. 20-21). Furthermore, Hamilton Direct Exhibit 2, Summit's permit application in South Dakota, shows that Summit intends to obtain zoning permits there. In fact, here is what that application says at page 85:

> The Applicant will comply with local regulations to review proposed Project measures within their respective counties and municipalities before construction. Project pipelines will cross multiple counties (**Table 32**). Project aboveground facilities, including pump stations, launcher-receivers, and MLVs will be located in Beadle, Brown, Codington, Edmunds, Kingsbury, Lake, McPherson, Minnehaha, Spink, and Sully
> counties.
>
> The Applicant reviewed zoning and comprehensive plans for counties where pipelines and aboveground facilities have been proposed. Local regulations require a review of proposed Projects within their respective counties. For example, the Lincoln County subdivision ordinance requires the review of any proposed utilities prior to excavation, construction, and improvements (Lincoln County 2005) and the Beadle County Comprehensive Plan identifies objectives to design around wetlands and to limit development in areas with poor soils and high-water tables (Beadle 2016).

> The Brown County Zoning Ordinance, Title 4 and McPherson County Zoning Ordinance No. 10-2 require a conditional use permit for utility substations (i.e., pump stations) in all zones except commercial, highway commercial, and light industrial districts:
>
> > Public Utility Substations: facilities for the distribution of telephone, radio, communications, water, gas, and electricity…shall be permitted as a conditional use in the various zoning districts subject to conditions, which will assure their harmony, especially aesthetically with the nature of the respective district (Brown County ND, McPherson County 2011).
>
> The Applicant will coordinate directly with county and municipal offices and comply with all applicable ordinances. **Table 32** is a list of anticipated local reviews and permits that will be required for the Project based on the Project facilities in each county.

For some reason, Summit thought it could get by in Iowa with ignoring, and in fact challenging, local ordinances. As Professor Hamilton explained, it cannot.

The Pipeline and Hazardous Materials Safety Administration (PHMSA) has also clarified this issue in a letter dated September 15, 2023, which states in pertinent part as follows:

> [PHMSA] has received several inquiries regarding the ability of federal, state, and local governments to affect the siting, design, construction, operation, and maintenance of carbon dioxide pipelines.
>
> **********
>
> As was the case in 2014 [in a previous letter], PHMSA continues to support and encourage all three level of government – federal, state, and local – working collaboratively to ensure the nation's pipeline systems are constructed and operated in a manner that protects public safety and the environment.
>
> **********
>
> Congress has vested PHMSA with authority to regulate the design, construction, operation, and maintenance of pipeline systems, including carbon dioxide pipelines, and to protect life, property, and the environment from hazards

associated with pipeline operations. While the Federal Energy Regulatory Commission has exclusive authority to regulate the siting of interstate gas transmission pipelines, there is no equivalent federal agency that determines siting of all other pipelines, such as carbon dioxide pipelines. Therefore, the responsibility for siting new carbon dioxide pipelines rests largely with the individual states and counties through which the pipelines will operate and is governed by state and local law.

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Federal preemption of pipeline safety means that states do not have independent authority to regulate pipeline safety but derive that authority from federal law through a certification to PHMSA.

In the case of local governments that are not subject to federal certification of pipeline safety authority, they may still exercise other powers granted to them under state law but none that adopt or enforce pipeline safety standards or contradict federal law.

However, PHMSA cannot prescribe the location or routing of a pipeline and cannot prohibit the construction of non-pipeline buildings in proximity to a pipeline. Local governments have traditionally exercised broad powers to regulate land use, including setback distances and property development that includes development in the vicinity of pipelines. Nothing in the federal pipeline safety law impinges on these traditional prerogatives of local – or state – government, so long as officials do not attempt to regulate the field of pipeline safety preempted by federal law.

PHMSA recognizes local governments have implemented authorities under state law that contribute in many ways to the safety of their citizens. We have seen localities consider measures, such as:

1. Controlling dangerous excavation near pipelines.

2. Limiting certain land use activities along pipeline rights-of-way.

3. Restricting land use and development along pipeline rights-of-way through zoning, setbacks, and similar measures.

4. Requiring the consideration of pipeline facilities in proposed local development plans.

> 5. Designing local emergency response plans and training with regulators and operators.
>
> 6. Requiring specific building code design or construction standards near pipelines.
>
> 7. Improving emergency response and evacuation plans in the event of a pipeline release.
>
> 8. Participating in federal environmental studies conducted under the National Environmental Policy Act (NEPA) and similar state laws for new pipeline construction projects.
>
> Each state treats these issues differently, so pipeline operators should be prepared to deal directly with each locality and state body interested in the siting and construction process.
>
> Each community affected by an existing or proposed pipeline faces unique risks. The effective control and mitigation of such risks involves a combination of measures employed by facility operators, regulatory bodies, community groups, and individual members of the community. As a pipeline release can impact individuals, businesses, property owners, and the environment, it is important that all stakeholders carefully consider land use and development plans to make risk-informed choices that protect the best interests of the public and the individual parties involved. Sharing appropriate information with state or local governments and emergency planners, which may include dispersion models or emergency response plans, may help stakeholders make risk-informed decisions.

(Jorde Landowner Hrg. Ex. 622). So PHMSA has made it clear that the Board and counties have authority to protect Iowans from Summit's pipeline through appropriate routing and land use decisions.

5. Summit's Attitude

A review of the record in this case presents a display of Summit's arrogant attitude toward the Board and toward Iowans in general. Summit's project would impose the most damaging impact on Iowa's economy and environment and people of any project in

memory. Summit's application, especially Exhibit F, and the testimony of James Powell, James Pirolli, Erik Schovanec and Micah Rorie consist of corporate hype and unsupported claims, expecting the Board to just accept them at face value. For example:

- Exhibit F claims that "The project greatly benefits Iowa's critical ethanol and agricultural industries, enhancing their long-term environmental and economic sustainability." As explained above, there is no evidence presented that the ethanol industry is critical to Iowa or that Iowa agriculture in general would be benefited by the pipeline. Nor is there any evidence that Summit's project would enhance the long-term sustainability of ethanol or agriculture.

- Exhibit F goes on to say that "Utilizing the Project to capture and permanently store their CO2 emissions enables participating ethanol plants to reduce their carbon footprint by as much as fifty percent (50%) putting them on the path towards producing a net-zero carbon fuel." First, there was no credible evidence that Summit's project would enable ethanol plants to reduce their carbon footprint by as much as 50%. Even if the ethanol plant's carbon intensity score is reduced, that does not equate to an equal decrease in the carbon footprint. Second, there was no evidence that the Summit project would ever lead to ethanol plants producing a net-zero carbon fuel.

- Exhibit F then states that "Those [low-carbon fuel] markets represent a significant growth opportunity for low carbon fuels, such as ethanol into the future." However, as Dr. Jacobson testified, the low-carbon fuel markets will soon be history.

● Exhibit F also claims that agriculture in general will be benefited. But the farmer landowners who testified disproved that claim. And Summit did not provide any evidence to support the claim.

● Exhibit F further claims that Summit will offer its services to other "industrial facility owners in Iowa and surrounding states." But James Pirolli's testimony did not substantiate that there would ever be any shippers other than ethanol plants. It is much more difficult to obtain pure carbon dioxide from any source other than the fermentation process at ethanol plants. It may not be economically feasible. Even the ethanol plants are not capturing the carbon dioxide from their own power plants.

● Exhibit F claims that Summit's project will provide jobs and tax revenue. This is true but not to the extent Summit promises. Andrew Phillips testified that the jobs might be part-time jobs, and even if there is tax revenue, the 45Q and 45Z tax credits reduce taxes paid by Summit and the ethanol plants. Mr. Phillips admitted that those taxes were not considered in his analysis. Summit also claims that because it is based in Iowa, more of the revenues will stay in Iowa. There was no evidence to support that claim. In fact, Dr. Silvia Secchi testified that most of the labor and materials for the pipeline will come from outside of Iowa. Finally, witnesses testified that their property is ripe for economic development, but the pipeline constructed on their property would hinder or prevent that development.

● Exhibit F, in claiming that the project will reduce greenhouse gas emissions, states that the project will remove "up to" 12 million metric tons of carbon dioxide per

year, and that that is equivalent to removing 2.6 million cars from the road. But there was no evidence to support that statement. And that statement does not consider the rapid advent of electric vehicles. So even if the statement were true in the very short term, its validity will be gone in a few years. Finally, Exhibit F states, "Once operational, the Project will provide the largest and single most meaningful technology based reduction of carbon emissions in the world." There was no evidence to support that statement. It obviously pure bluster. And Dr. Mark Jacobson's testimony completely rebutted it.

- Exhibit F next states that pipelines are safer than truck or rail for transporting carbon dioxide. As discussed above, no one has even suggested that the carbon dioxide be transported by rail or truck. This claim is simply a distraction and a straw man.

- Exhibit F further states that "Construction of the proposed Project will have no significant post-construction impacts to land use." The testimony regarding soil compaction and damage to drainage tile clearly refute that statement. And, as mentioned above, there was testimony that economic development would be hindered or prevented as a result of the construction of the project.

- James Powell, Direct Testimony, p. 5, claims demand for the pipeline is high. But he only mentions the ethanol plants, and even then, Summit has to solicit the ethanol plants. The ethanol plants are not soliciting Summit. James Pirolli stated that Summit solicited the ethanol plants (Pirolli Depo. p. 14-15). If demand were high, the ethanol plants would have solicited Summit.

- James Powell, Direct Testimony, p. 5, claims the Summit project will sustain demand for corn, but Summit has presented no evidence of that or that there was any likelihood that demand for corn would diminish without the pipeline. The farmer landowners who would know best, disagreed with Mr. Powell's statement.

- James Powell, Direct Testimony, p. 5, states that Summit's project will keep ethanol viable well into the future. There was no credible evidence of that. And with the imminent advent of electric vehicles, ethanol will not be viable well into the future, with or without the pipeline.

- Powell Direct Testimony, p. 6, alleges that the pipeline will create high corn prices and high land prices. Again, there was no proof of that.

- Powell Direct Testimony, p. 6, claims that the pipeline will create additional rural jobs. Although construction of the pipeline will create some jobs and there may be some permanent jobs, there was no evidence that these would be rural jobs.

- Powell Depo. p. 12-13, states that Summit decided to build the pipeline in Iowa because the states involved in the project are receptive to pipeline projects, so Summit assumed the project would be approved by the Board, taking the Board's decision for granted..

- Erik Schovanec Rebuttal Testimony, p. 7, claims that Professor Hamilton misunderstands how a pipeline impacts land use. Mr. Schovanec claims that there are 45,000 miles of pipeline in Iowa with no adverse consequences. But the Summit pipeline is clearly of a different order of impact than other pipelines. The safety issues and other

land use impacts that would be caused by the Summit pipeline have been discussed above.

- Micah Rorie's hearing testimony contained several examples of an arrogant attitude:

- Public acceptance of the project means landowner acceptance by signing easements – Hrg. Tr. p. 2591 – But almost 900 landowners have not signed easements, and the public is a much larger group than the landowners who have signed easements.

- He says landowners just need information about the project to get them to sign easements – Hrg. Tr. p. 2592 – but his view of information was the corporate hype that appears in Exhibit F, as discussed above.

- He says the project is necessary and that is why it is appropriate for Summit to ask for eminent domain – Hrg. Tr. p. 2600

- Summit should keep getting easements and seeking eminent domain even though Summit has been denied permits in North Dakota and South Dakota – Hrrg. Tr. p. 2603 – This implies that Summit is certain it will receive a permit in Iowa

- He says even if a landowner says he or she do not want to sign and easement and does not want to be contacted further, that simply means the landowner needs more information, i.e., the corporate hype discussed above – Hrg. Tr. p. 2851 – He claims landowners appreciate be kept abreast of how things are going

- He says landowners need to understand how critical the Summit project is – Hrg. Tr. p. 2854

● He says some landowners are waiting to sign easements until the permit is granted – Hrg. Tr. p. 2855- So, just as Mr. Powell said in his deposition, Summit assumes the Board will issue a permit.

● He says Summit certainly can't have a minority of landowners holding up or stopping or canceling the installation of something this critical and this large – Hrg. Tr. p. 2855-2856.

● Summit witnesses repeatedly claimed during the proceedings, as if it were an established fact not subject to dispute, that Summit is a common carrier.

● Likewise, Summit tried to create the assumption that ethanol production is a public good and must be supported.

This evidence shows that Summit is taking the Board for granted. It is also worth noting that Summit engaged in essentially no cross examination of the intervenors' witnesses. As Sierra Club counsel said during the hearing, Summit counsel did not cross examine because they believe the Board will issue a permit anyway and cross examination would have just extended the proceedings.

The point is that the Board should not just accept Summit's grandiose statements and assume Summit is entitled to a permit.

CONCLUSION

This is a pipeline case like no other. Even Dakota Access, the closest project in scope and impact to Summit's project to come before this Board, cannot be compared. Even though intervenors, including Sierra Club, challenged Dakota Access because it

would maintain the status quo and delay the transition away from fossil fuels, the project at least arguably transported a product that would be used by the public. There was also concern about the impacts of an oil spill from the Dakota Access pipeline, but as the evidence has shown in this case, the impact of a release of carbon dioxide from the Summit pipeline would be even more devastating. An oil spill would damage the land over which it spread, but the damage would be contained and there is no danger to human lives or health. A carbon dioxide release, however, cannot be effectively contained because it disperses through the air and stays close to the ground. And it is hazardous to humans and animals. So any attempt by Summit to equate its project with Dakota Access should not be taken seriously by the Board. It should not be assumed that because the Board issued a permit to Dakota Access, that a permit should be issued to Summit.

There is one point on which the Dakota Access experience should inform the Board's decision in this case. That is the impact of pipeline construction on farmland. There is evidence in the record that construction of the Dakota Access pipeline resulted on long-term damage to the soil and the fertility of the land. There is also evidence that drainage tile was damaged during construction of the Dakota Access pipeline that was not repaired properly. Although Summit will undoubtedly say it will undertake construction properly, Dakota Access said the same thing. Two county inspectors, Cole Kruizinga and Lee Gallentine, testified that it is very difficult for county inspectors, no matter how hard they try, to control the construction crews. The Board must protect the landowners by denying a permit.

Sierra Club's interest in this case is based on challenging Summit's claim that its project will mitigate climate change. Climate change is clearly the existential issue of our time. Addressing that challenge primarily means phasing out the use of fossil fuels and transitioning to renewable energy. Iowa is already a leader in constructing wind energy projects and is fast becoming a leader in solar energy. So we don't need to approve a project that delays that transition. With renewable energy, there is no need to capture carbon dioxide. Thus, any argument for the Summit project is based on a claim of alleged benefits, that, even if true, would be short-lived. The Board must not issue a permit based on such a short reed.

Instead of addressing climate change and promoting renewable energy sources, the Summit project's primary focus is on supporting the ethanol industry, which would continue the use of fossil fuels and delay critical action to address climate change. Ethanol is not a fuel by itself. It is mixed with gasoline, which is a fossil fuel. And as Dr. Mark Jacobson testified, the climate change benefits of ethanol are vastly overstated. And with increasingly stricter low carbon fuel standards and the imminent deployment of electric vehicles, ethanol's days are numbered anyway. Ethanol has been subsidized since its beginning. It has also been generous with political contributions to Iowa politicians of both parties. It is time for the free market to control ethanol's future.

That last statement brings us to the real motive behind the Summit project – the 45Q and 45Z tax credits. Summit has stated publicly that without those credits, it would not be doing this project. This is a significant cost to taxpayers. Summit may argue that

the tax credits were passed by Congress with bipartisan support, and that this shows that the tax credits support a public benefit. What it actually means is that the special interests that benefit from the tax credits has enough lobbying power and made enough political contributions to convince Congress that this was the only way to address climate change. But the actual result was to ensure the continuation of business as usual. The evidence in this case shows that the tax credits benefit only Summit and the ethanol plants.

Summit claims it is supporting Iowa agriculture. If it actually were supporting agriculture – and addressing climate change – it would support sustainable agriculture practice. It was encouraging to hear so many of the landowner witnesses say that they are undertaking sustainable practices like no-till farming and planting cover crops, as well as other practices that keep carbon in the ground. These landowners need to be encouraged and supported, not placed in danger of having their land impacted and threatened with eminent domain. Summit claims it will repair damage to soil, to drainage tile, to terraces, etc., but those are empty promises, as proven by the experience with Dakota Access. Those kinds of damages simply cannot be repaired, at least in the lifetimes of anyone living now. Landowners should not be forced to endure this damage to their land.

The issue that weighs over this entire proceeding is eminent domain. That is the most devastating and consequential power a government can use against its citizens. It has certainly been the most significant concern about this project expressed by landowners, members of the public, and public officials. Every landowner who testified mentioned eminent domain. Many local governments submitted objections to the docket

in this case, with the eminent domain issue as a thread running through all of those objections. The Iowa House of Representatives voted overwhelmingly for a bill that would have severely restricted the use of eminent domain for carbon dioxide pipelines. The Republican legislators who intervened in this proceeding clearly stated that the use of eminent domain was their primary objection to Summit's project.

As explained extensively in previous sections of this brief, Summit is not entitled to eminent domain. This is true even if the Board grants Summit a permit. If Summit is not granted eminent domain authority and that prevents Summit from building its pipeline, Summit has no complaint. Summit is not entitled to build a pipeline.

It may be that the Board has never denied a permit for a pipeline. But that does not mean that Summit is automatically entitled to a permit. The other pipelines that were granted a permit were probably transporting a product to be used by members of the public nor had all of the negative impacts discussed above regarding the Summit project. Even the Dakota Access pipeline, although it obtained a permit, garnered this statement on page 108 of the Board's Final Decision and Order, "If the terms and conditions adopted above were not in place, the evidence in this record would be insufficient to establish that the proposed pipeline will promote the public convenience and necessity." So that was a close call, even for a pipeline that arguably had a better basis for public convenience and necessity than Summit has.

As stated at the outset of this Conclusion, this is a pipeline case like no other. There is a perception, as stated by some of the landowners, that the Board is under

political pressure to grant Summit a permit. Summit seems to think that is the case. Sierra Club trusts that the Board will do what it said it would do and issue a decision based on the facts and the law. We are confident that when the Board does that, Summit will not be granted a permit and will not be granted the power of eminent domain.

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